

# Panzer Blitz For Miniatures Version 5

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#### INTRODUCTION

PANZER LEADER MINI is a realistic game simulating tactical level combat between Axis and Allied forces in World War II and the Cold War. Many different game situations allow you to re-create clashes between Axis, Western Allied and Soviet forces, ranging from lightning raids to desperate, climactic battles in Europe, the Soviet Union and North Africa from 1939 through 1985.

#### IF YOU HAVE NEVER PLAYED A WAR-GAME

**BEFORE**, don't be overwhelmed by what looks like a lot of complicated rules. The length of the rules is due to their precision in expressing the simple and easily understood concepts that make up the game.

**Remember:** the rules are all common-sense recreations of actions that happen in the real world, so if you think of actual tanks moving and shooting across the desert or in hills and towns then you will easily understand what is going on in the game. **IT IS NOT NECESSARY TO MEMORIZE THESE** 

**RULES**. Just read the rules briefly and play a practice game or two, then re-read those rules that were unclear when you played.

A WORD TO VETERAN GAME PLAYERS: This game variant is based on the familiar PANZERBLITZ and PANZER LEADER game system, but there are a number of important changes. You should closely examine all the charts, and carefully read each section of rules.

#### **Game Equipment**

To use these rules you must own the counters from Panzer blitz or Panzer Leader or Arab Israeli wars or all. You will need to keep the counters of the miniature vehicles you are using in your scenario on the side to refer to during the game. We supply a Unit function chart for you to use.

The time scale is 10 minutes so all counter ranges are multiplied by 2. All movement rates are used unmodified from the Panzer Blitz/Panzer Leader games and doubled for the Arab Israeli Wars game (except for units with a movement allowance of 1, who are multiplied by 2).

To convert the Panzer leader map boards to miniatures, we use a scale of 1 hexagon = 2 square inches on the game table.

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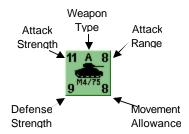
#### The Map Boards

Refer to the Terrain Effects Chart for a complete explanation of map board symbols and their effects on movement and combat. The Playing Pieces

The metal pieces represent vehicles, personnel, heavy weapons, gun detachments of different types (e.g., infantry, tank, assault

gun, etc.), which are the playing pieces used in the game. Hereafter they will be referred to as "units". The numbers and text on the unit counters in the original Panzer Blitz/ Panzer Leader and/or Arab-Israeli Wars games represent that units' capabilities with respect to movement, attack, defense and range of weapons. The other symbols or silhouettes identify what type of units the counters represent.

Example: Western Allied M4/75 Armored Fighting Vehicle.



**Attack Strength:** The basic offensive power of a given unit, expressed as a certain number of attack strength points, for a given weapon type. (Note: most units have more than one type of weapon. However, for game purposes usually only one type is represented. Exceptions are noted where appropriate.)

**Weapon Type:** A letter identifying the main armament carried by the unit. Some units have more than one attack type.

**Range:** The maximum effective distance (in inches) that a units' attack strength can be used against enemy units.

**Defense Strength:** The basic defensive strength of a given unit, expressed as a certain number of defensive strength points.

**Movement Allowance:** The basic maximum number of inches which a unit may move in one turn, expressed as a certain number of movement points. In general each unit will expend one movement point or more from its movement (point) allowance to move a distance of one inch.

## **Glossary**

Term	Definition
AFV	Armored Fighting Vehicle, all units with a silhouette other than trucks and wagons.
CAT	Close Assault Tactics, often used to refer to the game mechanic of Close Assault
Close Assault	The combat function specific to infantry to attack adjacent units, at an advantage.
Cover	Terrain that inhibits spotting of a unit
CRT	Combat Results Table
Direct Fire	Attacks made against spotted targets to which the attacking unit has a LOS
Dispersed	A combat result neutralizing a Unit until it can recover during its Recovery Phase
DRM	Die Roll Modifier

Term	Definition
Indirect Fire	Attacks made against spotted targets to which the attacking unit may not have a LOS, but some other friendly unit does.
Light Artillery	Any artillery unit that requires only half of a transport units movement allowance to load or unload
LOS	Line of Sight, a straight line from the center of one unit to the center of another unit
Marker	A playing piece representing a game function marker, as opposed to a combat unit
Morale	A rating of the units training and élan.
Opportunity Fire	The combat function that allows friendly units to attack moving enemy units, including those making Overruns and Close Assaults.
Overrun	The combat function specific to AFVs to attack units by moving into them, at an advantage
Spotted	A term used to identify units in Cover that can be seen by enemy units.
TEC	Terrain Effects Chart
Unit	A playing piece representing a combat unit, as opposed to a game function marker
WEC	Weapons Effectiveness Chart

#### **Stands**

A stand consists of groups of figures placed on a tray in some order to represent a platoon sized sub component of a military unit. Units are groupings of stands to resemble a military formation. There are ten types of personnel and vehicle stands:

Command Post Stands: Command Post stands consist of two officers and one radioman figures plus their vehicle on the same stand. They represent the unit staff headquarters. Command Post Staff stands may use radio communications. Not all Command Post stands may spot for artillery but those that can, may not command when doing so.

**Observer Stands:** Observer stands consist of two officers and one radioman figures plus their vehicle on the same stand. They represent the observer group of an artillery unit. Observer stands may use radio communications to direct artillery fire within their line of sight. Observer stands may not command.

**Infantry Stands:** Infantry stands consist of five infantry figures armed with either rifles or submachine guns and rifles as appropriate. They represent a platoon-sized group of infantry. Infantry stands maybe given the opportunity to employ a limited anti tank weapon capability.

**Scout Stands:** Scout stands consist of four infantry figures armed with either rifles or submachine guns and rifles lying down on the same stand. They represent a less than platoon-sized group of infantry. Scout stands may not be given the opportunity to employ an anti tank weapon capability. Scout

stands represent the dismounted crew of recon vehicles, such motorcycles, armored cars and scout vehicles.

Engineer Stands: Engineer stands consist of five infantry figures armed with either rifles or submachine guns and rifles as appropriate. They represent a platoon-sized group of engineers. These stands have unlimited capability to create demolitions, build bridges and blocks (if material is present) and may be allotted an integral flamethrower with up to three shots. When not doing an engineer function they are treated as a rifle infantry stand. If given the capability by a scenario, engineers can lay one square inch of mines per turn, this can continue to the maximum allotted square inches provided a medium tuck carrying the mines remains intact and with the laying engineers. To do so the engineer simply moves one inch per turn with the inch behind the engineer becoming a minefield after the engineer moves out of it. Engineer stands maybe given the opportunity to employ a limited anti tank weapon capability.

**Machinegun Stands:** Machinegun stands consist of one machinegun and ammo assistant gunners. They represent a platoon-sized group of machineguns (Medium or Heavy) or the weapons platoon of an infantry company (Weapons Stand).

Anti Tank Stands: Anti tank stands consist of five figures are either shaped charge weapons (such as bazooka, panzer Faust or ATGW) or anti tank rifles and fire as such. They represent of the grouping of dedicated anti tank weapons of a company or battalion. Note that the scenario may allow infantry to employ anti tank weapons in lieu of their normal firepower in any one turn as well.

**Gun Stands:** Gun stands consist of three figures manning a gun or heavy support weapon. Some guns will have larger crews, for example the 88mm AA gun.

Mortar Stands: Mortar stands consist of two to three figures mounted on a stand with the mortar. Light mortars (less than 70mm in caliber) will have one to two figures with the mortar. Medium (between 71mm and 96mm in caliber) and heavy mortars (greater than 96mm in caliber) will have three figures with the mortar. These stands represent the mortar platoons and batteries of a battalion.

**Vehicle Stands:** All vehicles are mounted one model to a stand and represent approximately enough vehicles to lift an infantry platoon. Thus a stand can have 1 large vehicle, 2 smaller vehicles or 3 jeep type vehicles mounted on it.

**Cavalry Stands:** Cavalry stands are mounted troops who ride on horses. There is no requirement to have horse holders, therefore, cavalry troops all dismount with a stand of dismounted horses left to show where they dismounted.

#### **Sequence of Play**

**PANZER LEADER MINI** is played in turns. Each turn is divided into two identical player segments: the First player

segment and the Second player segment. Please see the Player Aid Charts for the Detailed Sequence of Play.

Play continues until one side has achieved victory or all turns allotted for the game have been played.

MORALE, RECOVERY AND COMMAND

#### **Morale**

Morale represents the leadership, cohesion and training of the units involved.

Morale levels are rated as Poor, Low, Normal or High. Players check the morale of their units either as a result of combat or during attempts to recover dispersed units during the Recovery phase.

Each side's units have a morale level in the scenario being played. If not specifically listed, assume a default level of "Normal".

**Morale Checks:** A unit may be required to make a morale check as a result of combat or some other game function.

To determine if a given unit passes a morale check roll one die, add any modifiers, and compare the result against the units Morale Level on the Recovery Table. If the modified die roll is less than or equal to the number shown then the unit passes. Otherwise, it is dispersed and a dispersed marker is placed on it.

If attacked while dispersed the attacker gains an additional – 1DRM for the attack.

An already dispersed unit that fails a combat related morale check is eliminated.

#### Recovery

During the Recovery Phase the phasing player may attempt to recover dispersed units.

To determine if a given dispersed unit recovers, roll one die, add all modifiers and compare the result against the units Morale Level on the Recovery Table. If the die roll is less than or equal to the number shown then the unit recovers and the dispersed marker is removed.

A dispersed unit that recovers is dispersed until the end of the turn.

There is no penalty for failing to recover.

#### **Command Control**

Some stands represent commanders and their command post officers and are called Command Post stands. These stands are designated in the unit's ORDER OF BATTLE. These stands issue orders each turn, which control the actions of the stands

subordinate to them. Units must be within a certain radius of their command post in order to carry out actions such as movement and fire.

Standard command radius is 20 inches but can be modified by morale status and scenario special rules.

#### **COMBAT**

#### **How to Have Combat**

Basically, to have combat, the attacking unit compares its attack strength to the defending units' defense strength. The comparison is stated as a ratio, attacker to defender, which is then rounded down (in the defenders favor) to conform to the combat odds column printed on the Combat Results Table (CRT).

EXAMPLE: 11 to 3 rounds down to 3.5 to 1. Roll the die and apply the results, as indicated by the CRT, to the defending units involved in that specific combat situation.

A player may make as many or as few attacks per turn as he desires (within the restrictions of the rules of combat). A player is never forced to attack. Attacks are voluntary, never required.

Units may fire only once per player segment.

A given unit may be attacked by any combination of attack types in one turn, but may not be attacked by the SAME attack type more than once in the same turn (exception: Opportunity Fire).

EXAMPLE: the same unit might suffer attacks from Indirect Fire, Direct Fire, Overrun and Close assault in the same turn.

Odds less than 1-4 have no affect. Odds greater than 4-1 are treated as 4-1.

Combat Results:

**X** – Target unit destroyed and removed from the map board.

**DD** – If target unit already dispersed, target is destroyed. Otherwise, target is dispersed.

M+1, M+2 – Target unit must make a morale check, adding +1 or +2 DRM as indicated. A good order unit failing a morale check is dispersed. A dispersed unit failing this combat morale check is eliminated.

**M** – Target unit must make a moral check. A dispersed unit failing this combat morale check is eliminated.

**A** – Effects the attacker instead of the defender.

See Morale and Recovery for the effects of dispersal on a unit.

#### **Direct Fire Attack**

Direct Fire allows units to make attacks against spotted target units in terrain to which they have a LOS.

Direct fire attacks are executed in the combat phase of a player segment. Only the player whose combat phase it is may attack; the other player is considered the defender.

Only enemy units within range of an attacking unit may be fired upon by that attacking unit.

A single unit may not attack more than one enemy unit per combat phase. Attack and defense strengths are not transferable from one unit to another. Each unit is treated as an indivisible attack strength and defense strength.

More than one attacking unit may fire at one target unit. All attacking units firing on the same defending unit must total their attack strengths into one combined attack strength before computing the combat odds.

All attacking units executing direct fire attacks must be able to trace a line of sight to the target. A line of sight, as explained under the obstacles and elevation section, is a straight line traced from the attacking unit to the target unit that is free of blocking terrain.

Direct fire attacks are resolved on the Combat Results Table using the procedure outlined above.

Indirect Fire

There are two types of Indirect Fire; Neutralization and Destruction.

The same location may not be attacked by both Neutralization and Destruction in the same turn (For ease of play purposes).

As the name implies, indirect fire differs from direct fire in that the firing unit itself is not required to trace a direct line of fire to the target (it doesn't have to see the target). In order for certain artillery units to attack a target by the indirect fire method, it is only necessary that another friendly unit be able to see (have a direct line of sight to) the target. In regards to woods and town terrain, a friendly unit must be within in two inches to targets in this terrain, or an enemy unit must have fired from that target location, for indirect fire attacks to be designated against them (see SPOTTING).

ONLY class M, and those class H units indicated by parentheses, (H), may employ indirect fire.

Only command and Observer stands that could theoretically use direct fire against a target (that is "see" it) may be used to fulfill the indirect fire sighting requirements.

Units that are loaded or dispersed may not be designated for indirect fire. Units designated for indirect fire may not move between the time the fire is designated and the time the fire is executed.

There is a template used for indirect fire attacks. For light mortars (70mm or less), a 1 by 1 inch template is used. For light

artillery (90mm or less) and medium mortars (71 mm to 90mm), a 2 by 2 inch template is used. For medium artillery (91mm to 130mm) and all other mortars, a 3 by 3 inch template is used. For heavy artillery (131mm plus), a 4 by 4 inch template is used.

Templates can be used linear as well with the template becoming 50% longer and half as wide. For example, a 4 by 4 inch template would become 6 inches by 2 inches.

Units attacked by Indirect Fire may be attacked with direct fire in the same combat phase.

**NOTE:** Class (H) weapons may only use indirect fire against targets which are more than 1/4 of their printed range away (rounded down).

EXAMPLE: A British 25 lber (range = 140 inches) could not fire indirectly at targets that are within 35 inches of its location.

#### **Neutralization and Destruction Attacks**

Neutralization attacks are Indirect Fire attacks executed against specified enemy units in a specified location.

The attack must be designated during combat phase by secretly writing down the target coordinates, the firing units, and the specific enemy unit to be attacked.

The target unit must be spotted by some un-dispersed friendly spotting unit when the attack is recorded.

The spotting unit, target location and target unit must be recorded. As well, it must be recorded whether the attack is neutralization or destruction.

Such designated targets MUST be fired upon (that is, the gun cannot change targets if the target location turns out to be empty or if something better turns up) if the unit is to execute any attacks in that combat phase. The unit is required to attack, and it must attack only the designated target location using the indirect fire method.

Each Neutralization attack is executed during the friendly fire phase of the turn AFTER it was recorded.

Each attacking unit must be on the board (unless designated as off board fire support), not dispersed, or it cannot attack or add to an attack.

If the recorded target unit is not in the target location or is not spotted when the attack takes place, then the attack is made anyway. Other units (Friendly as well as enemy) in the target location are attacked by that Neutralization attack.

Any other units in a target location receive a +1 modifier on the CRT if they are not the specified target but they are attacked.

All Neutralization attacks directed against the same target unit combine into one attack.

The WEC is used to find each attacker's effective strength. The die roll is modified normally for indirect fire attacks and the normal CRT results are applied.

Neutralization attacks must be executed as recorded, even if they have no effect because the target unit has moved or is not spotted or there are no units in the target location. Attacking units are marked as fired as soon as the attack has been executed.

A type of indirect fire attack called Destruction is a neutralization attack executed on an artillery template half the size of a normal template for that type of artillery. When executing a Destruction attack it requires two allotted indirect fire missions to complete and receives a -2 CRT DRM.

#### **Overrun Attack**

An Overrun attack is performed by armored vehicle units moving adjacent to an enemy position and attacking it as part of its movement.

Armored vehicle units may overrun those enemy units located in clear terrain only (including clear terrain road and clear hilltops).

Overruns are executed and immediately resolved as they occur in the movement phase. All units intending to overrun the same target are moved before the attack is resolved.

To overrun a unit, move the attacking armored vehicle unit adjacent to the enemy and expend an additional 4 movement points to execute the attack. Units that cannot expend the additional movement points may not participate in the attack. The entry location does not have to be clear terrain only the target must be clear terrain.

The Weapons Effectiveness Chart is used to determine modified attack strength as with a normal attack. An overrun attack is considered a zero range attack.

Only one defending unit may be attacked by Overrun at a time. More than one armored unit may overrun an enemy unit and the overrunning units do not have to start from or attack from the same location. They must, however, execute their overrun attack as one combined attack strength. In other words, a defending unit may not suffer more than one overrun attack per movement phase.

Units on block locations may not be overrun.

The SPA units (such as US M7, German Maultier, Wespe and Hummel, etc) may NOT make overrun attacks. Units with only

I class weapons may not overrun armored vehicles. Infantry units may not overrun. See the Unit Function Table for an exact listing of overrun limitations for all types of units.

Attacking units may use roads to traverse prohibited terrain, but may not use the road movement rate at any time before or during the overrun attack.

See the rules on Opportunity Fire for resolution of Opportunity Fire by the target units against overrunning units.

#### **Close Assault**

A Close Assault attack is performed by infantry units moving into the enemy position.

All types of infantry units have the option of using close assault tactics (CAT) instead of making a normal attack.

Close Assaults are executed and immediately resolved as they occur in the movement phase. All units intending to attack the same target are moved before the attack is resolved.

To make a Close Assault, the attacking units must expend 2 movement points to execute the attack.

Units that have been transported by vehicular units in the same player segment may not use CAT attacks (Exception: Infantry may "jump off" an overrunning tank or assault gun and make a CAT on the survivors in the combat phase).

The Weapons Effectiveness Chart is used to determine modified attack strength. A Close Assault is considered a 0 range attack.

More than one infantry unit may attack an enemy unit and the attacking units do not have to attack from the same location. They must, however, execute their attack as one combined attack strength. In other words, a defending unit may not suffer more than one Close Assault attack per movement phase.

If engineer units are adjacent to non-engineer infantry when it is close assaulting the same defender, the attack gains an additional -1DRM. At least one engineer unit must be participating with at least one non-engineer infantry unit.

MG, Mortar, AT infantry stands may only close assault if they are adjacent with at least one infantry-type stand (infantry, engineer, or scout) that is close assaulting the SAME defender.

Any type of defending unit, including armored targets, may be attacked using close assault tactics. CAT may be executed from any type of terrain except water. Open topped vehicles receive a -1DRM due to be open topped.

See the rules on Opportunity Fire for resolution of Opportunity Fire by the target units against CAT units.

#### **Opportunity Fire**

Friendly units may execute Opportunity Fire attacks against moving enemy units. Except when defending against Overrun or Close Assault, the friendly unit must occupy a Firing Position, improved position or fortification to use Opportunity Fire (see 0)

Any enemy unit that expends 1/4 or more of its movement allowance (do NOT round) continuously in LOS of a friendly unit may be attacked by that unit using direct fire attack techniques.

Each firing unit may attack only once per enemy movement phase.

Place Opportunity Fire counters on top of units that use Opportunity Fire in the enemy movement phase to signify that they may not fire or move in the next friendly player segment. The counters are removed at the end of the next friendly player segment.

As an enemy unit moves through the LOS of a friendly unit, it may be fired upon by that unit as it enters that map location which constitutes 1/4 of its movement allowance expended in the friendly LOS (or any location thereafter which is also in the LOS of the friendly unit). At that point, the non-moving player announces an opportunity fire attack. The enemy units movement is halted and the attack is immediately resolved. If the unit is dispersed, it is marked and ends all movement. If the attack has no effect, the unit may resume its normal movement.

Movement points expended by the enemy unit moving into forest and town locations that are in the firing units LOS do NOT count unless the target is SPOTTED by a friendly unit as it does so.

An enemy unit may be attacked more than once during each enemy movement phase if that unit expends 1/4 of its movement allowance in the LOS of EACH attacking unit.

Passenger units that are unloaded in a target location may also be attacked using opportunity fire. In this case, the moving player must first state whether or not the passenger unit is being unloaded in that location BEFORE the firing player announces an opportunity fire attack in that location.

Stands being transported on tank and assault gun units may be attacked exclusive of the carrier units.

Enemy units that do not move may NOT be attacked by opportunity fire even if they are in the LOS of friendly units.

Opportunity fire attacks against units moving into locations containing other units may NOT be directed against those other units already in that location.

Enemy units conducting Overrun or Close Assault attacks may not be fired upon while expending the movement points required to execute such an attack except by the targets of the Overrun or Close Assault attack.

Units designated for indirect fire attacks in the next friendly combat phase may not use opportunity fire.

A unit that expends 1/4 or more of its movement factors by loading, unloading, attempting and failing to enter a stream is considered to be a target for Opportunity Fire attacks even though the unit has not left its original location. Passenger units may be attacked if they unload, but not if they load.

Opportunity Fire against Overrun and CAT: There are specific rules to cover when an Opportunity Fire attack is made by target units against units expending the movement points required to execute an Overrun or Close Assault:

Each Opportunity Fire attack takes place BEFORE the Overrun or Close Assault is resolved, so that attacking units dispersed or destroyed do not contribute to the Overrun or Close Assault attack.

Attacking units do NOT get the benefit of terrain additions to defense when defending against Opportunity Fire.

Infantry being overrun may Opportunity Fire at the armored units about to overrun them.

An opportunity fire attack against an Overrun or Close Assault attack is considered a 0 range attack.

The defending unit does NOT need to be in a Firing Position to conduct opportunity fire against the attacking units.

#### **Smoke Shell Concentrations (SSC)**

Smoke shell concentrations are represented by cotton balls on the game board. Players may use the counter sheet provided to name a SSC model so that there is no doubt as to its function on the game board.

Those (H) class artillery weapons (EXCEPTION: rocket launchers) may fire smoke shell concentrations, (SSC) in order to obstruct the LOS traced through certain map board locations.

Only (H) class weapons may fire smoke.

SSC are executed in the same manner as Indirect Fire or Direct Fire attacks.

SSC may not be fired into sea, stream (including those crossed by bridges), or swamp terrain.

SSC have no effect on units that may be in the target terrain.

SSC may not be fired as part of an opportunity fire attack.

**Duration:** An SSC lasts for two consecutive turns after which it is dissipated.

Indicate those locations receiving SSC by placing a "SMOKE 1" counter next to the cotton ball in each one as they are fired upon.

At the start of the next combat phase, replace all "SMOKE 1" markers with "SMOKE 2" markers.

At the start of the following combat phase, remove all "SMOKE 2" markers and cotton balls.

Unless otherwise indicated in a scenario, each unit capable of making a SSC attack is limited to five (5) smo ke shell attacks. Record the SSC expenditure of units to keep track of their current ability to fire SSC. SSC cover the area equal to the artillery template for their bore size in the game scale you are using.

#### Weapon-To-Target Relationships

The class-key letter symbols determine what type of weapons a unit is armed with:

I — Infantry-type weapons (this is primarily machine guns, but includes rifles, SMG, grenades).

**A** — Armor piercing weapons (high velocity tank and anti-tank guns).

**AA** — Anti aircraft weapons (H class weapons designed primarily to engage aircraft).

**H** — High explosive shells (low velocity howitzers, etc., but also including Anti-aircraft guns with high rate of fire and air-burst shells).

**(H)** — High explosive shells with indirect fire capabilities.

**M** — Mortars (similar to (H)).

**C** — Units designed to transport other units.

**G** — Guided missile armed units.

#### Weapons Effectiveness Chart (WEC)

The effectiveness of these weapons changes in relation to target type and range from target. This is reflected in the WEC by modifying a unit's attack strength accordingly.

Half range is always rounded DOWN. A partial attack strength is never rounded off; retain fractions.

EXAMPLE: half of 13 is 6 1/2.

See the Weapons Effectiveness Chart for further details.

#### TERRAIN EFFECTS ON COMBAT

#### **Obstacles and Elevations**

The map board is a three-dimensional representation of actual terrain. The various terrain features, aside from affecting movement and combat may also affect units by obstructing the line of sight. Since the weapons used in the game are primarily direct-fire weapons, an attacking direct fire unit may not fire at any target that it cannot see (trace an unobstructed line from the firing unit to the target unit).

There are three general types of obstacles that block line of sight and therefore prevent fire.

Low obstacles: Ground level woods and towns (10 to 20 meters).

Medium obstacles: slopes (60-70 meters).

High obstacles: hilltops and cliffs, (100 to 140 meters).

Whether or not a firing unit can see over these obstacles depends upon the elevation at which the firing unit and its potential target are. Units themselves are not considered as obstacles to fire, and players may fire over or through units, enemy or friendly.

There are four elevations at which a unit may be:

Stream or Gully level: -5 meters

Ground level: 0 meters

Slope level: 50 to 60 meters

Hilltop level: 100 to 140 meters

A unit's elevation is determined by the terrain it is on. The Target Elevation Table shows what terrain obstructs the line of sight in different cases.

#### Hill and Slope Defense Exceptions

Units using direct fire, opportunity fire, overrun, or close assault against an enemy unit defending BEHIND a slope or hilltop crest attacks at one half-attack normal strength.

Exception: When the defending unit is behind the applicable terrain, an attacking unit is NOT halved if it is on a hilltop.

Exception: Units using Indirect Fire are never halved by hill and slopes.

#### **Streams**

European streams and small rivers are characterized by steepsided meanders and silted bottoms. Further, they form depressions and support heavy vegetation offering excellent concealment. While not exceptionally swift, the depth of the slow moving water and the mushy consistency of the streambeds make streams impassible for vehicles:

The streams shown on the map board are DEPRESSIONS (minus 5 meters).

Vehicular units (including wagons) may never enter stream except on (undestroyed) bridge or fords.

For movement purposes only, all units may ignore the stream to enter a bridge from any non-stream location, treating the bridge as clear terrain for movement cost purposes.

Non-vehicular units may enter streams, but must then make a morale check at +1DRM.

Units in stream may not attack in any manner.

Units in stream may not be spotted or attacked by units in ground level unless such units are within one inch.

Units in stream may be spotted and attacked by units in hilltop or slope terrain if they can trace an unobstructed LOS into that stream. Treat the unit in the stream as if it were at ground level for TET purposes.

#### Rivers/Lakes/Sea

European rivers are characterized by steep-sided meanders and silted bottoms. Further, they form depressions and support heavy vegetation offering excellent concealment. They are swift and deep:

The rivers shown on the board are DEPRESSIONS (minus 5 meters).

Vehicular units (including wagons) may never enter river except in a (undestroyed) bridge.

For movement purposes only, all units may ignore the river to enter a bridge from any non-river location, treating the bridge as clear terrain for movement cost purposes.

Only amphibious units may enter a river/lake/sea.

Units in river may not be spotted or attacked by units in ground level unless such units are adjacent to the river.

Units in river may be spotted and attacked by units in hilltop or slope terrain if they can trace an unobstructed LOS into that stream. Treat the unit in the river as if it were at ground level for TET purposes.

#### Gullies

The gullies shown on the map are DEPRESSIONS (minus 5 meters).

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Units in gullies may not fire at (or BE fired at by) units at ground level or in other gullies unless they are within one inch of each other.

Units in gullies may fire at (and BE fired at by) units on slopes and hilltops. In these cases treat the unit in the gully as if it were at ground level for TET purposes.

#### **Fords**

Fords represent exposed (not depressed) areas of a gully or stream. They are equivalent to clear terrain for all purposes. The terrain on which a road crosses is also considered as clear terrain (even if for some reason the road becomes unusable).

#### **Bridges**

Bridges represent extensions of a road across a stream (or river).

Units that intend to enter a stream must do so from an adjacent terrain, they may not enter a stream while on a bridge. Likewise, units under a bridge may not move directly onto that bridge.

Units on (but not under) bridges (both permanent and temporary) that are otherwise clear terrain (example, not woods) may be overrun, but only from an adjacent non-bridge terrain.

Units on bridges may make an overrun or close assault attack against any adjacent non-bridge terrain.

A wreck on a bridge negates that bridge for all purposes until removed.

Bridges may be destroyed in the following manner:

**Engineers:** See the section on engineers.

**Artillery:** Combat units may destroy bridges by gunfire by using direct or indirect fire. M-type weapons may not be used to destroy bridges.

Bridges must be ignored for combat purposes if any other units on the bridge are being attacked.

When attacked by themselves, bridges have a defense strength of 30. The attack strength of the indirectly firing units is HALVED automatically. (Bridges are very difficult targets to hit and destroy.)

If the bridge is destroyed by direct or indirect fire, any vehicular units (and their passengers) on that bridge are destroyed.

#### **Buildings**

Non-vehicular units with a movement allowance may enter buildings and use them as cover or protection. Non-vehicular units without a movement allowance may start a scenario set up in a building but may not be moved out of a building during the scenario. In order to set up in a building all buildings must have a unique ID code painted on the roof of the building. Units are held in numbered boxes off board.

A building may hold as many units as its footprint allows in terms of the size of the unit stand. It may hold this may on each floor as the building model indicates.

In terms of defense, a building is considered an improved position type 2. Building can be considered forts only when specified in the scenario rules. All rules for improved positions and forts apply except that in multi-floored building enemy and friendly units can occupy the same building but not the same floors.

#### Cover

A Cover is terrain that provides cover to the units that occupy it.

A unit in a town or woods terrain or behind a hedge, fence or wall is in Cover for all game purposes.

A unit in terrain with a Crest is in Cover when the Line of Sight is traced through that Crest and the enemy unit is NOT on a higher Slope or Hilltop.

#### **LINE OF SIGHT**

#### **Line of Sight Defined**

The Line of Sight is a perfectly straight line measured from the spotting unit to the target. The LOS is traced by placing a straightedge (such as a taunt string) on the map board so that it runs through the midpoint of the firing unit and the target unit. The line is exactly equivalent to the Line of Fire from the firing unit to the target unit. Using the TET and LOS Obstructions section, determine whether or not any terrain encountered in tracing the Line of Sight actually obstructs the Line of Sight.

The LOS Limit is the maximum distance at which a particular unit could "see" an enemy unit, or even a specific location.

**IMPORTANT:** No unit may make a Direct or Opportunity Fire attack against a target at a range greater than the LOS limit, nor may it spot those targets.

The unit type, terrain and visibility conditions (specified in the scenarios special instructions) affect the LOS Limit. Consult the LOS and Spotting Limits table to determine the LOS Limits in effect for a scenario. The LOS and Spotting Limits table provides three columns to differentiate LOS range limits for different combinations of unit type and terrain occupied by that unit.

By default, visibility is "Good".

Units in cover terrain must be SPOTTED to be fired on.

#### **LOS Obstructions**

Only that terrain (hedges, fences, walls and woods) or towns intersected by the straightedge line between the firing unit and the target unit block the Line of Sight.

If the straightedge bisects a terrain through its LENGTH, that terrain blocks the LOS.

The defender is given the benefit of the doubt if the straightedge cuts exactly through the corner of eligible terrain. The LOS is blocked, however, through the entire eligible terrain.

When firing FROM a slope or hilltop TO a ground level target, the Line of Sight is obstructed if the target unit is directly behind a hedge, fence, and walls, town or woods terrain. Directly behind means the intended target is either adjacent to a terrain such that part of the terrain blocks the Line of Sight.

When firing FROM ground level TO a target on a hilltop or a slope, the Line of Sight is obstructed if the FIRING UNIT is directly behind a town or woods terrain. Directly behind means the intended target is either adjacent to a terrain such that part of the terrain blocks the line of sight.

When firing FROM a hilltop TO a ground level target, the Line of Sight is obstructed by intervening terrain is closer to the TARGET than to the firing unit or if the terrain is exactly midway between the two.

The ONLY case in which a unit may trace an unobstructed Lineof-Sight through MORE than ONE hilltop is when both the target and the firing unit are on hilltops. In all other situations, the LOS is obstructed if it must be traced through MORE than ONE hilltop.

No matter what the obstacle or the terrain; a unit may ALWAYS fire at a target to which it is directly adjacent (regardless of elevation).

In some cases, there are towns and woods on top of hilltops. The woods and town in these cases obstruct ALL fire, when they are intervening obstacles, no matter what the elevation of the target and firing unit (except when directly adjacent to each other).

When both the target and the attacker are on ground level, ALL slopes, crests, hedges, fences, walls, woods and town obstruct the line-of-sight.

When a unit is on a Slope or Crest the LOS is NOT blocked through that terrain.

#### **SPOTTING**

When a defending enemy unit is in a cover terrain, it may not be fired upon by opposing units unless it has been spotted by at least one friendly unit. Defending units in cover terrain are spotted if:

There is a friendly, undispersed, unit within 2 inches of the defending enemy unit.

The Cover is provided by a crest and a friendly undispersed unit has a LOS to that unit that does not cross that crest.

The defending unit has fired (used its attack strength in a non-CAT attack) while in the LOS of a friendly undispersed unit and the target unit is within the Cover Line of Sight Limit to the spotting unit. Place a Spotted marker on those enemy units that fire while in the LOS of friendly undispersed units as such firing occurs. The markers remain until the enemy units are no longer in friendly LOS or ALL friendly spotting units are subsequently dispersed, or the firing unit moves out of its initial firing position into an unspotted town or woods location.

**IMPORTANT:** No unit may spot at a range greater than the LOS limit, nor may it make a Direct or Opportunity Fire attack against such locations.

Spotting units must be undispersed at the time that they direct fire. In regards to 2), above, the spotting unit cannot have been dispersed since the target unit fired.

Truck, car, jeep, limber and wagon units may not spot for any type of fire. Units being transported may not spot.

A spotted unit that moves out of its spotted location and then move back into it in the same turn becomes unspotted only if it moved out of the LOS of the spotting units.

A unit that is spotted and then loads onto a carrier causes the carrier to become spotted.

A unit that is spotting and moves to terrain with a blocked LOS and then to terrain with clear LOS does NOT retain its spotting status to the target. If it was the only spotting unit then the target unit is unspotted.

Only command posts and observer stands with radios may spot for indirect fire.

#### **MOVEMENT**

During the movement phase of a players segment, he may move as many eligible units as he wishes. Each unit may be moved as many inches as desired within the limits of its movement allowance and terrain restrictions (see the Terrain Effects Chart). How to Move Units

Movement is calculated in terms of inches. Basically, each unit expends one movement point (MP) of its total movement (point) allowance for each inch it moves. To enter some types of terrain it requires the expenditure of more than one MP for each inch moved into. A complete list of these entry costs is found on the Terrain Effects Chart (TEC).

In any one turn a player may move as many or as few of his units as he desires. Movement is voluntary, never required.

Units that have fired (used their attack strength) in the combat phase of a players segment may not move in that movement phase. Dispersed units may not move (see How to Have Combat and the Combat Results Table).

Each unit is moved individually, tracing the path of movement through each inch in turn. Once a unit has completed its movement, it may not be changed, repositioned, or realigned (A unit's movement is considered completed when the player begins moving another unit).

Units with a movement allowance of 1 may move one inch per turn regardless of terrain (exception: prohibited terrain).

If a vehicle unit has insufficient MF to move into a location, then it may not move into that location (Exception; 7.2.5).

Units must move around terrain containing other friendly units. Two units may never occupy the same location at the same time at the end of a turn (exception: Roads).

Units may not enter or pass through terrain containing enemy units.

No enemy movement is allowed during a friendly movement phase.

There is no order to movement of units. A player may move any and all of his units in any order that he sees fit.

Various units pay different movement costs based on their movement mode. There are four movement modes in the game:

**W** – Wheeled, further divided into W and W (CPP). Those units that are road bound are noted under the CPP column, see special unit capabilities below.

**P** – Personnel, units that move via foot, bicycle or horse

**AO** – All Others which includes; tracked, fully tracked vehicles such as tanks, and; Half Tracked, vehicles with a combination of tracks and wheels that move in unison

AC – Aircraft units that fly.

**TO** – Units with no movement capability; these units are towed by "C" class units.

#### **Transporting Units**

**Carrier Units.** The C class vehicular units (including armored personnel carriers such as halftracks and Bren carriers) have the capability of transporting non-vehicular units (guns and personnel).

**Passenger Units.** The "P" class non-vehicular units (including infantry and towed guns) have the capability of being transported vehicular units (truck and half-tracks).

In any one turn a C class unit may either "Load" "Transport", or "Unload", or it may perform combination of these operations depending on the type of unit being transported:

Towed (TO) artillery units (those units without a movement allowance) require the C class unit to expend its entire movement allowance to load or unload. That is, the C class unit and the artillery unit must be adjacent at the beginning and end of the movement phase.

All other units require the C class unit to expend half of its movement allowance for that phase (do not round fractions) to load or unload. The C class unit may move up to half its movement allowance before performing the load or unload operations, or it may perform either of them and move up to half its movement allowance afterwards. The passenger unit may NOT move in the player segment in which it is loaded or unloaded.

Passenger or carrier units that use their attack strength in the current player segment, or are dispersed may NOT load in that player segment.

A carrier units movement allowance MAY be split before and after a load or unload operation in the same movement phase. However, it may only load or unload in a single movement phase, NEVER BOTH.

A carrying unit and the unit it is transporting have the combined defense strength of the carrier unit.

Passenger and carrier are treated as one unit for combat purposes, if combat results call for elimination, both are eliminated. If dispersed, both are dispersed.

Units that are being transported may not make an attack that turn (Exception: Mounted Infantry Fire).

German and Soviet armored vehicle units (tanks, assault guns, etc.), may transport infantry-type units in a fashion similar to "C" units. (Scenario special rules may allow Allied armored vehicles to do so.) Each armored unit may transport on passenger unit. EXCEPTION: SPA, open topped AFVs and armored cars stands may never transport other units.

If an armored unit is destroyed while transporting, both passenger and carrier are destroyed. Units being transported on armored units may be attacked exclusive of the armored unit, in which case the passenger unit has a nominal defense strength of 1. The armored unit is unaffected if only its passenger unit is attacked. In this case, the passenger unit is immediately unloaded if dispersed.

Armored units may fire when loading or unloading passengers. All other transport rules, however, apply.

Armored vehicles units may not transport mortar units or non-infantry I type units.

This rule does not include armored personnel carriers such as halftracks and Bren carriers, which are specifically listed as carrier units. All carrier units may only carry units on the inside.

See Unit Function Table for the exact capabilities of all units.

#### Road Movement

Units traveling along roads do so at the road movement rate regardless of the other terrain around the road. Units may travel all roads on the map board through all types of terrain in which they might otherwise be prohibited. Roads do not alter the defensive effects of other terrain except roads through woods where roads are considered open ground.

All units move along roads at the road movement rate for each road inch entered. Entering a road through a non-road terrain feature is done at the cost of the other terrain.

Units may freely combine road and non-road movement in the same turn.

Units may not enter locations containing blocks, fortifications, or minefield at the road movement rate. Units may not enter terrain containing a wreck at the road movement rate.

#### **POSITIONAL DEFENSES**

All mines, fortifications, improved positions and blocks are three-dimensional counters one inch square. Players may use the counter sheet provided to "name" a positional defense model so that there is no doubt as to its function on the game board.

#### **Mines**

The player with the minefield counters may position them anywhere within his set-up area unless otherwise directed by the situation card. Each mine counter represents a minefield constructed in that location.

Only one mine counter may be placed in each location. Minefield counters may not be placed on sea or swamp terrain.

Once positioned, mines may not be moved,

Mines have no friends - they affect both sides.

A minefield attacks each unit that moves onto or tries to move off of it the instant such movement is attempted.

The minefield attacks ALL units at 2 to 1. Terrain does not affect a mine attack. Each unit that moves onto a minefield counter is attacked separately. Surviving units may continue moving.

Units dispersed by minefields may not move off them.

A minefield is never used up. It remains active until removed by an engineer unit.

Minefield attacks take place during the moving units' movement and do not preclude direct or indirect attacks against that unit.

#### **Blocks**

BLOCK counters represent tank traps, roadblocks, barbed wire, felled trees and anything else that may impede movement.

Blocks may be placed anywhere within a players set-up area, (except sea).

A unit may only enter a location containing a block counter if it begins its movement phase directly adjacent to that the block. Upon entering the block location, the unit must stop and may move no further that turn. In its NEXT movement phase, it may move off the block at the normal movement rate.

Blocks do not obstruct the Line-of-Sight and have no effect upon combat.

Blocks are never used up. They may only be removed by engineer units.

A block counter on a road negates the road in that location.

#### **Fortifications**

Fortifications represent substantial defensive positions, such as Bunkers, redoubts, pillboxes, etc.

Fortifications may be placed anywhere within a players set-up area, (except swamp, sea, beach, or stream terrain) as directed by the scenario. Once placed, they may not be moved.

Only non-vehicle units may be IN a fortification. One non-vehicle unit may occupy a fortification. Note that since vehicle units may never enter a fortification, they may not load or unload units directly into the fortification. However, units without a movement allowance may be placed in a Fortification during setup.

Units in a fortification defend using their own target type with +10 defense points and a +2 CRT DRM. Fortifications are treated as ARMORED targets. Terrain and Weapons Effectiveness are taken into account when a fortification is defending.

Units attack from fortifications using their normal attack strength.

If a fortification is destroyed, any unit in it are also destroyed.

A fortification itself has no attack strength and may only defend.

If abandoned or unoccupied, fortifications may be captured and used by the opposing player. To capture a fortification, simply move a unit into the unoccupied fortification.

Unwanted fortifications may only be destroyed by attacking them with ones own direct fire weapons.

The fortification unit is not an obstacle to fire.

Fortifications may suffer dispersal in which case the units occupying them are dispersed also.

Armored vehicles may NOT make overrun attacks against fortifications.

Un-occupied fortification may never spot for other units.

The Artillery Field of Fire restriction optional rule is very appropriate for use for A LL units in fortifications.

#### **Improved Positions**

Improved Positions represent defensive positions that could be built in a day or two without special equipment. There are two levels of defensive value. The first type represents hasty positions quickly dug by the unit occupying it. The second

stronger type represents improved first type positions that the occupier has had time to work on.

Improved Positions may be placed anywhere within a players set-up area, (except swamp, sea, beach, or stream locations) as directed by the scenario. Once placed, they may not be moved.

Any type of unit(s) may occupy an improved position.

Improved Positions cannot be destroyed. If abandoned or unoccupied, improved positions may be captured and used by the opposing player. To capture an improved position, simply move a unit into the unoccupied improved positions.

The improved position is not an obstacle to fire.

Un-occupied improved positions may never spot for other units.

A unit in an improved position uses the defensive benefit of the improved position – the defensive effects of the terrain are ignored. See the terrain effects chart for the defensive benefits to units in improved positions.

#### **Wreckage**

Whenever an ARMORED unit is destroyed in combat it is marked as a wreck:

Wrecks have no effect other than prohibiting entry into the terrain they are located on.

A wreck on a road or bridge negates the road for all purposes. Vehicles may not cross prohibited terrain or enter prohibited terrain using a road or bridge negated by a wreck.

#### **SPECIAL UNIT CAPABILITIES**

#### **Firing Positions**

Any undispersed unit that does NOT expend any movement points during its turn may have a Firing Position marker placed on it.

A Firing Position marker is removed from a unit the instant that unit is expends any movement points, loads or unloads.

All units must be in a "Firing Position" to conduct Opportunity Fire unless it is the object of an overrun.

Units may not share Firing Position markers.

#### **Bailout**

Any time a carrier stand is destroyed the passenger has a chance of survival. Roll one die if a six is rolled; the passenger is unloaded beside the wreck in a dispersed condition.

Units can only bail out of armored carriers and only certain units can bail out successfully taking their equipment with them. See the unit function chart for which units can bail out.

#### **Hull Down**

Certain armored vehicles may claim a defensive modifier for being partially obscured by a hill. In order to claim this modifier, the vehicle must be adjacent to the crest of a hill and the line of fire must be traced through the crest.

Vehicles will receive a 0, +1, or +2 die roll modifier based on their manufacture and the state of crew training for hull down positions in that particular nationality's' military.

Consult the Hull Down column of the Unit Function Table for the type of vehicle targeted.

#### **Cross Country Penalty**

Certain vehicles have a poor ability to move off road. Most two wheel drive trucks and cars with narrow tires will fall into this category.

Vehicles so marked pay twice the wheeled (W) rate, **while moving off road**, but may always move one inch except in prohibited terrain.

Vehicles with poor cross-country performance are marked "X" in the CCP column of the unit function chart.

#### Split Move and Fire

Certain units, as identified on the Unit Function Table, have turrets moving cannons and may make a Direct Fire attack and then move, with the following limitations: The unit may make a Direct Fire attack during the combat phase, but at half strength.

The unit may expend one half of its movement allowance during the movement phase.

The owning player must state that a given unit is using Split Move and Fire before making the attack.

Infantry-type units (including MG or mortar) may not use Split Move and Fire.

Units with this capability are marked "X" in the SMF column of the Unit Function Table.

#### **Mounted Infantry Fire**

Certain units with a passenger carrying capability and an open topped passenger compartment may use mounted infantry fire. Basically the passenger may add its attack strength to that of the carrying unit.

The passenger must attack the same target as the carrying unit and does so at half its attack strength.

#### **Infantry Quick March**

Any infantry-type unit (exception MG or mortar) may treat clear terrain as costing 1/2 movement point during a movement phase with the following limitations:

If fired on by opportunity fire while moving, the unit defends at half defense strength.

The owning player must state that a given unit is using Quick-Time Speed before moving.

Units with this capability are marked "X" in the QM column of the Unit Function Table.

#### **Artillery Field-of-Fire Limitations**

Artillery pieces are not very mobile once they are emplaced for firing. Therefore, the following rule restricts the direction in which artillery units can fire:

Artillery types with a movement allowance of 0 may only fire at targets that are within their Field-of-fire. Mortars and units capable of Anti-aircraft fire are exempt from this rule (except when within fortifications).

A unit's field-of-fire consists of an arc 45 degrees either side of the front of their gun barrel within an area radiating from the front towards which the unit is facing. Facing is determined by the position of the gun barrel.

**Facing Changes:** Artillery units may adjust their facing up to one inch during the movement phase of their player segment:

Units that fire in the combat phase of their player segment may NOT change their facing.

An artillery unit of 88mm or larger (EXCEPT 25 lber) may only change facing if there is a carrier-type unit in the adjacent at the beginning of the movement phase (There must be one carrier unit for each artillery stand).

An artillery unit of less than 88mm (including 25 lber) does not need a carrier-type unit in the same location to change facing.

Units with this limitation are marked "X" in the FOF column of the Unit Function Table.

#### **Amphibious Movement**

Units marked as having amphibious movement can, if specified in the scenario use such movement. Amphibious movement is never automatic as it takes time to prepare a vehicle to "swim".

Units with amphibious capability are marked with an "X" in the Amph column of the unit function table.

#### Fixed Gun

Units said to have a fixed gun may not take up a hull down position and fire in the same turn. Fixed gun units may not use split fire and move.

All AFVs without a turret but have a large caliber cannon in either the hull or open casement are fixed gun vehicles.

This rule does not apply to vehicles armed solely with machineguns.

Units with this capability are marked "F" in the SMF column of the Unit Function Table.

#### **Wire Guided Missiles**

Certain missiles are directed against a target via a remote system wired to the missile (ATGW - Anti Tank Wire Guided).

The units equipped with wire guided missiles are "G" class units as indicated on the UFT. Additionally, numerous vehicles are equipped with a one shot ATGW that is equal to their nationality's ATGW counter for one shot only.

Players should keep track of vehicle shots on a separate piece of paper recording which have fired and which have not. The vehicle may fire ATGW only once per game.

There is a +1 DRM to all "G" attacks on Israeli armoured vehicles after 1980 with regards to defending against the Arab states only. Against all other nations this DRM is not applied to the Israelis. IFVs can fire cannon shells or wire guided missiles, but not both in the same turn.

**Terrain Limitations:** Wire guided missiles can't be fired if the LOF passes through a wood. Missile's wires passing through woods and bushes causes the mis sile to divert from its path. Unit firing from, or to, elevated terrain, do not take account of this rule (e xample: a TOW unit firing from hill to a ground level location, fires regularly, even if the LOF pass through "woods" hex). All LOS-LOF rules apply.

Wire guided missiles can't be fired if the LOF passes over a river. Unit firing from elevated locations, to, another elevated location do not take account of this rule (example: a TOW unit firing from a hill terrain to a target on another hill, fires regularly, even if the LOF pass over a river).

#### Airborne Troops

Whether paratroops or glider-troops, airborne troops arrive via the same procedure:

> The owning player picks a drop zone spot on the map board and rolls one die. The number on the die corresponds to direction of drift as indicated:

> > 1 = North

2 = South

3 = East

4 = West

5, 6 =the allotted spot.

If a 1 to 4 is rolled, a second die is rolled. This second die indicates the number of inches the drop zone is moved (due to pilot error, wind drift, etc).

Stands landing in water are eliminated. Stands landing in trees or urban areas are rolled for with 4, 5, 6, eliminating them.

Gliders landing in trees or urban areas are eliminated. Gliders landing in water are rolled for BAIL OUT for each passenger in the glider. A surviving stand is placed on the nearest shore in a dispersed condition.

## **Engineers**

Engineers may be used to clear minefields, create and remove blocks, demolish bridges and increase the effectiveness of CAT attacks.

Before the game, designate one truck, halftrack or other carrier for each engineer platoon to carry its equipment. There are special rules concerning the designated carrier of an engineer unit.

This vehicular unit may no longer transport anything but its designated engineer unit.

It must be adjacent to the location in which the engineers are performing any of the following:

Bridge demolition,

Creating blocks,

Removing blocks.

If an engineers' designated vehicle unit is eliminated, it may not be assigned another engineers vehicle.

The engineer is restricted to mine-clearing if the engineers designated vehicle is destroyed.

If the vehicle assigned to an engineer is dispersed prior to completing an engineering task, the engineer must wait until the vehicle is not dispersed before resuming the task.

#### **Clearing Minefields**

Minefields are cleared in a four-turn process, as follows:

**Turn 1:** Engineer unit moves adjacent to minefield.

**Turn 2:** Minefield counter is inverted at the beginning of the movement phase.

**Turn 3:** Engineer unit moves onto minefield.

**Turn 4:** Minefield is removed at the beginning of the movement phase.

If the engineer unit is dispersed at any time during this sequence, the clearing process is temporarily halted. When that engineer unit is un-dispersed, the sequence is restarted at the step in which the dispersal took place. Once the minefield is inverted, other units entering the minefield are still liable to the normal minefield attack until such time as the engineer unit removes the mine counter

If an engineer unit is eliminated during this sequence, any new engineer unit must begin all over again.

An engineer unit may only clear one minefield counter at a time. When engaged in minefield clearing, the engineer unit may not attack in any manner or load into a carrier vehicle.

#### **Bridge Demolition**

To destroy a bridge, an engineer unit must remain on the bridge for three turns. (It must begin and end three friendly movement phases in a row without moving out of the bridge.) On the fourth, or any subsequent turn, it must move to an adjacent location. As soon as it makes this move, the die is rolled for the bridge demolition.

A die roll of 1-5 means that the bridge is successfully destroyed and the bridge is removed.

A die roll of 6 means that the attempt has failed. In this case, the engineer unit must move back on to the bridge, if another demolition attempt is desired. It executes the same procedure as before. If the attempt fails again, the sequence must be restarted from the beginning. An engineer unit may not be dispersed during any of the stationary turns, or the sequence is interrupted until the unit becomes un-dispersed again.

#### **Creating Blocks**

Within the time period of any given situation, an engineer unit may only create one block on a road. The procedure is the same as bridge demolition procedure, but when successful the engineer unit places a block counter on the road. The number of stationary turns required to initially create a block is two turns for a woods-road location and four turns for any other type of road. Only one turn is required to try again if the first attempt fails. A die roll of 1 through 5 on the second or any subsequent attempt successfully creates the block.

#### **Removing Blocks**

The procedure for removing a block is exactly the same as that used in clearing minefields.

Units with the engineer capability are marked in the Engr column of the Unit Function Table.

#### Mine clearing Tank

This unit whether equipped with flail, plow or rollers performs like a normal tank unit, except that it may clear minefields. Procedure for doing this is:

Mine Clearing unit moves into the minefield counter and ends all movement.

In the following movement phase, the Mine Clearing unit expends half of its total movement allowance leaving the minefield counter.

As the Mine Clearing unit leaves the minefield counter, the minefield is removed from the board. Mine Clearing tanks cannot be harmed by minefields.

Units with this capability are marked "MC" in the Engr column of the Unit Function Table.

#### **Flamethrower Tank**

This was a tank with its main armament replaced by a flamethrower for close range work.

Units with this capability are marked "FT" in the Engr column of the Unit Function Table.

#### **Bridge Layer**

This was a tank chassis converted to carrying a tank bridge for rapid deployment. Bridges are laid in the following manner:

Bridge layer moves adjacent to the obstacle to be breached and ends all movement.

In the following movement phase, the bridge layer expends three movement points and backs one inch away from the obstacle,

As the bridge layer leaves, the tank bridge is placed on the obstacle, which can be used like a permanent bridge in the next phase. Once emplaced, the tank bridge may not be relocated.

Units with this capability are marked "BL" in the Engr column of the Unit Function Table.

#### **Ferry**

This was a vehicle chassis converted to carrying other vehicles over a water obstacle. This vehicle works exactly like a carrying unit except that it is excluded from the carrying rule with regard to carrying other vehicle units. This unit can carry any unit including a unit loaded with passengers.

Ferries operate in water and are considered a boat. To load the ferry moves adjacent to the shore line or dock. Unloading is the same.

Units considered to be ferries are marked with an "F" in the Engr column of the Unit Function Table.

#### **AIRPOWER**

Three types of tactical aircraft are represented in the game; fighter-bombers, helicopters and light observation aircraft. Because of the space-time scale of the game, the aircraft units perform in a rather abstract manner. Each aircraft unit is equivalent to one airplane.

#### **Procedure**

Aircraft units move, undergo AA attacks, and resolve combat during the air phase of a player segment. The following actions take, in order, place during the Air Phase

The phasing player moves all aircraft.

After aircraft movement, the non-phasing player may make AA attacks against air units that enter within range of AA units during movement.

Surviving air units may make attacks against enemy ground units.

The non-phasing player may make "Collective Ground Fire" attacks against any air units within 4 inches of undispersed non-phasing player units.

#### Air Combat

All Air to air and anti-aircraft combat is conducted on the Anti-Aircraft Combat Factors Table. Basically, the attacking player totals all anti-aircraft points making a single attack, rolls one die, adds the target's defense DRM to the roll and finds the result on the table.

Example; A player attacking with 24 attack factors on an aircraft with a +1 DRM rolls a "4". The player adds "1" to the "4" making the roll a "5". The player then applies the result cross-indexed between the Die Roll "5" and "24" combat factors which is a result of "D" meaning the aircraft is damaged but may continue it's attack this turn only; then it is removed permanently at the end of the Air Phase.

#### <u>Movement</u>

Aircraft have unlimited movement capabilities; they may move anywhere on the map board in one turn. Terrain has no effect on aircraft movement.

Aircraft units enter and exit the map board as indicated in the individual situation rules. Aircraft may leave before the end of the game, but once exited, they may never return.

## **LOS and Spotting**

Aircraft are subject to the same line of sight limit and Spotting limitations as ground units.

Rules governing blocking terrain do not apply for LOS from aircraft to ground units, or vice-versa.

#### **Observation Aircraft**

Observation aircraft are used to sight enemy units to fulfill indirect fire sighting requirements.

As with ground units sighting for indirect fire, the observation airplane must be within spotting range of the target unit from the time the indirect fire order is written until it is executed in the following turn.

#### **Fighter-Bombers**

Fighter-bombers (FB) have three different types of direct fire weapons systems: machine guns, air-to-Ground rockets and/or bombs. Fighter-bomber attacks are executed in the air phase of the player segment.

Fighter-bomber attacks are executed by moving the FB unit to within 4 inches of the target unit undergoing AA attack, if any, and resolving combat. All aircraft attacks are executed as direct fire attacks.

A particular target location may be attacked only as many times as there are separate aircraft but each aircraft may attack only once in a turn.

A FB unit may not attack with machine guns in the same air phase in which it conducts a bomb or rocket attack.

Each FB unit may conduct bomb or rocket attacks only once per attack pass to the maximum allotted in the strike package. It may fire its machine guns only four times per game. A side record must be maintained to verify FB employment.

Unguided bombs are subject to the placement and drift rules of airborne troops unless dropped from dive-bomb ers.

FB units may sight targets in the same manner as the observation aircraft. They may not, however, sight (or spot) targets for ground units, but only for other FB units. Thus, FB units cannot be used to sight targets for indirect fire, but if one FB unit sights a target, all FB units presently on the board may attack it.

Fighter-bomber units may not execute Opportunity Fire attacks against enemy ground units.

**Air Strike Packages:** All aircraft are assigned a strike package of attack factors in terms of Weapon Class(es), Attack Firepower factors, and number of times each class can be used by the aircraft. This is assigned in the scenario briefing. Weapons' classes are:

Class A weapons are normal for armored targets and halved against non-armored targets. These include bombs, rockets and cannon.

Class H weapons are normal against non-armored targets and halved against armored targets. These include bombs and rockets.

Class I weapons are normal against non-armored targets and ineffective against armored targets. These include machineguns.

Class G weapons are normal for armored targets and halved against non-armored targets. These include guided rockets and bombs.

A typical WW2 ground attack aircraft will have 3 A x4 in cannon and 8 H x 2 in bombs or 10 H x1 in rockets. A modern A10 will have 20 A x4 in cannon, 15 A x4 in rockets and 15 H x6 in bombs.

There is no modification for range to target or terrain (although terrain DRMs still apply).

#### **Helicopters**

Helicopters are normal combat units that remain on the map board until they are eliminated (or they exit). However, all game procedures are modified to some degree when helicopters are involved.

Helicopters are allowed in any terrain on the map board. Helicopters expend movement points, moving like other units. Helicopters move during the friendly movement phase and they pay only one movement point per inch.

Helicopters move after all air strikes are compiled at the start of the friendly movement phase.

Helicopter units move one at a time each completing its' move before the next unit may move.

A helicopter may move its' full movement allowance even if it is dispersed or has fired.

Helicopters are attacked, as are other aircraft by opportunity fire during the friendly air phase. They must expend one fourth (1/4) of their movement allowance before they are attacked. Helicopters may also be attacked during the enemy direct fire phase. Helicopters may not be attacked by CAT (unless "down"), overrun (unless "down"), or indirect fire (unless "down"). When helicopters attack they ignore Hull down shielding. A defender is still hull down shielded if other non-helicopter units are taking part in the attack. Helicopter units with attack points and range printed on them attack normally in the direct fire phase.

Air strikes can be assigned to helicopters in the scenario briefing. These units carry out air strikes like other aircraft but all rules for helicopters still apply. These air strikes are carried one time only and the helicopter reverts to its' normal capabilities after that strike is launched.

Air strikes carried by a helicopter may be launched at the owning player's discretion during the game and does not have to be written down.

Helicopter may not attack with both an air strike and its' own attack strength in the same turn.

Some helicopter units are carrier units (see UFT).

A helicopter unit can carry 1 personnel unit stand.

A helicopter must expend its' whole movement allowance to load or unload any number of passengers at once, subject to its' carrying capacity.

A helicopter cannot unload passengers in woods, town, stream, gully or water.

Helicopters must be "down" to load or unload passengers.

**HELICOPTER DOWN** - Helicopters may be specified as being "down". Down helicopters are assumed to be landed or hovering just off the ground. A helicopter is down only if a down counter is placed on top of the helicopter.

Down counters are placed on helicopters only during the friendly air phase, immediately after the end of movement.

The owning player may place down counters on as many of his helicopters as he chooses.

If a helicopter unit moved that air phase, it must be "marked moved" as soon as the down counter is placed on it.

All down counters are removed from friendly helicopters just before helicopter movement begins during the next friendly air phase.

Down counters may be placed on helicopters during initial placement.

LOS/LOF is traced normally to "down" helicopters.

Elevation and terrain block LOS/LOF to down helicopters.

A "down" helicopter can be attacked by CAT, Overrun, and Indirect fire attacks each attack treats the "down" unit as the target type most favorable to that attacker

A "down" helicopter is always spotted when in enemy LOS/LOF, even when in a woods or town.

A "down" helicopter never gets defensive bonuses for terrain, fortifications or improved positions.

"Down" helicopters cannot attack.

#### **Anti-Aircraft Defense (AA)**

Anti-aircraft fire is a type of direct fire attack initiated in the player's air phase, before air units execute their attacks. AA fire is resolved in a similar manner to regular direct fire, except the AA Table and Procedures are used instead of the normal CRT.

All units may initiate AA attacks. However, only those units indicated as being Anti-aircraft units on the unit function table (including German 20mm, 20(4)mm, 37mm, and Wirbelwind) may make AA attacks. See Collective Ground Fire for how non-AA capable units may attack aircraft.

AA attacks are executed in the same manner as regular attacks.

Place an Opportunity Fire marker on those AA units that fire to indicate that they may not attack or move in the owning players' next segment.

See AA Table for further clarifications.

#### **Collective Ground Fire**

After all aircraft attacks are completed the non-phasing player's units (regardless of whether they are AA capable or not) may attack enemy aircraft that made an attack and who are in a location within 4 inches of an enemy aircraft.

One attack is made against each aircraft, regardless of the number of non-phasing units eligible to attack it.

This attack represents the small arms and inherent unit machineguns of the unit, thus these units are NOT considered to have fired and may fire normally in the next phase or turn.

The attack is executed on the 4 strength column of the Anti-Aircraft table. Aircraft that receive a damaged result and were already damaged are treated as destroyed.

#### **CHANGES TO THE SCENARIOS**

Some of the rule changes from the original games may impact the already published scenarios in unexpected ways. In particular, some items represent features not present in the original rules. At the very least, the following must be considered.

Assume each side has a morale level of "Good" unless there is a good reason to or players desire to give one or both sides different morale levels.

Obviously, any and all units could start the game in Firing Positions.

#### **Other Game System Usage**

Other scenarios from other platoon scale rule systems will work just fine with these rules systems; Command Decision, Spearhead, Tacforce or any of the free rule sets.

The board games such as Mech War 77 and Panzer 44 can be used with counters swapped one for one for miniature stands. Terrain Usage

Players need to keep the terrain simple. The following terrain features should be the maximum types used from other game systems:

Open Ground: clear terrain and plow fields

**Slopes:** the upward part of the hill

Crests: top of a hill where there is no plateau.

Hilltops: flat ground at the top of a hill.

**Streams:** water course that can be forded at fords.

**Rivers:** water course that can be crossed only at bridges.

Lake/Sea: body of water that is prohibited entry.

**Towns:** organized grouping of buildings, walls and fences.

**Roads:** prepared ground for the use of vehicles.

**Bridges:** man made objects that allow roads to go over gullies, streams and rivers.

**Sand Dunes:** hills of sands, usually without any plateaus but have a crest.

**Beach:** open ground of sand, usually the transition between open ground and lake/sea terrain.

**Fords:** spots along streams and gullies where the ground is flat enough for a vehicle to enter the terrain feature and cross.

**Cliff:** the rapid transition of hills to flat open ground. Prohibited to cross except by units with climbing equipment.

**Gully:** similar to stream except there is no water coursing through.

**Light Woods:** stands of vegetation that can be traversed by personnel and some vehicles. Orchards are considered light woods.

**Heavy Woods:** stands of vegetation that can be traversed by personnel and a very limited number of vehicles.

**Swamp:** mixed ground of short vegetation and open spots with water courses. Impassable terrain to all units except personnel.

Fences: man made barriers of wood.

Walls: man made barriers of stone.

**Hedges:** man made barriers of vegetation.

#### PLAYER AID TABLES

	COMBAT ODDS									
Die Roll	1-4	1-3	1-2	1-1	3-2	2-1	2.5-1	3-1	3.5-1	4-1
-2	DD	D	X	X	X	X	X	X	X	X
-1	M+2	DD	D	X	X	X	X	X	X	X
0	M+1	M+2	DD	D	X	X	X	X	X	X
1	M	M+1	M+2	D	D	X	X	X	X	X
2	AM	M	M+1	DD	D	D	X	X	X	X
3	AM+1	AM	M	M+2	DD	DD	D	X	X	X
4	AM+2	AM+1	AM	M+1	M+2	M+2	D	D	X	X
5	ADD	AM+2	AM+1	M	M+1	M+1	DD	D	D	X
6	AD	ADD	AM+2	AM	M	M	M+2	DD	D	D
7	AX	AD	ADD	AM+1	AM	DD	M+1	M+2	DD	D
8	AX	AX	AD	AM+2	AM+1	AM	-	M+1	M+2	DD

X - Target unit destroyed and removed from the map board

DD - Target unit dispersed. If already dispersed it is destroyed.

M+2-Target unit(s) must make a moral check at +2DRM. Units that fail are dispersed.

M+1 – Target unit(s) must make a moral check at +1DRM. Units that fail are dispersed.

M – Target unit(s) must make a moral check. Units that fail are dispersed. Units that are already dispersed and fail a morale check are destroyed Attacks against units that are already dispersed gain an additional -1DRM. Odds less than 1-4 have no affect. Odds greater than 4-1 are treated as 4-1. A- Attacker.

	ANTI-AIRCRAFT COMBAT FACTORS							
Die Roll	4-7	8-11	12-15	16-19	20-25	26-35	36+	
1	D	X	X	X	X	X	X	
2		D	D	X	X	X	X	
3			D	D	D	X	X	
4				D	D	D	X	
5					D	D	D	
6						D	D	

X – Target aircraft destroyed and removed from map board. D – Aircraft Damaged: aircraft may execute attack in current air phase, but is removed at the end of the air phase. It does not count as a unit destroyed for victory purposes, if applicable, unless damaged again by Collective Ground Fir

	MAN MADE FEATURES CHARTS						
Feature Type	Movement	Combat	Other				
Fort	None	+10 defense strength; +2 DRM	Up to three non-vehicle units may occupy fort.				
Block	Negates road. Unit must start adjacent to enter, and may move no further that turn.	None					
Improved Position 1	None	Vehicles: +1DRM Others: +5 defense strength, +1DRM					
Improved Position 2	None	Vehicles: +2DRM Others: +10 defense strength, +2DRM					
Smoke	None	None	Blocks LOS. Units in smoke must be spotted.				

	LOS LIMIT						
Visibility	Type One Infantry and Light Artillery in Cover.	Type Two Infantry and Light Artillery in Clear	Type Three Vehicles and heavy artillery in cover.	Type Four Vehicles and heavy artillery in Clear			
Good	2 (4 if fired)	10	2 (10 if fired)	20			
Poor	1 (2 if fired)	5	1 (5 if fired)	10			
Variable	1 (Roll/3 if fired)	Roll/2	Roll/10 (Roll/2 if fired)	Roll			

WEAPON EFFECTIVENESS CHART				
Weapon	Target	Range to Target	Effect	
Ι	Armored	0	Normal	
I	Non-Armored	<= ½ Printed Range <= Printed Range	Double Norma l	
M	Armored	Any	Normal	
M	Non-Armored	Any	Double	
A	Armored	<= 1/3 Printed Range <= 2/3 Printed Range <= Printed Range	Double +50% Normal	
A	Non-Armored	Any	Half	
G	Armored	Any	Normal	
G	Non-Armored	Any	Quartered	
Н, (Н), АА	Armored	500 meters 501 to 1000 meters 1001 plus meters	Normal 3/4 Half	
H, (H), AA	Non-Armored	Any	Normal	
I, H, AA Aircraft		<= 1/3 Printed Range <= 2/3 Printed Range <= Printed Range	Double +50% Normal	

MORALE/RECOVERY TABLE					
Morale Level Die Roll needed to Recover					
High	5				
Normal	4				
Fair	3				
Poor	2				

Roll d6. If result is equal to or less than number shown then unit passes morale check or recovers from dispersal.

**WEC Notes**Close Assault, Overrun, and Opportunity Fire against Close Assault or Overrun are considered 0 range attacks and gain a -1DRM.

#### **OEC Notes**

- X terrain ALWAYS obstructs LOS
- # terrain may obstruct LOS. See numbered section for details
- n/a terrain does not block LOS

OBSTACLES AND ELEVATIONS CHART												
Firing	Ground Slope Hilltop											
Terrain	Woods	Slope	Crest	Town	Woods	Slope	Crest	Town	Woods	Slope	Crest	Town
Ground	X	X	X	X	See Rules	X	X	See Rules	See Rules	See	X	See Rules
Slope	See Rules	X	X	See		X	X	n/a		n/a	X	n/a
Hilltop	See Rules S	See Rules	X	See Rules	See	n/a	X	n/a	See Rules	n/a	n/a	See Rules

SEQUENCE OF PLAY					
FIRST PLAYER SEGMENT					
RECOVERY PHASE	First player attempts to recover any dispersed units.				
INDIDECT FIDE DILACE	First player removes second turn smoke markers and then flips first turn smoke markers to their second turn side				
INDIRECT FIRE PHASE	First player plots Indirect Fire attacks for the next turn				
	First player makes Indirect Fire attacks plotted last turn.				
DIRECT FIRE PHASE	First player makes Direct Fire attacks.				
	First player moves all aircraft units.				
	Second player executes AA attacks. Opportunity Fire counters are placed on firing units.				
AIR PHASE	First player resolves all aircraft attacks.				
	Second player executes a "Collective Ground Fire" attack against all aircraft units that made an attack.				
MOVEMENT PHASE	First player moves as many units as he desires, executing any overrun or close assault attacks as he does so. Second player may execute Opportunity Fire attacks as appropriate and desired.				
END OF PLAYER SEGMENT	All First Player fire counters from previous turn are removed.				
	SECOND PLAYER SEGMENT				
Second player repeats the above u	sing his own units.				
	END OF TURN SEGMENT				

Indicate the passage of one complete game turn on the Turn Record Track. Players repeat segments one through three each turn for as many turns as the situation card indicates or until one player concedes defeat.

	TERRAIN EFFE	CTS CHART	
Terrain Type	Movement	Combat	Other
Beach	P: 1mp W: 4mp Others: 2mp	Non-vehicles: +1DRM	
Bridge	Treat as roads	None	
Open	P: 1mp W: 4mp All others: 2mp	None	Includes clear hilltop
Cliff	No units except infantry may cross cliffs. These units must roll a 1 on the die to cross. If unsuccessful they may not move that turn.	No Close Assault attacks across cliff. Attacker halved when attacking across cliff except when on another hilltop.	LOS obstruction
Dune	P: No effect W: +2mp Other vehicles: +1mp	Attacker halved when attacking across dunes	LOS obstruction
Ford	As Clear terrain		
Gully	P: 1mp W: 4mp, +4 to leave All other vehicles: 2mp, +2mp to leave	See rules	LOS obstruction
Hilltop	NA	Attacker halved when attacking across except when on another hilltop	LOS obstruction
Road	P: 1/2 mp from along same road Vehicles: 1 mp from same along same road	Other terrain in location	Use other terrain in along road for movement when not moving along road.
River/Lake/Sea	Amphibious unit only	As stream	
Slope	P: 1mp W: 6mp Other vehicles: 3mp		
Crest	P: No effect W: +2mp Other vehicles: +1mp	Attacker halved when attacking across a crest	LOS obstruction
Stream	Vehicle units may not enter except at bridges or fords.  Non-Vehicles: 1mp, dispersed.	See rules	LOS obstruction
Swamp	Vehicles may not enter except along a road P: 1 mp	Non-vehicles: +1DRM	
Town	P: 1/2 mp Other Vehicles: 1 mp	Vehicles: +1DRM Others: +5 defense strength, +2DRM	Target must be spotted. Town is LOS obstruction.
Light Woods	Adds to cost of other terrain. W: +2mp Other vehicles: +1mp	+1DRM	Target must be spotted
<b>Heavy Woods</b>	Vehicles may not cross except along a road		LOS obstruction
Hedge Stone Walls Wood Fences	To Cross: P: Imp W: 4mp (may not cross stone walls) Other vehicle 2mp (4mp to cross stone walls)	As cover: Hedge +1 DRM Fence +2 DRM Wall +3 DRM	LOS obstruction for units spotting one another on same level.

FORT	FORT	FORT	FORT	FORT	FORT	FORT	FORT	FORT	FORT	FORT	FORT
Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire
Position	Position	Position	Position	Position	Position	Position	Position	Position	Position	Position	Position
Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down
Opp	Opp	Opp	Opp	Opp	Opp	Opp	Opp	Opp	Opp	Opp	Opp
Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire
Opp	Opp	Opp	Opp	Opp	Opp	Opp	Opp	Opp	Opp	Opp	Opp
Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire
Spotted	Spotted	Spotted	Spotted	Spotted	Spotted	Spotted	Spotted	Spotted	Spotted	Spotted	Spotted
Spotted	Spotted	Spotted	Spotted	Spotted	Spotted	Spotted	Spotted	Spotted	Spotted	Spotted	Spotted
Disperse	Disperse	Disperse	Disperse	Disperse	Disperse	Disperse	Disperse	Disperse	Disperse	Disperse	Disperse
Disperse	Disperse	Disperse	Disperse	Disperse	Disperse	Disperse	Disperse	Disperse	Disperse	Disperse	Disperse
Mine	Mine	Mine	Mine	Mine	Mine	Mine	Mine	Mine	Mine	Mine	Mine
2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1
Mine	Mine	Mine	Mine	Mine	Mine	Mine	Mine	Mine	Mine	Mine	Mine
2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1
Improved Position	Improved Position	Improved Position 1	Improved Position 1	Improved Position 1	Improved Position 1	Improved Position 1	Improved Position	Improved Position	Improved Position 1	Improved Position	Improved Position 1
Improved Position 2	Improved	Improved	Improved	Improved	Improved	Improved	Improved	Improved	Improved	Improved	Improved
	Position	Position	Position	Position	Position	Position	Position	Position	Position	Position	Position
	2	2	2	2	2	2	2	2	2	2	2
Interdict	Interdict	Interdict	Interdict	Interdict	Interdict	Interdict	Interdict	Interdict	Interdict	Interdict	Interdict
Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire	Fire
Block	Block	Block	Block	Block	Block	Block	Block	Block	Block	Block	Block
Block	Block	Block	Block	Block	Block	Block	Block	Block	Block	Block	Block
Smoke	Smoke	Smoke	Smoke	Smoke	Smoke	Smoke	Smoke	Smoke	Smoke	Smoke	Smoke
1	1	1	1	1	1	1	1	1	1	1	1
Smoke	Smoke	Smoke	Smoke	Smoke	Smoke	Smoke	Smoke	Smoke	Smoke	Smoke	Smoke
2	2	2	2	2	2	2	2	2	2	2	2

# Another Idea from the Mind Of

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