SQUAD COMBAT IN A DYSTOPIAN FUTURE



MOBILE ARMORED SHOCK SQUAD

MASS IMPACT

GAME DESIGN BY MIKE NAGEL

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MOBILE ARMORED SHOCK SQUAD

M.A.S.S IMPACT

1.0 Introduction

M.A.S.S IMPACT is a two-player game of combat between soldiers wearing powered armor that not only provides maximal levels of protection, but also an array of powerful weaponry. Although these soldiers provide a fearsome tip of an army's spear, they also form a powerful defense to hold the ground they have taken. The game is inspired by the classic ***Battlesuit*** game originally published in *Space Gamer Magazine* #59, designed by Steve Jackson.Rules marked with a star (★) symbol have been updated since the last updating of the rules.

2.0 Game Board

The game board is comprised of one or more individual map panels. Each panel is geomorphic so that larger play areas can be created by placing individual panels end-to-end or side-to-side. Each panel is printed with a variety of terrain types and a pattern of colored dots that is used to regulate the movement of soldiers on the map.

2.1 Map Points

In game terms, map points are the individual colored dots whose pattern overlays each map panel. Map points perform several duties. First, soldiers are placed on these dots and move from dot to one of six adjacent dots while expending their allotment of movement points each turn. Secondly, each dot is color coded to indicate the type of terrain into which a soldier moves as different terrain types have different costs in movement points. Finally, the dots are used to determine if any terrain intervenes between a soldier's current position and a target during combat as this terrain may affect the effectiveness of an attack. Each dot is identified by a grid ID derived from the map identification letter, row identification letter, and column identification number. For example, point A-H-11 is a woods map point. The half-dots along the edges of the map panels are the A or M row and the 01 or 35 column and can be referred to interchangeably, depending on the map panel in question (A-R-05 is the same at B-A-05 when the A and B maps are joined along the long edge). Half-dots along the edges of the map are in play and may be occupied by soldiers.

2.2 Meta-Hexes

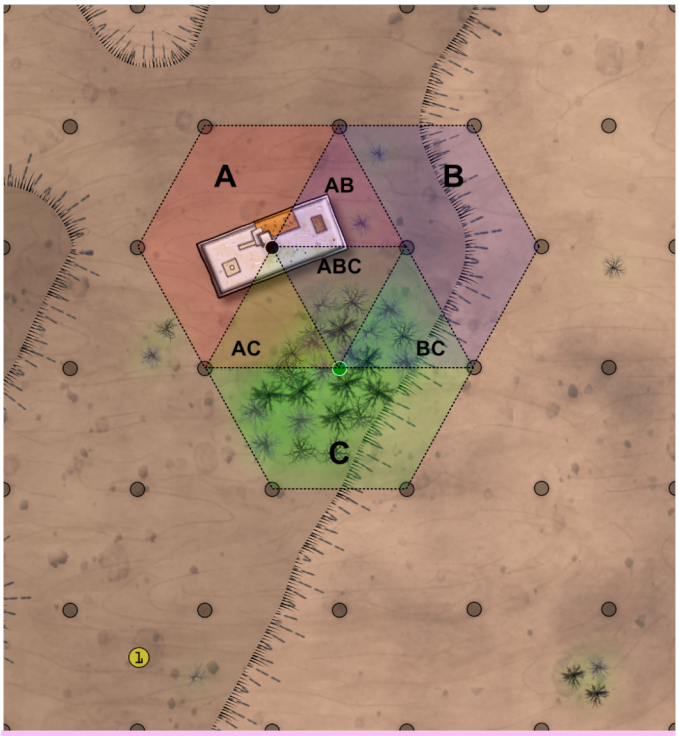
A map point and the six surrounding points constitute a "meta-hex" that encompasses the terrain within the area surrounding a map point. The map point at the center of a meta-hex indicates the type of terrain that fills it completely, even though the artwork on the map may not indicate this. Meta-hexes are used to simplify the determination of lines of sight (see 6.0) during combat.

2.3 Terrain

Each map panel is printed with a variety of terrain types. To avoid confusion, the type of terrain that encompasses a map point is noted by the map point's color. The different types of terrain with which a soldier may contend are as follows:

2.3.1 **Clear** – Clear terrain constitutes flat, open ground that is easy to traverse and provides no cover to a soldier occupying it. Clear terrain is marked by a transparent map point.

2.3.2 **Woods** – Woods terrain represents clumps of burned out, dead trees sufficiently dense as to block the ability to see through it. Woods terrain provides adequate protection against in-coming attacks, although unarmored soldiers are more



***Example**: The diagram above shows the interaction of three adjacent and overlapping meta-hexes. Hex A is a building hex, B is a clear hex and C is a woods hex. For the purposes of determining line of sight, the intersections AB contains buildings and BC contains woods. Intersections AC and ABC contains either building or woods, which ever has the greatest impact upon line of sight.*

vulnerable to explosive attacks due to flying splinters. Woods terrain is marked by a green map point. Woods terrain blocks line of sight (see below).

2.3.3 **Building** – Building terrain represents the remains of larger structures or strongpoints that might dot the battlefield. As these structures are constructed with steel and concrete, they provide good protection and block vision beyond them. Building terrain is marked by a black map point. Building terrain blocks line of sight (see below).

2.3.4 **Marsh** – Marsh terrain represents swampy, soggy ground that's difficult to traverse but which provides some protection due to tall grasses and the ability to absorb explosive impacts. Marsh terrain is marked by a light blue map point.

2.3.5 **Slag** – Slag terrain represents patches of burned out earth that is treated like clear terrain that is unfortunately radioactive. Slag may cause damage to any soldier who moves into it. Each scenario describes the glow of the slag that indicates how much damage is might cause. Slag terrain is marked with a red map point.

2.3.6 **Water** – Water terrain represents large pools or ponds and streams. Water may or may not be impassible, depending upon the scenario description. If water terrain is deemed impassible, it may only be crossed by soldiers on the ground by bridge. Water terrain is marked with a blue map point.

2.3.7 **Contours** – Contour terrain indicates an increase in elevation on the battlefield. Contours are not assigned map points, but always exist between them. Map points that are bound by a contiguous contour are all at the same higher elevation and constitute a hill mass. Hill masses may be bound by other hill masses, indicating continually rising terrain. Each hill mass is noted with an indication of its elevation in a small yellow badge.

***Note**: A higher level represented by contours is assumed to completely fill the map point's meta-hex. This means that, even though the contours may not follow the sides of a meta-hex, they are assumed to do so when determining line of sight. This rule also implies that contours that surround a lower level map point only extend to the edges of the lower map point's meta-hex. If there is a conflict caused by a shared intersection between two meta-hexes of different levels, the higher level affects line-of-sight.*

2.3.8 **Rubble** – The ruins of a previous structure are littered about the area. Rubble terrain may exist already on the battlefield, or may be the result of destroying building or bunker terrain. Rubble rises two levels, costs two movement points to enter or land within, and provides a -4 attack modifier when attacking units within rubble. Rubble is marked with a gray map point.

2.4 Elevation

One of the challenges in tactical games is to represent three-dimensional terrain in a two-dimensional space. This is done through the concept of elevation, which is managed in a fashion similar to a layer-cake. The lowest, or ground, level is Level 0. Crossing up a contour moves to Level 1, then to Level 2, and so on as contours are crossed upwards. Woods and Building terrain also have an elevation. Woods and Buildings both rise six levels (although special scenario rules may alter these levels). These terrain levels are cumulative with the level upon which they are resting. *For example, a building with an elevation of six that rests on a Level 2 hill mass rises eight levels.* Elevation is critical to movement and combat.

2.5 Compass

Each map includes a directional compass surrounding its identifier. This compass is used to determine random directions, where a die draw indicates the direction movement takes.

2.6 Scale

Each soldier unit represents an individual soldier. The distance between a map point and the adjacent six map points is 25 meters. The height of each elevation level is three meters. Each turn represents about sixty seconds of action.

3.0 Game Pieces

There are a large variety of playing pieces used while playing the game. These include armored and unarmored soldiers, armed and unarmed drones and status markers. Red pieces are used by the Red, while blue pieces are used by the Blue forces. These are all described below:

3.1 Armored Soldiers



These are the primary type of unit that is used on the map. What distinguishes armored soldier units from unarmored soldiers is an identification letter (A through T) on the base of each unit. These identifiers are used to track the status of each unit on the unit tracking cards (see below). There are a variety of armored soldiers:

3.1.1 **Front Line** – These soldiers are equipped with the most basic type of powered armor.

3.1.2 **Assault** – These soldiers are equipped with advanced combat systems and heavier armor.

3.1.3 **Command** – These squad leaders are equipped in a similar fashion as assault armored units, but are equipped with superior communication and defensive systems that allow them to guide units within their squad. Each side begins with one commander that is noted with two star icons. This is the side's squad leader. A scenario may stipulate that a side begins with two leaders, the second (with a single star designation) is the assistant squad leader. If a squad leader is killed, place his or her command marker two spaces ahead on the turn track. When that turn is reached, the assistant squad leader has taken over as the new squad leader.

3.1.4 **Ranger** – These soldiers are primarily charged as scouts and raiders with a lighter weapon load, but armor equipped with stealth technology and advanced movement thrusters.

3.1.5 **Dead-Eye** – These soldiers are similar to front line troops, but armed with a light pulse canon and superior optics.

3.1.6 **Thumper** – These soldiers are also similar to front line troops, but are armed with a heavy pulse canon.

3.1.7 **Sniper** – These soldiers are armed with heavy, single-shot pulse canon equipped with a superior targeting system. Snipers may not use rapid-fire, but have an extended attenuation modifier.

3.1.8 **Engineer** – These soldiers have the ability to perform both repair and demolition activities during the turn.

3.1.9 **Crusaders** – These soldiers tend to the spiritual needs of soldiers on the battlefield and provide support needed to keep them motivated.

3.1.10 **Jack-Knife** – These soldiers are specialists at hand-to-hand combat. They are heavily armored and deadly if they get adjacent to an enemy soldier.

3.2 Unarmored Soldiers

Unlike armored units, the status of unarmored soldiers are not tracked using unit cards, but one is provided for reference. Other than being unable to bounce, unarmored soldiers are treated in the same manner as armored soldiers. There are two types of unarmored soldiers:

3.2.1 **Police** – These are paramilitary units that are well armed and primarily used to defend installations. They have an attack value of four, a defensive value of zero, and a movement rate of two.



3.2.2 **Militia** – These are volunteers that are lightly armed and represent locals who have taken up arms against invaders (probably fruitlessly). They have an attack value of three, a defensive value of zero, and a movement rate of two.



3.3 Drones

These are small devices capable of remotely controlled flight. They may be armed or unarmed. There are five types of drones. All drones allow indirect fire, but each may only perform its distinct task.



3.3.1 **Recon** – These drones are typically used to paint targets. They have an attack value of zero, a defense value of zero, and a movement value of eight. Recon drones may paint targets, but may not attack.

3.3.2 **Attack** – These drones are armed with a weapons package. They have an attack value of six, a defense value of zero, and a movement value of eight. Attack drones may attack, but may not paint targets.

3.3.3 **Bomb** – These drones are armed with a single mini-nuke. They have an attack value of zero (but see below for the effects of dropping their payload), a defense value of zero, and a movement value of eight. Bomb drones may attack (in their fashion), but may not paint targets.

3.3.4 **ECM** – These drones are armed with an electronic countermeasures kit that suppresses enemy communications and control. ECM drones may not paint targets.

3.3.5 **Sentry** – These are heavily armed, but immobile drones that are placed as defensive measures. Sentry drones may not paint targets, but their attack strength is not reduced for rapid fire.

3.4 Complete Markers

These markers are used to indicate soldiers that have completed their actions for the turn. Remove them at the end of the turn. The number value is used to track stealth effects when in use.

3.5 Shock/Panic Markers

These red and black markers are used to indicate a soldier that is in shock or has panicked and become a hazard not only to the enemy, but to friendly units as well.

3.6 Bunkers/Improved Position Markers

These markers indicate the existence of a bunker at the specified point. A bunker acts like a building in most ways except that it does not block line of sight (see below). An improved position is a temporary structure than provides some modest additional protection.

3.7 Painted Markers

These markers are used to indicate a target that has been painted with a targeting laser that provides an attack bonus. This bonus is typically +3, but snipers that paint targets create a +4 bonus.

3.8 Active Command Marker

Use this marker on the turn track to note available points resulting from active command as well as the status of commanders.

3.9 Control Marker

These markers are used to indicate map points that are controlled by one side.

3.10 Turn Marker

Use this marker to note the current turn on the Turn Track. Flip the marker to reveal the color of the side that holds the initiative for the current turn, as needed.

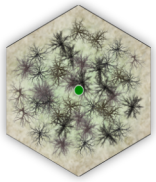
3.11 Victory Points

These markers are used on the Turn Track to indicate the number of victory points a player has earned during the game.

3.12 Mines

These markers indicate the potential existence of a mine within a meta hex. Place the mines on their hidden side during setup and reveal them when a soldier enters their meta hex. The reverse of these markers reveals either a dummy, explosion, or nuclear effect.

3.13 Terrain Tiles



Special hexagonal tiles are provided to modify terrain printed on the map. These may be placed as part of a scenario's setup, or may be placed during play when rubble or slag might be created.

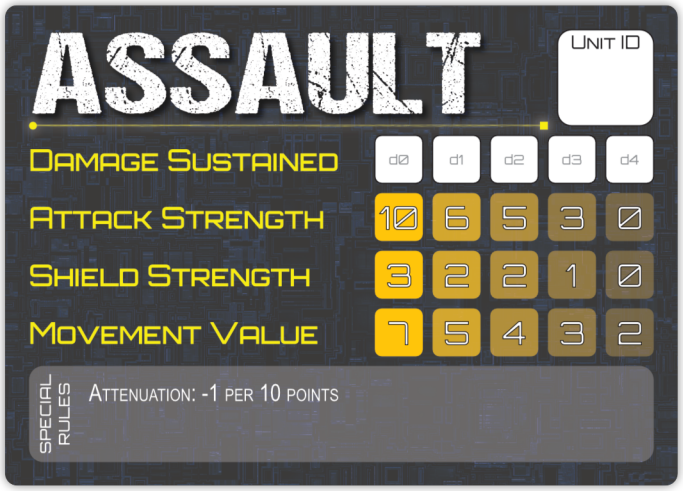
3.14 Elevation Tiles



Use these tiles to indicate the elevation of a soldier that is airborne. When a soldier is higher than +6 levels, add another elevation marker on its +6 side and sum the two elevation tile values to note the soldier's elevation.

4.0 Soldier Tracking Cards

Each armored soldier is provided a card to keep track of his or her status during the course of the battle. Each card indicates the type of soldier and includes a table indicating the soldier's attributes as they relate to the soldier's current damage state. There is also a section indicating any special rules to which the soldier must adhere. The status of these cards should remain hidden from an opponent until a unit moves, attacks, is attacked, rallies, or



MARKER EXAMPLES



Complete



Shock



Panic



Bunker



Improved Position



Painted



Active Command


Control



Turn



Victory Points


Mine



Nuclear Mine



Explosive Mine



Dummy Mine

must otherwise prove the soldiers status. Slide these cards into sleeves and use a dry-erase marker (included with the game) or grease pencil to note a soldier's damage status.

4.1 Unit ID

The upper right corner of each card includes a blank box where a soldier's identifier can be noted with a grease pencil or dry-erase marker.

4.2 Soldier Status

There are four rows of boxes used to track the status of a soldier's abilities as the soldier takes damage in combat. The four tracks are as follows:

4.2.1 **Damage Sustained** – These five white boxes are lightly printed with a soldier's current damage level (d0 through d4). For each hit taken in combat, use a grease pencil or dry-erase marker to cross off the boxes from left to right. The column of colored boxes beneath the first unchecked box indicates the soldier's current status levels. When the last box is marked off, the soldier is "down" and unresponsive, but can still be repaired. A soldier that takes a hit, but has no boxes to check off is eliminated.

4.2.2 **Attack Strength** – The number in these boxes indicate a soldier's current attack strength. This value is used to determine the outcome of combat.

4.2.3 **Shield Strength** – The number in these boxes indicate the current level of protection provided by a soldier's armor and other defensive equipment.

4.2.4 **Movement Value** – The number in these boxes indicate the number of movement points a soldier has to spend during the current turn.

4.3 Special Rules

The shaded area at the bottom of the card summarized any special rules that a player must take into account when activating the soldier for movement, combat, or other activity.

4.4 Unit Notes

The reverse of a soldier's card includes a space where notes considering the soldier may be jotted down with a grease pencil or dry-erase marker.

4.5 Soldier Card Querying

Soldier cards may not be examined, except to prove a game action (combat, rally, etc.). However, a card may be examined prior to combat by Dead-Eye, Ranger, and Sniper units prior to selecting a target. Ranger and Dead-Eye units may do this once per activation without forcing an attack upon the examined unit. Snipers may query every enemy soldier within the unit's line of sight (see 6.0) prior to selecting a target.

4.6 Other Unit Types

Other unit types also have tracking cards, but they may be used a little differently.

4.6.1 **Unarmored Soldiers** – There is a single card used with unarmored soldiers. As these soldiers are eliminated upon sustaining a single hit, damage does not need to be tracked for them. Instead, their card simply displays the status values for each unarmored soldier type (Police and Militia).

4.6.2 **Drones** – A single status card is provided for each of five drone types. As drones are also destroyed upon receiving a single hit, damage does not need to be tracked for drones. Instead, the card provides four spaces to note the identification number of each drone of the type listed by the card. A force may include up to four drones of a single type (no more than nine drones, total).

5.0 Action Cards

A deck of seventy-two action cards is provided to determine the outcome of randomly determined events during play. These include the results of combat, drawing random "die" results, and the resolution of random events. The manner in which these cards are used is described in the rules governing their use within each situation.

5.1 Attack Result Determination

The two columns of values on the left side of an action card are used to determine the result of combat. The first column indicates the strength of an attack, while the second column indicates its outcome.

5.2 Random Location

When an event requires the determination of a random location on the map, two cards are drawn. The first determines the alpha value of a map row, while the second determines the map column. There are several cards that note a "thumbs-up" or "thumbs-down" icon in lieu of a number value. In these cases, the former indicates that the drawing player may choose any numeric value (between 01 and 34), while the latter provides the other player this choice.

5.3 Die Results

Each card provides a random die result value. The left die icon is used to determine a 'd6' (six-sided die) result, while the right icon is used to determine a 'd12' (twelve-sided die) result.

5.4 Event Icon

Twelve of the action cards are noted with an event icon. When one of these cards is drawn at the end of a turn, a random event occurs. Additionally, the action deck is reshuffled when one of these cards is drawn.

ACTION CARD EXAMPLE



5.5 Random Event Text

If a card is drawn at the end of a turn that includes the event icon, a random event occurs. The player draws another action card and resolves the event text noted on that card.

5.6 Card ID

At the lower-left of each card is the numeric value of the each card.

6.0 Line of Sight

In order to attack an enemy unit, a soldier must be able to see the target. The concept is referred to as "Line of Sight" (LOS). LOS may be blocked by intervening terrain that rises to a height that is higher than either or both the attacking soldier and the target, according to the following strictures:

6.1 Determination

LOS is determined by drawing an imaginary line from the attacker's map point to the defender's map point. If the LOS crosses a meta-hex that encompasses blocking terrain, LOS may be blocked. Players are encouraged to use a thread or stretched rubber band to determine the path of LOS. In situations where LOS crosses directly between two meta-hexes, LOS is blocked if terrain exists along both sides of LOS.

6.2 Equal or Lower than Both

If the height of the intervening terrain rises to a level that is equal to or lower than both the attacking soldier and the target, LOS is not blocked.

6.3 Higher than Both

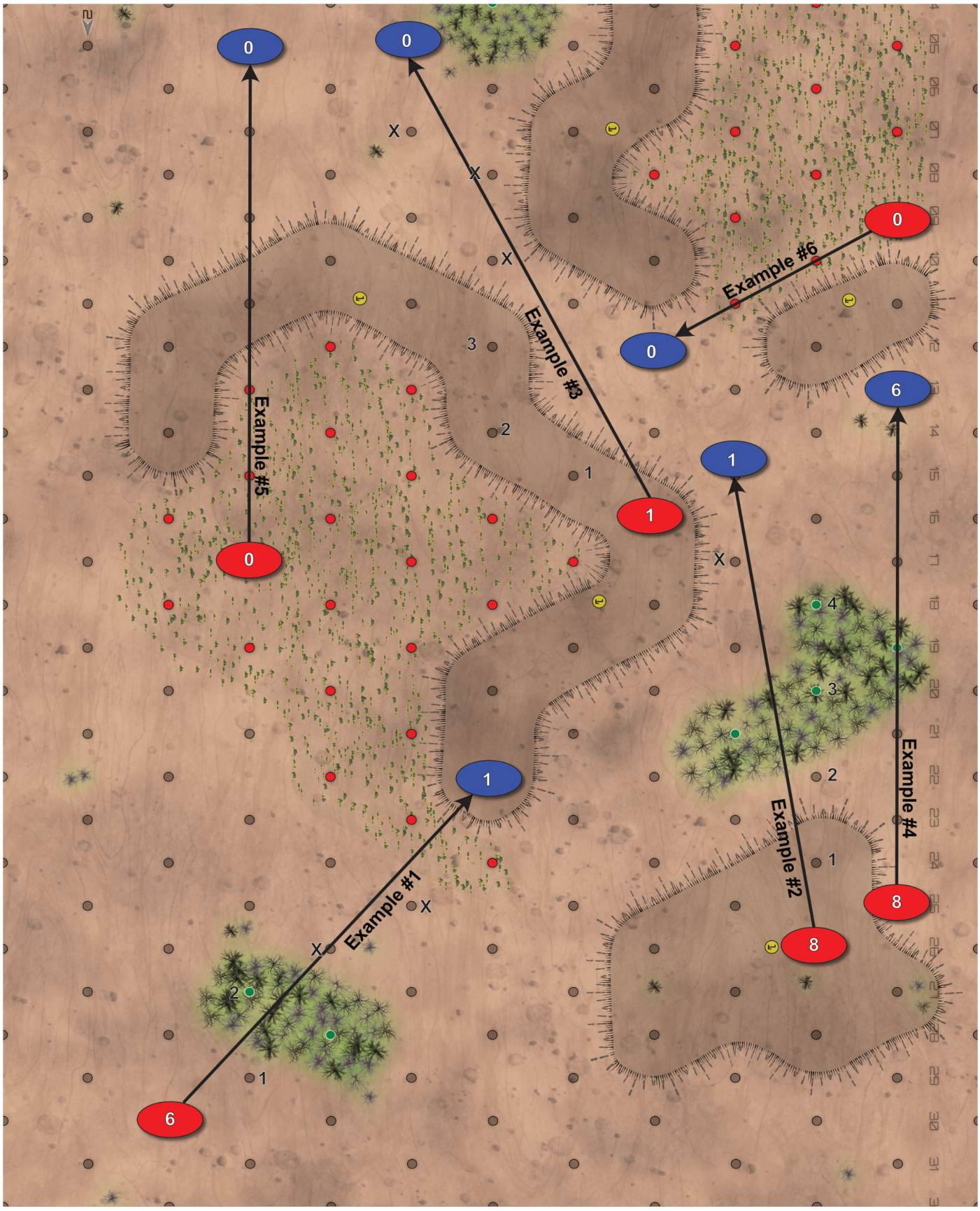
If the height of the intervening terrain rises to a level that is higher than both the attacking soldier and the target, LOS is blocked.

6.4 Equal to Higher Soldier

If the height of the intervening terrain rises to a level that is equal to the higher of the two soldiers, LOS may be blocked. Count the number of map points between the higher soldier and the center map point of the terrain's meta-hex or the last map point before crossing a contour at the same level as the higher unit. The count of map points is the number of blind map points distant that extend beyond the blocking map point to which the meta-hex would block LOS.

***Example**: A soldier hovers at level six, with a woods map point (level six) that is five map points distant. Any map point with a LOS that passes through the blocking meta-hex and that is five points or less away from the woods map point are blind and cannot be directly attacked. Any map points beyond five are visible.*

COMPREHENSIVE LINE OF SIGHT EXAMPLE



6.5 Higher than One

If the higher of the soldiers is above the blocking terrain, blind hexes are created as in 6.4. However, for each level that the soldier is above the level of the blocking terrain, deduct the number of blind map points by one to a minimum of one blind point (soldiers may always hide in the shadow adjacent to blocking terrain), rounding any final fraction normally.

***Example**: A Red unit at Level 8 wants to fire at enemy units beyond a Woods (Level 6) point that is seven points away. If the Red unit were at Level 6 (the same as the Woods), seven blind map points would extend beyond the Wooded map point. Since the Red unit is two levels higher than the woods, the number of blind map points is reduced to two (seven to three-and-a-half for the first level and to one-and-three-quarters for the second level, rounding up), so any unit beyond those two blind points could be targeted.*

6.6 Lower Soldier Height

The two latter situations (6.4 and 6.5) assume the lower soldier is at level zero, relative to the height of the blocking obstacle. If this is not the case, reduce the number of blind map points by one for each level the lower unit is above ground level.

***Note**: Determining LOS is the trickiest part of play. In the last instance (6.5), it may be easier to subtract the level of the lower unit from the levels of the attacker, defender, and intervening terrain before calculating the blind spots.*

6.7 Reciprocity

It is always true that if an attacking unit can see a target, the target can also see the attacking unit.

6.8 Blocking Terrain

Terrain that blocks LOS includes Buildings, Woods, and Contours. Contour meta-hexes only block LOS when the LOS crosses through the meta-hex and not along an edge.

6.9 Overlapping Meta-Hexes

There will be many, many instances where LOS is drawn through two overlapping meta-hexes. When this occurs, LOS is affected by the meta-hex with the greatest blocking effects (blocking terrain, higher levels, etc.).

Line of Sight Examples

In the diagram nearby are several examples of how to determine LOS based on soldier positioning and the existence of blocking terrain.

***Example #1** – The red soldier is at level six, while the blue soldier is at level one. The blocking woods terrain rises to level six. Since the red unit is at the same level as the blocking terrain, a number of blind points (X) are created equal to the distance to the furthest blocked point (two). Therefore, a unit more than two points beyond the last blocking point are visible. Soldiers within the blind points and lower than the terrain height cannot be seen.*

***Example #2** – The red soldier is at level eight, while the blue soldier is at level one. The furthest blocking terrain is four points away, and so four blind points are created beyond that furthest blocked point. However, since the red soldier is two levels higher than the blocking terrain and the blue soldier is one point off the ground, the number of blind points is reduced by three. Therefore, only one blind point is created beyond the blocking point.*

***Example #3** – The red soldier is at level one, while the blue soldier is at level zero. The furthest blocking terrain is three points away from the red soldier (the crest). Therefore, three blind points are created beyond that last point.*

***Example #4** – The red soldier is at level eight, while the blue soldier is at level six. Since both soldiers are at or higher than the level of the blocking terrain, LOS is not blocked and both soldiers can see each other without hinderance.*

***Example #5** – Both the red and blue soldiers are at level zero, while the intervening terrain rises to level one. Since both soldiers are lower than the intervening terrain, neither can see the other.*

***Example #6** – Both the red and blue soldiers are at level zero, with a line of sight between two level one contours. The soldiers can see each other as LOS drawn directly along the edge of a contour meta-hex does not block LOS. If either soldier were one point to the left or right, causing the LOS to cross through the contour meta-hex, LOS would be blocked.*

***Example #7** – The diagram below indicates the interplay between two overlaying meta-hexes at different levels. Meta-hex A is at Level 1, while meta-hex B is at Level 0. The contour within the shared area is assumed to extend to the hex sides 1-3-4 for hex A, and 1-2-4 for hex B. Depending upon where a LOS is drawn dictates which meta-hex impacts it. Since the LOS from points 5 to 6 crosses along the contour from points 3 to 4, LOS is not blocked. The LOS from points 7 to 8 is blocked as the LOS does not cross along a side of the meta-hex.*

7.0 Sequence of Play

Each game turn is played in a series of alternating impulses in which players activate one (or possibly more than one) soldier. Soldiers must be activated in a specific sequence, depending upon their status at the beginning of a turn.

7.1 Initiative

Prior to activating any soldiers, each player must draw a d6 die result. The player with the higher result wins the initiative for the turn. In case of ties, the player with more

good order soldiers wins the initiative. If both players have the same number of good order soldiers, the player who held the initiative during the previous turn retains it (on the first turn, draw again). The player holding the initiative has the option to activate a soldier first or second during that turn.

7.2 Shocked Soldiers

A player with inactivated, shocked soldiers must activate one of these soldiers. All shocked soldiers must be activated in sequence, before any other soldiers are activated. Note that an inactive soldier may become shocked during the course of a turn, and must be activated prior to any panicked or good order soldiers. A shocked soldier makes a morale check by drawing a d12 result and comparing the result to the following table:

0-2 **Panic** – Flip the shock marker over to its panic side. The soldier will have to check for panic status later in the turn.

3-6 **Stunned** – The soldier remains in shocked status and can do nothing this turn. Place a completed marker on the soldier.

7-8 **Shocked** – The soldier recovers from shock (remove the shock marker), but is still a little shaky. The soldier may move normally and/or fire with a -2 combat penalty (in addition to other modifiers). The soldier may not target an enemy unit, nor may the soldier benefit from targeting.

9-12 **Recovery** – Remove the shock marker. The soldier may move and/or fire normally.

7.3 Panicked Soldiers

Once all soldiers that started in shocked status have been activated, soldiers in panicked status must be activated (including those that panicked during their shocked morale check. A panicked *armored* soldier makes a morale check by drawing a d12 result and comparing it to the following table:

0-2 **Berserk** – Draw a d6 result. If the result is even, the soldier jumps up six levels. If the result is odd, draw a second d6 result. Move the soldier as far as possible in the direction specified by the second die result. At the end of this movement, if the soldier has not been shocked or killed by reaction fire, the soldier fires upon the closest visible soldier (enemy or friendly). If two or more are equally close, the one that is most likely to be hit is attacked. If a target can still not be specifically targeted, draw a die to determine the target among those closest. Place a completed marker on the soldier. If the soldier moves off-map, the soldier is eliminated unless such movement is legal per special scenario rule (SSR).

3-4 **Paranoia** – The soldier immediately fires upon the closest visible soldier (enemy or friendly). If two or more are equally close, the one that is most likely to be hit is attacked. If a target can still not be specifically targeted, draw a die to determine the target among those closest. The soldier may not move. Place a completed marker on the soldier.

5-6 **Fright** – The soldier moves directly toward the nearest, best cover. The soldier does not move if already in cover. If more than one equally protective point is equally distant, the owning player determine where the soldier moves. The soldier may not attack. Place a completed marker on the soldier.

7 **Self-Destruct** – The soldier makes a fatal error with suit controls. Remove the unit.

8-10 **Shock** – The soldier freezes again. Flip the panic marker over to its shock side. The soldier may do nothing during the turn. Place a completed marker on the soldier.

11-12 **Recovery** – Remove the panic marker. The soldier may move and fire normally.

A panicked *unarmored* soldier makes a morale check by drawing a d12 result and comparing it to the following table:

0-2 **Berserk** – Draw a d6 result and move the soldier in the direction indicated on the movement gauge as far as possible. The soldier then fires upon the nearest visible soldier, be it friendly or enemy. If there is a choice, the soldier fires upon the target most likely to be hit. If there is still a choice, draw a d6 result to randomly select the target.

3-4 **Run Like Hell** – The soldier moves a six map points toward a friendly map edge, regardless of the cost to enter those points. Each point entered must be closer to the friendly map edge. If the soldier exits from the map, he or she is considered eliminated.

5-6 **Fright** – The soldier moves directly toward the nearest, best cover. The soldier does not move if already in cover. If more than one equally protective point is equally distant, the owning player determine where the soldier moves. The soldier may not attack. Place a completed marker on the soldier.

7-10 **Shock** – The soldier freezes again. Flip the panic marker over to its shock side. The soldier may land if airborne, but may do nothing else during the turn. Place a completed marker on the soldier.

11-12 **Recovery** – Remove the panic marker. The soldier may move and fire normally.

7.4 Commander Disabled

If a side's squad leader is in shock, panic, or has been eliminated, deduct one from all morale die draws. This penalty is in effect until the squad leader has recovered or has been replaced by an assistant squad leader. If a side has no commanders, the penalty is applied permanently. Commanders themselves are not impacted by this penalty.

7.5 Good Order Soldiers

Once all shocked and panicked soldiers have been activated, a player may activate good order soldiers to move and/or fire normally.

7.6 Command Interruption

A player may override a shocked or panicked soldier's morale check to activate a command unit. The command unit can take an action or perform "active command" (see below).

7.7 Actions

When a soldier is activated, it may (depending upon morale check results) take one of these actions: Move, Assault (move and fire), Stationary Fire, Rapid Fire (fire twice), Targeted Fire (paint and fire), Repair, or Pass. Each action is described in detail below. Following the completion of an action, mark the soldier with a completed marker to show that the soldier may not be reactivated during the turn.

7.8 Soldier Down

If a soldier has had all of his or her damage boxes crossed off (having taken five hits), the soldier is considered "down" and is unresponsive. A down soldier removes any shocked or panic status and may not be activated. A down soldier may take no action until repaired by an Engineer or Crusader. A down soldier may not repair him or herself. A down commander cannot provide any command benefits. A down soldier that takes an additional hit is eliminated.

7.9 Random Event Check

After all soldiers have been activated, the player holding the initiative must reveal the top card from the action deck and check for the existence of an event icon trigger (noted above the two die draw icons). If the icon is present, immediately reshuffle the action deck. The initiative holder then draws a card from the reshuffled action deck and resolves the event text indicated on the card.

8.0 Movement Action

Each turn, a soldier receives an allotment of movement points (MP) as noted on their tracking card. Any number of these points may be expended during a turn, but any unspent movement points cannot be carried over or held for future turns. When movement is completed, mark the soldier with a completed marker.

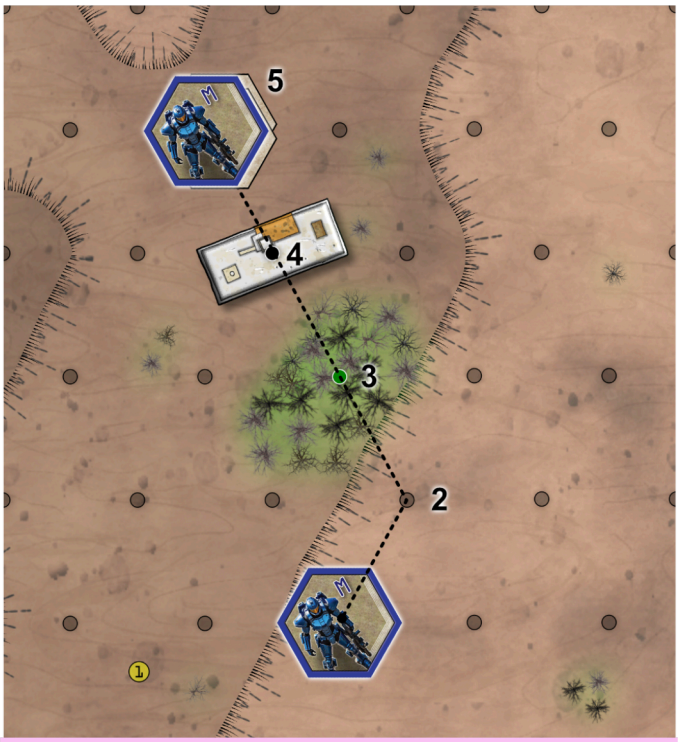
8.1 Map Points

A soldier must always be placed on a map point. The color of the map point stipulates the type of terrain occupied by the soldier. Moving onto a map point costs a specific number of MP. The Terrain Effects Chart (TEC) indicates the cost to move onto each terrain type. A soldier moves from its current map point to one of the six adjacent map points, reducing the allotment of MP as the soldier does so. If a soldier does not have sufficient MP to pay the cost of entering a map point, the soldier may not do so. However, a soldier may always move to a single adjacent movement point, regardless of cost, so long as the terrain type is not prohibited (such as water).

8.2 Bouncing

Each armored soldier is equipped with thrusters to propel him or her into the air. Bouncing allows a soldier to move more efficiently over terrain as well as get a clear LOS to enemy targets that are obscured by terrain.

8.2.1 **Low Altitude** – A soldier may bounce up to six levels to a low-altitude position at no cost. The declaration is simply made as the soldier is moved. For example, a soldier could change their height to Level 2 or Level 6, as desired. A soldier must bounce to a level at least one level higher than the ground level below.



***Example**: In the example above the soldier has five movement points to expend. In the first point entered, the soldier expends one movement point and then one more to bounce up to level +7. Now higher than the trees, one movement point is expended to advance over the woods and another to advance over the building. The soldier expends one final point to advance to the next map point.*



8.2.2 **High Altitude** – A soldier may bounce from a low-altitude position up to another six levels to a high-altitude position at the cost of one movement point (for example, a soldier could expend one movement point to bounce straight up to Level 12). A soldier may not bounce higher than Level 12.

8.2.3 **Mid-Air Bounce** – As noted, a soldier may bounce a maximum of six levels at no cost. If a soldier is less than six levels from the ground, a second bounce would move the soldier up to six levels plus whatever level the soldier currently occupies. For example, a soldier at Level 2 could bounce up to Level 8, and would have to expend an additional MP to move higher than that.

8.2.4 **Horizontal Bounce** – Once airborne, a soldier that occupies a level equal to or higher than terrain may move over that terrain as if it were clear terrain (essentially, the soldier is moving on top of the terrain, rather than through it).

8.2.5 **Relative Height** – A soldier bounces at a fixed level. Moving over a contour does not increase a soldier's height (the thrusters work against the force of gravity and cannot lift a soldier more than twelve levels, regardless of the terrain beneath). If a bouncing soldier enters a point that is equal to the soldier's current level, the soldier is assume to have "landed" on that point and is now walking.

8.2.6 **Sustained Bounce** – A soldier that bounces remains in the air for the duration of the turn. A soldier may either bounce or land during a turn, not both, unless the soldier moves to a map point at a level equal to their currently occupied height. An airborne soldier must either land or bounce again to maintain (or increase) altitude at a cost of one MP. Note that airborne soldiers can decrease their level as desired, so long as terrain does not interfere, or increase their height by up to six levels (to a maximum of twelve).

8.2.7 **Landing** – A bouncing soldier may land on any turn following the turn on which the bounce occurred. A soldier may not land on the same turn as the bounce, unless moving onto a map point at the same level as the bouncing soldier or being forced to crash land (see below) as a result of combat. Landing generally costs no MP, but landing on a woods or building map point costs two MP. A soldier may land in woods or building at no cost, but this constitutes a crash landing.

8.2.8 **Crash Landing** – If a soldier is forced to land as a result of combat or opts to avoid paying MP to land safely, the soldier crash lands and may take damage as a result. Draw a d6 result and decrease that value by the number of MP not spent to land safely (noting that an inactive soldier still maintains his or her full complement of MP, while an activated soldier has none). If the result is lower than the soldier's current damage level (zero if undamaged) the soldier sustains a point of damage (in addition to any sustained as a result of combat). For example, a soldier at D3 attempting an uncontrolled landing into woods terrain sustains another point of damage if he or she draws a five or less.

8.2.9 **Representing Height** – To represent the level to which a soldier has bounced, place one or two level marker beneath the soldiers. If the soldier is at low altitude (levels 1 to 6), place a single level marker indicating the soldier's level. If the soldier is at high altitude (Levels 7+), place two markers, with one of them at +6 (the sum of the two level markers indicates the soldier's level.

8.2.10 **Boosting** – When a soldier initially bounces to an airborne position, the soldier may optionally gain an additional movement point. However, if this point is used, the soldier suffers a -1 penalty to attack strength.

8.3 Stacking

Only one soldier may occupy a map point, even if the soldier is airborne. A soldier may move through a point that is occupied by another soldier, as long as the moving soldier has sufficient MP to exit the occupied point to an adjacent point. If a moving soldier is forced to stop on an occupied map point, the soldier retreats to the point just occupied.

***Coup-de-gras Exception**: a non-airborne soldier may enter and halt on a map point occupied by an enemy down soldier. Doing so eliminates the down soldier.*

***Note**: The reason that soldiers may not occupy the same map point is mostly to ease game play. However, it's easy to assume that a stationary soldier beneath another soldier is subject the the jet thrust of the soldier above, which would be damaging. Similarly, a soldier stationary above an enemy would make his or her heat signature vulnerable to a missile strike from below.*

8.4 Entering and Exiting the Map

It costs a soldier a single movement point to enter or exit the map.

8.5 Reaction Fire

For each map point entered by a moving soldier, an inactive, non-airborne enemy soldier within LOS of that point has the opportunity to fire upon the moving soldier. For this reason, an active player should pause momentarily as a soldier moves from point to point to allow the opposing player to opt for reaction fire. A second or two is all the time that should be allowed for the decision to be made. The opposing player may not take the time to determine LOS, range, etc. prior to making the decision to employ reaction fire.

8.6 Reinforcement

When units begin a scenario off-map, they are considered under command during the turn on which they enter (as if a command unit were already present on-map). An off-map command unit may not provide any benefit until the soldier is moved onto the map.

9.0 Fire Action

This rules section describes how weapons are fired and enemy units shocked, panicked, or eliminated. A soldier may fire while moving (assault fire) at a cost of one MP. This expenditure is functionally equivalent to moving to an adjacent map point (i.e. the soldier is subject to reaction fire before or following his or her own attack). A soldier that does not move at all during a turn may fire twice (rapid fire), either at the same or different targets. Also, in lieu of movement, a soldier may paint an enemy soldier in order to increase the strength of their own and other attacks on that enemy unit. A soldier may target an enemy soldier and then fire at that same soldier. (targeted fire). Reaction fire also follows this same process.

9.1 Attack Strength

Each soldier's tracking card is noted with an attack strength. This value represents both the power and accuracy of the soldier's weapon. A soldier with an attack strength of zero cannot attack at all as the soldier has been disarmed.

9.2 Shield Strength

Each soldier's tracking card is noted with a shield strength. This value represents a soldier's armor durability, as well as the effectiveness of an available Electronic Countermeasure (ECM) package (the ability to "spoof" attackers).

9.3 Attack Limits

Only one soldier may attack at a time. Soldiers may not sum their attack strengths. Only one defender may be attacked at a time, although "spillover fire" onto a unit on a map point adjacent to the target or on the target's map point if the target is moving through another unit is possible.

9.4 Attack Resolution

Once a soldier declares an attack, resolve the attack through the following sequence:

9.4.1 **Determine LOS** – Ensure that the attacking soldier has a LOS to the target. If not, the attacking soldier is employing "indirect fire."

9.4.2 **Determine Attack Strength** – Read the soldier's current attack strength and modify the value as indicated below.

+3	if the defending soldier is being targeted (see below)
-?	the defending soldier's defense strength
-2	if the attacker is using reaction fire (see below)
-1	if the defender is at a higher level, but not airborne, and within LOS
+1	if the defender is below the attacker
-7	if the defender occupies a bunker
-5	if the defender occupies a building
-3	if the defender occupies woods
-1	if the defender occupies marsh
-2	if the attacker is shocked after a morale check
-5	if the attacker is using indirect fire

-5 if a spillover attack

-1 if the attacker is using rapid fire

-2 if the attacker is using assault fire

-2 if the attacker is using targeted fire

-1 for each full set of map points the defender is distant from the attacker, per the soldier's attenuation modifier.

-1 if the attacker is out of command

-? two times a stealth marker's value if target is under stealth.

+1 if the defender is on an adjacent point.

-1 if attacker boosted

9.4.3 ★**Determine Result** – The attacker *draws a card*, notes the value next to the attacker's modified strength to determine the result of the attack. More than one result type is possible. Results are:

- No Effect

S The defending soldier is shocked (place a shocked marker under the defending unit). If airborne, the soldier immediately lands. If the soldier does not have sufficient MP to land safely, the soldier crash lands. If the soldier has sufficient MP, the soldier may move an additional map point.

E The defending soldier is eliminated.

1 If the target is armored, mark the next unchecked box on the soldier's tracking card. If unable to check a box off, the target is eliminated. If the target is unarmored or a drone, the unit is eliminated.

2 If the target is armored, mark the next two unchecked box on the soldier's tracking card. If unable to check off one of these boxes, the target is eliminated. If the target is unarmored or a drone, the unit is eliminated. If the target is unarmored, the unit is eliminated.

3 If the target is armored, mark the next two unchecked box on the soldier's tracking card. If unable to check off one of these boxes, the target is eliminated. If the target is unarmored or a drone, the unit is eliminated. If the target is unarmored, the unit is eliminated.

9.4.4 **Apply Result** – Apply the results (if any) to the defending soldier.

9.4.5 **Overkill** – If the strength of the attack is greater than 10, make a second draw using a strength equal to the amount greater than 10. Apply only damage results (1, 2, or 3), treating any other result as no effect.

9.5 Painting

Rather than firing upon an enemy unit, a soldier may "paint" it with targeting lasers, thereby making the enemy unit easier to hit. To paint a target, the target must be within the LOS of an active soldier that has not moved. The active soldier may not move when painting a target. When attacking a painted target, apply a +3 bonus to the firing soldier's attack strength. A soldier that paints a target may only fire upon that painted target. Painting a target does not trigger reaction fire. The effects of being painted follow the painted soldier if the soldier moves during the turn (even if out of the LOS of the originating soldier). Place a painted marker on the painted soldier and remove the marker at the end of the turn.

9.6 Reaction Fire

Immediately after a soldier has moved to an adjacent map point, the enemy player may declare reaction fire from an inactive soldier that is within the moving soldier's LOS. This declaration must be made within a second or two following the movement of the potential target and prior to checking to see if LOS actually exists or the range to the target. If, following the reaction fire declaration, the target is deemed out of LOS or too far away for the attack to be effective, the reacting soldier is treated as if he or she had fired anyway and marked accordingly. The reaction fire process is completed in the same manner as a normal fire attack, but with a -2 penalty to attack strength (among any other modifiers).

9.7 Indirect Fire

A soldier may attack an enemy unit that is not within the soldier's LOS, so long as the target is within any friendly soldier's LOS (and preferably painted). This is referred to as indirect fire and carries a -5 penalty to attack strength.

9.8 Rapid Fire

A soldier that does not move at all during its activation may fire twice (either at the same or different targets). Each attack carries a -1 penalty to attack strength. A soldier may use one of these attacks to paint a target that is subsequently fired upon with the second attack. When firing at a second target, that target may be no further than a number of map points from the first target equal to the unmodified die draw result determined during the first attack.

9.9 Spillover Fire

When firing at a soldier, there is a chance that the effects of that attack spillover into adjacent map points as well as any units sharing the target's map point if the target is moving through another soldier's location. For each addi-

tional soldier on the target's map point or on an adjacent point, complete a new attack, but reduce the strength of the attack by five if the original target is within the LOS of the attacking unit (i.e. not an indirect attack). Spillover fire is agnostic and affects friendly and enemy soldiers alike.

10.0 Repair Action

A good-order soldier that is damaged and not airborne may spend his or her entire turn attempting to repair the damage sustained. This is accomplished by drawing a d6 result. If the result is greater than the soldier's current damage level, reduce that level by one step (moving the damage marker one space to the left and flipping it over if necessary).

11.0 Passing

Rather than activate a unit, a player may pass and do nothing. If both players pass in sequence, the turn is over and play proceeds to the random event check. If one side has activated all of its soldiers, the remaining side may activate its soldiers one at a time until all have been activated or a pass is declared.



12.0 Special Soldier Abilities

A few soldier types have special abilities that require detailed elaboration.

12.1 Commanders

In addition to keeping other soldiers in command (thus avoiding penalties when making morale checks for shock and panic), commanders have other special abilities.

12.1.1 **Action Override** – Instead of activating a shocked or panicked unit, a command unit may be activated to take an action (move, fire, repair), instead. Once this action is completed, the player must next select a shocked or panicked unit, normally.

12.1.2 **Active Command** – In lieu of taking a standard actions, a command unit may be activated to provide morale benefits to shocked and panicked units as well as to allow multiple soldiers that are in command to activate in sequence, before the opposing player can activate a unit. Upon activating the command unit, the player draws a d6 result and places the commander's Active Command marker on the Turn Track box equal to the result. This draw provides a pool of points that the player may use to modify morale draws or activate soldiers out of sequence. When points are spent, move the marker down the track to show the reduction in points available. Any unspent points are lost at the end of the turn. The command unit may not move, fire, or repair when using active command and is marked as complete after determining the command point pool.

12.1.2.1 **Morale Modification** – When a shocked or panicked soldier makes a morale check, the player may expend one or more active command points to provide a +1 die draw modification per point spent. These points must be spent before the die is drawn.

12.1.2.2 **Group Activation** – After a solider has been activated, a player may spend an active command point to activate another soldier. After spending the point and selecting the soldier, draw a d12 result. Add the selected soldier's current damage level to the result. If the result is greater than a 9, the soldier is marked complete and does nothing that turn. Otherwise, the soldier may complete the activation normally. If the player intends on activating more than one soldier at a time, all soldiers must be selected before any status checks are made. The selected soldiers' activations may be completed in any order.

***Example**: Rather than activate a shocked soldier, a player activates a command unit for active command. The player draws a five and places the active command marker on the five box on the turn track. The player marks the commander complete. When the player makes a morale check for the aforementioned shocked unit, the player spends two active command points to add +2 to the morale check result. After resolving an activation, the player declares that two more soldiers will be activated as well and two more active command points are spent. A die draw is made for each soldier. The first soldier has a damage level of 0 and draws a 10. This result fails and the soldier is marked complete without being able to take an action. The second soldier, with a damage level of 3, draws a 6 (which is modified to a 9). This barely passes, but the soldier may complete an action.*

12.2 Sniper

A sniper may only fire once per turn, may not move when firing, and may not fire when airborne. A sniper equipped soldier may move, paint, and repair normally. A sniper gains a +4 bonus when painting a target, but the soldier may not fire upon the painted target. Snipers reduce their attack strength for every increment of fifteen points that the target is distant (rather than ten). A sniper receives a -2 attack strength penalty if the target is five or less points distant.

12.3 Engineer

Engineers are equipped with a variety of tools allowing them to perform a variety of repair and destructive actions:

12.3.1 **Repair** – A damaged soldier that begins its activation next to an inactive engineer, both units may be marked completed to automatically repair one point of damage. An engineer may attempt to repair several points of damage by drawing a d6 result and subtracting the engineer's current damage level from the result. A number of damage points equal to this modified value are repaired.

12.3.2 **Demolition** – An engineer that begins its activation in or adjacent to a bridge, building or bunker point may convert that point to rubble in lieu of movement. The soldier is not damaged. Place a rubble tile on the point. Any enemy soldiers on the destroyed point are eliminated.

12.3.3 **Mine Clearance** – An engineer that enters a mine point draws a d12 result. If the result is greater than the soldier's current damage level, remove the mine marker. Otherwise, the mine detonates normally.

12.4 Crusader

Keeping a soldier motivated often requires a dollop of faith. Crusaders provide this guidance on the battlefield. The presence of a crusader (activated or not) within three movement points of a shocked or panicked soldier allows that soldier to either automatically convert a panic marker to a shock marker or remove a shock marker entirely in lieu of making a morale draw. The soldier making this conversion is marked completed.

12.5 Jack-Knife

Jack-Knife soldiers are experts in close-range combat. They are heavily armored so that they can get in close to an enemy soldier. When attacking an adjacent soldier, their printed attack strength is tripled.

13.0 Random Events

After all soldiers have been activated, the player holding the initiative draws a card from the action deck. If that card is noted with a random event icon (above the die draw icons), a random event has occurred. Reshuffle the action deck. The initiative-holder then draws a card from the reshuffled deck and resolves the text printed on the card.

13.1 Event Disposition

For the most part, the events are beneficial toward the initiative holder (another benefit to holding the initiative). There is a smaller proportion of cards that are beneficial toward the non-initiative holder, referred to on the cards as "the enemy." If a card does not specify one player as receiving a benefit or penalty, either player could be affected. Interpret the card text literally.

13.2 Random Selection

Several cards require that players select one or more soldiers or locations randomly. This can be done in several different ways, but the process is basically the same. Players select a random method (typically a die draw), and pull one or more random results from the action deck to make the determination. Examples follow:

13.2.1 **Map Point Selection** – To determine a random map location, first determine the map section where the map point is located. Divide the number of maps into a d12 draw (if there are remainders, redraw those results). For instance, if there are four maps, a 1-3 selects the first map, 4-6 the second map, and so on. Then draw two cards to determine the letter column and number row of the selected map point. If a thumbs-up or thumbs-down symbol is drawn, the initiative holder and non-initiative holder, respectively, may select the number row.

13.2.2 **Soldier Selection** – Assign a numeric value from one to however many soldiers are in the

squad and draw a d12 result to select the soldier. If there are more than 12 soldiers, use a similar process to select a smaller grouping of soldiers and then another card to select the soldier within that smaller grouping.

14.0 Optional Rules

Optional rules can be used to handicap one side, add tactical complexity, or ramp up chaos in a scenario. They can be used in a pre-existing scenario if both sides agree to do so, or may be stipulated in a scenario's special rules.

14.1 Improved Detection

One side is equipped with superior detection equipment and receives a +2 bonus on every attack made.

14.2 Suit Integrity

Some suits of powered armor were built better than others. A battlefield may be contaminated with chemical or biological agents that can quickly kill an unprotected soldier. If a soldier takes two or more points of damage, draw a d6 result. If the result is a one or two, the suit is breached and the soldier eliminated. If a soldier's damage increased beyond two, the suit is breached automatically and the soldier is eliminated.

14.3 Stealth

A soldier's suit is armed with stealth technology that mask it from detection. When a soldier is activated to move, it may activate stealth mode by flipping the soldier's unit marker to its reverse (stealth) side and placing the soldier's matching stealth tracking marker in the first box of the turn track.

14.3.1 **Stealth Status** – After determining initiative, check the status of each soldier under stealth by drawing a d6 result for each. If the result is less than the marker's turn track location, the soldier is revealed (flip the marker back to its non-stealth side) and marked with a completed marker with a value equal to the box on the turn track where its marker is located. If the result is greater than the marker's location, the soldier may be removed from stealth when activated normally. At the end of the turn, advance any stealth markers on box on the turn track. After completing its action, place or flip a completed marker on its appropriately colored side.

14.3.2 **Movement** – When a soldier is revealed, it is immediately moved from its current location. The soldier has a number of movement points equal to *half* (round up) of the soldier's movement value times the turn track space where the stealth marker is located (multiply first, then halve). All movement must be completed on the ground (no bouncing is allowed) and may not pass through slag terrain. Once movement is complete, the soldier may assault fire. Soldiers coming out of stealth are immune to reaction fire. Flip the soldier's stealth tracking marker to its "Cool Down" side and place it a number of turns ahead of the current turn equal to the value of the box from which the marker was removed. For example, if the marker was removed from the third space, place it three turns ahead of the current turn space on the turn track. The soldier cannot use stealth movement until that turn has been reached (the stealth systems need to cool down).





14.3.3 **Targeting** – A soldier under stealth may be fired upon in its initial location, increasing its shield strength by twice the value of the stealth tracking marker's location (e.g. -2 on the first turn, -4 on the second, -6 on the third, etc.). A soldier struck while in stealth immediately loses this status and moves per 14.3.1.

14.4 Drones

Drones are small, remotely guided vehicles or stationary weapon platforms that may be armed or unarmed. They move in the same fashion as soldiers with a couple of exceptions. First, they are never required to land. Second, they may not move through terrain of any kind and must fly over it. Drones that have an attack value may be used for combat normally. A drone that sustains damage of any kind is eliminated. Shock results force the drone to land. A drone that survives a crash landing may be flown on subsequent turns.



14.4.1 **Shock and Panic** – A drone that receives a shock result in combat becomes unresponsive, must crash-land if airborne, and cannot fire until it recovers from shock in the same manner as a human soldier. If a drone suffers a panic result, it goes into shut-down and is marked with a second shock marker. When in shut-down, a drone must recover from both shock markers, one per activation. If a drone suffers a second panic result while in shut-down, the drone goes off-line and is removed from the map, but does not considered destroyed for victory purposes.

14.4.2 **Bombing** – Bomb drones carry a mini-nuke that can cause substantial damage over a wide area. A player may detonate a bomb drone at any time,

even prior to reaction fire on the drone. However, in these cases, if the owning player opts not to detonate the bomb drone prior to the attack being resolved, the bomb may not be detonated if the drone is destroyed. The effects of a detonation depend upon the range to the target:

14.4.2.1 **Target Point** – A bomb drop on the target map point destroys bridge, building, and bunker terrain as well as any soldiers occupying them. Remove a bunker marker or place a slag marker on the map point. Any soldiers on the point are eliminated, regardless of terrain or if airborne.

14.4.2.2 **Adjacent Point** – Bridge and Building terrain is eliminated on a d12 result of one to six. Bunker (including CP) terrain is eliminated on a d12 result of one or two. Place a rubble marker on the map point. Soldiers in eliminated terrain are eliminated as well. Soldiers that survive this blast as well as soldiers in other types of terrain (including airborne) resolve an attack with a strength of ten.

14.4.2.3 **Non-Adjacent Point** – Soldiers that are two points away from the blast are attacked with a strength of nine, three points away with a strength of eight, four with a strength of seven, and so on.

14.4.3 **ECM Drones** – The purpose of an ECM drone is to broadcast a signal that scrambles the enemy's control and communication systems. Any soldier within ten points of an ECM Drone doubles the attenuation penalty (e.g. +2 for each full ten hexes away from the target) and acts as if the soldier is out of command. ECM drones may not be painted.

14.4.4 **Sentry Drones** – Sentry drones are fixed in place and cannot fly. They are, however, heavily armed with the heavy pulse cannons. As they cannot move, they may fire twice when activated, but may not paint a target. Sentry drones fire in any direction and may set up in any terrain but marsh.

14.4.5 **Control** – Drones need a command unit to operate with maximum effectiveness. If a command unit is not available, a drone's movement rate is reduced to six.

14.4.6 **Unidentified Drones** – The opponent should only know if a drone is sentry or mobile and if a mobile drone is armed or unarmed. The type of drone is only revealed when it attacks or employs a special rule.

14.5 Marines

Certain scenarios may involve elite soldiers. In game terms, these are Marines. Marines have a number of benefits applied to game mechanics:

14.5.1 **Firepower** – Marines gain a +1 bonus to their attack strength value.

14.5.2 **Aggressive** – Reduce a Marine's shield value by one.

14.5.3 **Morale** – Add +1 to all morale checks for Marines that are shocked or panicked.

14.6 Mines

Mines are buried explosives that may detonate upon entering their map point (even when airborne). When entering a map point that contains a mine marker, reveal that marker to determine its effects.

14.6.1 **Grounded** – When a soldier enters a mine point on the ground, the soldier must stop, but may fire after the result of the mine marker revelation is resolved.

14.6.2 **Airborne** – When an airborne soldier enters a mine point, the soldier must stop temporarily while the result is determined. If the soldier is unaffected, he or she may continue moving and may fire.

14.6.3 **Attack Results** – There are three possible results following the revelation of a mine marker:

14.6.3.1 **Dummy** – A player starts with twice as many dummy markers as explosive markers to hide the location if the actual mines. When a dummy marker is entered, simply remove it from the map.

14.6.3.2 **Explosive** – When an explosive marker is revealed, the moving soldier is attacked with a strength of nine. Any soldiers on an point adjacent to the mine is attacked with a strength of six.

14.6.3.3 **Nuclear** – When a soldier triggers a nuclear mine, the attack is resolved as if a drone had dropped a nuclear bomb (see 12.4.1 to 12.4.3).

14.7 Nap-of-the-Earth Movement

Rather than cap the height of an airborne unit at twelve, regardless of the height of the terrain beneath the soldier, add the level of that terrain to the soldier's level. Doing so allows the height of an airborne solder to be treated in the same fashion as woods or building terrain positioned higher than level zero, but may complicated LOS calculations a tad.

14.8 Strict Combat

Once a player opts to check LOS to a target, that soldier is committed to the attack. If it is determined that the attack cannot legally take place, the soldier is marked as completed and takes no other action.

14.9 Facing

When using this option, a soldier must face towards an adjacent map point, and may only fire without additional modification at targets that occupy the arc 60-degree arc formed by the map point where the soldier is located and the two map points adjacent to the one towards which the soldier faces. The soldier may rotate to face a new map point prior to firing, but this results in a -1 strength penalty per map point rotated and may trigger reaction fire.

14.10 Hidden Setup

When a scenario stipulates that either or both sides in a scenario begin set up on the map, note the initial locations of these units on the hidden unit log before placing the soldiers on the map. To use the log, note the map, lettered column and numbered row of the map point where a soldier is located. A soldier may only set up hidden in woods, building, bunker, or improved position terrain, unless otherwise noted in the scenario special rules.

14.11 Squad Command

A platoon is comprised of two squads of five to nine soldiers and a commander. If either or both sides has at least ten soldiers and two commanders, split the command into to distinct squads. A commander can only provide command benefits for his or her own squad unless the commander is within the LOS of the other squad's soldiers. If the total number of soldiers drops to less than nine and a single commander remains, that side may opt to take no actions for the turn in order to "reorganize" into a single squad. When reorganizing, all shock and panic morale draws are modified by +2.



***Example**: In the image above the soldier's arc of fire extends toward infinity (theoretically, of course) through a 120-degree arc through the front of the soldier's unit. Any targets that occupy this shaded area may be attacked, subject to line of sight. Any units behind this arc cannot be attacked.*

14.12 Squad Morale

When a squad begins to take losses, its collective morale begins to drop and its soldiers less effective as a whole. Therefore, when a squad loses half or more of its initial strength, all soldiers must apply a -1 penalty to attack strength and morale draws. If a side has more than one squad in play, each squad is handled individually. If squads are consolidated per 12.11, the -1 penalty is still applied to the newly formed squad.

14.13 Multi-Level Buildings

Typically, a building is not strong enough to sustain the weight of an armored soldier (who would just drop through to ground level). However, if a scenario requires it, a building may be up to twelve levels high and sustain an armored soldier's weight. Each level of a building constitutes four levels of height and it costs a armored soldier one movement point to move up one level. An armored soldier may not bounce to a higher level within a building hex, but may bounce out of or into a building's upper levels. However, a crash landing always results in a solder being at a building's ground level. Use building level markers to indicate which buildings have higher levels as well as which level a soldier occupies. A scenario stipulates the level of those buildings higher than level four.

14.14 Abandonment

Per the standard rules, the status shocked and panicked soldiers must be checked prior to the activation of good-order soldiers. If it is discovered that a shocked or panicked soldier was skipped, that soldier must be activated. Apply a negative modifier to the morale check equal to the draw of a d6.

15.0 Scenarios

Each scenario represents a different battlefield situation and describes the makeup of each sides' forces, the configuration of map panels, and any specific goals that must be achieved in order to be victorious. Each scenario is presented on a separate card and organized with the following details.

15.1 **Title and Description** – Each scenario is presented with a brief paragraph describing the situation at hand.

15.2 **Map Diagram** – A thumbnail image of the maps in play showing how they should be configured and a compass arrow depicting the northern direction.

15.3 **Forces Engaged** – This section indicates the composition of the forces involved, along with the build value of each, in case players would

like to modify a force to see if different squads can be just as successful.

15.4 **Setup** – This section describes how soldiers are set up on the map or enter the battlefield. The sides of the map that are friendly to each side are also noted here.

15.5 **Special Scenario Rules** – This section includes any exceptions to standard rules or special situations that might not be specifically covered by the standard rules.

15.6 **Victory Conditions** – This section includes the means by which either or both sides can win the scenario.

Armored soldiers may be initially set up on the ground or at any level while airborne. Similarly, any soldiers moving on to the map may enter on the ground or airborne.

16.0 Using Miniatures

This section of rules describes how players can implement the use of miniature soldiers rather than the hexagonal counters.

***Note**: When **M.A.S.S IMPACT** was originally designed, it was intended to use miniatures, rather than counters. Using miniatures provides a much more physically appealing experience, and certainly draws a crowd when playing at a local club or convention. Note that the image below was created when playing with an earlier iteration of the maps.*

16.1 Physical Scale

As each map point is roughly an inch apart, the ideal size for the miniatures of 15mm, using a 20mm base. This ensures that the base is wide enough to support a miniature soldier without toppling over.

16.2 Required Components

Creating each miniature for play requires the following components.

16.2.1 **Miniature Base** – The miniature soldier should be based with a half-inch circle or square that is noted with its letter identifier (A through T). Printable bases are available for download from relativerange.com.

16.2.2 **Flight Stand Assembly** – The flight stands are inserted into this topper. To create the low-level flight stands, insert a one-inch flight peg into a 20mm base. To create the high-level flight stands, insert a two-inch flight peg into a 20mm base. These pegs can be glued into place, but twice the number of flight stands are required. It is more convenient to swap out a flight stand rather than swap out the post during play, but it's obviously a more expensive option. To attach the flight stands to the miniatures, glue a peg topper to the base of each miniature. Do not glue the stands to the peg toppers!

***Note**: It is recommended that the flight stand components be acquired from Litko.net. Enough components for the game can be purchased for around $50.*



16.2.3 **Flight Stand Usage** – When using the miniatures, a soldier that is on the ground is placed on a map point without a flight stand. A soldier "stands" on its peg topper. When a soldier bounces to low-level, insert a low-level flight stand. When a soldier bounces to high-level, insert a high-level flight stand.

***Note**: If you find that your miniatures topple over when placed on the map without a flight stand, you can create a "ground level" flight stand by inserting a very short (say, an eighth-inch) flight peg into a 20mm base.*

16.2.4 **Indicating Levels** – When using flight stands, use a d6 to indicate the soldier's level when bouncing. For instance, a one-inch, low-level flight stand with a d6 showing a '3' is at level '3.' A two-inch, high-level flight stand with a d6 showing a '2' is at level '8.'

***Note**: In order to keep clutter on the map down, the smaller the die, the better. A collection of tiny, 5mm "micro dice" can be purchased from Kaplow on Amazon.com for a very low cost.*

16.2.5 **Unarmored Soldiers** – Since unarmored soldiers cannot bounce, there's no need to place bases on these soldiers as long as the miniatures themselves provide a clear indication of which are Police and which are Militia.

16.2.6 **Drones** – Although drones require the use of flight stands just like armored soldiers, they do not require that bases with identifiers be attacked to them (only the peg topper needs to be attached). Instead, place a drone identification marker near a drone to keep track of which drone is which. This cuts down on the number of drones that need to be purchased.

17.0 Playing Mapless

For those players who have decided to adopt the use of miniatures to play ***M.A.S.S IMPACT***, the next logical step is to get rid of the map. Doing so is easier than it might seem.

17.1 **Game Scale** – The map points on each printed map are roughly one inch apart. This makes it easy to adapt movement and ranged combat to the use of a ruler. Count off inches rather than map points when moving or determining range during combat.

17.2 **Measuring Tools** – In order to measure distances, players will need a sturdy measuring tape that can extend out a couple of feet without bending.

17.3 **Soldier Movement and Range** – It's easiest to measure distances from the edge of a soldier's base, rather than its post. Given this, players should adopt the use of "ground level" bases referenced in 15.2.3. For unarmored Police and Militia, measure from the edge of the miniature itself.

17.4 **Terrain** – Selecting terrain to use for play is relatively simple. Note that regardless of the size of terrain used, buildings and woods terrain still rise to the levels stipulated by the game charts, unless players decide otherwise (there's no reason that a building cannot be +2 levels).

17.5 **Meta-Hexes** – Since play is mapless, there are no meta-hexes to worry about. This means that the terrain on the table is what impacts movement and line-of-sight. A soldier or line-of-sight must touch the terrain to have an impact on movement and combat.

17.6 **Mines** – The effects of mines on the battlefield are triggered when a soldier moves within one inch (or more, depending upon the scenario) of the mine marker, regardless of whether a soldier is on the ground or airborne.

17.7 **Scenarios** – Of course, it's a little difficult to accurately recreate the terrain and sight-lines of the original maps in a non-map form. Therefore, just try to get a close enough representation as possible. Alternatively, just wing it and have fun!

18.0 Design-Your-Own

It is very easy to create new scenarios for ***M.A.S.S IMPACT***. Each player uses a pool of build points to create one or two squads of soldiers. The size of the pools are based upon the type of scenario that's being played.

18.1 **Meeting Engagement** – If both sides are attempting to cross the battlefield and, in the process, destroy each other's soldiers, each pool size should be the same. A good starting point is 120 points.

18.2 **Holding Action** – If one side is trying to stop the other from advancing and can take advantage terrain, the attacker's build pool should be a quarter to a half larger than that of the defender. A good starting point is 100 points for the defender and 130 points for the attacker.

18.3 **Build Limits** – The only limitations on the composition of a squad is the limits of the tracking cards available and the limit of one commander per squad.

18.4 **Build Points** – The build point value of each soldier is noted in the listing below. The parentheti-

cal value is the maximum number of soldiers of each type that can be purchased.

Front Line (18):	*8*
Assault (9):	*10*
Ranger (9):	*12*
Thumper (3):	*12*
Dead-Eye (3):	*10*
Commander (1):	*20*
Crusader (1):	*15*
Engineer (2):	*15*
Sniper (1):	*15*
Jack-Knife (9):	*12*
Attack Drone (4):	*5*
Bomb Drone (4):	*3*
ECM Drone (4):	*3*
Recon Drone (4):	*3*
Sentry Drone (4):	*4*
Police (none):	*2*
Militia (none):	*1*

18.5 **Scenario Size** – Generally, a standard scenario uses the build point pools described above, and the map consists of four panels in a two-by-two grid. A large scenario doubles the build points in order to create two squads per side and should use at least six maps in a two-by-three grid.

18.6 **Special Rules** – The most important rule when designing custom scenarios is that there are no rules. Feel free to break any of the rules in order to add some additional flavor to a scenario. Just don't go too far afield.

18.7 **Victory Conditions** – Victory in a scenario may be determined through the destruction of enemy soldiers, the occupation of terrain, exiting the opposite end of the map, the denial of enemy goals, or any combination of these. Points can be awarded based upon the build value of enemy soldiers or simply on a one-point-one-kill basis. Points for occupation could be awarded at the end of a scenario or on a turn-by-turn basis. In any case, test the scenario to ensure that points awarded result in a challenging effort by both sides.

19.0 Credits

Game Design: Mike Nagel
Graphics & Layout: Mike Nagel and HotPot.ai
Printing: Blue Panther, LLC

20.0 Designer Notes

As noted in the introduction to these rules, the ***M.A.S.S Impact*** game system is inspired by the classic ***Battlesuit*** game designed and published by *Steve Jackson*. Although ***Battlesuit*** is quite underrated (and well within the shadow of its better known siblings ***OGRE*** and ***GEV***), there are several features in that design that have not aged well relative to other tactical game designs. So, I decided that the system needed a full facelift.

One of the original games' biggest issues was with how line of sight was handled. Players were expected to physically graph out whether line of sight was blocked, using pencil and paper. Other tactical systems have adapted handling the effects of terrain on line of sight by using a "layer cake" paradigm that's a lot easier to digest during play. As depicted within this game's system, the determination of blind spots and blocking terrain is more easily determined by simply counting map points.

The map point system used in ***Battlesuit*** is brilliant, but how the points interact with terrain is a bit trickier, so I developed the "meta-hex" concept to deal with it. The use of hexes is more common in tactical systems, so the meta-hex process makes positioning relative to terrain a little easier to grok. And speaking of the map, I redesigned it in the form of geomorphic map panels to make the terrain changeable, therefore enhancing the game's replayability.

Another issue I have with the original game is its use of summed battle dice. This creates an averaging effect on the combat results table that's not chaotic enough, especially with regards to the subject being simulated. I opted to change the combat system to rely upon a deck of cards printed with a rotating combat results table that mimics the original table without the clustering of results (a "simple" rather than a "normal" distribution). Since I was now using cards, to maximize their functionality I added random events to further enhance the chaos of the combat environment as well as strip the need for dice in the game.

Finally, and probably most noticeably are the changes to the soldiers themselves. I wanted the ability to add more unit types as well as hide their statuses from my opponent. I was originally going to go with a tracking sheet, but it soon became clear that using status cards for each soldier provided a much smoother play experience.

A couple of additional acknowledgements. First is to a few fellows on *BoardgameGeek.com* whose ideas inspired me in particular: *Ken Prescott* and *Dominique Sumner*. I've adopted or enhanced some of their ideas into the soldier units and optional rules. I must also give a nod to *HotPot.ai* that I used to create many of the soldier and drone graphic images found within the game (artist, I am not). I'm sorry if using AI bothers you, but believe me that I'm not stealing anything or putting anyone out of work. Using AI is necessary to keep the game affordable.

I hope you have as much fun playing the game as I did in creating it. Enjoy!

Mike Nagel



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