**Eschaton: Fifth Edition**

## 0.1 – Introduction

In 2019, I rediscovered the old von Tchischwitz manuals for a wargame specifically designed for the training of Prussian officers in the mid-19th century, called “Kriegsspiel.” Its introduction, which was done to replace chess and other rudimentary, abstract mind exercises as the primary strategic training for post-Napoleonic officers, led to a flurry of popularity in wargaming which in some sense, persists until the present day. This original, extremely complicated game is the precursor to all modern wargames, from *Warhammer* to *A Fistful of TOWs.*

A few months later, I published the First Edition of a newly reworked *Kriegsspiel* for use in land battles. It was written to be a modern, streamlined, complex but still easy to play descendant of the original Kriegsspiel, retaining its original usefulness for strategic training. In the successive two updates, naval combat (Second Edition, 2019), and air combat (Third Edition, 2020), were added and integrated. By 2021, work had begun on a Python-based automatic game manager, called “umpire,” and a Fourth Edition was published to align the gameplay with the program itself.

This is the Fifth Edition, which is considerably longer than previous editions. The most notable changes from the Fourth Edition are: a complete overhaul and reworking of the combat system, designed to more accurately reflect the conditions of real warfare; clearer instructions for the game umpire in designing scenarios; the ability to adapt wargames to *any era in human history, including the far future*; a better system for dealing with units of different sizes, and better military organization overall; better terrain and structure handling; and a number of different effects which units and groups of units may experience, depending on the course of the game.

Additionally, I have decided to rename both the game and the program that runs it to *Eschaton*, which refers to the “last thing” and is a reference to a famous tennis-based wargame from David Foster Wallace’s *Infinite Jest*. This was done to prevent confusion with the original German word “Kriegsspiel,” which can refer either to the entire genre of tabletop wargames, as well as to a particular variation of chess.

**0.2 – *Umpire* program**

### 0.2.1 – Prerequisites

There are very few computational prerequisites for the installation of the Umpire program itself. All that is required is the newest version of Python 3. If you want to create your own campaigns, it is recommended that you install an integrated development environment, like VisualStudio Code, PyCharm, or Neovim, if you have not already. The writing style of Umpire is such that it can run, without modification, on any platform.

### 0.2.2 – Downloading the Repository

To download the Umpire program, go to github.com/gtfmadrigal/umpire/releases and download the latest .zip or .tar.gz. Then, unzip or un-tar the archive or tar-ball. Inside the umpire/ directory are the following files and subdirectories:

umpire.py contains the actual code for the Umpire program itself.

README.md contains the GitHub readme file.

LICENSE is the GNU General Public License version 3 (Umpire is an open-source program).

gamefiles/ contains various campaign gamefiles provided by the program.

documentation/ contains all of the documentation, including this manual, a changelog detailing every Git commit, and notes for every full release.

### 0.2.3 – Creating a Gamefile

To create a new campaign gamefile, simply follow along with the template provided in gamefiles/gamefile\_template.py.

### 0.2.4 – Running Umpire

1. Ensure that umpire.py will import the correct gamefile.
2. Open up a new instance of your terminal. The way you do this will differ based on your operating system.
3. Navigate to the umpire/ directory.
4. Run umpire.py with Python 3.
5. If the program will not run, ensure that your version of Python is up to date, and you have not made any mistakes in your gamefile.

### 0.2.5 – Entering Commands

The shell will look as follows:

x ~ y team % \_

Enter your command at this shell. See the section labelled “Commands” to learn each command’s syntax. X represents the round number, and Y the command number.

# 1 — Basic Mechanics and Principles

* 1. **– Tools**

A game or campaign of *Eschaton* requires several tools and equipment, as such:

* The gamespace itself, which might include, but are not limited to:
  + A map, or some other depiction of the terrain of the campaign, which can be as simple or as complex as you like, and can be two- or three-dimensional; ideally including:
    - Terrain indicators
    - Names of locations
    - Topography
    - A scale or legend
* Anything which might appear on the gamespace, named or not, either as a part of the map itself or as two- or three-dimensional representations of their real-life counterparts placed upon them, including but not limited to:
  + Roads
  + Bridges and other infrastructure
  + Structures
  + Defensive works
  + Settlements
* Unit markers, clearly labelled to indicate:
  + Name, which might be:
    - A geographical indicator (“Pacific Fleet”)
    - A unique indicator (“103rd Division”)
    - The commanding officer (“Sutherland’s Company”)
  + Allegiance (including none)
  + Type
  + Size
  + Uniforms, if playing with miniatures as opposed to mere colored cubes
* Tools for resolving commands into actual actions:
  + Dice and other tools for generating randomness:
    - Two-sided coin
    - D4
    - D6
    - D8
    - D10
    - D12
    - D20
  + Hit markers
  + Movable indicators for player-built structures, defensive works, and infrastructure
* Equipment for performing the job of the umpire:
  + Ruler
  + This rulebook, and information about the campaign itself
  + Information about individual units
  + Calculator
  + Pad of paper
  + Python umpire program
  + Communication mechanism
* Additional tools for helping the players themselves:
  + Pad of paper for issuing commands
  + Scrap paper for planning and keeping track of unit information
  + Calculator
  + Ruler
  + This rulebook, and information about the campaign itself
  + Communication mechanism

**1.2 – Players and the Umpire**

An *Eschaton* campaign can be played with at least three players. At minimum, there must be two teams, or militaries, represented by at least one player each, plus an umpire to oversee the game. Militaries may be unified, with one or more players working together and with perfect information, or may be divided, where each player has a subcommand, and even players on a single team do not work together. Unified campaigns are ideal for new players.

The umpire is a universal; every campaign will have an umpire. The umpire’s role is to manage the gamespace and track the attributes of each unit, either by hand or through the use of the umpire program, which is designed to eliminate the use of paper-and-pencil by the umpire, and to prevent preferential treatment or cheating on his part.

In contrast to many other tabletop wargames, the players themselves do not touch or alter the gamespace itself. Only the umpire may alter the gamespace, including the battlefield, units, and any other objects. In any dispute over location or position, the umpire’s word is final.

* 1. **– Campaign**

Gameplay of Fifth Edition *Eschaton* is open-ended. Campaigns are prepared in advance, either based on real or imaginary scenarios. Campaigns should specify all of the following:

* The units belonging to each player (this need not be known to both players, it may be more advantageous for there to be information asymmetry)
* The layout of the battlefield and gamespace
* Whether or not one or both or neither players will be allowed to pre-deploy units on the battlefield, and where
* The epochs and correlating technological advancement of all units
* Whether or not units may start with, or maintain, certain status effects
* The conditions for victory
* The strength of the fog of war mechanic
* The theaters of warfare
* The system for sending commands

## 1.4 – Combat Mechanic

As with any set of rules for conducting wargames, the combat mechanic is the most important part of an *Eschaton* campaign and can be understood as the heart and soul of the game. The combat mechanic is, naturally, only used when units are engaged in combat, as defined by the attack and dogfight commands. When this occurs, the combat outcome must be determined for every turn these units remain “bogged down,” according to the system outlined in this section.

### 1.4.1 – Attack Rolls

The baseline numbers from which combat damage and resolution are calculate depends on the roll of dice. This is to simulate the inherent pseudo-randomness of warfare operations (it should be noted that this is *not* in fact true randomness, but rather pseudo-random emergence: individual soldiers, sailors, marines, and airmen behave rationally and predictably, but the actions of an entire unit can appear random in the aggregate). The die used to determine the attack and defense strength of a unit is as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| **Army Units** | **Naval Vessels** | **Aircraft** | **Attack/Defense Die** |
| All infantry and artillery, except heavy infantry | Amphibious assault ships and patrol boats | All except heavy fighters | D4 |
| Light cavalry, heavy infantry | Corvettes | Heavy fighters | D6 |
| Medium cavalry | Destroyers |  | D8 |
| Heavy cavalry |  |  | D10 |
| Special forces, command units | Aircraft carriers, battleships, cruisers |  | D12 |

*Table 1.4.1a*

Note that units which are not listed on the above table are considered to not have any combat strength whatsoever.

### 1.4.2 – Defense Rolls

Opposing units also have the opportunity to roll for defense, using the corresponding dice for their units which are engaged in combat. The essential formula of the combat mechanic of *Eschaton* is this: the total adjusted defense strength is subtracted from the total adjusted attacking strength. If this number, the net attack, is positive, that many health points will be distributed across the defending units and subtracted. If this number is negative, that many health points will be distributed across the attacking units and subtracted. If the number is zero, no damage takes place.

### 1.4.3 – Effect Modifiers

There are two effects that directly affect attacking and defending strength rolls: Strength and Weakness. Each level of Strength increases the combat strength of a particular unit by 1, while each level of Weakness decreases that combat strength by 1.

Other effects may alter the combat situation. Haste and Fatigue affect the strength and weakness of combat rolls when a unit is attacking through a defensive work or another structure, with each level of Haste increasing the roll by 1, and Fatigue decreasing it by 1. Resistance and Acquiescence affect the *net* attack. When a unit with Resistance engaged in combat results in a net attack which would ordinary subject that unit to damage, the net attack is decreased by 1 (overall, not per unit engaged in combat). In contrast, Acquiescence increases that net attack by 1. Units that suffer losses in combat have a likelihood to desert, and when a roll is made to determine whether or not that unit will desert, the number is increased by 1 per level of Gallantry and decreased by 1 per level of Cowardice.

### 1.4.4 – Gamespace Modifiers

Items on the gamespace can also alter the mechanics of combat. While terrain in-and-of-itself does not affect combat mechanics, the movement modifiers altered by terrain can. However, structures directly affect the net attack, though not the attack or defense strength prior to the calculation of the net attack. Only the structures listed below affect the net attack:

* Walls
* Earthworks: trenches, defensive works, and foxholes
* Constructions: houses, buildings, settlements, and religious structures

When the subtraction of defense from attack results in a net attack which would damage a unit or units which are inside one of the above, the strength of the structure is subtracted from the net attack, but no damage is done to the structure. However, this structural strength-based benefit decreases by 1 for every turn that the units are engaged in the same position. This decrease is unlimited, and may eventually result in the structure being a detriment to the unit within or behind it.

When two units are engaged in combat where they are both inside of the structure, there is no such benefit. Additionally, a unit which is attacking from a defensive position, there is also no benefit.

### 1.4.5 – Tactical Modifiers

The tactical battlefield situation in which combat occurs can also affect its mechanics. Broadly, there are six tactical situations which confer a benefit upon the attacking military units. Note that, where possible, tactical modifiers may stack.

When a large, multi-unit army formation has been marching in a column, or when a fleet or flotilla of ships has been sailing in a line, and an opposing force manages to “break through” the line, this is known as “penetration of the center.” Penetration of the center results in the attacking formation’s units having Strength I until the center is pushed back, or until a different tactical structure emerges on the battlefield.

Similar to the penetration of the center, “crossing the T” occurs when a fleet or flotilla of ships, or even a single ship, is blocked off at the point or the tail of the line by a perpendicularly sailing enemy ship. Crossing the T results in the ship or ships which are unable to fire on the broadside due to being crossed suffering from Weakness II until the tactical structure changes.

Ambushes are perhaps the oldest tactic in warfare. A concealed unit may spring forth from a hidden defensive position to attack an unsuspecting enemy force. Doing so is temporary, as it is not a battlefield-wide *spatial* strategy, but instead an ephemeral *temporal* one. An ambush results in the ambushing unit or units receiving Strength IV for the remainder of the turn.

Units may also envelop or “flank” one another. In *Eschaton*, there are four possible types of envelopment: single perpendicular, parallel, perpendicular-parallel, and total envelopment. Units can only envelop each other on a same-size or greater basis, i.e. a unit requires at least two enemy units of the same size to envelop it for single perpendicular or parallel flanking maneuver, at least three for a perpendicular-parallel maneuver, and at least four for a total envelopment.

Single perpendicular flanking occurs when two units attack another at right-angles to one another. It results in Weakness II for the enveloped unit or units until the situation changes. Parallel flanking occurs when two units attack from opposite sides, and results in Weakness II. Perpendicular-parallel occurs when two units attack in a U-shaped formation, all at right-angles to one another, and results in Weakness III for the enveloped unit. Total envelopment occurs when a unit is surrounded on all four sides, and results in Weakness IV.

There are, however, drawbacks to envelopments. During an envelopment, a number of D10s must be rolled, one for each unit involved in the envelopment maneuver. For each 1 which is rolled, subject to the Foolishness and Wisdom modifiers, a friendly fire event occurs, and 1 D4 worth of damage will be immediately dealt across the attacking units, subject to the Resistance and Acquiescence status effects.

### 1.4.6 – Attribute Modifiers

Attribute modifiers affect the net attack strength in a multiplicative way. There are two possible attribute modifiers: size and epoch, which may be added geometrically.

Unit size affects the strength of combat engagements, since the size of a military formation naturally governs the ability of that formation to operate against the enemy. The net attack of two units is multiplied by the ratio of the size of the unit inflicting damage to the size of the unit taking damage. That ratio is inverted for turns where the opposite happens. These ratios need not be whole numbers. Consider an engagement between a corps consisting of three divisions and a corps consisting of two. If, as a result of combat rolls, the larger corps wins a particular turn, their net attack will be multiplied by 3/2. Should the inverse happen, the net attack of the smaller corps will be multiplied by 2/3.

Conversely, the epoch of the two units only affects the net attack in one direction: in detriment to the more ancient unit and for the benefit of the technologically advanced. Technological asymmetry multipliers are listed in the “Epoch” section. When two units of differing military advancement are in combat, and the one with better technology wins an engagement turn, their net attack will be multiplied by that coefficient. However, when the less-advanced unit is to inflict damage, their net attack remains the same. This to reflect the fact that less-advanced, weaker units are still able to occasionally inflict casualties on far superior units (see the Battle of Isandlwana).

Epoch and size coefficients are co-multiplicative, where relevant.

### 1.4.7 – Criticality Events

In the course of combat, units often experience debilitating losses, which can cause them to behave in ways contrary to optimal fighting condition. In *Eschaton*, these are known as “criticality events,” and occur at a likelihood approximately inverse to their quality and strength.

A criticality event occurs when two units are engaged in combat and one rolls its maximum possible strength, and the other rolls a 1. These rolls only cause criticality when they are *natural*, that is to say, when the roll is the actual number appearing on the dice, rather than the resulting roll after modifying effects are taken into account. Note that a criticality event may occur against a unit on the winning side of a combat engagement; it is not required that a critically hit unit *also* take ordinary damage.

When a criticality event occurs, two D6 are rolled, one for the critically hit unit and one for the hitting unit, and the results are given by the table below, subject to the Gallantry and Cowardice status effects.

|  |  |  |
| --- | --- | --- |
| **Roll** | **Effect on Critically Hit Unit for the Subsequent Turn** | **Effect on Opposing Unit for the Subsequent Turn** |
| 1 | Death of Commander: unit disappears from the gamespace and is assumed to be dead | Victory Disease: Weakness II |
| 2 | Disorderly Retreat: unit flees 50% of its distance range from the location of the battle: Weakness IV, Acquiescence IV, Cowardice IV | Traffic Jam: Weakness I |
| 3 | Orderly Retreat: unit flees 50% of its distance towards the closest logistics unit, Weakness III, Acquiescence III, Cowardice III | No effects |
| 4 | Weakness II, Acquiescence II, Cowardice II | No effects |
| 5 | Weakness I, Acquiescence I, Cowardice I | Pride: Strength I, Resistance I, Gallantry I |
| 6 | Last Stand: Strength IV, Acquiescence I, Gallantry III | Medal of Honor: Strength II, Resistance II, Gallantry II |

*Table 1.4.7a*

It should be noted that if a 1 is rolled on a criticality determination roll, if the commander of that unit is also the commander of a larger formation or indeed the entire side of a campaign, every unit under that commander’s command is subject to Weakness II, Acquiescence II, and Cowardice II.

### 1.4.8 – Resolution

After the required dice rolls are dealt with, multiplied, added, and subtracted from as required by the various inclement status effects, the damage must be distributed, and combat resolved. Net damage is distributed across the losing units. Note that unlike other wargaming rulesets, damage can be indicated in decimal terms, if required. However, if the players and the umpire agree, they may choose to only track damage in whole numbers, rounded up or down as required.

Should a unit reach a damage level of <1, it is considered killed, and it is removed from the gamespace.

Any unit which has suffered >50% damage after the distribution of hits is, regardless of the actual rolls required, considered to have suffered a criticality event and must be dealt with as outlined in the preceding section. However, while a unit may suffer both a positive and a negative criticality event in the same turn, it may not suffer two of either the positive or the negative and is considered to only suffer one.

A unit, even if it has suffered enough damage to warrant a criticality roll, which is not currently engaged in combat, does not suffer a criticality event, and is allowed to proceed normally.

# 2 – Unit and Game Attributes

## 2.1 – Unit Attributes

### 2.1.1 – Team

Every unit belongs to a team, and a given unit’s allegiance is largely, though not entirely, immutable. Ownership can be changed only for naval units via the commandeering of a ship.

### 2.1.2 – Type

Every unit has a “type.” The standard unit types of universal but are altered depending on the time and place of the campaign. These unit types are very important, as most attributes are assigned by type, rather than by individual unit, which would be far too clunky.

### 2.1.3 – Health

A unit can represent any number of men, depending on the size and scale of the battle. In order to determine the starting health of a particular unit, determine the size of the unit compared to the base size for the campaign, and divided or multiply that by the base starting health of the unit type. For instance, a brigade consisting of three battalions in a campaign with “battalion” as the base size will have three times the health. Health is measured in Health Points, or HP. When a unit’s HP reaches zero, it is considered dead and removed from the gamespace.

### 2.1.4 – Size

Size is variable, and is dealt with according to the rules laid out in the “size” section.

## 2.2 – Unit Epoch

### 2.2.1 – Neolithic

The Neolithic Epoch covers prehistoric warfare prior to the invention of metallurgy. It is defined by stone and wooden tools, and limited use of bows. The available units are:

* Light infantry (wielding clubs)
* Heavy infantry (wielding stone knives or axes)
* Light artillery (wielding stone-arrow bows)
* Engineers
* Special forces

Units have no mobility benefits, as they have no vehicles.

### 2.2.2 – Chalcolithic

The Chalcolithic Epoch covers warfare during the Bronze Age (3300 to 1200 BC) and is defined by the use of the newly discovered metal. The following new units are added:

* Light cavalry (chariots)
* Logistics
* Spies and other intelligence units
* Amphibious ships (oarships and triremes)

Light cavalry and logistics units may have mobility effects, as they are vehicular. When fighting Neolithic units, the benefit is \*2.

### 2.2.3 – Ancient

The Ancient Epoch covers warfare during the pre-Classical Iron Age (1200 to 550 BC) and is defined by the use of primitive steel. No new units are added. Benefits are:

* vs. Neolithic: \*4
* vs. Chalcolithic: \*2

### 2.2.4 – Classical

The Classical Epoch covers warfare during the Classical Iron Age (550 BC to 500 AD) and is defined by the use of more advanced formations. The following new units are added:

* Heavy cavalry (mounted knights)
* Heavy artillery (siege engines)

Benefits are:

* vs. Neolithic: \*6
* vs. Chalcolithic: \*3
* vs. Ancient: \*1.5

### 2.2.5 – Medieval

The Medieval Epoch covers warfare during the Middle Ages (500 to 1100 AD) and is defined by the use of knights. The following new units are added:

* Medium artillery (Longbowmen)

Benefits are:

* vs. Neolithic: \*9
* vs. Chalcolithic: \*4
* vs. Ancient: \*3
* vs. Classical: \*1.5

### 2.2.6 – Gunpowder

The Gunpowder Epoch covers warfare during the early gunpowder era (1100 to 1500 AD) and is defined by the use of cannons. The following new units are added:

* Corvettes (cannonships)

Benefits are:

* vs. Ancient and previous: \*10
* vs. Classical: \*3
* vs. Medieval: \*1.5

### 2.2.7 – Smoothbore

The Smoothbore Epoch covers warfare from 1500 to 1750 AD and is defined by the use of matchlock and flintlock rifles. The following new units are added:

* Medium cavalry
* Cruisers
* Destroyers
* Patrol ships (sloops)

Benefits are:

* vs. Ancient and previous: \*10
* vs. Classical: \*6
* vs. Medieval: \*3
* vs. Gunpowder: \*1.5

### 2.2.8 – Rifle

The Rifle Epoch covers warfare from 1750 to 1900 AD and is defined by the use of single-shot rifles. The following new units are added:

* Battleships

Benefits are:

* vs. Classical and previous: \*10
* vs. Medieval: \*6
* vs. Gunpowder: \*3
* vs. Smoothbore: \*2

### 2.2.9 – Bolt

The Bolt Rifle covers warfare from 1900 to 1930 AD and is defined by the use of repeating-action rifles. The following new units are added:

* Mechanized infantry
* Attack submarines
* Light fighters (biplanes)
* Bombers
* Reconnaissance planes

Benefits are:

* vs. Medieval and previous: \*10
* vs. Gunpowder: \*6
* vs. Smoothbore: \*4
* vs. Rifle: \*2

### 2.2.10 – Modern

The Modern Era covers warfare from 1930 to 1950 AD and is defined by the use of semi-automatic and bolt-action battle-rifles, and advanced unified theater combat commands. The following new units are added:

* Aircraft carriers
* Heavy fighters
* Stealth bombers
* Transport airplanes

Benefits are:

* vs. Smoothbore and prior: \*10
* vs. Rifle: \*4
* vs. Bolt: \*2

### 2.2.11 – Atomic

The Atomic Era covers warfare from 1950 to 1990 AD and is defined by the use of atomic weapons and automatic rifles. The following new units are added:

* Missile submarines
* Drones

Benefits are:

* vs. Smoothbore and prior: \*10
* vs. Rifle: \*6
* vs. Bolt: \*3
* vs. Modern: \*1.5

### 2.2.12 – Armalite

The Armalite Era covers warfare from 1990 to the present day and is defined by the use of computerized warfare and technology. The following new units are added:

* Spacecraft

Benefits are:

* vs. Smoothbore and prior: \*10
* vs. Rifle: \*8
* vs. Bolt: \*4
* vs. Modern: \*2
* vs. Atomic: \*1.5

### 2.2.13 – Future

The Future era covers futuristic warfare and is defined by the use of technology not yet actually existing. New units may be added, but according to the umpire. Benefits are:

* vs. Rifle and prior: \*10+
* vs. Bolt: \*6+
* vs. Modern: \*4+
* vs. Atomic: \*3+
* vs. Armalite: \*2+

## 2.3 – Unit Size

### 2.3.1 – Effects of Size on Combat

Unit size also has substantial effects on combat. Opposing units of the same size deal with combat in a 1:1 fashion. When units come into conflict that are of a different size, attack and defense rolls are adjusted according to the ratio of sizes between them. For instance, when a division engages in combat with a corps consisting of 3 divisions, the larger corps will have its attack and defense rolls multiplied by 3, with actual dice rolls still used in order to ascertain criticality.

### 2.3.2 – Size Alteration

The sizes of units can be altered at any time: units can be divided or combined at will at any time during a pre-turn. However, units currently engaged in combat cannot be so divided or combined until they disengage. When new units are created in this sense, their representations on the gamespace must be likewise changed, and the new units take on the effects of their precursors, subdivided if necessary. For instance, if a corps consisting of three divisions has Slowness III and a health of 12, the newly divided divisions will each have a health of 4 and Slowness III. When combining units together, the new unit will absorb the effects of the precursors. However, if only some of the precursor units have an effect, that effect will be distributed if possible. For instance, consider the following four platoons:

* Alpha Platoon: Resistance IV, Speed I
* Bravo Platoon: Speed I
* Charlie Platoon: Speed I
* Delta Platoon: Speed I

If these platoons combine into a new company, the resulting company will have Speed I and Resistance I.

When new units are created, the new unit must be assigned a new name or designation and, if necessary, the name of its commanding officer.

### 2.3.3 – Unit Sizes and Organization

Aircraft units are as follows:

* Single aircraft commanded by a Lieutenant
* Section commanded by a Captain
* Squadron commanded by a Major
* Wing commanded by a Colonel
* Group commanded by a Brigadier
* Division commanded by a General

Naval units are as follows:

* Single vessel, commanded by a Lieutenant
* Squadron commanded by a Commander
* Flotilla commanded by a Captain
* Force commanded by a Rear Admiral
* Fleet commanded by a Vice Admiral
* Admiralty commanded by an Admiral

Army units are as follows:

* Team commanded by a Corporal
* Squad commanded by a Sergeant
* Section commanded by a Staff Sergeant
* Platoon commanded by a Lieutenant
* Echelon commanded by a Captain
* Company commanded by a Major
* Battalion commanded by a Colonel
* Brigade (which may consist of various different types of units) commanded by a Brigadier
* Division commanded by a Major General
* Corps commanded by a Lieutenant General
* Army commanded by a General
* Army Group commanded by a Marshal

## 2.4 – Effects

Units, apart from their intrinsic qualities as otherwise described, may also suffer at any time from any number of *status effects*. These effects are impermanent, and may be imposed for only a turn, or until conditions change. Status effects may be positive or negative, may exist in several levels, and may alter the way in which gameplay proceeds. These effects always exist in pairs: one positive, one negative. Because of these pairings, the effects cancel out: a unit that has the first level of a negative effect and acquires the second level of the corresponding positive effect will, as a result, end up with the first level of the positive effect. Please note that throughout this rulebook, when an event or situation is said to “cause” a unit to “suffer” or “receive” an effect, the overall effect on a unit is *increased* or *decreased* by that status effect, rather than the unit being changed to that effect level. For instance, if a unit already had Weakness I, and it receives Strength III, the overall effect will be Strength II, since effects are additive.

Many of the effects alter the value of a die roll, either by increasing or decreasing it. However, the actual value of the die roll is used in determining criticality, *not* the value as adjusted according to the status effect.

The following sections serve only to explain the various status effects, and does not explain how units acquire those effects.

### 2.4.1 – Strength and Weakness

Strength and Weakness affect the capacity of units to engage in close-range combat, that is:

* Small-arms or hand-to-hand combat for army units, including artillery
* Air-to-air dogfighting via machine-gun fire
* Anti-aircraft defenses

excluding cavalry fire, which is considered, for the purpose of this game, to be a type of artillery.

Each level of Strength increases the value of rolls in close-range combat (the “attack” and “dogfight” commands) by +1, whereas each level of Weakness decreases those values by -1, for a minimum of 0.

### 2.4.2 – Speed and Slowness

Speed and Slowness affect the speed of unit travel. Each level of Speed increases the distance a unit can travel in a given turn by one-third, and each level of Slowness decreases such distance by one-third. This can affect any unit which can travel, by land, sea, or air, using the “move,” “heading,” or “takeoff” command.

### 2.4.3 – Mobility and Immobility

Mobility and Immobility affect the ability of units to move at all. There is only one level of each of these status effects, and apply to all units: a unit is either able to move, or not.

### 2.4.4 – Precision and Inaccuracy

Precision and Inaccuracy affect the capacity of units to engage in long-range combat, that is:

* Land-to-land terrestrial missiles and artillery from artillery and cavalry units
* Surface-to-surface maritime missiles and artillery from ships
* Submarine torpedoes
* Anti-submarine depth charges
* Nuclear weapons
* Electromagnetic pulses
* Kamikaze attacks
* Air-to-surface missiles launched from aircraft
* Bombing raids

Each level of Precision increases the value of rolls in the above combat situations by +1, and each level of inaccuracy reduces them by -1.

### 2.4.5 – Haste and Fatigue

Haste and Fatigue affect the capacity of units to break through defensive works and structures on the ground and in the sea. Each level of Haste increases the attack strength of a unit attempting to break through a defensive work or structure by +1, and each level of Fatigue reduces it by -1.

### 2.4.6 – Industry and Slack

Industry and Slack affect the quality of defensive works and structures built or repaired built by the unit or units. Each level of Industry increases the roll for defensive value of such structure by +1, whereas each level of Fatigue reduces it by -1.

### 2.4.7 – Regeneration and Impotence

Regeneration and Impotence affect the ability of units to recover from injuries suffered during battle. When treating wounded members of a unit, each level of Regeneration increases the roll for health points restored by +1, whereas each level of impotence reduces it by -1.

### 2.4.8 – Resistance and Acquiescence

Resistance and Acquiescence affect the ability of units to protect themselves from damage from short-range combat governed by the “attack” or “dogfight” commands, or anti-aircraft defenses. Each level of Resistance increases these saving rolls by +1, whereas each level of Acquiescence to -1.

### 2.4.9 – Nobility and Cruelty

Nobility and Cruelty affect the sympathy of neutrals and civilians to the unit. When attempting to summon assistance, military or otherwise, for a unit in distress, Nobility increases the relevant roll by +1 per level, whereas Cruelty decreases it by -1 per level.

### 2.4.10 – Vision and Blindness

Vision and Blindness affect espionage ability, that is:

* The “spy” command for land- and sea-based units
* The “survey” command for aircraft
* The “sweep” command for minesweeping
* Any intelligence actions taken by intelligence logistics units

Rolls related to the quality of intelligence required for the resolution of the above commands will be increased by

### 2.4.11 – Silence and Turmoil

Silence and Turmoil affect the ability of units to be seen by the enemy. Each level of Silence decreases the ability of enemy intelligence to ascertain the position of a unit by -1, whereas each level of Turmoil increases this ability by +1. Additionally, units with at least Turmoil II cannot be hidden.

### 2.4.12 – Invisibility and Exposure

Invisibility and Exposure affect whether or not units are visible, i.e. whether or not their representation is present on the gamespace. There is only one level each of Invisible and Exposure; a unit is always either visible or invisible.

### 2.4.13 – Wisdom and Foolishness

Wisdom and Foolishness affect the ability of unit commanders to properly interpret commands given to them by the player. Each level of Wisdom decreases the likelihood of a misinterpreted command by -1, whereas each level of Foolishness increases the likelihood of misinterpretation by +1.

### 2.4.14 – Gallantry and Cowardice

Gallantry and Cowardice affect the likelihood of a unit to desert. When a critical hit lands on a unit, a saving throw must be made to ascertain whether or not that unit will desert. Each level of Gallantry decreases the likelihood of a unit to desert by -1, whereas each level of Cowardice increases that likelihood by +1.

## 2.5 – Technological Comparison

### 2.5.1 – Technological Parity and Asymmetry

Combat, whether between units or between entire militaries, is assumed to be at technological parity, that is, that they have similar levels of military hardware and tactical ability. When units engaged in combat are of the same level of technical complexity, they are understood to have *parity*, and combat works on a 1:1 basis according to the baseline dice tables. There is no multiplicative effect.

Combat between units of different technological advancement are referred to as *asymmetric.* When this occurs, the more advanced unit has a multiplying effect both on offense and on defense. According to the table in the following section, their offensive and defensive rolls for commands relying on technical ability (short-range and long-range combat) are multiplied. However, the actual non-multiplied rolls are still used in determining criticality. Other unit abilities and effects may be affected by technological advancement as well.

### 2.5.2 – Epochs

Technological advancement is determined according to a unit’s particular *epoch*. An epoch may be literal, as when a campaign is understood to take place at a certain place or time, or it may be metaphorical, as when a campaign takes place between armies of differing military technology. The epochs are merely suggestive, and not definitive.

## 2.6 – Timeline

One of the most important aspects of a campaign is the timeline, mostly in the per-turn sense. At the beginning of each game, the players and the umpire must decide how long each turn represents, as this will dictate the movement of units and the construction of fortifications and structures. Turns need not be uniform: turns might get shorter as time goes on. In short battles, the timeline might be as short as 30 minutes per turn. For larger campaigns, a turn may represent days or even weeks.

## 2.7 – Fog of War

The fog of war mechanism affects the likelihood of a command to fail. Without any fog of war, the roll of a 1 on a D20 on commands affected by fog of war results in a command failure. For every additional point of fog of war intrinsic to either the entire campaign or only one side, a roll one number higher on such rolls would also result in a command failure.

# 3 – Units

## 3.1 – Armies

### 3.1.1 – Infantry

Infantry are those units which, comparatively speaking in terms of the epoch of the army to which they belong overall, use short-term weapons. They are not mounted nor armored, nor do they carry ranged weapons. However, “infantry” in the sense of unit type does not include intelligence-gather units, logistics teams, or the command guard.

Using this definition, then, there are five types of infantry units: light infantry, heavy infantry, mechanized infantry, engineers, and special forces. As the most common type of unit for land-based warfare, they require the longest treatment:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Unit Type** | | | | |
|  | **Light Infantry** | **Engineers or Sappers** | **Mechanized Infantry** | **Heavy Infantry** | **Special Forces** |
| **Health** | 4 | | 6 | | 20 |
| **Epoch** | **Example units** | | | | |
| **Neolithic** | Wooden clubs | Artisan homebuilders, farmers |  | Stone clubs | Beserkers |
| **Chalcolithic** | Bronze spearmen |  | Bronze swordsmen | General’s guards |
| **Ancient** | Iron spearmen |  | Iron swordsmen |
| **Classic** | Roman infantry |  | Roman heavy infantry |
| **Medieval** | Leather-armored peasant infantry |  | Steel-armored aristocratic infantry |
| **Gunpowder** |  | Blunderbuss |
| **Smoothbore** | Matchlock | Sappers, Pioneers |  | Flintlock |
| **Rifle** | Minutemen |  | Hessians, etc. |
| **Bolt** | Ordinary infantry | Pioneers, Engineers Corps | Motorized rifles | Marines |
| **Modern** | Army riflemen | Marines, SS battalions |
| **Atomic** |
| **Armalite** |
| **Future** | Dictated by scenario | | | | |

*Table 3.1.1a*

### 3.1.2 – Artillery

Artillery are those units which, comparatively speaking in terms of the epoch of the army to which they belong overall, use long-term weapons, whether bows, cannons, or mortars. However, they do still carry short-range weapons. Under this definition, artillery can be broadly categorized by the weight of their missiles, into light, medium, and heavy.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Unit Type** | | |
|  | **Light Artillery** | **Medium Artillery** | **Heavy Artillery** |
| **Health** | 6 | 7 | 8 |
| **Epoch** | **Example units** | | |
| **Neolithic** | Stone arrow archers |  |  |
| **Chalcolithic** | Bronze arrow archers |  |  |
| **Ancient** | Steel arrow archers |  |  |
| **Classical** |  | Siege engines |
| **Medieval** | Longbowmen |
| **Gunpowder** | Cannon batteries | Large cannon batteries |
| **Smoothbore** | Small cannon batteries |
| **Rifle** | Light mortar | Medium mortar | Large mortar |
| **Bolt** |
| **Modern** |
| **Atomic** |
| **Armalite** |
| **Future** | Dictated by scenario | | |

*Table 3.1.2a*

### 3.1.3 – Cavalry

Cavalry are those units which, comparatively speaking in terms of the epoch of the army to which they overall belong, are better equipped to travel further distances more quickly, and which are relatively well protected from infantry, either because they are mounted on horses or are protected by armor and tanks. Under this definition, cavalry can be broadly categorized by the strength of their protection compared to their speed.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Unit Type** | | |
|  | **Light Cavalry** | **Medium Cavalry** | **Heavy Cavalry** |
| **Health** | 8 | 10 | 12 |
| **Epoch** | **Example units** | | |
| **Chalcolithic** | Chariots |  |  |
| **Ancient** | Early horsemen |  |  |
| **Classical** | Light horsemen |  | Roman equites |
| **Medieval** |  | Armored horsemen |
| **Gunpowder** |  |
| **Smoothbore** | Rifled horsemen |
| **Rifle** |
| **Bolt** | Early Renault, FT, and Mark I tanks |
| **Modern** | BT, Ha-Go, Panzer I and II, M2 Sherman, M24 Chafee, Mark VIII | Mark II, T-28, M4 Sherman, Panzer IV, T-34 | Char B1, T-35, KV-1, Tiger I and II, IS Series, Abrams I |
| **Atomic** | PT-76, M41 Walker Bulldog, FV101 Scorpion | Leopard 1, T-72, M1 Abrams | M103, FV214 Conqueror, ARL 44, Leopard 2, Challenger 2, Merkava, Type 99, |
| **Armalite** |
| **Future** | Dictated by scenario | | |

*Figure 3.1.3a*

## 3.2 – Navies

### 3.2.1 – Brown-water

Naval vessels can be broadly categorized in terms of the zones in which they can carry out naval operations. Ships which are capable of operations in oceans and deep seas are considered “blue-water,” while ships which focus on operations in rivers, littoral zones and coasts, and estuaries, are known as “brown-water.” In Eschaton, there are three types of brown-water vessels: corvettes, amphibious ships, and patrol boats. It should be noted that, in modern military terminology, some words which are used to refer to ship classes in Eschaton have far more strict meanings, but in Eschaton, they are only relative.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Unit Type** | | |
|  | **Corvettes** | **Amphibious** | **Patrol Boats** |
| **Health** | 4 | 4 | 2 |
| **Epoch** | **Example units** | | |
| **Chalcolithic** |  | Biremes and triremes |  |
| **Ancient** |  | Simple sailships |  |
| **Classical** |  |  |
| **Medieval** |  |  |
| **Gunpowder** | Sixth-rates |  |
| **Smoothbore** | The smallest ships |
| **Rifle** | Steam corvettes | Small steamships |
| **Bolt** |
| **Modern** | *Bathurst*-class, *Flower*-class |
| **Atomic** | *Tarawa*-class, *America*-class, *Wasp*-class |
| **Armalite** | *Freedom*-class, *Independence-*class, | *Cyclone*-class |
| **Future** | Dictated by scenario | | |

*Table 3.2.1a*

### 3.2.2 – Blue-water

In contrast to brown-water ships, blue-water ships are designed for full-scale ocean- or sea-going combat. There are three types of blue-water ships: destroyers, cruisers, and battleships

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Unit Type** | | |
|  | **Destroyer** | **Cruiser** | **Battleship** |
| **Health** | 8 | 10 | 12 |
| **Epoch** | **Example units** | | |
| **Smoothbore** |  | Sloops-of-war |  |
| **Rifle** | *Daring*-class, *Havock*-class | *Shannon*-class | Ironclads |
| **Bolt** | *Durandal*-class, *Brainbridge*-class, *River-*class, *Paulding*-class, *Akatsuki­*-class (1901) | *Minotaur*-class, *Drake*-class, *Eclipse*-class, *Descartes*-class, *New York*-class, *Königsberg-*class | Dreadnoughts |
| **Modern** | *Aigle*-class, *L’Adroit-*class, *Akizuki*-class, *Fubuki-*class, *Kagerō-*class, *Matsu*-class, *Narvik*-class, *Navigatori*-class, *Town*-class, *Gnevny*-class, *Allen M. Sumner*-class, *Clemson*-class, *Fletcher-*class, *Gleaves*-class | *Suffren*-class, *Agano*-class, *Nagara*-class, *Holland*-class, *York*-class, *Kronshtadt*-class, *Baltimore*-class, *New Orleans*-class, | *Richelieu*-class, *Yamato*-class, *Bismarck*-class, *Queen Elizabeth*-class, *Colorado*-class, *Iowa*-class, *King George V-*class |
| **Atomic** | *Daring*-class, *Forrest Sherman*-class, *Kotlin*-class | *Kara-*class |
| **Armalite** | *Renhai*-class, *Murasame*-class, *Visakhapatnam*-class, *Arleigh Burke-*class, *Zumwalt-*class | *Kirov*-class, *Slava*-class, *Ticonderoga*-class |
| **Future** | Dictated by scenario | | |

*Table 3.2.2a*

### 3.2.3 – Carriers

Aircraft carriers are a specific type of blue-water naval vessel which has the unique ability to act as a mobile airfield.

|  |  |
| --- | --- |
| **Health** | 16 |
| **Epoch** | **Example units** |
| **Modern** | *Hiyō-*class, *Taiyō*-class, *Graf Zeppelin*-class, *Attacker*-class, *Empire*-class, *Pegasus*-class, *Ruler*-class, *Casablanca-*class, *Essex*-class, *Yorktown*-class |
| **Atomic** | *Colossus*-class, *Vikrant*-class, *Kiev*-class, *Midway*-class |
| **Armalite** | *Charles de Gaulle*-class, *Kuznetsov*-class, *Queen Elizabeth-*class, *Nimitz*-class, *Gerald R. Ford*-class |
| **Future** | Dictated by scenario |

*Table 3.2.3a*

### 3.2.4 – Subsurface

Submarines are a specific type of blue-water ship that are specifically designed to remain underwater, and to conduct

|  |  |  |
| --- | --- | --- |
|  | **Unit Type** | |
|  | **Attack Submarine** | **Missile Submarine** |
| **Health** | 1 | 1 |
| **Epoch** | **Example units** | |
| **Bolt** | *U-19* class, *K-*class |  |
| **Modern** | *400*-class, *Redoubtable*-class, *Yu I*-class, *Ko*-class, *Type II*-class, *Type IX*-class, *Type VII*-class, *Type XXI*-class, *Grampus*-class, *Srednyaya*-class, *Balao*-class, *Gato*-class, |  |
| **Atomic** | *Collins*-class, *K-*class, *Valiant*-class, *Churchill*-class, *Barracuda-*class | *Ohio*-class, *Resolution*-class, *Lafayette-*class, *Typhoon*-class, *James Madison*-class |
| **Armalite** | *Yuan*-class, *Trafalgar-*class | *Vanguard*-class, *Arihant*-class, *Triomphant-*class, *Xia-*class, *Jin*-class, *Borei*-class, *Columbia*-class |
| **Future** | Dictated by scenario | |

*Table 3.2.4a*

## 3.3 – Aerospace

### 3.3.1 – Fighters

Aircraft come in a variety of types. The most common type of aircraft are fighters, which are analogous to land-based infantry. They are either light or heavy.

|  |  |  |
| --- | --- | --- |
|  | **Unit Type** | |
|  | **Light Fighter** | **Heavy Fighter** |
| **Health** | 4 | 8 |
| **Epoch** | **Example units** | |
| **Bolt** | Biplanes | Triplanes |
| **Modern** | Under-armored propeller fighter | Armored propeller fighter |
| **Atomic** | Under-armored jet engine fighter | Armored jet engine fighter |
| **Armalite** |
| **Future** | Dictated by scenario | |

*Table 3.3.1a*

### 3.3.2 – Bombers

Bombers are the aerial version of artillery, and they come in two different types: ordinary and stealth.

|  |  |  |
| --- | --- | --- |
|  | **Unit Type** | |
|  | **Stealth Bomber** | **Ordinary Bomber** |
| **Health** | 10 | 12 |
| **Epoch** | **Example units** | |
| **Bolt** | Biplane bomber | Triplane bomber |
| **Modern** | High altitude propeller bomber | Armored propeller bomber |
| **Atomic** | High altitude jet engine bomber | Armored jet engine bomber |
| **Armalite** |
| **Future** | Dictated by scenario | |

*Table 3.3.2a*

### 3.3.3 – Transport

Transport aircraft are generally bombers retrofitted for the transportation of infantry units, as opposed to carrying bomb ordinance.

|  |  |
| --- | --- |
| **Health** | 4 |
| **Epoch** | **Example units** |
| **Modern** | Any plane used primarily for the transport of army units |
| **Atomic** |
| **Armalite** |
| **Future** | Dictated by scenario |

### 3.3.4 – Reconnaissance

Reconnaissance aircraft are any aircraft designed for the purposes of gathering intelligence as opposed to air-to-air or air-to-surface warfare. They come in two types, defined by whether or not they are manned: ordinary reconnaissance planes, which are manned by a human crew, and drones, which are unmanned aerial vehicles.

|  |  |  |
| --- | --- | --- |
|  | **Unit Type** | |
|  | **Reconnaissance** | **Drone** |
| **Health** | 4 | 4 |
| **Epoch** | **Example units** | |
| **Bolt** | Any plane used for the reconnaissance of the battlefield or the sea |  |
| **Modern** |  |
| **Atomic** | Unmanned aircraft |
| **Armalite** |
| **Future** | Dictated by scenario | |

*Table 3.3.4a*

### 3.3.5 – Extraterrestrial

Not listed in a table here are extraterrestrial aircraft, which are available to players of Eschaton for use in certain futuristic campaigns. Their attributes should be designed by the players, and as such are not explicitly specified here.

## 3.4 – Extra-theatrical

### 3.4.1 – Command

Every military campaign requires a commander for each side, represented by the player. If the player’s character is represented on the battlefield, he appears as a command unit, which is effectively an infantry unit with greater strength and health.

|  |  |
| --- | --- |
| **Health** | 16 |
| **Epoch** | **Example units** |
| **Neolithic** | The companions of the commanding officer |
| **Chalcolithic** |
| **Ancient** |
| **Classical** |
| **Medieval** |
| **Gunpowder** |
| **Smoothbore** |
| **Rifle** |
| **Bolt** |
| **Modern** |
| **Atomic** |
| **Armalite** |
| **Future** | Dictated by scenario |

*Table 3.4.1a*

### 3.4.2 – Intelligence

Intelligence-gathering units can also appear on the gamespace.

|  |  |
| --- | --- |
| **Health** | 4 |
| **Epoch** | **Example units** |
| **Chalcolithic** | Intelligence-gathering services, including human intelligence, signals intelligence, etc. |
| **Ancient** |
| **Classical** |
| **Medieval** |
| **Gunpowder** |
| **Smoothbore** |
| **Rifle** |
| **Bolt** |
| **Modern** |
| **Atomic** |
| **Armalite** |
| **Future** | Dictated by scenario |

*Table 3.4.2a*

### 3.4.3 – Logistics

Logistics units are mainly useful for their ability to restore the health of other units.

|  |  |
| --- | --- |
| **Health** | 4 |
| **Epoch** | **Example unit** |
| **Chalcolithic** | Logistics units for the purposes of surgery and medical treatment, the distribution of supplies, quartermasters, etc. |
| **Ancient** |
| **Classical** |
| **Medieval** |
| **Gunpowder** |
| **Smoothbore** |
| **Rifle** |
| **Bolt** |
| **Modern** |
| **Atomic** |
| **Armalite** |
| **Future** | Dictated by scenario |

*Table 3.4.3a*

# 4 – Gamespace

## 4.1 – Scale

Scale is one of the most important aspects of the *Eschaton* gamespace. A scale legend should be provided either on the map itself or provided using a table which can be freely used by the player. It should clearly state the ratio between distances on the map and distances in the real world. This scale is used to calculate the effective range for some types of weapons. When combined with the timeline of a turn, scale is also used to compute distance travelled.

Ideally, the ratios should be identical for both longitude and latitude, but in some circumstances it may be more advantageous for there to be two different scales. Some campaigns may take place in three dimensions, in which case the same scale may apply in all three directions, or a different scale may be used for the altitude. However, for ordinary air warfare in addition to a land- or sea-based campaign, it is not necessary for there to be an altitude scale.

## 4.2 – Terrain

### 4.2.1 – Terrestrial Terrain

Terrestrial terrain is defined by the type of vegetation and soil in a given area on land. Terrain may vary according to location on the map itself. Terrain comes in two varieties: baseline (vegetation) and topographic, whose effects stack. Note that all terrestrial terrain is impassable by sea vessels. These are the types of baseline terrain, along with their effects:

|  |  |  |
| --- | --- | --- |
| **Terrain Type** | **Concealability** | **Speed or Slowness Effect** |
| Plains, savannah, heath, tundra, polar desert, steppe, desert, shrubland | No | None |
| Forest | Yes | Slowness I |
| Dense forest, taiga, temperate rainforest | Yes | Slowness II |
| Jungle, swamp, marshland, tropical rainforest | Yes | Slowness III |

*Table 4.2.1a*

Topographic terrain (the amount to which a certain region’s elevation changes in altitude per unit of longitude or latitude), is separate from baseline terrain, and the specific zones of topography may not overlap directly with vegetation zones. Topographic terrain is defined as such:

|  |  |  |
| --- | --- | --- |
| **Terrain Type** | **Concealability** | **Speed or Slowness Effect** |
| Flatland | Dictated by baseline | None |
| Hills | Yes, if line of sight is obstructed | Slowness I |
| Steep hills | Yes, if line of sight is obstructed | Slowness II |
| Mountains | Yes, if line of sight is obstructed | Slowness III |

*Table 4.2.1b*

### 4.2.2 – Aquatic Terrain

Terrain on the surface of the sea or bodies of water is mostly dictated by depth and speed of current. Aquatic terrain has no impact on concealability, except for submarines, which may always be concealed in any body of water in which they can travel. Note that all army units are impassable unassisted through bodies of water. There are the following types of terrain:

|  |  |
| --- | --- |
| **Terrain Type** | **Traversable Vessels** |
| Creek | None |
| Shallow river | Amphibious ships |
| River | Amphibious ships, patrol boats, and corvettes |
| Shallow sea, reef | All vessels except battleships, carriers, and submarines |
| Open sea | All vessels |

*Table 4.2.2a*

## 4.3 – Structures

Structures are constructed things which exist on top of the terrain of the map. They may be constructed over the course of a campaign, or they may be pre-existing. The following is a non-comprehensive table of possible structures.

|  |  |  |
| --- | --- | --- |
| **Structure** | **Use** | **Strength when pre-existing** |
| Road | Faster travel | 4 per mile |
| Paved road | Faster travel | 3 per mile |
| Bridge, causeway | Travel over water or marsh | 3 per mile |
| Dam | Creation of reservoir, draining of wetlands | 5 |
| Lock | Travel upriver or through canal | 5 |
| Canal | Artificial river | 5 per mile |
| Port | Loading/disembarking of ships on land | 8 |
| Wall | Protection of area | 4 per mile per cubic meter of material per meter |
| Foxhole | Hiding of a squad | 2 |
| Trench | Hiding of a company | 2 per mile |
| Defensive works | Slowing of enemy advance | 4 per mile |
| House | Hiding of a platoon | 3 |
| Building | Hiding of a company | 5 |
| Religious structure | Hiding of a company (use results in Cruelty II, except when used first by the enemy) | 5 |
| Airfield | Takeoff and landing of aircraft | 4 |
| Hospital | Recovery of units (attack results in Cruelty III) | 6 |

*Table 4.3a*

# 5 – Commands

## 5.1 – Strategic Commands

### 5.1.1 – Hide

hide [unit]

Units are always either hidden or not. A unit can be hidden at any time provided that the following conditions are met:

* It is not currently engaged in warfare (Turmoil II or greater)
* It is a unit of a type which may be hidden
* The terrain in which it is currently located is one which a unit can be hidden

Unit concealability is governed by the table below:

|  |  |  |
| --- | --- | --- |
| **Unit** | **Concealable** | **Cause for Exposure** |
| Infantry (incl. Special Forces, Engineers, Espionage, Command, and Logistics) | Yes, D8 | Destruction of building |
| Artillery | Yes, D6 | Destruction of building, firing artillery |
| Submarines | Hidden by default | Depth charge hit |
| Stealth bombers | Hidden by default | Anti-aircraft hit |
| Reconnaissance aircraft | Hidden by default | Anti-aircraft hit |
| Drones | Hidden by default | Anti-aircraft hit |
| Transport aircraft | Hidden by default | Anti-aircraft hit |

*Table 5.1.1a*

Units which are concealable may be hidden in any roofed building, provided that it is large enough to host such a unit, and in the following types of terrain:

* Dense canopied arbor: forest, jungle, etc.
* Muddy terrain: marshland, swamp, etc.
* Mountains

When a hide command is issued to a unit which can be hidden, but which currently is not, the umpire will roll the relevant die (a D8 for infantry and a D6 for artillery). If a 1 or 2 is rolled, subject to adjustment according to the Silence and Turmoil effects, the hide command fails. When a unit is hidden, its representation is removed from the gamespace, and it will remain as such until it is willingly revealed, moved from concealable terrain, fires artillery shells, or exposed by an opponent. Hiding a unit does not prevent it from undertaking other actions, especially moving. A unit may move into concealable terrain and be hidden in the same turn, it may move while hidden (though in this case, the die must be rolled again), or move from a hidden position into one in which it must be revealed in the same turn.

### 5.1.2 – Reveal

reveal [unit]

When a unit is hidden, a player can choose to reveal it at any time during its turn. A revealed unit is placed back on the gamespace. Ordinarily, this command is not used except by the umpire, though a player can reveal a unit’s location as a tactical means to make a formation appear larger than it really is. Only a hidden unit can be revealed. Additionally, a unit is automatically revealed if it has the effect Turmoil II or greater.

### 5.1.3 – Message

message [player]

The message command is used to allow players on the same or opposing teams to communicate with each other. The odds that a message will fail depends on the fog of war mechanism. When a message fails to be delivered, a D4 is rolled. If the roll is 1 or 2, the message simply fails to send. If the roll is a 3, the message will be garbled in transit. If the roll is a 4, the enemy will intercept the message in its entirety, though the message will also reach the intended recipient.

## 5.2 – Agnostic Commands

### 5.2.1 – Attack

attack [unit] > [target]

Attacking is the most important command in the game for army and naval units, and is nearly ubiquitous. Aircraft use the similar “dogfight” command. Simply put, a unit or vessel which is within range of an enemy unit or vessel, it may attack. The attacking range is defined as 20% of the ordinary movement range of the attacking unit, adjusted for terrain but not for speed effects.

Once this occurs, a unit is considered “engaged,” and will participate in combat with the opposing unit or units. The attacking unit is placed directly adjacent to the defending unit or units, sometimes in an organization governed by the tactical battle structure of the units involved. Actual combat using these commands is much too complex to simply include here under these command notes, so please see the combat section for more information on the mechanics of warfare under *Eschaton* Fifth Edition. A unit that has engaged in combat will be immediately revealed and have the effect Turmoil II, unless it is a light infantry or a special forces unit, in which case it will have its level of Turmoil increased by 1.

A unit which is engaged in combat, either in attacking or in defense, cannot perform any other command, as it is “bogged down” by combat.

### 5.2.2 – Disengage

disengage [unit]

As mentioned previously, a unit which is engaged in combat cannot perform any other command, including moving. In order to be able to access other commands, a unit must abandon combat by disengaging, in which case that unit will be able to move and perform other actions per usual, including in the same turn. However, a unit that has disengaged (though not units which have been disengaged *from*) will suffer Slowness I and Cowardice I for the remainder of that turn, in addition to any effects gained through combat.

### 5.2.3 – Move

move [unit]

Every unit has a maximum distance it can travel in each turn. All units, except ships, can be moved in any direction, up to the maximum distance. The unit’s representation is then moved, provided the command was successful. All units except submarines and artillery can move and fire in the same turn. For information about aircraft distances, see the takeoff command. Movement is dictated by the method of travel, the relative weight of the unit, as well as the terrain in which movement occurs. Baseline movement is dictated as such:

|  |  |  |  |
| --- | --- | --- | --- |
| **Method of Travel** | **Per-Hour Speed** | **Per-Day Speed** | **Per-Week Speed** |
| Foot | 1.5 miles | 8 miles | 45 miles |
| Horse (incl. chariot) | 20 miles | 100 miles | 600 miles |
| Motorized Infantry | 40 miles | 200 miles | 1000 miles |
| Tank | 25 miles | 125 miles | 525 miles |
| Oarship | 3 knots | 70 knots | 500 knots |
| Sailboat | 5 knots | 120 knots | 840 knots |
| Steamship | 15 knots | 360 knots | 2500 knots |
| Diesel or Nuclear Ship | 35 knots | 840 knots | 5800 knots |

*Table 5.2.3a*

Weight affects movement in the following ways, according to the Slowness and Speed effects:

|  |  |
| --- | --- |
| **Unit Particulars** | **Effect** |
| Special Forces | Speed I |
| Engineers | Slowness I |
| Non-Archery Light Artillery | Slowness I |
| Medium Cavalry | Slowness II |
| Heavy Infantry | Slowness II |
| Non-Archery Medium Artillery | Slowness II |
| Aircraft Carriers | Slowness II |
| Heavy Cavalry | Slowness III |
| Non-Archery Heavy Artillery | Slowness III |

*Table 5.2.3b*

In addition to weight and method of travel, terrain and weather conditions also affects speed according to the table below. Conditions usually stack: travel through a hilly forest during a rain would result in Slowness III. However, roads are considered a separate from the surrounding terrain, so travel along an unpaved road, even in a swamp, would still result in Speed I.

|  |  |  |
| --- | --- | --- |
| **Terrain or Condition** | **Effect on Army Units** | **Effect on Naval Units** |
| Unpaved road | Speed I | Impassable |
| Paved road | Speed II | Impassable |
| Forest | Slowness I | Impassable |
| Hills | Slowness I | Impassable |
| Creek | Slowness II | Impassable |
| Dense forest | Slowness II | Impassable |
| Steep hills | Slowness II | Impassable |
| Swamp, jungle, or marsh | Slowness III | Impassable |
| Mountains | Slowness III | Impassable |
| Rain | Slowness I | Slowness I |
| Snow | Slowness II | Slowness I |
| Hail | Slowness III | Slowness II |
| River | Impassable | Speed I for amphibious ships, impassable otherwise |
| Shallows | Impassable | Impassable except for amphibious ships |
| Prevailing wind | None | Speed I per 10 knots for sail and oar ships |
| Opposing wind | None | Slowness I per 10 knots for sail and oar ships |
| Neutral wind | None | Speed I per 20 knots for sail and oar ships |

*Table 5.2.3c*

A command for movement requires the roll of a D20 to perform. A roll of a 1, plus the fog of war variable, results in a command failure. Wisdom and Foolishness effects alter this likelihood. When a command fails, a D6 is rolled, with an odd number resulting in the commander entirely failing to receive the command, in which case the unit remains in place, and an even number resulting in a misinterpreted command, in which case the unit travels the wrong way 40% of the distance it would have properly travelled.

### 5.2.4 – Spy

spy [unit] [location]

While intelligence can be gathered by reconnaissance aircraft, the regular intelligence services of a military, and prisoners-of-war, additional information can be gained by passing the spy command to any infantry unit (including mechanized infantry, special forces, and engineers). Occasionally, its use will provide information about the enemy’s hidden units or strength. When the spy command is sent, a die is secretly rolled by the umpire to determine the quality of the intelligence:

|  |  |
| --- | --- |
| **Unit** | **Dice Roll** |
| Engineers | D6 |
| Infantry | D8 |
| Special Forces | D10 |

*Table 5.2.4a*

A roll of a 6 or higher, less 1 per level of Vision, plus 1 per level of Blindness, results in good intelligence being given to the player. A roll of a 1 or 2 results in false information being given, while any other roll results in no information being retrieved.

### 5.2.5 – Fire

fire [unit 1] [unit 2] … > [target 1] [target 2] …

While the attack command is dual-sided (the defending team has a chance to not only reduce an attack’s damage but could inflict damage on the attacking team), the fire command is single-sided, and the defending team cannot defend against its use. Fire is available to artillery, cavalry, corvettes, cruisers, destroyers, and battleships. The player can specify as many firing units and as many targets as they would like. Targets may be enemy units or structures. Friendly fire is possible. Each firing unit has a maximum damage amount generated based on its type and its epoch, which is summed and divided across every target. A unit cannot fire and move in the same turn. The following dictates base maximum damage before taking into account Precision or Inaccuracy modifiers:

|  |  |
| --- | --- |
| **Unit** | **Damage roll** |
| Light artillery | D8 |
| Medium artillery | D10 |
| Heavy artillery | D12 |
| Light cavalry (tanks only) | D8 |
| Medium cavalry (tanks only) | D10 |
| Heavy cavalry (tanks only) | D12 |
| Corvette | D6 |
| Cruiser | D20 |
| Destroyer | D10 |
| Battleship | D12 |

*Table 5.2.5a*

Maximum effective range is governed not by artillery type, but by epoch, as such:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Light** | **Medium** | **Heavy** |
| **Epoch** | Light artillery, light cavalry, corvettes | Medium artillery, medium cavalry, destroyers | Heavy artillery, heavy cavalry, cruisers, battleships |
| Neolithic | 20 meters |  |  |
| Chalcolithic | 30 meters |  |  |
| Ancient | 40 meters |  |  |
| Classical | 50 meters |  | 25 meters |
| Medieval | 60 meters |  | 40 meters |
| Gunpowder | 500 meters | 400 meters | 250 meters |
| Smoothbore | 750 meters | 550 meters | 400 meters |
| Rifle | 1000 meters | 750 meters | 500 meters |
| Bolt | 1500 meters | 1200 meters | 750 meters |
| Modern | 2000 meters | 1500 meters | 1000 meters |
| Atomic | 3000 meters | 2250 meters | 1500 meters |
| Armalite | 5000 meters | 3750 meters | 2500 meters |
| Future | Dictated by rules | | |

*Table 5.2.5b*

## 5.3 – Army Commands

### 5.3.1 – Convert

convert [unit]

Artillery and cavalry land units can be converted to ordinary infantry, if for whatever reason they decide to abandon their armor or their cannons. When this takes place, they are converted to light infantry, with all of the correlating effects, including an adjustment of health. Status effects are maintained, except for those particular to artillery and cavalry: such effects are removed. When a player wants to convert a unit intentionally, this should be passed at the beginning of the turn, so that they have access to greater movement capabilities.

### 5.3.2 – Merge

merge [unit 1] [unit 2] … > [new unit]

All land units can merge, provided they are of the same type. A new unit with greater health will be created, and this new unit will be treated in the same manner as their subsidiaries. Effects are maintained, distributed, or multiplied in accordance with the rules for conversion. When this takes place, the original will be removed from the gamespace, and the new units placed in the same location.

Units may also be “false-merged,” by assigning a novel name to a group of units on the gamespace. Doing so allows a player to control a group of units *as if* they were one, without performing a full merge. These false merges can be reorganized at will.

### 5.3.3 – Split

split [unit] > [new unit 1] [new unit 2] …

Land units may also split, even if they were not originally merged. The newly created units will be weaker than the original, and they will maintain exactly the same effects as the original unit. When this takes place, the original will be removed from the gamespace, and the new units placed in the same spot as the original.

### 5.3.4 – Reorganize

reorganize [unit 1] [unit 2] …

When land units have taken damage, it may be advantageous to reorganize them into fewer units at full health. When this occurs, remaining units at 0 health are removed from the board, but are not considered “killed” for the purposes of the game. For instance, if four units at 50% health are reorganized, the result will be two units at 100% health. Ordinarily, the units which had the lowest starting health are the ones removed from the gamespace, but if units are of equal remaining health, this may be done at random. Reorganization causes the resulting units to have Weakness I, Slowness I, and Fatigue I for the remainder of that turn and the following turn. These effects may modify existing ones.

### 5.3.5 – Conscript

conscript [area]

When in favorable territory, a commander may choose to conscript recruits from among the local population, when there are enough civilians in an area to do so. This involves two rolls: a roll for success and a roll for units raised. First, the player rolls a D6, where a 1 or 2 results in a failure, adjusted according to the Cruelty and Nobility effects. A success results in new units being raised, while a failure results in an increase of 1 level of Cruelty. When successful, the commander will then roll a D4 to see how many units will be raised. These units will be light infantry, with Weakness II, Acquiescence I, Fatigue I, Slack I, Turmoil I, and Cowardice II. Conscription can only take place once every two weeks. The size of the units raised will be equal to the ordinary base unit size. The new units must be labelled, named, and their representations placed on the game space.

### 5.3.6 – Build

build [unit] > [structure]

Infantry, mechanized infantry, special forces, and engineer units can build structures, including fortifications and buildings. These structures can be used to defend against attacks or hide units. These structures have a name and a health value and can be referenced in commands. They are represented on the gamespace as well. A unit may build a structure while it is hidden, though it must re-roll in order to confirm that it remains hidden, and the structure must be built entirely within the concealable terrain. The repairing of damaged structures is dealt with in the repair command. Units may be bogged down in constructing something for multiple turns, if the time to construct is longer than a single turn.

|  |  |  |
| --- | --- | --- |
| **Structure** | **Time to Construct** | **Strength Roll** |
| Road | 90 minutes per mile | D4 |
| Paved road | 120 minutes per mile | D4 |
| Bridge or causeway (over a creek or lowlands) | 240 minutes per mile | D4 |
| Dam or wall | 360 minutes per mile per 3 meters D4 of height | D4 |
| Foxhole | 30 minutes | D4 |
| Trench | 120 minutes per mile | D4 |
| Defensive Works | 60 minutes per mile | D6 |

*Table 5.3.6a*

Engineers are able to construct structures in 40% less time than other units which are still able to build. The strength of constructions is subject to modification according to the Industry and Slack effects. Engineers have Industry I and Haste I by default.

A unit currently engaged in building (or repairing) a structure is immobile, and suffers Weakness II and Acquiescence III until it is completed.

### 5.3.7 – Repair

repair [unit] > [structure]

Pre-existing structures can also be repaired if they suffer damage. Repairing is considered identical to building in most respects, including modifiers. When structures are repaired, a D4 is rolled to determine the strength points added, up to the maximum pre-existing health, subject to the Industry and Slack effects, for every 2 hours of repair work done.

### 5.3.8 – Landmine

landmine [unit] > [location]

Engineers and light infantry can lay mines. Despite the perception of landmines as a modern phenomenon, land obstacles, booby traps, and spike pits are ancient tactics, as old as warfare itself. Once per week, each engineer unit can place up to three general-purpose mines within their movement range, and each light infantry can place one. For every turn that a unit is busy laying mines, they cannot otherwise move, build, or repair any structures. A unit may lay mines while being hidden, but a re-roll to remain hidden must be done.

Mines, once laid, are technically considered structures, and their locations should be hidden and noted by the umpire. A mine may be laid inside of or as a part of any structure. Any land unit, *regardless of its allegiance*, will set off the mine by going within 20% of the movement range of a light infantry unit, depending on the campaign scale, of it. When this occurs, a D4 will be rolled, and that amount of damage will be dealt to both the unit and the structure, if the mine was laid as a part of or inside a structure. Additionally, this unit will be immediately revealed, and suffer Weakness III for the remaining turn and the subsequent turn, Immobility for the remaining turn, and Slowness II for the subsequent turn.

### 5.3.9 – Sweep

sweep [unit]

Engineers and light infantry can sweep an area for mines, defined as a circle with radius 50% of that unit’s per-turn movement range. A unit sweeping for mines will not be able to otherwise move, build, repair, or lay mines during that turn, and will suffer Weakness II and Acquiescence I.

Rolls for the sweep command are done secretly, by the Umpire. For each mine within that area, the umpire will roll a D10 for sweeping engineers, and a D6 for sweeping light infantry. The roll of a 1 will result in a mine being set off by that unit, with consequential effects, while a 2 results in the mine not being located. Any other roll results in a mine being discovered and disabled. The sweep of an area requires 90 minutes, subject to the Haste and Fatigue modifier effects. The results of successful deactivation rolls and setting-off rolls will be announced by the umpire as they occur, but the players should never be allowed to know how many mines are in an area *prior* to the sweep, nor should they be allowed to know if a mine has not been discovered, but has also not been set off.

The Vision and Blindness affects the dice rolled for the success of the sweep command as such:

|  |  |  |
| --- | --- | --- |
| **Effect** | **Light Infantry** | **Engineers** |
| No effect | D6 | D10 |
| Blindness III+ | D4 | D4 |
| Blindness II | D4 | D6 |
| Blindness I | D4 | D8 |
| Vision I | D8 | D12 |
| Vision II | D10 | D20 |
| Vision III | D12 | D20 |
| Vision IV | D20 | D20 |

*Table 5.3.9a*

### 5.3.10 – Recover

recover [unit] > [logistics unit]

A unit that has suffered some damage but has successfully disengaged from combat may recover by returning to the location of an allied logistics unit or hospital. Units recover at a rate of 10% per turn, subject to the Regeneration and Impotence effects.

## 5.4 – Naval Commands

### 5.4.1 – Heading

heading [vessel] [direction]

Corvettes, cruisers, destroyers, battleships, and cruisers can only alter their direction by 1 degree per minute while moving. If a player wants to change a ship’s course by more than that, they must invoke the heading command. Using the heading command results in that ship being immobile for the remainder of the turn, and Slowness I for the subsequent turn. There are a number of possible ways to specify direction:

* According to the wind direction: “with the wind” or “against the wind”
* According to cardinal direction: “due North” or “South-by-Southwest”
* According to Cartesian heading: “330 degrees 30 minutes”
* According to destination: “on a heading for the port of Saint-Nazaire”
* According to subjective change in direction: “hard to port” or “full about-face”

### 5.4.2 – Torpedo

torpedo [vessel] > [target]

Submarines of both missile and attack types can fire torpedoes at ships, provided that the target ship is within 200% of the movement range of the submarine for a given turn. A submarine, once it fires a torpedo, is immobile for the remainder of the current turn, and suffers Slowness I for the subsequent turn.

When a torpedo is fired, the player will roll a D6 to determine the outcome of the torpedo, with results as such, subject to the effects of Precision and Inaccuracy:

|  |  |  |
| --- | --- | --- |
| **Roll** | **Damage to Target** | **Effects to Target** |
| 1 | None | None, submarine’s location is revealed |
| 2 | None | None |
| 3 | D4, minus 1 | Immobility for remaining turn |
| 4 | D4 | Immobility for remaining turn, Slowness I and Weakness I for subsequent |
| 5 | D4 | Immobility for remaining turn, Slowness II, Weakness I, and Inaccuracy I for subsequent |
| 6 | Immediately sunk |  |

*Table 5.4.2a*

### 5.4.3 – Surface

surface [submarine]

Submarines are required to surface every so often in order to recycle air and acquire food. This may be done in the open sea or at an allied port. The surface command is essentially a temporary reveal command. When a submarine surfaces, it is visible for a brief moment before being hidden again. A submarine may surface, be submerged, and perform other actions including moving within the same turn, but doing so imposes Slowness II.

The frequency with which a submarine must surface depends on its engine type. Diesel-powered submarines must surface once every 36 hours at port or on the open sea in order to off-gas carbon dioxide and exhaust, while nuclear submarines are not required to do the same. All submarines, like all other ships, must dock once every 6 months to restock on supplies.

A diesel-powered submarine which does not surface when required will suffer 15% damager per turn, rounded up, until it sinks, as well as being encumbered with one level each of Weakness, Acquiescence, Slowness, and Inaccuracy every turn. This damage is cumulative and does not disappear once the submarine does surface as required, though the effects abate.

### 5.4.4 – Depthcharge

depthcharge [vessel] > [submarine]

All ships except patrol boats and amphibious ships can drop depth charges to ward off submarines. If a submarine is within 33% of the movement range of that vessel, the dropping of a depth charge has a chance to sink the submarine. When this occurs, the player will roll a D6, subject to the effects of precision and inaccuracy. Such a unit may only drop one depth charge per turn.

|  |  |
| --- | --- |
| **Roll** | **Effect** |
| 1 | Miss |
| 2 | Miss |
| 3 | Miss |
| 4 | Miss |
| 5 | Submarine exposed in location, subject to Immobility and Inaccuracy II for the remainder of the turn and the subsequent one |
| 6 | Submarine sunk |

*Table 5.4.4a*

### 5.4.5 – Board

board [vessel] > [target]

All ships except patrol boats and amphibious ships can board another ship if it is within 20% of the movement range of that vessel. They have a small chance to seize the ship, subject to the epoch multiplier and the Weakness effect of the target vessel, a further small chance to sink the ship, and a more substantial chance to disable or damage the ship being boarded. A ship which is issued a board command cannot move for the remainder of the turn. A D20 is rolled to determine the success of the boarding command, with results as such:

|  |  |
| --- | --- |
| **Roll** | **Effect** |
| 20+ | Target ship seized, sailors taken prisoner |
| 19 | Target ship sunk |
| 18 | Target ship damaged by D4, subject to Immobility and Inaccuracy II for the remainder of the turn and the subsequent one |
| <18 | Boarding ship subject to Immobility and Acquiescence I for the remainder of the turn subsequent one |

*Table 5.4.5a*

A boarding command can only be issued to a vessel every six hours, or once per turn. Note that the above numbers are adjusted, apart from the epoch multiplier and the Weakness effect, according to the difference in ship classes, as such:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Target Vessel** | | | | | | |
| **Boarding** | Battleship | Destroyer | Cruiser | Carrier | Corvette | Amphibious | Patrol |
| Battleship | +0 | +1 | +2 | +3 | +4 | +5 | +6 |
| Destroyer | -1 | +0 | +1 | +2 | +3 | +4 | +5 |
| Cruiser | -2 | -1 | +0 | +1 | +2 | +3 | +4 |
| Carrier | -3 | -2 | -1 | +0 | +1 | +2 | +3 |
| Corvette | -4 | -3 | -2 | -1 | +0 | +1 | +2 |

*Table 5.4.5b*

If, as the result of a successful boarding roll, a ship is seized, two things occur. First, the seized ship changes allegiance, and becomes part of the fleet of the seizing navy. Second, the remaining crew must be dealt with, either by being taken prisoner, released, or killed. The crew of a captured ship is considered equal to a battalion, and if taken prisoner, their weight must be accounted for on the seizing ship. If the captured prisoners are killed, the entire navy acquires Cruelty III. Regardless, the seized vessel may now be piloted and used by the seizing navy as if it was one of theirs.

An abandoned vessel or a vessel which has surrendered may be seized without contest, and no roll For success is required if this occurs.

### 5.4.6 – Load

load [unit] > [vessel]

Aircraft and army units can be loaded onto certain ships to be moved around the gamespace, or to protect them from attack, according to the weight of the unit and the capacity of the ship, according to the following tables. Ships can carry up to their weight in both aircraft and army units at the same time:

|  |  |  |
| --- | --- | --- |
| **Ship** | **Land Unit Weight Capacity** | **Airplane Weight Capacity** |
| Aircraft Carrier | 8 | 8 |
| Battleship | 8 | 4 |
| Cruiser | 4 | 1 |
| Destroyer | 2 | 1 |
| Corvette | 1 | 0 |
| Amphibious | 4 | 0 |
| Patrol Boat | 1 | 0 |

*Table 5.4.6a*

Units have the following weights:

|  |  |  |
| --- | --- | --- |
| **Land Units** | **Aircraft** | **Weight** |
| Light infantry, engineers, special forces, light artillery | Light fighters, transport aircraft, drones | 1 |
| Heavy infantry, medium artillery, light cavalry | Heavy fighters, reconnaissance aircraft | 2 |
| Mechanized infantry, heavy artillery, medium cavalry | Ordinary and stealth bombers | 4 |
| Heavy cavalry |  | 5 |

*Table 5.4.6b*

A ship requires 1 hour to load a ground unit, which can only be done at a dock, from another ship within 20% of the loading ship’s movement range, or, in the case of an amphibious assault ship, on a beach, and is subject to Slowness II for the remainder of the turn. Aircraft can land on any ship while it is moving, but that ship will have Slowness I for the remainder of the turn, except for an aircraft carrier, which suffers no movement effects. Note that if a ship is sunk while the units are on board, those units are also lost. While weight does not generally affect the speed of a ship, a ship being entirely free of aircraft or land unit cargo, it experiences Speed II. A unit loaded onto a ship, except for aircraft on an aircraft carrier, cannot be passed commands to, and are considered hidden if their ship is as well.

### 5.4.7 – Disembark

disembark [vessel] > [unit]

Vessels carrying land units can unload them onto another ship, or onto a dock, or, in the case of an amphibious assault ship, onto a beach, at any time. Disembarking takes 1 hour, reduces the carried weight of the ship, and causes Immobility for the remainder of the turn.

### 5.4.8 – Dock

dock [vessel] > [port]

Vessels that cannot disembark at a beachhead or on another ship (i.e. all ships except amphibious assault ships), must visit an allied dock at least once every six months, at which point the ship is repaired, its crew is cycled to full health, and units may be loaded on and off. Docking requires a minimum time of at least two hours, at which point the six-month docking requirement is met. For every turn a vessel spends docked, its health recovers by 10%, rounded down, until it is fully restored, subject to the Regeneration and Impotence effects. A vessel which does not dock when required to will suffer one level each of Weakness, Acquiescence, Slowness, and Inaccuracy per turn, until it returns to port. Once it has been docked for a minimum of two hours, the effects abate.

### 5.4.9 – Missile

missile [vessel] > [target]

Destroyers and missile submarines having attained at least the Atomic Era are able to fire missiles, which, unlike the fire command, can be defended against by other units which are also able to fire missiles, according to the rules outlined in general combat. The vessels which are able to fire missiles do so with the damage and range outlined in the table below, subject to the Precision and Inaccuracy effects. Note that time-asymmetric combat is subject to multipliers as outlined in the Epoch section.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **Epoch** | | |
| **Vessel** | **Die** | **Atomic** | **Armalite** | **Future** |
| Destroyer | D8 | 500 miles | 1200 miles | Dictated by scenario |
| Submarines | D12 | 1000 miles | Unlimited | Dictated by scenario |

*Table 5.4.9a*

Without specificity, the warheads within these missiles are assumed to be conventional. However, the player firing missiles can, if he has attained at least the Atomic Age and, if he is allowed to according to the campaign rules, use nuclear weapons by attaching them to these missiles.

The damage inflicted by the detonation of a nuclear weapon attached to a missile is divided into six ranges, whose radii are governed by the effective yield of that warhead, dictated by the campaign rules. These ranges cause differing effects on structures and units within those units, regardless of their allegiance. Dice may be rolled to determine actual damage.

|  |  |  |  |
| --- | --- | --- | --- |
| **Destruction Type** | **Radius** | **Structural Damage** | **Personnel Damage and Effects** |
| Fireball | 1 meter per ton of effective yield | Immediate vaporization | Instant death |
| Heavy blast damage | 3 meters per ton of effective yield | D8 +2 | Instant death |
| Moderate blast damage | 6 meters per ton of effective yield | D6, D4 for every subsequent hour | Instant death |
| Thermal radiation | 7 meters per ton of effective yield | D6, D4 -1 for every subsequent hour | D10 |
| Light blast damage | 16 meters per ton of effective yield | D4, 1 additional for every subsequent hour | D4, D4 for every subsequent 12 hours remaining within the radius |
| Radiation | 22 meters per ton of effective yield | D4 | D4 |

*Table 5.4.9b*

Nuclear weapons are limited in number, and a player may only launch a certain number of them over the course of the game, as provided by the campaign rules.

### 5.4.10 – Seamine

seamine [vessel] > [location]

Corvettes and patrol boats can lay seamines. Once per week, each of corvette can lay up to three general-purpose mines within their movement range, and each patrol boat can lay one. For every turn that a vessel is busy laying mines, they cannot otherwise move. A vessel may lay mines while being hidden, but a re-roll to remain hidden must be done.

Mines, once laid, are technically considered aquatic structures, and their locations should be hidden and noted by the umpire. Land unit, *regardless of its allegiance*, will set off the mine by going within 20% of its movement range, depending on the campaign scale, of it. When this occurs, a D6 will be rolled to determine the outcome of the mine strike, with a 1 causing an instant sink, and any other number causing a D4 to be rolled, and that amount of damage to be dealt to the unit. Additionally, any minestruck vessel will be immediately revealed, and suffer Acquiescence III for the remaining turn and the subsequent turn, Immobility for the remaining turn, and Slowness II for the subsequent turn,

### 5.4.11 – Sweep

sweep [vessel]

Corvettes and patrol boats can sweep an area for mines, defined as a circle with radius 50% of that unit’s per-turn movement range. A vessel sweeping for mines will not be able to otherwise move, build during that turn, and will suffer Weakness II and Acquiescence I.

Rolls for the sweep command are done secretly, by the Umpire. For each mine within that area, the umpire will roll a D10 for sweeping corvettes, and a D6 for sweeping patrol boats. The roll of a 1 will result in a mine being set off by that vessel, with consequential effects, while a 2 results in the mine not being located. Any other roll results in a mine being discovered and disabled. The sweep of an area requires 90 minutes, subject to the Haste and Fatigue modifier effects. The results of successful deactivation rolls and setting-off rolls will be announced by the umpire as they occur, but the players should never be allowed to know how many mines are in an area *prior* to the sweep, nor should they be allowed to know if a mine has not been discovered, but has also not been set off.

The Vision and Blindness affects the dice rolled for the success of the sweep command as such:

|  |  |  |
| --- | --- | --- |
| **Effect** | **Patrol Boats** | **Corvettes** |
| No effect | D6 | D10 |
| Blindness III+ | D4 | D4 |
| Blindness II | D4 | D6 |
| Blindness I | D4 | D8 |
| Vision I | D8 | D12 |
| Vision II | D10 | D20 |
| Vision III | D12 | D20 |
| Vision IV | D20 | D20 |

*Table 5.4.11a*

### 5.4.12 – Abandon

abandon [vessel] > [destination]

When it becomes apparent that a vessel is unsalvageable, the crew of that ship may abandon it. Doing so is only possible once a vessel has suffered at least 40% damage. Once this occurs, the crew is converted to a battalion of light infantry and can travel otherwise. The crew and the abandoned vessel can then be dealt with independently.

The crew of an abandoned vessel may immediately be rescued by another ship using the load command. If they cannot, they proceed towards the nearest shore at the speed of an on-foot light infantry unit suffering from Slowness III. One additional level of Slowness and 10% damage are inflicted every 2 hours that the crew remain at sea. A crew at sea cannot attack until allowed to recover. A crew, once rescued, loses these effects and can be shuffled around ordinarily. A crew that surrenders to an enemy are treated as ordinary prisoners of war.

The ship, once abandoned, must roll a D4 every 4 hours, and that amount of damage is inflicted. An abandoned ship can be seized by an opposing navy without contest. Mines can be lain in abandoned ships before or after they sink.

### 5.4.13 – Scuttle

scuttle [vessel] > [target vessel]

An empty ship, whether abandoned or not, which has the same allegiance as another ship, may be intentionally sunk in order to prevent it from falling into enemy hands. This must be done by any ship except a patrol boat or an amphibious assault ship, and results in the target ship being immediately sunk. Mines may be lain in a scuttled shipwreck.

## 5.5 – Air Commands

### 5.5.1 – Takeoff

takeoff [aircraft]

Aircraft are not governed by the same rules as land- or sea-based units. As such, they do not have a usual movement distance. Base movement is considered in terms of effective range, as such:

|  |  |  |
| --- | --- | --- |
| **Aircraft Propulsion** | **Distance Range** | **Flight Time** |
| Biplane | 80 miles | 6 hours |
| Balloon | 5 miles/hour | Unlimited |
| Regular Propeller | 200 miles | 6 hours |
| Jet-engine | 500 miles | 4 hours |

*Table 5.5.1a*

Note that the distance range refers to the distance at which an aircraft may fly *to* and *return* to the launching airfield or carrier. If an aircraft is to land at a different aircraft or carrier, it may do so at any valid landing site up to 200% of the distance range given above.

In contrast to land and sea units, which are affected by weather conditions using the Speed and Slowness effects, wind speed affects the range of aircraft directly, via the Pythagorean theorem. Other weather conditions affect range as such:

|  |  |
| --- | --- |
| **Weather Event** | **Effects** |
| Rain | Slowness I |
| Snow | Slowness II |
| Hail | Slowness III |

*Table 5.5.1b*

### 5.5.2 – Land

land [aircraft] > [destination]

At the end of the air warfare turn, every aircraft must land at an airfield or aircraft carrier within its range. If they cannot, or if they fail to do so, or if an aircraft remains in the air longer than its available time, an aircraft which remains in the air by the end of the air warfare turn crashes and is lost. Once a unit lands, it may not takeoff again during the subsequent turn.

### 5.5.3 – Pulse

pulse [aircraft] > [location]

Bombers, stealth bombers, and drones having attained at least the Atomic Epoch can drop electromagnetic pulses on groups of units that are together. When a pulse is dropped, a D6 is rolled, and based on the results of the roll and the type of aircraft, a radial range is given:

|  |  |  |
| --- | --- | --- |
| **Roll** | **Bomber Radius** | **Drone Radius** |
| 1 | None, failed pulse | None, failed pulse |
| 2 | 100 meters | 50 meters |
| 3 | 200 meters | 100 meters |
| 4 | 300 meters | 200 meters |
| 5 | 400 meters | 300 meters |
| 6 | 500 meters | 400 meters |

*Table 5.5.3a*

All units within that range, regardless of allegiance, suffer the following effects for the remainder of the turn: Immobility, Foolishness III, Inaccuracy III, and Weakness III. No damage is taken, and these effects abate at the end of the current turn.

### 5.5.4 – Airlift

airlift [unit] > [aircraft]

Transport planes, stealth, and ordinary bombers can be used to airlift land units during the aircraft phase of a turn. In order for this to happen, the land unit must be within 20% of its movement range of the aircraft, and after the airlift, the land unit or units may move ordinarily from its new location. Ordinarily, the unit will be disembarked from the plane at the airfield or carrier at which the aircraft lands. See the “halo” command for other options for airlifted units. The units an airlifting aircraft can carry is given according to its weight capacity, using the table below.

|  |  |
| --- | --- |
| **Aircraft** | **Weight Capacity** |
| Stealth and Ordinary Bombers | 2 |
| Transport | 4 |

*Table 5.5.4a*

Carried units of company size have a certain set weight, which is identical to their battalion weight for being loaded onto ships:

|  |  |
| --- | --- |
| **Land Units** | **Weight** |
| Light infantry, engineers, special forces, light artillery | 1 |
| Heavy infantry, medium artillery, light cavalry | 2 |
| Mechanized infantry, heavy artillery, medium cavalry | 4 |
| Heavy cavalry | 5 |

*Table 5.5.4b*

Should a unit’s size or weight exceed the capacity of an aircraft, it can be divided among several aircraft. For instance, a heavy cavalry company can be carried by two transport airplanes, if required to do so.

### 5.5.5 – Halo

halo [aircraft] > [unit] [location]

Ordinarily, airlifted units are simply disembarked at the landing site of their aircraft. However, units transported on transport planes can also disembark at any location along the flight path of that aircraft via an airborne jump. The success of the airborne jump is dictated by a series of die rolls. Transported units must roll a die for success according to the table below. Note that *each unit* requires a roll, rather than each portion of a unit on an aircraft. For instance, a battalion of four companies of medium artillery travelling on four transport planes only requires one die roll, despite being divided.

|  |  |
| --- | --- |
| **Land Units** | **Die** |
| Infantry (all types) | D10 |
| Light artillery, medium artillery and light cavalry | D8 |
| Heavy artillery and medium cavalry | D6 |
| Heavy cavalry | D4 |

*Table 5.5.5a*

The roll of the die, adjusted for the Precision and Inaccuracy effects of the carrying aircraft, given by the above table dictates effects as such:

|  |  |
| --- | --- |
| **Roll** | **Effects for remaining turn** |
| 1 | Damage dealt, intended location missed, Weakness III, Blindness III, Foolishness III |
| 2 | Intended location missed, Weakness I, Blindness I, Foolishness II |
| 3 | Intended location missed, Foolishness I |
| 4 | Intended location missed |
| 5 | Intended location missed |
| 6 | Intended location missed |
| 7 | Intended location missed |
| 8 | Intended location missed |
| 9 | Intended location missed |
| 10 | Intended location missed |
| Maximum of die | Perfect land, no additional die roll required |

*Table 5.5.5b*

If a damage die roll is required, a D4 is rolled and the unit suffers that amount of damage. If the intended location is missed, both a D6 and a D12 will be rolled. The D6 determines the distance away from the intended location the unit will land, by multiplying the roll of the die by 10% and by the per-turn distance range of mechanized infantry. The D12 dictates the direction away from the intended location that the unit will land, as such:

|  |  |  |
| --- | --- | --- |
| **Die Roll** | **Compass Direction** | **Degrees Bearing** |
| 1 | 30º East of North | 30º |
| 2 | 30º North of East | 60º |
| 3 | East | 90º |
| 4 | 30º South of East | 120º |
| 5 | 30º East of South | 150º |
| 6 | South | 180º |
| 7 | 30º West of South | 210º |
| 8 | 30º South of West | 240º |
| 9 | West | 270º |
| 10 | 30º North of West | 300º |
| 11 | 30º West of North | 330º |
| 12 | North | 0º |

*Table 5.5.5c*

Once a unit has landed, it is considered an ordinary land unit, and may be hidden or suffer terrain effects like any other unit according to the gamespace. All units suffer Slowness I for the remainder of the turn after a halo jump. Units after a halo jump are hidden by default from all players, unless terrain disallows it.

### 5.5.6 – Kamikaze

kamikaze [aircraft] > [vessel]

Fighter aircraft can fly into ships within their ordinary movement range. A D6 will be rolled, with the following effects:

|  |  |
| --- | --- |
| **D6 Roll** | **Effect** |
| 1 | Aircraft misses, shot down |
| 2 | Aircraft misses, shot down |
| 3 | Aircraft hits ship, -2 damage done on damage roll |
| 4 | Aircraft hits ship, -1 damage done on damage roll |
| 5 | Aircraft hits ship, ordinary damage roll |
| 6 | Ship immediately sunk |

*Table 5.5.6a*

If a damage roll is required to be made, a D4 is rolled, with adjustments for Strength or Weakness of the aircraft and Resistance or Acquiescence of the target ship and according to the table above. That amount of damage is dealt to the ship.

### 5.5.7 – Missile

missile [aircraft] > [target]

Fighters and bombers having attained at least the Atomic Era are able to fire missiles, which, unlike the fire command, can be defended against by other units which are also able to fire missiles, according to the rules outlined in general combat. The aircraft which are able to fire missiles do so with the damage and range outlined in the table below, subject to the Precision and Inaccuracy effects. Note that time-asymmetric combat is subject to multipliers as outlined in the Epoch section These missiles may not be nuclear.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **Epoch** | | |
| **Vessel** | **Die** | **Atomic** | **Armalite** | **Future** |
| Fighters (light and heavy) | D6 | 200 miles | 500 miles | Dictated by scenario |
| Bombers (stealth and ordinary) | D8 | 100 miles | 250 miles | Dictated by scenario |

*Table 5.5.7a*

### 5.5.8 – Dogfight

dogfight [aircraft 1] [aircraft 2] … > [target 1] [target 2] …

The dogfight command is similar to the attack command used for army and naval units, but not identical, mostly in that an aircraft which is engaged in a dogfight is still able to engage in other aerial actions, including firing missiles, dropping bombs and electromagnetic pulses, etc. However, an aircraft engaged in combat is not able to airlift or halo-drop units, nor may it survey terrain. An aircraft may, at any time during the aerial phase, dogfight any enemy aircraft whose flight path it crosses. Once this occurs, an aircraft is considered “engaged” until the end of the turn, an aerial kill on either aircraft, or the successful escape by an aircraft.

Actual aerial combat using these commands is much too complex to simply include here under these command notes, so please see the aerial combat section for more information on the mechanics of warfare under *Eschaton* Fifth Edition.

### 5.5.9 – Bomb

bomb [aircraft] > [target 1] [target 2] …

While the dogfight command is dual-sided (the defending team has a chance to not only reduce an attack’s damage but could inflict damage on the attacking team), the bomb command, like the fire command, is single-sided, and the defending team cannot defend against its use. Bomb is available to stealth bombers, ordinary bombers, and drones. Targets may be enemy units or structures. Friendly fire is possible. Each bombing unit has a maximum damage amount generated based on its type and its epoch, which is summed and divided across every target. Bombs must be dropped along an aircraft’s flight path The following dictates base maximum damage before taking into account Precision or Inaccuracy modifiers:

|  |  |
| --- | --- |
| **Unit** | **Damage roll** |
| Stealth Bomber | D6 |
| Bomber | D8 |
| Drone | D10 |

*Table 5.5.9a*

Without specificity, the warheads within these bombs are assumed to be conventional. However, the player dropping bombs can, if he has attained at least the Atomic Age and, if he is allowed to according to the campaign rules, use nuclear weapons by attaching them to these bombs.

The damage inflicted by the detonation of a nuclear weapon attached to a bomb is divided into six ranges, whose radii are governed by the effective yield of that warhead, dictated by the campaign rules. These ranges cause differing effects on structures and units within those units, regardless of their allegiance. Dice may be rolled to determine actual damage.

|  |  |  |  |
| --- | --- | --- | --- |
| **Destruction Type** | **Radius** | **Structural Damage** | **Personnel Damage and Effects** |
| Fireball | 1 meter per ton of effective yield | Immediate vaporization | Instant death |
| Heavy blast damage | 3 meters per ton of effective yield | D8 +2 | Instant death |
| Moderate blast damage | 6 meters per ton of effective yield | D6, D4 for every subsequent hour | Instant death |
| Thermal radiation | 7 meters per ton of effective yield | D6, D4 -1 for every subsequent hour | D10 |
| Light blast damage | 16 meters per ton of effective yield | D4, 1 additional for every subsequent hour | D4, D4 for every subsequent 12 hours remaining within the radius |
| Radiation | 22 meters per ton of effective yield | D4 | D4 |

*Table 5.5.9b*

Nuclear weapons are limited in number, and a player may only launch a certain number of them over the course of the game, as provided by the campaign rules.

### 5.5.10 – Survey

survey [aircraft]

Intelligence can be gathered by reconnaissance aircraft and drones in the same manner as the spy command. Its use will provide information about the enemy’s hidden units or strength. When the survey command is sent, a die is secretly rolled by the umpire to determine the quality of the intelligence, which is always a D6. Unlike the spy command, the quality of intelligence does not depend on the aircraft used. Information can only be returned along the aircraft’s flight path.

A roll of a 6 or higher, less 1 per level of Vision, plus 1 per level of Blindness, results in good intelligence being given to the player. A roll of a 1 or 2 results in false information being given, while any other roll results in no information being retrieved.

# 6 – Gameplay

Gameplay is turn- and command-based and follows a clear progression.

## 6.1 – First Turn

Before the first turn, the umpire will decide which player will go first. It may be dictated by the circumstances of the campaign, or by the determination of initiative. Players may have an opportunity, prior to the beginning of the game itself, to deploy units, gather information, construct defensive works or other structures, and so on.

## 6.2 – Pre-Turn Information

Before each turn, the umpire may relay information to the player that may have been ascertained by intelligence-gathering units in the prior turn. This information may be useful or not, or true or not, depending on secret dice rolls made by the umpire.

## 6.3 – Ordinary Turn

### 6.3.1 – Aircraft Phase

First, if relevant, a player will submit a series of commands pertaining to his air force. This sub-turn, the “aircraft phase,” takes the same structure as the primary land or sea phase.

### 6.3.2 – Command Issuance

After the aircraft phase and any relevant combat has been resolved, a player will then submit a series of commands to his units, by writing down those commands according to the proper syntax and sending them silently to the umpire by whatever means agreed upon by the players prior to the start of the game, provided that opposing players cannot become aware of them. Commands submitted are final, and the umpire will interpret them as he believes it would realistically be interpreted on a real battlefield. Some units may receive more than one command, but only in a certain order, so it is imperative that the player issue them in the correct sequence. There is no limit to the number of commands that can be issued in a given turn, except as provided for by the attributes of the units and gamespace.

### 6.3.3 – Pre-Combat Phase

Commands are first interpreted, or “resolved,” into on-the-battlefield actions by the umpire in the order in which they were issued, according to the mechanics of the particular command. If any of the player’s units come into contact with an opposing player’s, or if a unit is commanded to attack or otherwise engage with the enemy, that unit is marked as being engaged in combat, and no further commands are parsed for that unit. The combat is instead dealt with in the combat phase.

### 6.3.4 – Combat

Combat and enemy engagement is then dealt with, in chronological order of the commands resulting in such engagement, according to the mechanics of the particular type of combat. When necessary, the player whose turn it is, and not the umpire, will roll dice in order to determine the offensive strength of a unit, and the opposing player will roll dice to determine the defensive strength or capacity to “save” or prevent an action from occurring.

### 6.3.5 – Opposing Turn

Once all combat has been resolved, the opposing player will have the opportunity to submit his commands to his own units.

## – Initiative Determination

After both sides of a turn have taken place, the “initiative” for the subsequent turn must be determined. The player with a turn’s initiative goes first. As such, initiative is an enormous advantage, and the ability to retain or take advantage indicates “winning” the current part of the game. It is largely based on battlefield outcomes, but there is an element of randomness. A player’s initiative potential is determined by summing the following:

* 3 points for each enemy unit destroyed in the preceding turn
* 2 points for each enemy unit which deserted in the preceding turn
* 1 point for each critical hit inflicted in the preceding turn
* 1 point for each enemy-occupied structure or enemy-constructed defensive work destroyed or occupied in the preceding turn

A player determines his net initiative potential by subtracting his opponent’s from his own. If both players have a net initiative potential of 0, the player who previously had the initiative will roll a D12. If he rolls a 1, he loses initiative for the following turn. Otherwise, he will maintain it. When a player has a negative net initiative potential, he will roll a D12, losing initiative on any roll of number *1+|NIP|*, such that a roll is not necessary for a player with a net initiative potential of -10 or lower.

## – Victory

The game can end under a variety of circumstances, set out at the beginning of the game. A game can be “won” clearly if a particular strategic goal is attained (the capture of the enemy commander or a particular city, etc.), or by a player who is able to secure a number of victory conditions, which may be equal in value or assigned a point-value. A game may simply end after a certain number of turns, or after some number of health points are lost, at which point victory may be determined by remaining strength or the number of victory conditions attained by each player, and so on. Conditions are left up to the players and the umpire to decide prior to each campaign.

# – Quick Reference Tables

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Type | Neo | Cha | Anc | Cla | Med | Gun | Smo | Rif | Bol | Mod | Ato | Arm | Fut |
| L Inf | Yes | | | | | | | | | | | | |
| H Inf | Yes | | | | | | | | | | | | |
| Mech | No | | | | | | | | Yes | | | | |
| Eng | Yes | | | | | | | | | | | | |
| L Art | Yes | | | | | | | | | | | | |
| M Art | No | | | | Yes | | | | | | | | |
| H Art | No | | | Yes | | | | | | | | | |
| L Cav | No | Yes | | | | | | | | | | | |
| M Cav | No | | | | | | Yes | | | | | | |
| H Cav | No | | | Yes | | | | | | | | | |
| Log | No | Yes | | | | | | | | | | | |
| Int | No | Yes | | | | | | | | | | | |
| S.F. | Yes | | | | | | | | | | | | |
| Com | Yes | | | | | | | | | | | | |
| Corv | No | | | | | Yes | | | | | | | |
| Amp | No | Yes | | | | | | | | | | | |
| P.B. | No | | | | | | Yes | | | | | | |
| Cruis | No | | | | | | Yes | | | | | | |
| Dest | No | | | | | | | Yes | | | | | |
| Batt | No | | | | | | | Yes | | | | | |
| Carr | No | | | | | | | | | Yes | | | |
| A Sub | No | | | | | | | | Yes | | | | |
| M Sub | No | | | | | | | | | | Yes | | |
| L Fig | No | | | | | | | | Yes | | | | |
| H Fig | No | | | | | | | | Yes | | | | |
| Bomb | No | | | | | | | | Yes | | | | |
| S Bom | No | | | | | | | | | Yes | | | |
| Trans | No | | | | | | | | | Yes | | | |
| Recon | No | | | | | | | | Yes | | | | |
| Drone | No | | | | | | | | | | Yes | | |
| Space | No | | | | | | | | | | | Yes | |

*Table 7a. Epoch Unit Availability*

|  |  |  |
| --- | --- | --- |
| **Unit Type** | **Health Points** | **Attack/Defense Die** |
| Light Infantry | 4 | D4 |
| Heavy Infantry | 6 | D6 |
| Mechanized Infantry | 6 | D4 |
| Engineers | 4 | D4 |
| Light Artillery | 6 | D4 |
| Medium Artillery | 7 | D4 |
| Heavy Artillery | 8 | D4 |
| Light Cavalry | 8 | D6 |
| Medium Cavalry | 10 | D8 |
| Heavy Cavalry | 12 | D10 |
| Logistics | 4 | D4 |
| Intelligence | 4 | D4 |
| Special Forces | 12 | D12 |
| Command | 16 | D12 |

*Table 7b. Land Unit Health and Combat Strength*

|  |  |  |
| --- | --- | --- |
| **Ship Type** | **Health Points** | **Attack/Defense Die** |
| Corvette | 4 | D6 |
| Amphibious Ship | 4 | D4 |
| Patrol Boat | 2 | D4 |
| Cruiser | 10 | D12 |
| Destroyer | 8 | D8 |
| Battleship | 12 | D12 |
| Aircraft Carrier | 16 | D12 |
| Attack Submarine | 1 | None |
| Missile Submarine | 1 |

*Table 7c. Ship Health and Combat Strength*

|  |  |  |
| --- | --- | --- |
| **Aircraft Type** | **Health Points** | **Attack/Defense Die** |
| Light Fighter | 4 | D4 |
| Heavy Fighter | 8 | D6 |
| Bomber | 12 | D4 |
| Stealth Bomber | 10 | D4 |
| Transport | 4 | D4 |
| Reconnaissance | 4 | D4 |
| Drone | 4 | D4 |
| Spacecraft | Dictated by scenario | |

*Table 7d. Aircraft Health and Combat Strength*

|  |  |  |
| --- | --- | --- |
|  | **Critical Loss** | **Critical Win** |
| **Cause** | Roll of a 1 while opposing unit rolls its maximum, or >50% damage while engaged in combat | Roll of maximum while opposing unit rolls a 1 |
| **Roll** | **Effects** | |
| 1 | Death of Commander: unit disappears from the gamespace and is assumed to be dead, other units under command suffers Weakness II, Acquiescence II, and Cowardice II | Victory Disease: Weakness II |
| 2 | Disorderly Retreat: unit flees 50% of its distance range from the location of the battle, Weakness IV, Acquiescence IV, and Cowardice IV | Traffic Jam: Weakness I |
| 3 | Orderly Retreat: unit flees 50% of its distance range from the location of the battle towards the nearest logistics unit, airfield, or port, Weakness III, Acquiescence III, and Cowardice III | No effects |
| 4 | Weakness II, Acquiescence II, Cowardice II | No effects |
| 5 | Weakness I, Acquiescence I, Cowardice I | Pride: Strength I, Resistance I, Gallantry I |
| 6 | Last Stand: Strength IV, Acquiescence I, Gallantry III | Medal of Honor: Strength II, Resistance II, Gallantry II |

*Table 7e. Criticality Events*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Neo | Cha | Anc | Cla | Med | Gun | Smo | Rif | Bol | Mod | Ato | Arm | Fut |
| Neo | 1 | 2 | 4 | 6 | 9 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10+ |
| Cha | 1 | 2 | 3 | 4 |
| Anc | 1 | 1.5 | 3 |
| Cla | 1 | 1.5 | 3 | 6 |
| Med | 1 | 1.5 | 3 | 6 |
| Gun | 1 | 1.5 | 3 | 6 |
| Smo | 1 | 2 | 4 |
| Rif | 1 | 2 | 4 | 6 | 8 |
| Bol | 1 | 2 | 3 | 4 | 6+ |
| Mod | 1 | 1.5 | 2 | 4+ |
| Ato | 1 | 1.5 | 3+ |
| Arm | 1 | 2+ |
| Fut | 1 |

*Table 7f. Epoch Multipliers*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Effect** | **Result** | **Level I** | **Level II** | **Level III** | **Level IV** |
| **Strength** | Increases attacking combat rolls | Penetration of the center, winning 5 on a criticality | Winning 6 on a criticality |  | Losing 6 on a criticality |
| **Weakness** | Decreases attacking combat rolls | Winning 2 on a criticality, losing 5 on a criticality, reorganization, losing 4 or 5 on a torpedo, 2 on halo drop, failure to surface or dock when required per turn | Conscripted unit, building or repairing a structure, losing 4 on a criticality, sweeping for mines, T-crossed, winning 1 on a criticality, flanked on parallel or single-perpendicular, other units under a killed commander | Losing 3 on a criticality, hit by landmine, hit by electro-magnetic pulse, 1 on halo drop, flanked perpendicular-parallel | Losing 2 on a criticality, flanked total envelopment |
| **Speed** | Increases distance travelled in a turn by 1/3 | Special Forces, land unit on unpaved road, amphibious ships on river, prevailing wind for sail or oarship per 10 knots, neutral wind for sail or oarship per 20 knots | On paved road |  |  |
| **Slowness** | Decreases distance travelled in a turn by 1/3 | Land unit in forest or on hilly terrain, rain, disengaged from combat, engineers or non-archery light artillery, reorganization, ship changing heading, fired a torpedo, losing 4 on torpedo, carrier landing aircraft, halo jump, failure to surface or dock when required per turn, opposing wind for sail and oarships per 10 knots | Medium cavalry or non-archery artillery, or heavy infantry, hit by landmine, surfacing submarine, ship loading units, hit by seamine, losing 5 on torpedo, aircraft carriers, snowing, land unit in dense forest, taiga, temperate rainforest or on steep hills | Hailing, heavy cavalry or non-archery artillery, land unit in jungle, swamp, marshland, tropical rainforest, or on mountains, abandoned ship into water per 2 hours at sea |  |
| **Precision** | Increases targeted attack rolls by 1 |  |  |  |  |
| **Inaccuracy** | Decreases targeted attack rolls by 1 | Losing 5 on torpedo, failure to surface or dock when required per turn | Losing 5 on depthcharge, 18 on boarding, hit by electro-magnetic pulse |  |  |
| **Haste** | Increases strength of attack against defensive works by 1 | Engineer |  |  |  |
| **Fatigue** | Decreases strength of attack against defensive works by 1 | Reorganized, conscripted unit |  |  |  |
| **Industry** | Increases roll for defensive value of structure by 1 | Engineer |  |  |  |
| **Slack** | Decreases roll for defensive value of structure by 1 | Conscripted unit |  |  |  |
| **Regeneration** | Increases regeneration roll by 1 |  |  |  |  |
| **Impotence** | Decreases regeneration roll by 1 |  |  |  |  |
| **Resistance** | Increases defense rolls by 1 | Winning 5 on criticality | Winning 6 on criticality |  |  |
| **Acquiescence** | Decreases defense rolls by 1 | Losing 5 or 6 on criticality, conscripted unit, sweeping for land or sea mines, failure to surface or dock when required per turn, <18 on boarding | Losing 4 on criticality, other units under a killed commander | Losing 3 on criticality, currently building or repairing, hit by seamine | Losing 2 on criticality |
| **Nobility** | Increases conscription rolls by 1 |  |  |  |  |
| **Cruelty** | Decreases conscription rolls by 1 | Failure to conscript units | Military use of religious building | Attack on hospital, killing of prisoners |  |
| **Vision** | Increases intelligence rolls by 1 |  |  |  |  |
| **Blindness** | Decreases intelligence rolls by 1 | 2 on halo drop | 1 on halo drop |  |  |
| **Silence** | Decreases enemy intelligence rolls by 1 |  |  |  |  |
| **Turmoil** | Increases enemy intelligence rolls by 1 | Light warfare or special forces while engaged, conscripted unit | Engaged in warfare unless light infantry or special forces |  |  |
| **Wisdom** | Increases command success rolls by 1 |  |  |  |  |
| **Foolishness** | Decreases command success rolls by 1 | 3 on halo drop | 2 on halo drop | 1 on halo drop, hit by electro-magnetic pulse |  |
| **Gallantry** | Increases losing criticality roll by 1 | Winning 5 on criticality | Winning 6 on criticality | Losing 6 on criticality |  |
| **Cowardice** | Decreases losing criticality roll by 1 | Losing 5 on criticality, disengaged from combat | Losing 4 on criticality, conscripted unit, other units under a killed commander | Losing 3 on criticality | Losing 2 on criticality |

*Table 7g. Effects and their Causes*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Light** | | | **Medium** | | | **Heavy** | | |
|  | LArt | LCav | Corv | MArt | MCav | Des | HArt | HCav | Bat |
| **Die** | D8 | | D6 | D10 | | | D12 | | |
|  | **Range in meters** | | | | | | | | |
| Neolithic | 20 | | |  | | |  | | |
| Chalcolithic | 30 | | |  | | |  | | |
| Ancient | 40 | | |  | | |  | | |
| Classical | 50 | | |  | | | 25 | | |
| Medieval | 60 | | |  | | | 40 | | |
| Gunpowder | 500 | | | 400 | | | 250 | | |
| Smoothbore | 750 | | | 550 | | | 400 | | |
| Rifle | 1000 | | | 750 | | | 500 | | |
| Bolt | 1500 | | | 1200 | | | 750 | | |
| Modern | 2000 | | | 1500 | | | 1000 | | |
| Atomic | 3000 | | | 2250 | | | 1500 | | |
| Armalite | 5000 | | | 3750 | | | 2500 | | |
| Future | Dictated by rules | | | | | | | | |

*Table 7h. Fire Command*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Structure** | **Use** | **Strength when pre-existing** | **Strength roll when built** | **Time to build** |
| Road | Faster travel | 4 per mile | D4 | 90 minutes per mile |
| Paved road | Faster travel | 3 per mile | D4 | 2 hours per mile |
| Bridge, causeway | Travel over water or marsh | 3 per mile | D4 | 4 hours per mile |
| Dam | Creation of reservoir, draining of wetlands | 5 | D4 | 6 hours per mile per 3 meters of height |
| Lock | Travel upriver or through canal | 5 |  |  |
| Canal | Artificial river | 5 per mile |  |  |
| Port | Loading/disembarking of ships on land | 8 |  |  |
| Wall | Protection of area | 4 per mile per cubic meter of material per meter | D4 | 6 hours per mile per 3 meters of height |
| Foxhole | Hiding of a squad | 2 | D4 | 30 minutes |
| Trench | Hiding of a company | 2 per mile | D4 | 120 minutes per mile |
| Defensive works | Slowing of enemy advance | 4 per mile | D6 | 1 hour per mile |
| House | Hiding of a platoon | 3 |  |  |
| Building | Hiding of a company | 5 |  |  |
| Religious structure | Hiding of a company (use results in Cruelty II, except when used first by the enemy) | 5 |  |  |
| Airfield | Takeoff and landing of aircraft | 4 |  |  |
| Hospital | Recovery of units (attack results in Cruelty III) | 6 |  |  |

*Table 7i. Structures*

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit** | **Land unit carrying capacity** | **Aircraft carrying capacity** | **Weight** |
| Carrier | 8 | 8 |  |
| Battleship | 8 | 4 |  |
| Cruiser | 4 | 1 |  |
| Destroyer | 2 | 1 |  |
| Corvette | 1 |  |  |
| Amphibious ship | 4 |  |  |
| Patrol boat | 1 |  |  |
| Light infantry |  |  | 1 |
| Engineers |  |  | 1 |
| Special forces |  |  | 1 |
| Light artillery |  |  | 1 |
| Heavy infantry |  |  | 2 |
| Medium artillery |  |  | 2 |
| Light cavalry |  |  | 2 |
| Mechanized infantry |  |  | 4 |
| Heavy artillery |  |  | 4 |
| Medium cavalry |  |  | 4 |
| Heavy cavalry |  |  | 5 |
| Light fighters |  |  | 1 |
| Transport |  | 4 | 1 |
| Drones |  |  | 1 |
| Heavy fighters |  |  | 2 |
| Reconnaissance |  |  | 2 |
| Bombers |  | 2 | 4 |
| Stealth bombers |  | 2 | 4 |

*Table 7j. Loading Weight*