U-Boot Z

ZOMBIE TANGO OSCAR

RULEBOOK

MEDITERRANEAN SEA

A SOLO AND COOPERATIVE EPISODIC NARRATIVE BOARD GAME

BASED ON THE PATHS UNKNOWN GAME ENGINE

RULES UNDER CONSTRUCTION

THANK YOU FOR YOUR UNDERSTANDING

These rules are a living document. They are still under development and playtesting, and will be updated as we make changes to the rules during development.

RAYBOX

WHAT IS U-BOOT Z

U-Boot Z is a solo or cooperative episodic narrative board game played on the pages of its scenario book, based on the award-winning Paths Unknown game engine. The player(s) will guide their heroes on the surreal voyage of the zombie-infested submarine U116. Over the course of 10 scenarios, tactics, skill, and luck will all be tested to the utmost as these desperate heroes strive to learn the secrets of the damned vessel before it carries them to the bottom of the Mediterranean forever.

GAME CONTENTS

INTRODUCTION

++ ULTRA SECRET ++
January 1941
Re: LRDG Operations al-Jaghbub

It has been 30 days since the last transmission out of the Rameses III al-Jaghbub site. Bomb damage assessment indicates that the tomb complex has been heavily damaged at its three main entrances. No reports received from on-ground assets. In spite of the fantastical-sounding reports of plague and re-animation of the dead we must continue to probe the area and verify or dismiss the veracity of the material, if for no other reason than the continued interest of our Ahnenerbe opponents in the same location.

ULTRA intercepts from traffic including Kriegsmarine U116 (Type XB) indicate that the Germans have also lost contact with their assets in the area. Kriegsmarine U375 (Type VIIC) has failed to report in and is overdue for replenishment. No RN or USN vessels or aircraft have reported sinking this U-boat. It is unknown at this time if the loss of the submarine is connected to the al-Jaghbub operation.

As soon as weather and current strategic and tactical conditions permit, SOE is directed to insert a small team to locate and recover LRDG personnel and data connected to the Rameses III al-Jaghbub operation and deny the same to the enemy. Compositionally, the team will be both local and specially selected individuals. We have been directed to include a representative of Soviet intelligence to strengthen our alliance.

Secondarily, a seven-reel Enigma machine is to be recovered if possible...

READ ENTRY #1

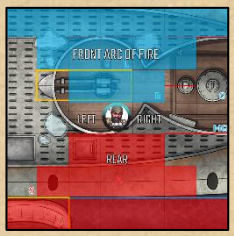
CORE CONCEPTS

Core concepts are common rules which are frequently referenced throughout the rules. They are included now so as to make it easier to understand future rules.

ALLY

These are troopers you encounter when playing scenarios. They are under player control.

ARC OF FIRE (AOF)



A figure has four Arcs of Fire: front, right, left and rear. These are 90-degree arcs as shown in the diagram. A figure may only attack a figure within its front arc. Grenades (see p.29) are the only exception. Zombies and NPCs have no facing or Arc of Fire. They are assumed to be facing all directions.

ADJACENCY



Many rules use the term "adjacent." Unless the context otherwise indicates (for example, by use of the term "diagonal"), this term specifically refers to orthogonal adjacency. So, for example, a zombie is adjacent to a character if it is in one of the four squares to the immediate left, right, in front of, or behind the character.

CONFLICTING RULES

If there is ever a contradiction of rules between the manual and the scenario card, the scenario card rules take precedence.

DICE

The game is played using twelve-sided dice (d12). Players may be required to roll one or more dice to resolve an action. The number of dice required for a roll is abbreviated as Xd12 where "X" represents the number of twelve-sided dice to be rolled. The result of each die is read separately.

FACING



This concept denotes the direction in which a figure is "looking." All survivors must face one of the four adjacent squares.

- The character marker's front facing is denoted by the blue hue.
- Zombies and NPCs are considered to be facing in all directions at the same time.

A miniature's facing is determined in a manner suggested by the miniature itself, usually by the direction of the head or weapon. It is ultimately up to the player to decide. Whatever it is, it should be consistent.

FIGURES

Character markers, zombie markers, standees and miniatures shall all be collectively referred to as figures in these rules.

HEROES

The word Hero is used to mean both characters and troopers, both of whom could potentially be added to your team. Any rule using the word Hero applies to both Characters and Troopers.

MARKER AVAILABILITY

When an item marker is needed but none remain, that item is simply unavailable.

MINIATURES

You can choose to play with miniatures if you like. Simply replace the character/zombie markers with miniatures when they appear on the scenario map. Use your own or purchase official miniatures from our website www.rayboxgames.com.

SURVIVOR

The term survivor is a catch-all that represents all non-zombie figures.

SURROUNDING SQUARES

Surrounding squares include all eight squares around a single square. This includes both the four orthogonally adjacent squares and the four diagonally adjacent squares.

TIES IN THE GAME

Any time there is a tie in the game, the active player chooses which option is used.

UNDEFINED TERMS

You will encounter some terms in advance of their rule's explanation. In this case a "see p.xx" gives you the page you can skip ahead to read the entire rule if you choose.

LET'S START THE CAMPAIGN

Starting a new campaign consists of selecting your two heroes, assembling your Crew Control Card, Loot Bag and then setting up the first scenario.

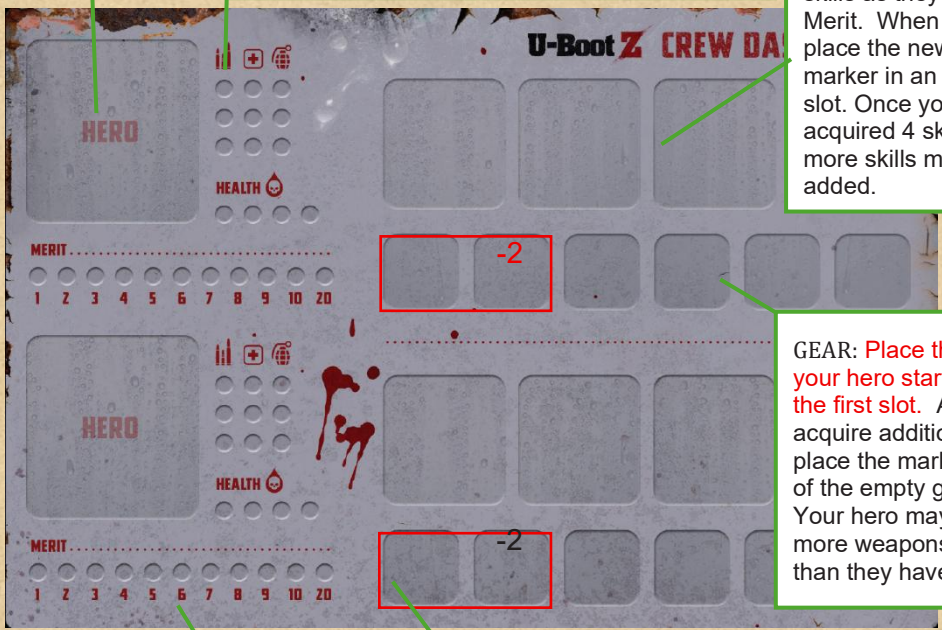
CREW CONTROL CARD (CCC)

The CCC records your crew members, merit, skills, weapons, gear and campaign notes. Below is an overview of your Character dashboard. U-Boot Z is designed to be played with 2 heroes. There are 4 to choose from at the start of the campaign. Choose two of them and set up your CCC as instructed below. Instructions in red pertain to setup. Just follow the red words in any order you choose and the card will be ready for play.

SUPPLIES
You have no supplies yet. Once you acquire them place a black peg in the appropriate hole. You can have up to 3 of each supply.
AMMO: If the character has no ammo markers, they can no longer fire their weapons.
MEDKITS: Medkits can be used to heal wounds. For every medkit used, heal 1 wound in the Between Scenarios segment.
GRENADES: Can injure multiple targets and use the AOE rules.

Hero Portrait: Place the marker corresponding to the hero you selected here.

SKILLS: Place the chosen character's first skill here. Your heroes will unlock additional skills as they attain Merit. When they do, place the new skill marker in an empty skill slot. Once you have acquired 4 skills, no more skills may be added.

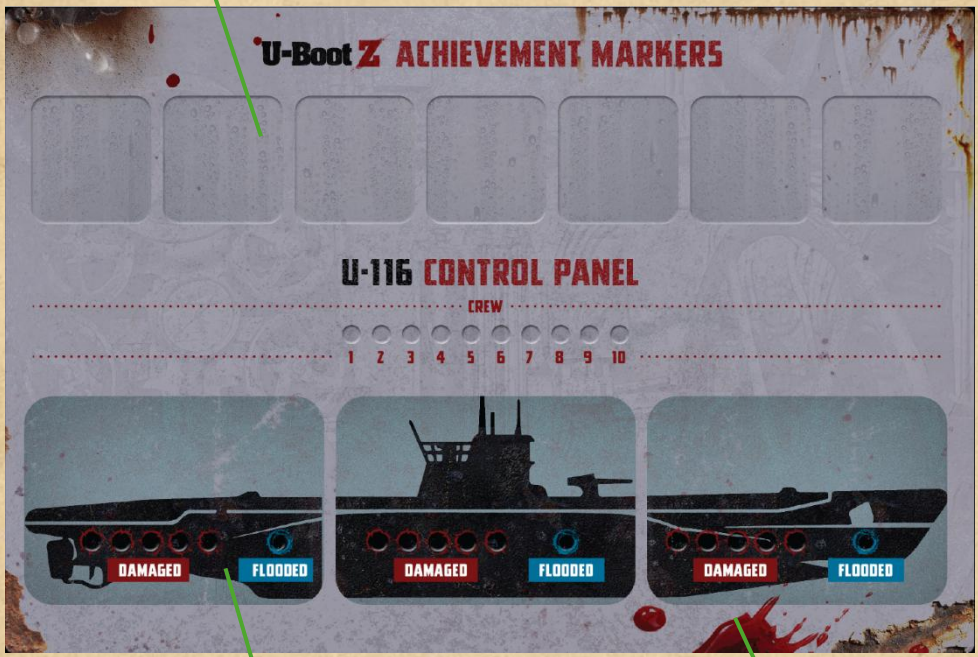


GEAR: Place the gear your hero starts with in the first slot. As you acquire additional gear, place the markers in one of the empty gear slots. Your hero may not carry more weapons and gear than they have slots.

MERIT
You have no Merit when you start the campaign. When you earn your first Merit, place a black peg in the hole matching the amount of Merit earned. As you earn more move the peg appropriately. Tens are measured with a second black peg in the 10, 20 holes.

READY WEAPONS
You may only attack with weapons in these slots. If you have a one handed weapon in both red slots then you can choose which one to use when attacking. Attacks with the off-hand weapon in the slot marked -2 suffer a -2 DRM. Switching weapons costs 2 APs.

ACHIEVEMENTS
Achievements are earned throughout gameplay, and each one gives your crew certain advantages or choices. Once you earn an achievement , place their markers here.



Damage and Flooding
Your U-Boot consists of 3 sections. Engine Room, Control Room and Torpedo/Mine room. As you play the campaign your U-Boot may take damage or flood. Record these on your Flooded and Damage tracks by placing a red pegs into the holes corresponding to the amount of damage taken.

U-BOOT DASHBOARD
Used to keep track of damage and crew placement on the U-Boat. See the U-Boot Special Rules section for full detail on compartments, damage tracks, and crew management.

LOOT BAG

Rules for Loot bag content are in the works.

SCENARIO SETUP

Set up your play area and the first scenario. The instructions on how to set up the scenario are contained on sides A and B of the scenario card.

Each scenario includes most of the following sections:

A. INTRODUCTION TEXT: You can read this now.

B. FORCES: Here you will find the heroes, allies and zombies present in the scenario. If the zombie's name is coloured orange, do not put that marker in the Zombie Pool. Set it aside and follow the setup/spawn instructions for it.



C. SETUP: Details on where the figures and markers are placed on the scenario map.

D. OBJECTIVE: The primary objective(s) needed to finish the scenario.

E. SECONDARY OBJECTIVES: Optional objectives. Objectives can only be completed once. Remove any objective marker after completion.

F. SPAWN: Rules for when and where a zombie will spawn on the map.

G. SPECIAL RULES: Any special rules for this scenario.

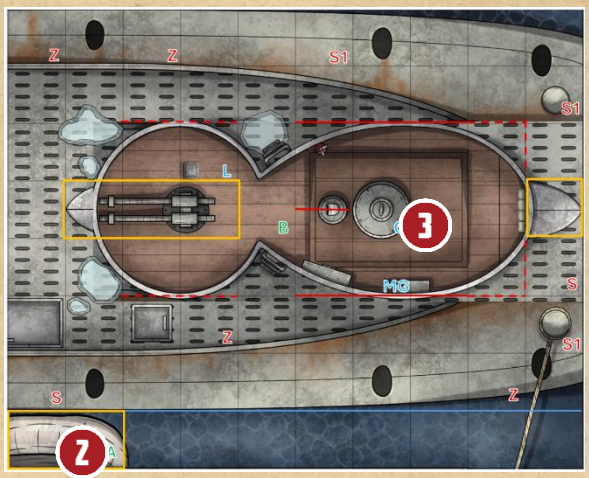
H. THINGS TO REMEMBER AND WHAT YOU CAN FIND: Useful information for the scenario.

I. EXIT: Read this after successfully completing the scenario.

J. BETWEEN SCENARIOS: Applicable from scenario 2 onward.

READING ENTRIES

When instructed to read an entry, refer to the War Diaries and read the specified entry. Some entries will only be revealed by reading other entries. Some letters or symbols on the map will only be revealed by reading an entry, so if you see them, the significance will be covered when and if you read the appropriate entry.









SETUP STEPS

1. Place the Crew Control Cards near the scenario book.
2. Place your character figures on or adjacent to the square marked A with your desired facing.
3. Place objective markers on all squares marked **O, O1, O2** and so on as well as squares marked **L.**
4. Then, gather the zombie markers as outlined in Forces. Designate an area next to the scenario book as the Zombie Pool.

    a) Omitting the ones in orange, shuffle them and place them face down in the Zombie Pool.

    b) Place zombie markers (without revealing them) from the Zombie Pool onto each Z on the map.

    c) Refer to the setup section and place any orange coloured zombie markers as indicated. If any of the orange markers remain, place them in the Zombie Pool.
5. Place the Round Track marker on the first space of the Round Track.
6. If there are any blue highlighted doorways in the scenario then place a door standee there.

7. Place any Fragile Equipment markers, Crew and NPCs as stated by the scenario.
8. Designate an area close by as your discard area.
9. Place 1x Fire Extinguisher marker on FX squares.
10. Only if using standees or miniatures, designate an In-play area for zombie markers currently in play. This is where you put the markers that are represented on the game map as a miniature.

ROUND TRACK NOTE

The Round Track tracks the progression of the scenario.

- Advance the round marker on the Round Track by one in the End Phase (see p.14).
- When the Round Track marker moves off the end, it resets. Take all zombie markers in the discard pile, shuffle them, and place them face down into the Zombie Pool.
- No Merit is gained for killing zombies once the Round Track resets.
- Spawning and other events will be marked on the Round Track.

PLAYING YOUR FIRST SCENARIO

This section covers the Round Sequence, Action Points, Movement, Terrain, Arc of Fire (AOF), Line of Fire (LOF), Revealing Zombies, Zombie Zone of Control (ZOC) and Zombie Spawning. The scenario is set up! Let's dive into the action.

ROUND SEQUENCE

Each scenario is played over a series of rounds. Each round is comprised of the Initiative Phase, Action Phase and an End Phase.

INITIATIVE PHASE

Roll 1d12 for both the players and the zombies.

- The zombies receive a -4 to their roll (some types of zombies may negate this).
- The higher roll gains the initiative and chooses who will take the first turn.
- If the zombies win, they always choose to go first.
- Ties are a player's choice.

ACTION PHASE

There are up to 3 action segments: Player, Non Player Character (NPC) and Zombie.

Player Action Segment

- Remove all status markers with the indicator Attacked or Covering.
- Activate each figure, one by one in any order.
- When a hero is activated, they spend their Action Points performing actions (see p.15).
- Each hero can only be activated once per turn.
- One hero must finish its activation before another can take theirs.

Non-Player Character (NPC) Action Segment

- The NPC Action Segment always occurs between the Player and Zombie segments.
- Activate NPCs one at a time starting with the NPC closest to a hero or zombie figure. If there are multiple equidistant figures then the hero figure takes precedence.
- When an NPC is activated, they follow the NPC rules (see p.16).

Zombies Action Segment

- Activate zombies one at a time starting with the zombie closest to a survivor.
- When a zombie is activated, follow the zombie rules (see p.16).
- After all zombies are activated, zombies are spawned according to the Round Track.



This diagram explains the order in which the zombies are activated. First off, zombies 1, 3 and 5 do not activate because the closed door and the wall block their path to Ida. Zombie 2 activates first as it is closest to Ida, followed by 4 and 6.

END PHASE

- Remove one timer marker from each timer stack. Satchel Charges whose last timer marker is removed detonate at this time (see Timers, p.32). Thrown grenades (see p.29) detonate at the end of the attacking hero's activation.
- Advance the round marker on the Round Track by one.
- When the Round Track marker moves off the end, it resets. Take all zombie markers in the discard pile, shuffle them, and place them face down into the Zombie Pool.
- Certain scenarios will have actions to perform during the End Phase (e.g., the water level rising, fire spreading etc.).

ACTION POINTS (AP)

Action Points are used by all figures to conduct various activities including attacking, moving and interacting with their environment.

SURVIVOR ACTION POINTS

There are 3 types of survivors: Characters, whom the players choose, and Troopers (see p.45) and NPCs, who are discovered along the way. Characters and Troopers are player controlled while NPCs are game controlled.

- Characters have 8 APs per activation, and troopers and NPCs have 6 APs per activation.
- Survivors may attack only once per round.

SURVIVOR ACTION POINT TABLE

ACTION	AP COST	NOTES
MOVEMENT		
One square forward	1	
One square sideways	2	
One square backward	2	
Move diagonally forward	2	
Move diagonally backward	3	
Turn 90 degrees	1	
Hindering terrain	+1	To enter the square.
Charge	8	Spend up to 8 APs moving to forward squares. At the end of the figure's movement perform a Jab attack for free and then end activation.
INTERACTION		
Open/close door	1	Door must be in an adjacent square.
Investigate	8	Must be in or adjacent to the square being investigated.
Skill test	1 or more	Gain a +1 DRM per 2 extra APs spent (see p.45).
ITEMS AND WEAPONS		
Pick up items	2	May rearrange items in gear slots and hands.

ACTION	AP COST	NOTES
Switch weapons	2	May rearrange items in gear slots and hands.
Pass items to adjacent hero	4	Passed weapons can be readied immediately for free. Only the passer spends the AP.
COMBAT		Survivors may attack only once per round.
Snap Fire/Jab attack	2	-2 DRM to the attack roll.
Normal Fire/Slash attack	4	0 DRM to the attack roll.
Aimed Fire/Strike attack	8	+2 DRM to the attack roll.
Throw grenade	3	Consumes one grenade.

NPC ACTION POINTS

Details for NPCs can be found in Appendix 2, page 58.

- NPCs have 6 APs.
- NPCs have a 360 degree Arc of Fire.
- NPCs cannot be stunned; stun results inflict 1 wound instead.

When activating an NPC it will follow this protocol:

  - If an enemy is in LOF (see p.23) and in Range and the NPC has 2 or more APs, it makes its best affordable attack and ends its activation.
  - Otherwise, it spends 1 AP and moves towards the closest enemy.
  - If it has APs remaining repeat the steps above. If not it ends its activation.

ZOMBIE ACTION POINTS

Details for Zombies can be found in Appendix 3, page 59.

- Zombie APs vary and are listed in their zombie description.
- Unrevealed zombies have 1 AP.
- When stunned zombies activate remove the stunned token and end its activation.
- Zombies may attack only once per round.

ZOMBIE ACTION POINT TABLE

ACTION	AP COST
Shamble: Move to a surrounding square	1 AP
Attack	1 AP
Remove Stun marker	All

When activating a zombie it will follow this protocol:

- If the zombie has LOF and Range to an enemy: it performs an attack and ends its activation.
- If the zombie does not have LOF and Range to an enemy: it spends 1 AP and moves towards the closest enemy.
- Repeat the above steps until the zombie has run out of APs.



This diagram explains the order in which the zombies are activated. First off, zombies 1, 3 and 5 do not activate because the closed door and the wall block their path to Ida. Zombie 2 activates first as it is closest to Ida, followed by 4 and 6.

MOVEMENT

In U-Boot Z, movement actions as well as opening doors, passing/picking up gear and changing weapons, are conducted using Action Points (APs).

HERO AND NPC MOVEMENT

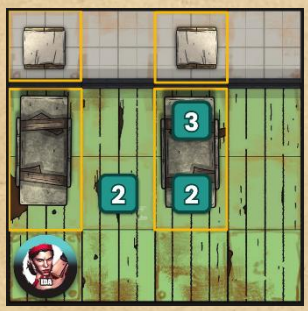
If the rule below is in green then it pertains to both heroes and NPCs while rules in black pertain only to heroes.

- A hero may perform as many movement actions as their APs will allow.
- Heroes may not move through walls, closed doors, or any solid barrier, or squares outlined in red. These are collectively known as obstructive terrain.
- Heroes may not move through a space occupied by another figure.
- It costs 1 AP to exit a map.
- When moving diagonally one of the adjacent squares being moved past must be unobstructed, unoccupied and not in a zombie's Zone of Control (ZOC).
- If both squares include hindering terrain or other terrain with an effect (fire, traps, toxic clouds, etc.) the move incurs the appropriate penalty/effect. If there are two different terrain squares, the player chooses.
- Heroes can move onto a fire square, causing them to take 1 wound, but cannot finish their activation on it. If a fire marker is placed in a square with a figure, that figure takes 1 wound.
- Hindering terrain (outlined in yellow on the map) costs 1 AP to move onto or cross (see p.22).
- A hero may interrupt their movement to perform a Snap Fire, Jab or Slash attack, then continue moving with their remaining APs.

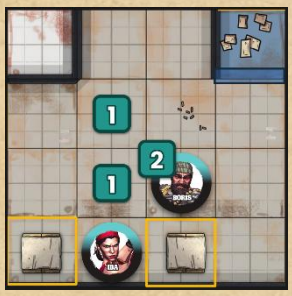
HERO/NPC MOVEMENT TABLE

ACTION	AP COST	NOTES
One square forward	1	
Turn 90 degrees	1	
One square sideways	2	
One square backwards	2	
Move diagonally forward	2	
Move diagonally backward	3	
Open/close door	1	Door must be in any adjacent square.
Hindering terrain	+1 AP	To enter the square.
Switch weapons	2	May rearrange items in gear slots and hands.
Pass items to adjacent hero	4	Passed weapons can be readied immediately for free. Only the passer spends the AP.
Pick up items	2	May rearrange items in gear slots and hands

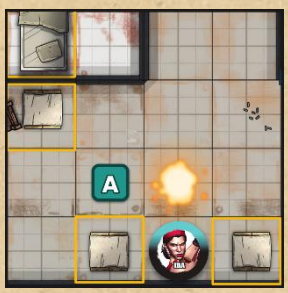
Examples of Movement



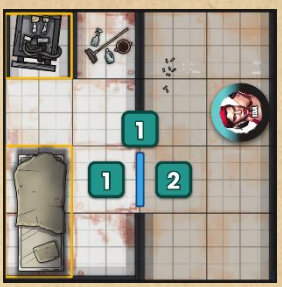
Ida moves diagonally, paying 2 APs. She then moves diagonally again and pays 3 APs for the 2nd square because she is moving onto hindering terrain, which costs +1 AP. Moving 1 square forward within the hindering terrain costs another 2 APs (1 to move forward and +1 for hindering terrain). Total APs spent is 7. The last AP is lost.



Ida wants to pass Boris a knife she has picked up. From her starting position, she cannot give it to him since they are not adjacent. She uses 1 AP to move forward, then 4 APs to give Boris the knife, and uses 1 AP to move forward 1 square. Boris is not required to spend any APs on this.



Ida wants to move to square A diagonally. She will be moving between the fire (causing 1 wound) and the crate (hindering terrain). She chooses to take the penalty from the hindering terrain rather than take a wound, so it will cost her 3 APs: 2 to move diagonally and +1 for the hindering terrain. If the crate was obstructive terrain (like stacked crates), she would be forced to take the wound from the fire.
Alternatively, if the fire square was empty, she would not incur the +1 from the hindering terrain and would only pay 2 APs.



Ida moves diagonally first, costing 2 APs, then she elects to open the door for 1 AP and then uses 1 AP to move one square forward.

ZOMBIE MOVEMENT

- A zombie will always move towards the closest survivor: the survivor that could be reached in the smallest number of moves this turn. When determining the shortest path, ignore any zombies between the activated zombie and the survivor.
- A zombie can move to a surrounding square for each AP it spends.
- A zombie can only move diagonally if at least one of the adjacent squares it is moving past is empty.
- Zombies will not move diagonally across the corner of a fire square.
- Zombies cannot enter obstructing or hindering terrain, but they can leave it.
- Zombies may not open doors.
- A zombie will not move if there is no path to a survivor (for example, a zombie in a room with a closed door with no survivor in that room).

EXAMPLES OF ZOMBIE MOVEMENT



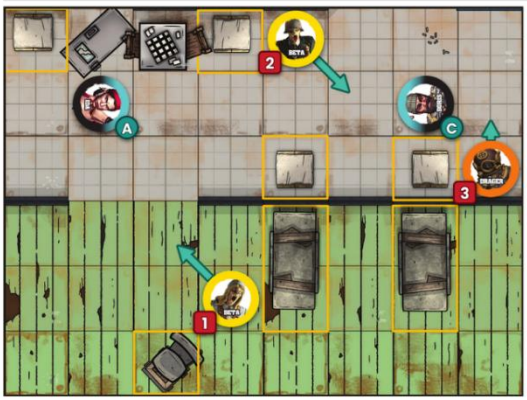
Move adjacent to a target

Zombie #1 can move to either A or B. Both are the same distance (1 move). Because the distance is equal, the player may choose which square the zombie moves to.



Move diagonally adjacent to a survivor

Zombie #1 will move to A (adjacent to the closest survivor). With A taken by zombie #1 and the other squares next to Ida blocked by hindering terrain, zombie #2 will move to B, diagonally adjacent to Ida.



Move towards the closest target

Zombie #1 is on the other side of the wall. Its only path to a survivor is through the doorway, so character A is its closest target and it moves toward the doorway.

Character C is the closest target to zombies #2 and #3, both of which can move adjacent with a single move.

Zombie #2 activates first and moves diagonally to be adjacent to C. Zombie #3 then moves up to be adjacent to C.

TERRAIN RULES

BASIC TERRAIN

There are three Basic types of terrain in the game: clear, hindering, and obstructive.



- **Clear terrain** is the default state of a map square and has no impact on movement or combat.
- **Hindering terrain** (outlined in yellow) slows your movement and can provide cover. It costs 1 AP to move onto or cross.



- **Obstructive terrain** (outlined in red) blocks movement and can't be attacked through. Walls, closed doors, or any other visual solid barrier shown on the map are considered obstructive terrain. Terrain with a dotted red line blocks movement but does not hinder Line of Fire (LOF).

WATER TERRAIN (Blue-bordered terrain)

Any fire effect (Molotov, torch etc.) is extinguished in deep water.



- **Shallow water (dotted light-blue bordered squares)**
  - Costs +1 AP to exit each square.
  - Costs +1 AP to turn while in the square.



- **Water, waist-deep (light-blue bordered squares)**
  - Costs +2 APs to exit each square.
  - Costs +1 AP to turn while in the square.
  - All attacks made into or out of water suffer a -1 DRM.



- **Deep water (light-blue and black bordered squares)**
  - Costs +3 APs to exit each square.
  - Costs +2 APs to turn while in the square.
  - All attacks made into or out of deep water suffer a -2 DRM.

FIRE

- Zombies will not move diagonally across the corner of a fire square.
- Heroes can move onto a fire square, causing them to take 1 wound, but cannot finish their activation on it.
- This damage also occurs if a hero moves between two diagonally adjacent fire squares or a fire square diagonally adjacent to obstructive terrain.
- If a fire marker is placed in a square with a figure, that figure takes 1 wound.
- Spawn locations with fire on them do not spawn. They are inactive until the fire is removed.

ARC OF FIRE (AOF)

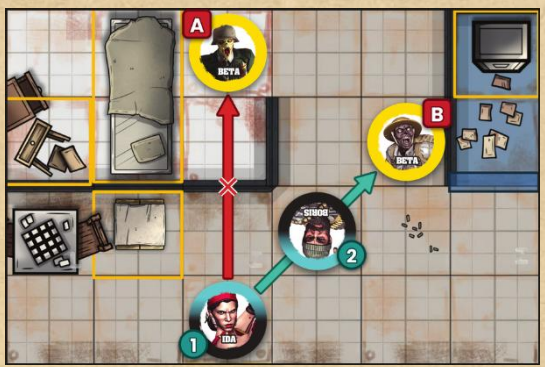
- A figure has four arcs of fire: front, right, left and rear.
- These are 90-degree arcs as shown in the diagram.
- A figure may only attack a figure within its front arc. Throwing grenades is the exception.
- Figures can “see” in all 4 AOF.
- Zombies have no facing or arc of fire. They are assumed to be facing all directions.



LINE OF FIRE (LOF)

Line of Fire determines whether there is an unobstructed path between two figures. Figures can only **see**, or **attack** figures, they have a LOF to.

- To determine LOF, trace a straight line from the center of the figure’s square to the center of the target figure’s square.
- Any squares through which the line passes are considered when checking if a LOF exists between the two figures.
- Line of fire is blocked by obstructive terrain (doors, walls, pillars, stacked crates, etc.).
- Corners do not affect LOF.
- For the purpose of revealing a zombie, the zombie can be in any of the heroes AOF.



1. Ida (#1) can attack zombie B because it is in her front arc, and she can trace a LOF to the center of its square. Her LOF crosses a square with another figure in it so she will receive a -2 DRM
2. If Ida rolls a natural 2 she hits Boris.
3. Ida cannot target A because her LOF crosses a wall.
4. Boris (#2) cannot target either zombie because neither is in his front AOF.

ZOMBIES

REVEALING ZOMBIES

Zombie markers are flipped, revealing the type of zombie, as soon as they are in LOF of a survivor. For the purpose of revealing zombies, Line of Fire is considered to be in all Arcs of Fire (360 degrees around hero).

- This is done immediately regardless of when it occurs.
- Unrevealed zombies have 1 AP.
- When a zombie is revealed, it gains the full APs it would have remaining for that round. *For example, if revealed after spending 1 AP, a zombie classified as having 2 APs may use its remaining AP to move or attack.*

ZOMBIE ZONE OF CONTROL (ZOC)

A survivor must stop when their move takes them into any square adjacent to a non-stunned zombie. A zombie's 4 adjacent squares are its zone of control.

- The survivor may use any unused APs to change facing.
- If the survivor has not attacked this round they may attack the zombie; if the zombie is stunned or killed, continue taking movement actions normally.
- Stunned zombies do not hinder survivor movement.
- If a survivor activates in a ZOC, they may move out normally. The ZOC is only triggered by moving into it.
- Survivors may not move diagonally between two ZOCs.



Zone of Control (ZOC)

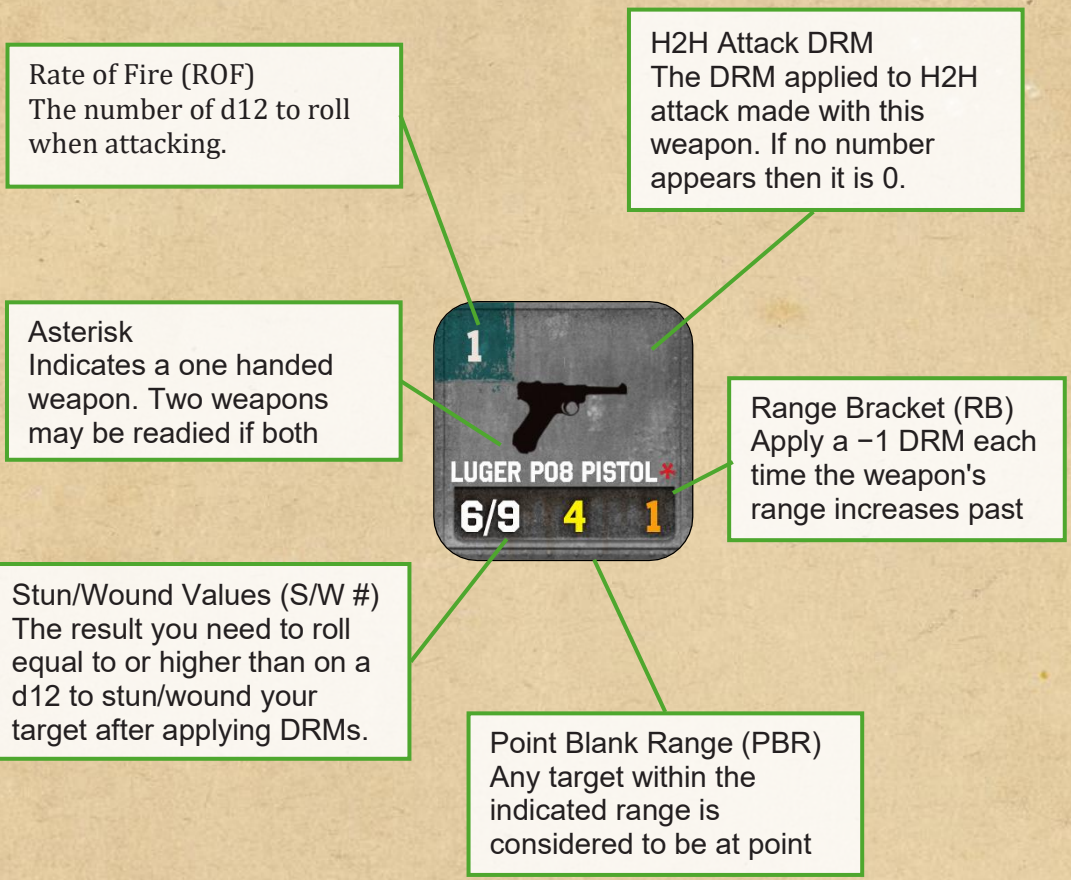
SPAWNING

Zombies are spawned at the end of the Zombie Action Phase when the current round space on the round track shows a spawn location. Draw (from the zombie pool) and place a face-down zombie marker on each matching spawn location.

- If you need to spawn a zombie and there are none left in the zombie pool, take all the zombie markers in the discard pile, shuffle them, and place them face down into the zombie pool. If none remain in discard or pool, skip spawn.
- If a spawn location is occupied, place the spawning zombie adjacent to the spawn location, player's choice.
- If a spawn location is occupied by a survivor, the survivor takes 1 wound.

WEAPON CHARACTERISTICS

Review the weapon anatomy diagram below to become familiar with a weapons terms and rules overview. Full details are on the following pages. For reference DRM means Die Roll Modifier. These affect your chance to hit.



Example: Luger Pistol

- The Luger pistol shown has a Rate of Fire of 1, which means it rolls 1d12 when attacking.
- Its S/W # is 6/9, meaning it will cause a stun on a 6+ or a wound on a roll of a 9+ (after DRMs are applied).
- The Range Bracket is 1, adding a -1 DRM for every 1 square the target is beyond the PBR.
- E.g., Using the Luger on a target at range 5, the DRM would be -1, at range 6 it would be -2 and so on.

COMBAT

Let's start getting into the meat of the combat rules.

ATTACKING

While a hero is activated, they may use APs to perform attacks. In some circumstances, they can attack at other points during the Round.

NOTE ON DIE ROLL MODIFIERS (DRMs)

DRMs affect almost every choice you make when attacking, so they are referenced constantly throughout the attack rules. Their full rules come later, in a dedicated DRM section (see p.35), after all the attack types have been covered. Since you will be weighing DRMs the moment you start choosing an attack, here is a short summary of how they work.

- Die Roll Modifiers are applied to the number rolled on your attack dice.
- A negative DRM makes it harder to hit a target while a positive DRM makes it easier.
- Modifiers are cumulative.

ATTACK PROCEDURE

Your hero must select a **valid target**. A valid target is the closest target that is in the attacker's front Arc of Fire, that they have LOF to and is in range of one of their readied weapons. Perform the following.

1. Determine the range to the target.
2. Choose an Attack Type.
3. Calculate DRMs (see p.35). DRMs are added to or subtracted from the number rolled on a die. They will be used in the examples of the Attack Type and are explained in more detail on the following pages.
4. Roll the number of d12 equal to the Rate of Fire (ROF) of the weapon.
5. Determine Attack Results by applying DRMs to each die result, comparing the modified die roll result against the weapon's S/W #, resolving the effect of the attack.

1. DETERMINING RANGE

To determine the range to the target, count the number of squares from the attacking figure to the target figure, including the target's square but not the attacking figure's square. When calculating range, any diagonals count as 2.

2. ATTACK TYPE

SITUATION	AP	NOTES
Jab Attack	2	A quick Hand to Hand attack (see p.28). A hero may interrupt their movement to Jab and then continue moving.
Slash Attack	4	The standard Hand to Hand attack. The hero **may interrupt** their movement to Slash and then continue moving.
Strike Attack (H2H)	8	A careful, deliberate Hand to Hand for maximum accuracy.
Snap fire attack (ranged)	2	A quick shot. The hero **may interrupt** their movement to Snap Fire and then continue moving.
Normal fire attack (ranged)	4	The standard ranged attack. They may not interrupt their movement to make this attack.
Aimed fire attack	8	A careful, deliberate shot for maximum accuracy.
Throw grenade	3	Consumes one grenade.
Covering Option	2/4/8	May be combined with all attacks. Allows a hero to attack outside of their turn (see p.32).
Spread Fire Option	0	May be combined with all ranged attacks. Allows a hero to attack multiple targets.
Autofire Option	0	May be combined with Normal Fire attacks. Allows the hero to double the ROF of ranged weapons with a 1 ROF. Incurs a -2 DRM.

There are several attack types to choose from.

HAND-TO-HAND COMBAT (H2H)

The Hand-to-Hand attack type must be used if the attacking figure is adjacent to a non-stunned enemy. Your choice of H2H attacks are Jab, Slash and Strike.

- Always use the weapons H2H DRM when attacking an adjacent enemy.
- H2H attacks never consume ammo.
- When using a ranged weapon in H2H, you have a range of 1 and only roll 1 attack die (ignoring the weapon's PBR and ROF).
- An unarmed character has a H2H S/W # of 10/12.



Emily is facing off with a couple of zombies. When using the axe with a PBR of 2, she can choose which zombie to attack as both are “closest” at a range of 2.



If Emily is using a knife, then she can only attack zombie #2 with a S/W of 4/7. This is because she must attack the closest zombie.

If Emily is using the Kar 98 rifle, then she still can only attack zombie

GRENADES

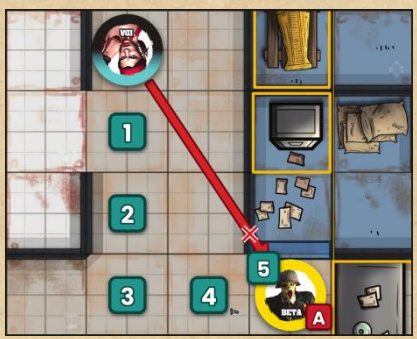
In these rules, the term grenade refers to all thrown explosives. Grenade attacks use Area of Effect (AOE) weapons; grenades, satchel charges and Molotov cocktails. The weapon is consumed when the attack is completed. Unlike other attack types, the attacking hero does not need to have the weapon readied, and the attack does not consume ammo. Instead, when the attack is completed the weapon used is consumed: discard the marker or reduce your supply of grenades by one.

- Select a target square in the thrower's front or side arcs, with LOF and within range 8.
- Determine the number you will need to roll to successfully land the weapon on the target square. This will be the range of the target square plus any standard attack modifiers, including LOF DRMs (such as -2 for a figure in the way). Range DRMs don't apply.
- Roll 1d12 - if your roll is equal to or greater than the calculated number, you land the explosive in the target square, otherwise, it deviates (see the Thrown Explosive Deviation section below).

THROWING WITHOUT LOF

This rule reflects the ability to throw grenades around corners or bounce them off walls. Grenades, and only grenades, may be thrown at target squares that the hero does not have LOF to.

• You cannot throw a grenade through Obstructive Terrain. When calculating the range to the target square you must trace a path that goes around any Obstructive Terrain. A DRM of -4 is applied.



Ida's LOF is blocked by the wall, so she throws a grenade without LOF. The range is 5. She needs to roll a 9 to land the grenade in the square containing

GRENADE DEVIATION

When a thrown explosive weapon deviates, roll 1d12 and use the following rules to determine where it lands:

- On a roll of 1-8, shift the target square as indicated on the Grenade Deviation Chart shown below.
- On a 9-12, the thrown explosive deviates 2 squares instead of 1. Roll 1d12 again to determine which direction. Any further 9-12 rolls are rerolled.
- If the new target square is occupied by Obstructive Terrain, reroll the deviation check from scratch.

Grenade Deviation Chart



RESOLVING AN AREA OF EFFECT (AOE) ATTACK

Grenade attacks do not resolve immediately. Instead, at the end of the attacking hero's activation, the grenade explodes. The exception is Molotov cocktails, which detonate immediately (see p.56). Explosives set with a timer instead detonate when their timer runs out (see Timers below).
Resolve an attack against all figures within the blast range and LOF of the target square by rolling attack dice equal to the ROF of the weapon against each.

- An explosive marker shows no Range Bracket but instead has "AOE" in its place.
- No LOF modifiers apply.
- Blast range calculations do not include the target square but do include the attacked figure's square.
- If the explosive attack targets an unrevealed zombie, reveal the zombie so you can assess any impact to the attack modifier and attack effects.
- Against human targets, a stun result from an explosive is considered a wound.



1. Ida has successfully thrown a grenade onto the square occupied by zombie #1 and will at the end of her activation resolve the grenade's AOE attack.

2. When resolving the blast, she will resolve attacks on zombie #1 and zombie #2 as both of them are within the grenade's point blank range of 2 and have a LOF to the square containing the AOE weapon.

3. When resolving the attack on zombie #1, she will eliminate it on an attack roll of 9 or better. If she fails to eliminate it, the zombie will be stunned regardless of the number rolled since it is in the target square.

4. When resolving the attack on zombie #2, Ida will need to roll a 6, 7 or 8 to stun it or eliminate it on an attack roll of 9 or better.

5. There will be no attacks on zombies #4 and #3. Zombie #4 is out of range and zombie #3 has no LOF to the Final Target square.

6. Ida is outside the grenade's PBR and will not be affected by it.

TIMERS

A timer allows for a delayed trigger on whatever the timer is set on, usually a Satchel Charge (see p.56).

- A timer is made up of a stack of one or more timer markers on an item or on a map square. Each timer marker represents 1 round.
- In the End Phase of each Round, remove one timer marker from each stack.
- When the last timer marker is removed, immediately detonate the explosive or perform any “when the timer runs out” effects for the item the timer was placed on.

For example, a hero sets a Satchel Charge on a square with a two round timer (2 timer markers). In the End Phase of the same round, one timer marker is removed. Then, in the End Phase of the following round, the second timer marker is removed, and the Satchel Charge explodes causing an AOE Attack.

COVERING

If a hero does not use all their APs and has not attacked, they may spend APs to be placed on Covering status. Place a Covering marker with the appropriate value next to the character. Covering attacks may take place at any point during the round, including the zombie turn.

COVERING STATUS CHART

- The covering attack uses normal combat rules and restrictions (must have LOF to target, target must be in front arc, etc.).
- Once a covering figure attacks, it loses its covering status, replaced by an attacked marker.
- Becoming locked causes covering status to be lost.

SPEND APs	RESULT
8	Covering 0, may perform a Covering Attack with 0 DRM
4	Covering 2, may perform a Covering Attack with -2 DRM
2	Covering 4, may perform a Covering Attack with -4 DRM

Ida, in her previous turn, did not attack and spent 4 APs to go on Covering, noted by the Covering 2 marker. A Dräger zombie walks from around a corner, exposing itself. Ida elects to interrupt the zombie turn and make a Covering attack at -2 DRM with her Kar 98k rifle. The Covering marker is removed and replaced with an attacked status marker.



SPREAD FIRE

This option allows a character's attack to be split across multiple targets when using a ranged weapon with ROF 2 or higher. It can be used with any type of ranged attack.

- A -1 DRM is applied.
- Must initially target the closest enemy.
- After rolling and resolving the first attack die, the attacker may change their target to any figure adjacent or diagonally adjacent to the previous target.
- Recalculate DRMs before rolling each die.



Boris has scrounged an MG34 light machine gun and is ready to try it out. This weapon has a Rate of Fire of 3 as noted in the top left of the weapon marker. He declares a Spread Fire attack (3 dice) and must attack zombie #1 as it is the closest zombie. His MG34 has a S/W # of 6/9. Because he is electing to Spread Fire, the attack suffers from a -1 DRM.

1. The first die rolled is a 2, which misses. For the second roll, Boris chooses to fire at the same target, rolls a 10 (-1 DRM for a final result of 9, equal to the wound number) and eliminates it. Boris's third die can be used to attack #2 or #3.

2. If Boris chooses to attack zombie #3 next anyway, there would be a -2 LOF DRM for the intervening figure.

Note that despite declaring a Spread Fire attack, you can choose to use all three attack dice on zombie #1.

AUTOMATIC FIRE

- Any weapon with a ROF of 1 can double its ROF to 2 but each attack suffers from -2 DRM.
- This option can only be chosen when using a Normal Fire attack with a ranged weapon.

3. DIE ROLL MODIFIERS (DRM)

Various factors may make it harder or easier to hit your target. This could be the type of attack conducted, the range of the target, or perhaps attacking through hindering terrain. These circumstances create Die Roll Modifiers (DRMs), which are applied to your die roll.

- A negative DRM makes it harder to hit a target while a positive DRM makes it easier.
- Modifiers are cumulative.
- It is possible for a figure to have enough modifiers to make an attack impossible.
- A character may also have modifiers from their dashboard, e.g., The Proficiency skill which grants a +1 DRM to all attacks with a specific weapon.
- The types of DRMs are Attack, LOF, Range and Character.

ATTACK DRMs

Attack DRMs represent how the attack itself is being made, the speed and care taken in aiming, the weapon hand used, the state of the target, or whether the attacker is acting on their own turn. These reflect choices and circumstances distinct from terrain and distance. These modifiers are cumulative.

ATTACK DRMs

SITUATION	DRM
Snap Fire/Jab attack	-2
Normal Fire/Slash attack	0
Aimed Fire/Strike attack	+2
Covering	0, -2 or -4
Spread Fire	-1
Automatic Fire	-2
Using off-hand weapon	-2
Throw grenade without LOF	-4
Stunned zombie target	+3

LINE OF FIRE (LOF) DRMs

LOF DRMs represent adjustments for intervening terrain and figures. The maximum total LOF DRM that can be applied to an attack is -4 DRM. It will stack with other DRMs.

- When an attack traces LOF through any portion of a square containing hindering terrain or a figure, a penalty is incurred for each such square/figure in the LOF between attacker and defender.
- Hindering terrain are lines or squares highlighted in yellow.
- If the attacking character is in or adjacent to a hindering terrain square or line in their LOF, it does not cause a penalty. Adjacent figures in LOF incur the normal penalty.

LOF DRMs

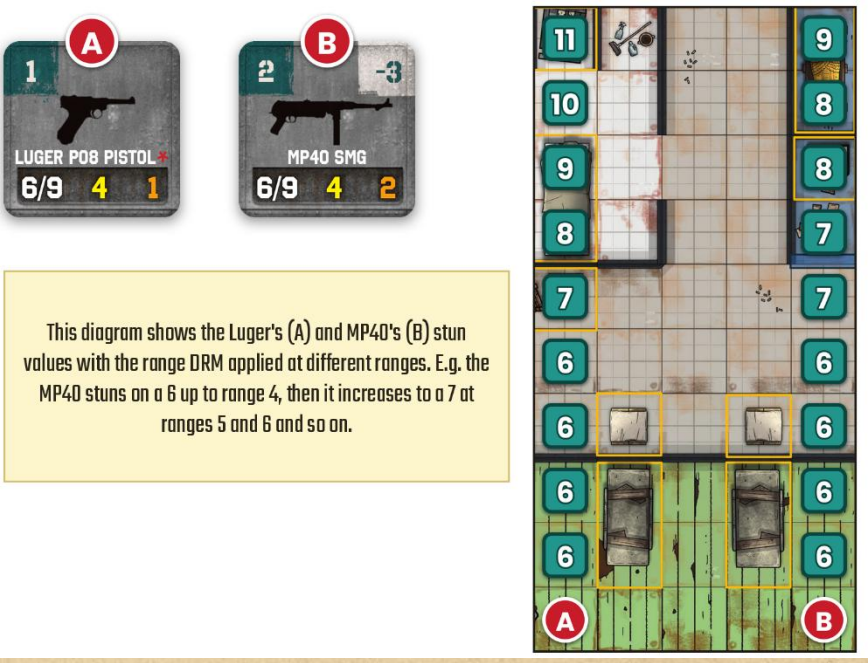
LOF SITUATION	DRM (MAX -4)
Attacking past a figure	-2 per figure
Hindering terrain	-2

RANGE DRMs

The accuracy of a weapon drops when attacking targets outside its Point Blank Range (PBR), the further the target, the greater the penalty. This is represented by the weapon's Range Bracket number.

A weapon's range bracket defines how many squares make up one penalty interval. *For example, a range bracket of 2 means a -1 DRM is applied for every 2 squares beyond PBR.*

When attacking a target outside of PBR, apply a negative 1 DRM to the die roll for each range bracket of distance beyond PBR.



This diagram shows the Luger's (A) and MP40's (B) stun values with the range DRM applied at different ranges. E.g. the MP40 stuns on a 6 up to range 4, then it increases to a 7 at ranges 5 and 6 and so on.

CHARACTER DRMs

Other DRMs cover modifiers that come from a character's own resources and effort rather than the situation around them. By spending Merit or APs, a character can push themselves to improve their odds on a roll.

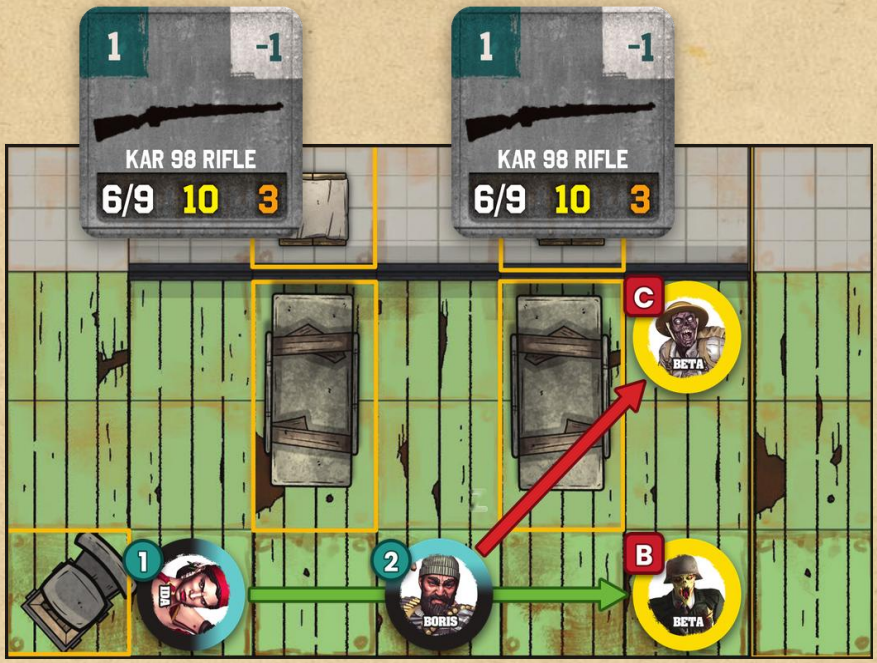
Effort	DRM
Spend 1 Merit before a die roll.	+1 DRM*
Spend 4 Merit after a die roll	+2 DRM*
Skill test: spend extra APs	+1 DRM per 2

COMBAT EXAMPLES



3. Emily (#1), with her Luger (S/W # 6/9) spends 4 APs to Normal Fire (0 DRM) at a Dräger zombie (A) along the green LOF. She is at range 4 which offers 0 R-DRM since her PBR is 4. She is attacking through 2 hindering terrain squares but will not be affected by the first since she is adjacent to it. She has a -2 DRM (0 for Normal Fire, 0 for the adjacent square of hindering terrain and -2 for the second square of hindering terrain). Her final S/W # is 8/11.

Normal Fire 0 ✚ LOF DRM -2 ✚ R-DRM of 0 = -2 DRM Total



1. The GREEN line indicates Ida's (#1) Line of Fire through the figure Boris (-2 LOF DRM). At this range (4 squares) there are no RANGE DRM because the target is within the 10 PBR of her Kar 98k rifle. Ida spends 4 APs to conduct a Normal Fire attack with her Kar 98k rifle (weapon S/W # of 6/9). Ida rolls an 8 stunning zombie B. Her roll of 8 minus the 2 DRM results in a final roll number of 6 which is equal to the weapons stun number. Note that if Ida rolls a natural 2 then she will hit poor Boris instead.
Normal Fire 0 ✚ LOF DRM -2 ✚ RANGE DRM of 0 = -2 DRM Total

2. Boris (#2) spends 2 APs to Snap Fire (-2 DRM) his Kar 98k rifle at zombie C. The Kar 98k has a S/W # of 6/9 with a PB range of 10. Zombie C is at range 4, which is within the weapon's PBR, so there is no RANGE DRM. The RED line indicates the figure's Line of Fire, which crosses a square of hindering terrain (the cart, -2 LOF DRM). Boris requires a roll result of 10+ to stun and cannot wound with this attack.
Snap Fire -2 ✚ LOF DRM -2 ✚ RANGE DRM of 0 = -4 DRM Total



4. The GREEN line indicates Boris's (#1) line of fire and Boris uses 2 APs to snap fire (-2 DRM) at zombie A. His attack is over one square of hindering terrain (-2 LOF DRM). At this range (4 squares due to diagonal), there is no R-DRM with his Kar 98k rifle because the target is within its 10 PBR. When he rolls his die he must subtract 4 from the die roll.
Snap Fire -2 ✚ LOF DRM -2 ✚ R-DRM of 0 = -4 DRM Total

5. Emily (#2), armed with a Luger, is attacking a zombie across hindering terrain; her LOF is depicted in BLUE. Emily uses 8 APs to perform an Aimed Fire attack giving her a +2 DRM. Attacking through hindering terrain causes a LOF DRM of -2. Her figure is 5 squares away from the zombie, so she also has a R-DRM of -1. When she rolls her die she will subtract a -1 from the roll.
Aimed Fire +2 ✚ LOF DRM -2 ✚ R-DRM of -1 = -1 DRM Total

4. ROLLING ATTACK DICE

Roll the number of d12 equal to the ROF of the weapon. Roll attack dice one at a time, applying DRMs to each roll before comparing against the weapon's S/W #.

- A natural die result means the unmodified number rolled on a die.
- A natural die result of 1 is always a miss for all types of attacks.
- A natural die result of 1 with a ranged weapon, reduce your ammo supplies by 1.
- A natural die result of 2 will hit the closest intervening figure in the LOF (if any) to the attacker instead of the target. Apply 1 wound to the intervening figure.
- DRMs are recalculated after each die is rolled. If the first die stuns the zombie, the stunned DRM applies before rolling the 2nd die.

5. ATTACK RESULTS

- Any die result equal to or over the weapon's Stun number (after DRMs) stuns a zombie and wounds a survivor. Further stun results against a stunned zombie have no effect.
- Any die result equal to or over the weapon's wound value (after DRMs) causes 1 wound versus survivors and stuns and wounds a zombie.
- For each wound, reduce the target's health by 1. If reduced to 0, the target is eliminated.
- Place an attacked status marker next to the survivor who attacked.

Attack Results Example: Attacking a Beta Zombie with 1 health. Weapon S/W is 4/7. On a roll of 9 with a -2 DRM for range = 7. Result: exactly meets the wound threshold, the zombie is eliminated. If the zombie had 2 health, it would take 1 wound and be stunned but not eliminated. On a roll of 6 with -2 DRM = 4, the zombie would be stunned.

ELIMINATED ZOMBIES

When zombies are eliminated, remove the figure from the map and place their marker in the zombie discard area. They will be returned to the zombie pool when the round track resets or when the zombie pool runs out.

ZOMBIES ATTACKING

- If able, a zombie will always attack an adjacent survivor (hero or NPC). If more than one survivor is adjacent, it attacks a locked survivor first; otherwise the player chooses.
- Zombies can only attack once per round.
- If a zombie's attack is against an unlocked survivor, they lock the survivor into H2H combat. Place a locked status marker between them.
- The survivor automatically faces the zombie when locked.
- If a zombie attacks a locked survivor, they inflict 1 wound.
- A zombie will always attack a locked survivor in preference to an unlocked one.
- When a zombie is stunned or eliminated, it loses any lock it had.
- Some zombies have special powers which allow them to perform different forms of attacks. Follow those rules where applicable.

LOCKED SURVIVORS

When a locked survivor is activated, their first action must be an attempt to break out of the lock. Resolve this attempt the same way you resolve a H2H attack (see p.28), applying any relevant DRMs. The attempt does not count as an attack, so it cannot stun or wound the zombie.

- If they roll at least the modified stun value (after DRMs), the lock is broken, and the survivor may act normally.
- If they fail to break the lock, they cannot spend any Action Points or attack.
- If a zombie locking a figure is stunned or eliminated, it loses any lock it had.

• PRIORITIES OF ATTACK

Instances may occur in which several different types of attacks happen simultaneously or interrupt one another. In these instances, refer to the priority chart to determine what happens first and so on.

The chart lists the priority fire from highest to lowest (highest goes first).

Actions with the same priority act simultaneously

PRIORITIES OF ATTACK	
PRIORITY	**ACTION**
1	**Skill.**
2	**Covering fire.**
3	**Any other attacks.**

EARNING MERIT

Merit are earned by killing enemies and completing scenario objectives. For characters, use black pegs on the Merit track on their dashboard for both the 10s and the 1s.

You do not receive Merit for killing zombies after the round track resets.

ACTION	Merit EARNED
Kill Beta Zombie	1
Kill Dräger Zombie	1
Kill Rotten Egg Zombie	1
Kill Alpha Zombie (XO Kreiss)	2*
Kill Alpha Prime Zombie (Bosun Haken)	3*
Kill Omega Zombie (Kapitän Hecht)	4*
Complete Scenario	1^
Complete All Secondary Objectives	1^

*On multi-wound enemies, Merit are earned only when the final wound is inflicted.

^All party members get this Merit.

SPENDING MERIT

You can spend Merit to add +1 DRM before a die roll, to reroll a die, or to add +2 DRM to a die which has already been rolled, and you use Merit to purchase skills. Action Points can never be spent to reroll or modify a die after it is rolled.

Effort	Result
Spend 1 Merit before a die roll.	+1 DRM*
Spend 2 Merit to Reroll 1 die. You can choose which result to use.	Reroll 1 die roll.
Spend 4 Merit after a die roll.	+2 DRM*

* Cannot be used on search rolls.

SKILLS

Many actions aboard U116, such as repairing damage and fighting fires, require the expenditure of APs. Some require the successful completion of a skill test. These will be noted in the Skill description. There are two types of Skills; Personal and Common.

PERSONAL SKILLS

Personal Skills are character-specific and listed on their character dashboard. They must be unlocked in the order listed, 1 to 3.

COMMON SKILLS

Common Skills may be obtained by any character who pays the Merit cost. A character may have up to 4 skills in total, in any mix of Personal and Common Skills. When a Common Skill is acquired, add the Skill marker to the character's dashboard.

COMMON SKILLS TABLE

NAME	MERIT COST	APs	DESCRIPTION	TEST ROLL	FAIL EFFECT
Proficiency	10 Merit	0	+1 DRM with preferred weapon.	Passive	n/a
Long Jump	10 Merit	1	May jump over 2 squares or 1 diagonal square, be it a pit or other terrain, and land on the other side.	6+	You land in the second square you were jumping over.
Focus	15 Merit	0	Gain 4 APs this activation. Twice per scenario.	Auto success	n/a
Dodge	40 Merit	0	Negate a Lock, Wound or Stun result.	9+	The Lock, Wound or Stun is not negated.
Repair	40 Merit	0	Automatically repair one damage to the sub per scenario.	Passive	n/a
Tough as Nails	50 Merit	0	Increase maximum Health by 1.	Passive	n/a

SCENARIO SKILL TESTS

During a scenario your heroes may be asked to perform a skill test to complete a task.

- Costs 1 AP.
- A result of 8+ is a success.
- Gain a +1 DRM per 2 extra APs spent.

UNLOCKING SKILLS

Heroes spend Merit to unlock skills. Merit are awarded when earned, but skills are not purchased until the Between Scenarios stage. When you purchase a skill, reduce your Merit by the amount of the purchase. Once purchased, skills take effect immediately. Place a peg in the unlocked Personal Skill or place the Common Skill marker on the character dashboard. For troopers, note it on the Crew Control Card.

YOUR TEAM

During the campaign, you may collect up to 4 characters to form your team. Most scenarios allow for up to 2 characters on the map.

NEW CHARACTERS

Apart from your starting characters, you may only add new characters when instructed to do so by a scenario. New characters start with 4 health and no gear or supplies, unless the scenario instructs otherwise.

CREW

These are crewmen on the submarine. Crew are troopers: player controlled, represented by markers, and recorded on the Crew Control Card. They activate and function identically to a character with the following exceptions:

- Crew have 6 APs.
- Crew have 2 Health.
- Activate in the same turn as the players.
- Wounded troopers have only 4 APs.
- Troopers can carry a total of 2 small or large items plus 3 supply items.
- At the end of the scenario all wounded crew are healed.

Engineer: This figure may add a +2 DRM to extinguish fires and performs any action other than a move or attack action for 2 fewer APs, to a minimum of 1 AP.

CHARACTER DEATH

If a character dies, they are permanently out of the campaign and may not be selected for future scenarios.

- The character rises immediately as a zombie in the square they were killed.
- The dead character is now a zombie with statistics identical to a Beta zombie, but harder to kill: it has the Death Mask power (-2 DRM on any non-AOE attack against it; see p.48).
- If the new zombie character is not eliminated during the scenario, the character's marker goes into each subsequent scenario's zombie pool until killed.
- Choose a new character to play with. Select a number of skills for your new character equal to the number the dead character had.

FAILING A SCENARIO

If you fail to complete the Objective of a scenario, you have failed that scenario. You may replay the scenario once. If you fail twice then restart the campaign.

BETWEEN SCENARIOS

The Between Scenarios section details what occurs between the completed campaign scenario and the next. After any scenario you can always use medkits, redistribute weapons and gear, and reorganize equipment. All of these items can be found in the Armoury. You also unlock Skills at this time.

THE ZOMBIE HORDE

BETA ZOMBIES

Betas with *: A Beta zombie marker with an * on it may, in designated scenarios, have a special power listed on the scenario card.

Dräger

Dräger DM20 Diving Helmet and Suit. Power: Diving Suit.

> *When the plague overtook the crew quarters and sickbay, Kapitän Hecht ordered crewmen into diving suits to enter the compartment to clear it. Those that came out were no longer human.*

ROTTEN EGG

Breather mask, coverall with apron, carrying a battery acid carboy. Power: Acid Cloud.

> *Maintenance drills burned into the brain by countless hours of training appear to linger in these battery techs after death and reanimation.*

ALPHA: U-BOOT XO WOLFGANG KREISS

Power: Leader of the Pack.

> *A good XO, to the end and beyond.*

ALPHA PRIME: BOSUN HAKEN

Power: Armoured, Frenzy, Hook.

> *Bosun Haken started out on the rough docks of Bremen and has not forgotten his old tricks.*

OMEGA: KORVETTENKAPITÄN GÜNTHER HECHT

U116 Commander. Powers: Leader of the Pack, Regenerate

> *The good skippers become like one with their boats, and Günther Hecht is one of the best.*

ZOMBIE SPECIAL SKILLS

Acid Cloud: When this zombie is stunned, it pops. Remove it and place a toxic cloud marker in its square. Roll 1d12; on a 10+ inflict one damage on the compartment.

Diving Suit: -4 DRM on any attack against this figure, making it much harder to stun or wound.

Hook: A model moving into this figure's Zone of Control is wounded on a 10+.

Fat: This figure has 3 Health. This figure ignores attacks made by knives.

Armoured: This zombie cannot be stunned.

Death Mask: -2 DRM on any non-AOE attack against this figure. Zombies that were formerly party members always have this power.

Frenzy: When this zombie attacks, instead of locking its target it inflicts one wound.

Leader of the Pack: While this zombie is on the map, all zombies that would normally move one square now move two and the -4 on the zombie initiative roll is eliminated.

U-BOOT SPECIAL RULES

U-BOOT COMPARTMENTS

U116 is divided into 3 compartments corresponding to the 3 map sections: Midships Control (Map 1), the Engine Room (Map 2), and the Torpedo Room (Map 3).

There is no line of sight between maps. A clear path for undead does not exist between maps.

Travel between maps is possible. To travel between Map 1 and Map 2, move from square 1 to square 2 or vice versa. To travel between Map 1 and Map 3, a figure must spend 4 APs to move from square 1A to square 3 or vice versa. Figures without enough APs may not move.

SINKING THE U-BOAT

If a compartment reaches 5 damage (the X on its damage track) it floods and is destroyed, unless the scenario rules say otherwise. If more than 1 compartment is flooded, U116 sinks. The living are drowned, eaten by on-board undead, or by sharks and zombies in the water. The campaign is over.

MINIMUM CREW

U116 requires a minimum of one engine specialist, one navigation specialist, one damage control fitter specialist, and 2 other crew to function. **There are currently 5 crew, not including officers or your party. Your heroes can be part of this crew, but if they are, they may not participate in scenarios.**

- Engine Specialist: Chief Engineer, Chief Electrician
- Navigation Specialist: Navigation Officer, Ahnenerbe Scientist
- Damage Control Fitter Specialist: Chief Engineer, Bosun

The Kapitän and the 1st Watch Officer may fill any one role at a time.

INCIDENTAL DAMAGE

Delicate systems and parts within the U-boat can be easily damaged by careless weapon fire.

Damage Test: Ranged attack dice missing their target other than natural 1s or 2s roll 1d12 again. On a roll of 10+ they have hit something in the compartment. Roll on the appropriate chart for the effect. An MG or rifle has a -1 DRM to this roll.

Midships Damage: Roll 1d12

Roll	Result
0-1	Electrical Fire: 1 Damage. Fire Started.
2-3	1 Damage.
4-5	Specialist Wounded. Player's Choice.
6-8	Crewman Killed.
9-10	Team Member Wounded. Player's Choice.
11	Minor Hit. No effect unless it is the final damage.
12	Wild Ricochet: No damage but reroll damage test.

Engine Room Damage: Roll 1d12

Roll	Result
0-1	Battery Fire: 2 Damage. Fire Started.
2-3	Battery Fire: 1 Damage. Toxic Cloud.
4-5	Specialist Wounded. Player's Choice of Chief Engineer, Chief Electrician, Bosun.
6-8	Fuel Leak. No effect... so far.
9-10	Team Member Wounded. Player's Choice.
11	Temporary Damage. No effect unless there is a Fuel Leak, in which case: Kaboom! Section destroyed.
12	Wild Ricochet: No damage but reroll damage test.

Torpedo Room Damage: Roll 1d12

Roll	Result
0-1	Torpedo Hit: Kablang! U-Boat Destroyed.
2-3	1 Damage.
4-5	Cargo Hit. Place 3 undead on empty Z squares farthest from heroes.
6-8	Crewman Killed.
9-10	Team Member Wounded. Player's Choice.
11	Specialist Wounded. Player's Choice of Chief Engineer, Scientist, or Bosun.
12	Wild Ricochet: No damage but reroll damage test.

DAMAGE RESULTS

Damage results apply to the compartment damaged. When a compartment reaches 5 damage (the X on its damage track) it is destroyed, unless the scenario rules say otherwise. Any heroes and crew make it out the watertight door and seal it behind them.

Kaboom!: Kills 3 crew, inflicts 1 wound on any specialists or heroes within, and destroys the section.

Specialist Wounded: By player's choice as detailed in the charts, a specialist is wounded. Specialists have 2 wounds. There must be enough specialists to perform the minimum crew functions.

Crewman Killed: Move the Crew Track down by one or wound a hero in that location.

Team Member Wounded: Wound a hero in that location.

Minor Hit: This damage has no effect unless it would move the marker to the red X, in which case it does so, destroying the compartment.

Wild Ricochet: No damage is done but reroll the damage test. On a 10+ the ricochet has hit something. Roll on the appropriate chart.

Fire Started: Place a fire marker on an empty square surrounding the target of the missed attack.

- A crewman or hero may attempt to extinguish an adjacent fire by passing a skill test (see p.45), or for 2 APs and the expenditure of a fire extinguisher a fire may be automatically extinguished.
- Turn the objective marker red side up on the damage track to show there is a fire in that compartment. Turn it back to the blue side when the fire is out.
- If a fire is burning when the round track marker resets or when the scenario ends, it does 1 more damage before going out.

Toxic Cloud: A battery has released a toxic sulphuric acid cloud from the hit.

- Place a toxic cloud marker on the target square.
- This cloud will wound any model activating in it.
- The cloud is removed at the end of the scenario.

Fuel Leak: One of the many saddle tanks has been holed. There is no effect as the diesel oil mixes with the bilge water, but if it gets to the engine exhausts or another hot round sparks it, there will be trouble. More than 1 fuel leak has no further effect. When the scenario ends, the fuel leak(s) are repaired before the next scenario begins.

Temporary Damage: There is no effect unless a fuel leak is in effect. If it is, there is an explosion: Kaboom!

Torpedo Hit: Doesn't matter if it was the fuel or the warhead that got hit. Kablang! The U-boat and all within are destroyed.

Cargo Hit: The cargo containment has been damaged, or the cargo itself has been awakened. Draw 3 undead markers and place them on the farthest Z squares from crew or heroes.

TRACKING DAMAGE

Damage is recorded on the various tracks under map 2. Place blue objective markers on the compartment damage and day tracks and use a health marker on the crew casualty and specialist wound tracks.

Losing the Midships Compartment: Supplies are not replenished. It is not possible to conduct damage repair. The U-boat may be controlled from the conning tower.

Losing the Engine Compartment: Add a 4th day to the campaign as the crippled boat proceeds on APU power and the current. A brief for this dire event will be presented if and when needed.

Losing the Torpedo Room: Consult the relevant scenario card for the effects of this loss.

SUPPLY REPLENISHMENT

Everything is neatly stowed and accounted for on the U-boat. There are no chests or boxes to be looted unless noted.

At the beginning of a scenario, before Set Up, each hero may receive 1x Knife, Spear, or Axe and 1x ammo. All firearms are locked in the safe or arms locker and will only be issued under special circumstances.

FIRE EXTINGUISHERS AND GAS MASKS

Each FX square contains 1x Fire Extinguisher and 1 Gas Mask which can be picked up for 2 APs each. They are returned or replaced to this space when the scenario is complete.

DOORS ON PURPLE DOORWAYS

These are watertight doors normally kept open so the engines can breathe. If a compartment is destroyed, place a door (or doors) on the purple doorway. These doors may not be opened.

DAMAGE CONTROL

If two of the Kapitän, the 1st Watch Officer, or the Chief Engineer are alive, then at the end of the scenario, 1 damage may be repaired in 1 compartment.

CREW DEPLOYMENT

Each scenario two crew markers are placed on the assigned squares. They are going about their necessary duties, (see Crew rules p.50)

- They may not leave the compartment
- are treated as enemies by undead
- are activated with and controlled by the player.
- If killed, replace their marker with an undead and adjust the crew casualty track accordingly.
- Crewmen are trained to make way, and a hero may therefore move through a crewman marker for +1 AP or vice versa.

FRAGILE EQUIPMENT

Fragile equipment may be damaged by incautious zombies attracted to the noise, scent, or temperature. Squares with blue objective markers on them represent such enticing items. Undead other than Alpha Primes or the Omega treat such squares as enemies. If they damage the square, remove the marker and the zombie and inflict 1 damage on the compartment.

ARMOURY

There may be discrepancies between weapons and gear detailed here compared to those listed in specific scenarios. Those listed in scenarios may have specific qualities for those scenarios and should be used as written.

- Large Items take up 1 full gear slot.
- Supply Items use the supply track on the character dashboards for characters.

GEAR

GEAR TABLE

NAME	CONSUMED	DESCRIPTION
Alarm Clock	yes	Alarm Clocks divert zombies away from heroes and troopers. They are thrown using the Grenade rules. The square containing the alarm clock marker is considered to be the closest target to all zombies not adjacent to a target. During each End Phase roll 1d12 for each alarm clock marker on the map: on a roll of 1 to 8 remove the marker.
Ammo	yes	When attacking with a ranged weapon, a natural roll of 1 reduces ammo by 1.
Fire Extinguisher	yes	For 2 APs and the expenditure of a fire extinguisher a fire may be automatically extinguished.
Gas Mask	no	Allows the wearer to ignore the effects of toxic clouds.
Medkit	yes	Consume Between Scenarios to heal 1 wound (up to the maximum health of a hero).
Spare Parts	yes	Required for some damage control actions. Consult the scenario card for specific uses.
Tool Kit	no	Used for damage control and repair actions. Provides a +2 DRM bonus to relevant tests.
Wrench	no	Tool and weapon. May be used in H2H (see Weapon Reference). Can also be used in damage repair actions.

WEAPON REFERENCE

MELEE WEAPONS	ROF	S/W #	PBR	RB	H2H DRM	NOTES
Bayonet (fixed to a rifle)	1	5/8	2	H2H	-2	†
Knife/Bayonet *	1	4/7	1	H2H	0	
Shovel *	1	3/6	1	H2H	0	
Spear	1	5/8	2	H2H	-2	
Axe	1	4/7	2	H2H	-1	
Wrench	1	3/7	1	H2H	0	

RANGED WEAPONS	ROF	S/W #	PBR	RB	H2H DRM	NOTES
Luger P08 Pistol *	1	6/9	4	1	0	
Mauser HSc Pistol *	1	6/9	3	1	0	
MP40 SMG	2	6/9	4	2	-3	
Kar 98k Rifle	1	6/9	10	3	-1	
MG34 LMG	3	6/9	5	3	-3	
Beretta MAB 38A SMG	2	6/9	4	2	-1	
M1 Thompson	2	6/9	3	2	+1	

* One-handed and size is small.

† Refer to the Weapon Rules below.

WEAPON RULES

All weapons are considered large sized except for one-handed weapons which are small sized.

Bayonet

- May be mounted to a rifle. Place the marker on top of the rifle that it is mounted to.
- Costs 2 APs to mount or demount.
- Apply a -2 DRM when the rifle is used for a ranged attack.

AREA OF EFFECT (AOE) WEAPONS

AOE WEAPON CHART				
WEAPON	**SIZE**	**S/W #**	**PBR**	**NOTES**
Grenade	supply	6/9	2	
Molotov Cocktail	small	5/6	2	†
Satchel Charge	large	3/6	3	†

MOLOTOV COCKTAIL

Uses grenade rules with the following changes.

- If the attack roll is a natural 1, the Molotov cocktail detonates in the thrower's square.
- Molotov cocktails detonate immediately upon impact in their final target square. Immediately resolve the AOE Attack, rather than waiting until the end of the hero's activation.
- After detonation, place a fire marker in the final target square.
- The fire marker is removed on a roll of 7+ during the End Phase of each subsequent Round.

SATCHEL CHARGE

A Satchel Charge is an explosive device that can be used in either a Grenade attack or set in place using a Timer (see p.32). When used as a weapon in a thrown explosive attack, use the following rule modifications:

- Satchel charges have a maximum throwing range of 5.
- To set a Satchel Charge, a hero must spend 8 APs, select an adjacent target square and place the Satchel Charge marker on it.
- Place your choice of 1 to 6 Timer markers on the Satchel Charge.
- When the timer markers on a Satchel Charge run out, it explodes. Resolve an AOE Attack as normal.
- Some scenario special rules may specify an effect from exploding a Satchel Charge on a specific square. Any such effects are resolved in addition to the AOE Attack.
- A Satchel Charge set on a door destroys the door and affects all figures in its PBR.

APPENDIX 2: NPCs

NPC TYPE	HEALTH	APs	SPECIAL
Lupo the Butcher	3	3	+2 DRM with Axe

APPENDIX 3: ZOMBIES

U116 ZOMBIES				
TIER	**NAME / DESIGNATION**	**AP**	**H**	**POWERS**
Beta	Beta Zombie	1	1	None
Advanced	Dräger	1	1	Diving Suit
Advanced	Rotten Egg	1	2	Acid Cloud
Alpha	U-Boot XO Wolfgang Kreiss	2	2	Leader of the Pack
BOSS ZOMBIES				
Alpha Prime	Bosun Haken	3	3	Armoured, Frenzy, Hook, Evolves
Omega	Korvettenkapitän Günther Hecht	3	4	Leader of the Pack, Regenerate, Evolves

Flavour text for each zombie is in The Zombie Horde section. Zombie Powers are listed in Zombie Special Skills (see p.48).