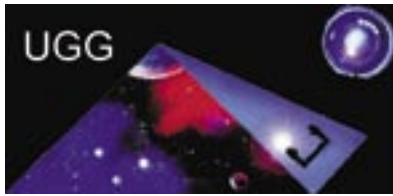


# Empires of Apocalypse

## Series Rules Book v. 2.0

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### Credits

This game has been developed since June 1994. Its copyright belongs to the designer Udo Grebe.

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### Answering of Rules Questions and Registration

Should any questions concerning play arise, the designer and publisher will gladly answer them. Please follow the guidelines printed below to expedite the process and ensure a response:

\* Please refer to the numbered rules section(s) applicable to each question, and if possible phrase the question in "yes or no" form.

\* Send your questions to one of the following addresses:

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The voice number is +49- 2272 -7702 but game questions will not be answered over the telephone. UGG prefers e-mail, fax, or letters for game questions, so that it will be easier for us to keep a record of the questions asked and how they were answered. No more than 10 questions per person can be answered.

\* If you want to register your name and address with Udo Grebe Gamedesign, please send a letter or an e-mail. Registered customers receive the UGG Newsletter, including new scenarios, rules, and advance product information, free of charge. Actual customer support on the UGG webpage: <http://www.ugg.de>.

Other Sources in the web: <http://www.consimworld.com>, click forum: Game Series Empires of Apocalypse.

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## 1. Introduction

*Empires of Apocalypse* is a combinable series of games about World War II and the worldwide events of that era. It is a conflict simulation game simulating total war, including military, political, and economic events. Each player gets to take command of a nation or alliance trying to win the war.

## 2. Game Equipment

can be found in the scenario books of the individual games:

- Quick start card (all)
- RP Activation Chart (Cold Days in Hell)
- Diplomatic status chart (Cold Days in Hell)
- Storage pools sheets (all)
- Research Chart (Cold Days in Hell)
- Countries Diplomatic Value Chart (Cold Days in Hell)
- USA Political Phase Chart (Cold Days in Hell)
- Tutorial (Morsecode...)
- Naval Quick Start Card (Pearl Harbor)

### 2.1 The Map

The map scale is 1:2,500,000 for the European maps. A hexagonal grid is superimposed on the map-board, to regulate both the positioning and the movement of the playing pieces, and to delineate the various terrain features that affect play. Following wargaming tradition, from now on in these rules the hexagons will be called “hexes”. Each hex measures approximately 25 miles from side to side or 50 miles for the Pacific map.

*Empires of Apocalypse 2.0* comes with the game Pearl Harbor featuring Pacific map scale. Nearly all of the examples in this book use European scale. The movement Point printed on the counters is based on the European map scale. To make it easier for you the terrain effects chart on the Pacific map gives Pacific Map Movement cost. However, the Movement Cost Table on the Charts and Tables sheet is for the entire Empires of Apocalypse series and therefore features European map scale. Details how to work with different maps scales see 19.0.

For details about the map symbols consult the Terrain Effects Chart.

Ports: Sometimes an anchor symbol is printed outside a city for reasons of space. Still the port is located in the city’s hex.

## 2.2 The Rules

Each major section of the rules is assigned a whole number (1., 2,...). Subordinate rules are assigned a corresponding number or letter to the right of a separating period. For example: 7.1 is under rule 7,... within it is submarine-section 7.1.1; and within that perhaps submarine-section 7.1.1.a or 7.1.1.1 will appear. This system allows quick and easy cross-referencing of rules. As it happens, rule 7. is the most detailed (and finely divided) major rules section. It is the Action Segment. Both Sides perform most of their activities here.

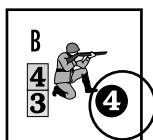
Numbers on the sheet of Charts and Tables correspond to rules sections. If you do not understand a table or chart, refer to the rule having the same number; The chart or table will be explained there.

*Throughout the rule book are interspersed designer’s comments and examples of play in italics to help clarify or explain various game mechanics.*

## Graphics

A lot of rules are supported by graphics. These graphics are part of the rules. What is expressed there is a rule even if it is not explicitly stated in a rules text. The rule applies, as well, to units of the same kind having different numbers.

From now on, in the example graphics, we will express the position of a value on a counter not by words but highlighting it with a circle, like this.



*Movement rating.*

### 2.2.1 How to learn the rules

*Empires of Apocalypse* (Empires of Apocalypse) is a rather complex system. The single elements might be simple, but their combination inevitably leads to a high-complexity game.

Look for the following symbols:



This rule is needed to get started. Make sure to read this.



This rule is not needed at the beginning. Include such rules step by step when you feel familiar with the basic system.



This is a rule that is needed only at certain times in a game, a players’ note, or a voluntary rule. Use this as a ‘dictionary’ when you need it.

### General advice:

- 1 Go through the Quick Start Card and refer to the rules sections and tables listed there.
- 2 Do not read the Weather or Naval rules at the beginning
- 3 Play through examples with your own die rolls.
- 4 When playing with Morsecode... try the tutorial.
- 5 Start any scenario early in the war and ignore all Naval units.



### 2.3 Charts and Tables

The Player Aid cards display the Production Chart, and the two Battle Charts. Another chart is called the Tables Chart.

The **Production Chart** is used for:

placing your newly built units and markers according to the date of their appearance (ships and aircraft that have been damaged in combat go here as well); indicating the actual game year and month; marking who has gained initiative; and marking the actual initiative bonus.

The **Battle Chart** is the place to which units involved in a battle are moved; place them into the box with the number corresponding to the battle vector marker that takes their place on the map.

The **Charts and Tables Sheet** (the big double-sided chart, approx. 18” by 12”) contains all the tables needed for game purposes: combat, movement, terrain, weather, politics and so on. The different tables are explained in rules sections with corresponding numbers.



### 2.4 The Units

All counters representing land units are approximately corps-sized. Air-unit counters represent 100 to 400 aircraft. Ship counters represent fleets of approximately 10 to 25 ships. These numbers depend both on nationality and on unit strength. BC and CV counters show one major ship, whose historical name is used for its group. It is possible in this game for named counters (HQs and ships) to appear in places and positions that are not historically accurate, because historical data depends on single generals and ships respectively.

### Nation

### Colors

#### Allies

British Empire: Light brown  
*The British Empire consists of the United Kingdom (no abbreviation), India (I), and the independent Commonwealth countries Australia (A), Canada (C), New Zealand (NZ), and South Africa (SA)*  
 USA: Dark Green  
 USSR: Red and Orange  
 France: Light Blue  
 China: Yellow, with black letters for the Nationalists and red letters for the Communists.

## Axis

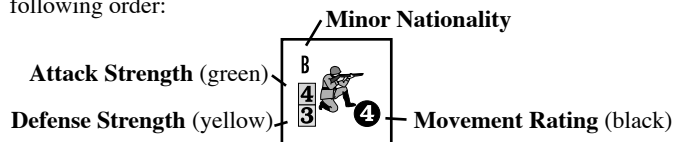
Italy: Light Green  
 Germany: Gray  
 Japan: Japanese War flag  
 Axis minors: Dark Gray  
 (Abbreviations: Finland - F; Romania - R; Hungary - HU; Bulgaria - B)

## Neutrals:

Brown,  
 (Abbreviations: Belgium - B; Switzerland - CH; Spain - E (Espania); The Netherlands - NL; Norway - No; Ireland - IRL; Denmark - Dk; Poland - P (P - also used for the German W-SS "Polizei" unit); Portugal - Pt; Yugoslavia - J; Greece - GR; Sweden - SW; Iraq - IRA; Iran - PER (Persia); Turkey - T; Arabia - ARA; Latvia - LET; Lithuania - LIT; Estonia - EST)

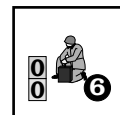
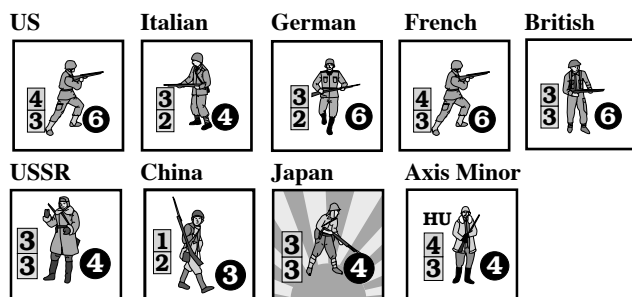
### 2.4.1 Ground Troops (land units)

Ground troops encompass all land units. Their ratings are given in the following order:



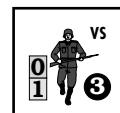
## Infantry (INF)

The backbone of all armies.



## Engineers (ENG)

These are the only troops able to construct installations and to repair hits.



## Militia (MIL)

The militia often are the last resort before defeat. Militia are poorly trained, so their strength is low. Militia were inadequately equipped, as is suggested by their graphic.



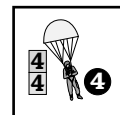
## Tanks (TNK)

Tank units are the most powerful ground troops because of their ability to perform deep penetrations into enemy territory. Any counter with a tank on it is a tank unit.



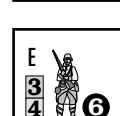
## Artillery (ART)

Artillery units are the only land units that, in combat, can add their strength to that of another land unit in the same hex.



## Paratroopers (PTP)

Paratroopers may be dropped from bombers and from strategic bombers (usually behind enemy lines).



## Mountain Infantry (MTN)

When fighting in mountain terrain, these units do not suffer the disadvantages that non-mountain units do (see 7.4.4.4).



## Cavalry (CAV)

Cavalry is equipped with horses (or, in the later years of the war, with motorized vehicles). Cavalry has movement advantages and needs less time to be built than does standard infantry.



## Marines (MAR)

When invading, marines do not get their attack strength halved, in the way that non-marines do.

## Headquarters (HQs)

Headquarters represent the staffs' leading formations. HQs have command functions and can be used to transport supplies. They typically represent the formation of army groups around them.



Standard



Naval



Tank

Movement Rating

Command Level

Defense Strength

Naval HQs can modify naval battles and tank HQs can modify tank battles. This extra ability for tank HQs is in addition to the way that standard HQs can modify land combat (see 7.3.2.f).

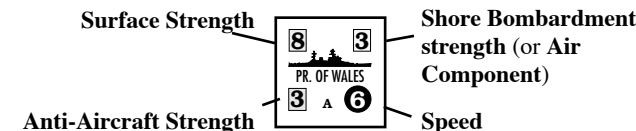


## Partisans (PTN)

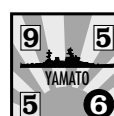
Partisans operate behind enemy lines. They usually perform sabotage actions, causing a lot of trouble for the occupying forces of a country. They exist as small bands, handled abstractly. They can also be converted into partisan divisions (at the rate of 5 partisan bands for each division); such a unit is represented by a counter.

### 2.4.2 Navy

The navy consists of ships and submarines. Ship counters represent fleets of approximately 10 to 25 ships. Their different strengths are defined as follows: The surface combat strength (blue) indicates the amount of strength a ship has when attacking another surface ship with gunnery. The anti-aircraft artillery strength (light brown) indicates a ship's defensive fire-power against an air attack. The shore bombardment strength (yellow) is used to support friendly land units in coastal hexes. The speed rating (black) represents the speed of the ship when chasing another ship.

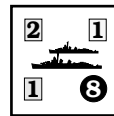


The range of a ship is not printed on the counter. All ships (except river craft) can cover four sea zones per month.



## Battleships /Heavy Cruisers (BC)

Battleship counters (BCs) stand for all heavily armored ships. All battleships have individual names, although they represent fleets, not individual ships.



## Destroyers /Light Cruisers (DD)

The destroyer is the classical convoy escort. A destroyer is the most effective unit against submarines.



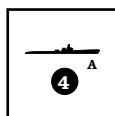
## Aircraft Carriers (CVs)

Land-based aircraft cannot land on a CV. Instead, the CV's air component represents the aircraft on it (see 2.4.3). The number shows the CV's air-to-air rating and its air-to-sea rating. For tactical bombardment strength, the number is halved (round fractions down). If a CV serves as a bomber, its air-to-air rating remains unmodified. CVs cannot be used for strategic bombardment. If the carrier ship is eliminated, so is its air component. A CV can in the same combat round both fight (by the use of its air component) and function (with its hull) as a target for enemy attack. A CV can use its air component to participate in a land battle. In order to do this, it must be within range (the maximum number of hexes carrier aircraft can fly, usually 6 hexes) of the land battle. Like the range of other aircraft, this range can be increased by the country's "long range level" (see 13.4). CV counters, like other naval units centered around one major ship, have historical names.



## Transports (TSP)

Transports are used to transport, supply goods, material and troops. Each transport has 5 points of load capacity.

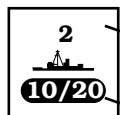


## Submarines (Submarine)

The number printed on each indicates its speed rating. It waits, lurking in the deep, for prey. Its victim might be a single boat or an entire convoy.

## River Craft (RC)

These are the smaller transport ships. Offshore boats and river craft can be used near ocean coasts but are more commonly used to transport goods on rivers. The number above the symbol indicates the load capacity and is equivalent to the number of river craft represented by the counter. River Craft in a hex always have a combined anti-aircraft strength of 1, regardless of how many of them there are in that hex.

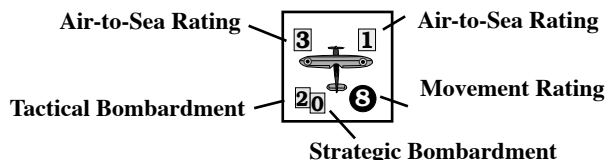


Transport Points =  
Number of Rivercraft

Movement Rating  
Sea / River

*Designer's note: The river craft counter system is different from that of other units. The river craft counting system is the same as the one for markers.*

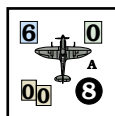
## 2.4.3 Air Force



The air force of a country includes all aircraft. The ratings are as follows: 'Air-to-air' rating indicates the amount of strength when fighting other aircraft, 'air-to-sea' refers to fighting versus ships, 'bombardment strength' refers to the bombardment value. Bombardment values are divided into tactical bombardment factors and strategic bombardment factors. The movement allowance determines the range of a unit from its base to its mission hex.

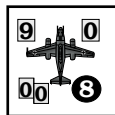
An easy reference procedure for distinguishing different types of air units is to look at their movement ratings:

<b>Fighter</b>	8
<b>Bomber</b>	12
<b>Strategic Bomber</b>	20 (or more)



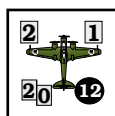
## Fighters

Fighter aircraft make bomber pilots break out in cold sweat. These high-speed aircraft are capable of reducing a huge fleet of bombers to a single squadron. They are often employed for that purpose, but they are also used as escorts.



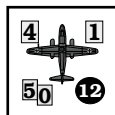
## Jet Fighters

A jet fighter is the technical advancement beyond the regular propeller-driven fighter.



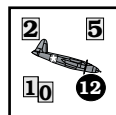
## Bombers

Bombers have their factors (in the bottom left-hand corner of the counter) divided into two categories: strategic and tactical. Some bombers possess both strategic and tactical factors. Bombers assist ground troops and can attack and destroy ground targets.



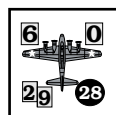
## Jet Bombers

As with jet fighters, jet bombers are the logical improvement of the regular propeller bombers.



## Naval Bombers

This submarine-type of bomber either is equipped with torpedoes or is a dive bomber. Both types have air-to-sea fighting capability.



## Strategic Bombers

These are a class of their own. They are four-engined and so can carry more bombs, but because of their lack of maneuverability they are less likely to score hits against tactical (smaller) targets. They have a movement rating of 20 or more.

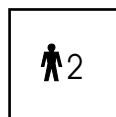
**One more point:** the phrases "strength 6 fighter" or "strength 7 BC" refer to the number in the **upper left-hand corner**. On fighters, this is the air-to-air rating. On BCs, this is the surface rating. For a CV unit, the air component is the most important rating. It is positioned in the upper right-hand corner of the counter. A "strength 5 CV" is one with an air component of 5.

## Pictures on Counters

**Pictures (icons or graphics) are illustrations only and do not state anything about the equipment of the units represented.** Empires of Apocalypse uses pictures of vehicles that were actually used by the different nations in WWII. Regarding the pictures selected for use: preference was given to units that look good and are distinguishable on counters and not to what units were the most common. For example, the Jagdtiger and the Elefant on German tanks were never produced in large quantities.

## 2.5 Markers

The number on a marker always states how great a quantity of the given item is represented.



## Replacements (RPs):

Replacements (see 12.1) are needed to build new units. They are brought in to replace losses.

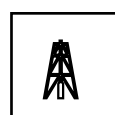
## Resources (12.1):

These are oil, coal, and mineral ore. They are extracted from the resource fields on the map.

## Resource

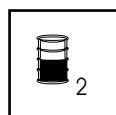


## Oil

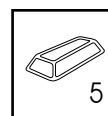
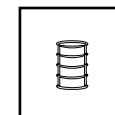


**Supply (12.1):** Food, ammunition, gasoline, boot polish..., everything that keeps your war machine running. The number on a supply counter indicates how many points are represented.

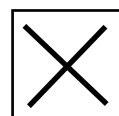
## Supply



## Out of Supply (Ships, Planes)



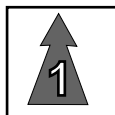
**Material** is used to build constructions (forts, for example). Certain units also need material to be built.



An **out of order** marker usually indicates that a feature is not functioning normally. One can also be employed to indicate that a unit has forfeited its regular abilities as a result of having been dedicated to a special task: for example, a land unit hunting partisans is marked as out of order.



**Red hit-markers** indicate hits on land units. They are placed directly underneath the affected unit. A **blue hit-marker** indicates hits on map features or constructions built by engineers. Blue hit-markers are also used to indicate how far a construction has progressed. To distinguish them from those that show hits, blue markers come in two different shades. A **battle vector** marker shows that a battle has arisen in the specified hex and indicates the main attacking direction. There cannot be more than one battle vector marker in any one hex.

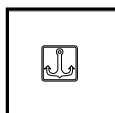


A **Mulberry** (see 12.3) is an artificial port that is transportable.

A **hull** is needed to build either a CV or a BC.

A **sea minefield** is used to keep enemy ships from moving through or into a sea hex.

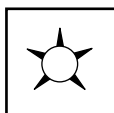
**Mulberry**



**Hull**

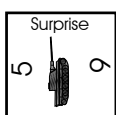
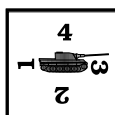


**Sea Minefield**



A **tank battle marker** (see 7.4.4.7) is used to indicate that the battle that is going on is a tank battle. It also shows the state of a tank battle. The **surprise marker** is used only if your opponent falls victim to a surprise attack (see 14.).

**Tank Battle Surprise**



A **factory** is needed to build new units.

An **advanced factory** is able to produce extra supplies, as well.

**Factory**

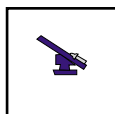


**Advanced Factory**

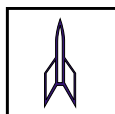


**V- weapons** are rockets. They exist both abstractly and as markers. The 'level two' units represent the historical V 2.

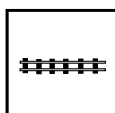
**V- Weapons Level 1**



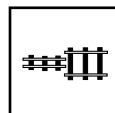
**V- Weapons Level 2**



**Railroad**



**Railroad gauges**



Railroad markers are used to mark the hex where roads transfer to railroads. Railroad gauge markers differentiate between standard gauge (small) and Russian gauge (wide). Wide railroad gauges only exist in the USSR, Finland and Eastern Turkey.

**National Flags**

These are used to indicate control of a hex or an area on the map or to indicate on a chart the level of a Major country's achievements.

**Allied**

**British Empire USA**



**France**



**USSR**



**China (nat.)**



**China (com.)**

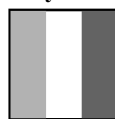


**Axis**

**Germany**



**Italy**



**Japan**



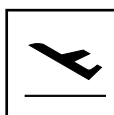
## Constructions

The following features can be built by engineers: **Radar** allows extra searches for ships or aircraft. Each **airfield** can have up to 3 aircraft stacked on it. A **fort** gives a defense bonus of +1 to all friendly land units inside the hex it is built in. A **fortress** might be of the standard type (red hexagon without filling) or of the Maginot type (full red hexagon). Both result in a higher defense bonus for friendly land units in that hex (see 7.4.4.4). Both fortress types are available either with or without a coastal battery (bottom pictogram, 9 points). They always contain anti-aircraft-artillery (top pictogram, 3 or 5 points).

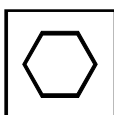
**Radar**



**Airfield**



**Fort**



**Fortress**



**Maginot type fortress with coastal battery (right)**

## 3. Standard Procedures

### 3.1 Hits on Land Units



These are marked in red, to indicate the amount to be subtracted from the unit's attack and defense strength (both). Movement rating is not affected by hits. If the hits reduce the unit's defense strength to zero, the unit is eliminated. Strength "0" units – for example, engineers – are eliminated if they take 1 hit.

### 3.2 Hits on Ships and Aircraft

These are not indicated with hit markers, because every affected ship or aircraft is unfit for action. Instead, there are three conditions that ships and aircraft that were hit can be in:

**E** = Eliminated: the unit must go back to the force pool and may re-enter the game only after being completely rebuilt.

**D** = Damaged: the unit goes to the repair pool and can be repaired for half (rounded up) of its replacement cost. Repairs take one month for aircraft, two months for ships.

**A** = Aborted: the unit is no longer fit for action (= cannot conduct any missions or move voluntarily).

**Both damaged and aborted units** must return to the nearest airbase or port. If a returning unit becomes involved in a combat – for example, on its way back to base, in the case of an enemy search (see 7.2.1.a.2; 4.4) or of an enemy attack on that base – it can suffer additional hits but cannot defend itself against such attacks. Units that are in status "D" thereafter go to the repair pool.

After the player finishes the active air and sea sections, each aborted unit automatically gets its strength back the next month (see 7.3.8).

The blank fields on the air/ naval combat tables have no effect.

Use the following formula when determining combat effects (do conversions in the order shown):

$$\begin{aligned} 2 \text{ A} &= \text{D} \\ 2 \text{ D} &= \text{E} \\ \text{A} + \text{D} &= \text{E} \end{aligned}$$



**These rules for the combat results “A”, “D”, and “E” are the same everywhere in the game.** They are used in the same manner for both ships and aircraft.

In combat the Active player (see 6.3) names his targets and fires first. This basic rule applies to all game situations.

A special situation arises if the air component of a CV is hit. In air combat one hit corresponds to “A”, two hits to “D”, three hits to “E”. A CV’s air component is marked temporarily with the blue number that corresponds to the hit result it suffered. For example, a “D” air component is marked with a blue hit marker.

After all combats are over, the markers are removed and the CVs are placed in the corresponding repair pools or ports (see 7.2.2.2).

### 3.3 Fractions and Rounding Rule

After calculating a result that produces a fraction always round decimal places down, unless otherwise specified.

### 3.4 Cumulative Effects

All possible modifiers are cumulative unless otherwise specified.

Example: A tank unit attacking across a river and against a “hex city” has its attack strength reduced by one because of the river and by two because of the city (see 7.4.4.4). Hence it will suffer a cumulative strength reduction of three.

**A units strength can be reduced to 0 or even a negative number.**

*Example: A tank unit with a defense strength of one, defending in a fortress is reduced by two, will have a modified defense strength of minus one.*

### 3.5 Movement Ratings and Ranges

When the game deals with such concepts as movement ratings, ranges, lengths of supply paths, and sizes of patrol zones, a number of hexes is mentioned. When counting this number of hexes, do not include the hex that the unit starts (or is) in, but do include the destination hex or the far end of the path.

### 3.6 Historical Abbreviations

W- SS	Waffen- SS
OKW	Oberkommando der Wehrmacht (German High Command)
RSI	Republic Salo Italy
G	USSR Guards
SHK	USSR Shock Armies

### 3.7 The National Pools

The National Pool of a country contains all goods that have been stored by that country. These may be replacements (RPs), supply, or material (the three basic items needed to manufacture new units and to keep the war machine running).

The National Pool has no specific location on the map. It is an abstract, and it can reach every place that a nation controls and can reach with regular supply (see 7.1.2). If some territory is cut off from the rest of a country, either by a sea barrier or by disconnection of supply lines (see 7.1.2), a separate pool for that territory must be opened. In order to learn how to handle the National Pools, refer to the storage pool sheet at the end of the scenario book. Goods that are not used during the production phase are stored in the country’s National Pool. Players can transfer goods from the pools to HQs, cities, or airfields that the pool is connected with, and vice versa, but only during a friendly movement or exploitation phase. For transport purposes, goods can be placed on ships or planes during the Naval and Air Movement Phase. Those ships and planes must begin the mission in a hex connected to the source that they extract the goods from, and they must end the mission in a hex connected to the destination that they add the goods to.

It is not allowed to do such transfers in the Non-Active phase.

In other words: if the enemy cuts off a part of your forces the supply that is already in the pocket (cities, airfields, HQs) will be there and loses its connection to the National Pool. You cannot negate being “out of supply” when you see the enemy has cut off part of your forces and then you move some supply points into the pocket from the National Pool.

## ① 4. Basics

### 4.1 Movement Restrictions

There are restrictions on movement in some areas of the game. In sea zones, movement is restricted in the following cases:

- Only neutral nations’ ships are permitted to sail through the Bosphorus strait. Any side at war has to ask Turkish permission. To grant permission, Turkey has to be in ‘March’ position in favor of the nation in question (see 11.1).
- If a land unit of a Power at war with a country exerts a ZOC on a canal, sailing through is prohibited for ships and submarine of that country.
- Submarines can generally roam any ocean - exception: Canals controlled by the opponent are prohibited for your submarine. The following restrictions do not apply to submarines:
- Because of Gibraltar, no Axis naval unit (except submarine) can use this connection between the western Mediterranean and the three Atlantic hexes farthest south-west. Italy can travel through Gibraltar as long as it is neutral. The British Empire, however, can use the arrival of Italian warships at the Gibraltar strait as an occasion to declare war on Italy immediately. This declaration of war immediately stops the Italians from moving through Gibraltar.
- Ground units cannot enter ‘all-sea’ hexes, nor can any unit “beam” itself directly into a hex that its current hex has no connection to.

Any of the restrictions mentioned above changes to the opposite if control of the land areas mentioned changes.

*Player’s Note: The latter should be common sense - always use common sense when you think there should be a restriction that is not mentioned.*

### 4.2 Stacking Limits

A land hex, such as the one shown below, can hold a **maximum of three land units**. NOTE: HQs and engineers do count for stacking purposes. **A limit of three also applies to air units on airbases.** The number of naval units that a port can hold is limited by the number marked on the port. If there is no number in the port hex, it is a major port and can hold an unlimited number of ship units. Any hex allows the presence of any number of aircraft as long they are on a mission. The same is true for ships in sea hexes.

**WRONG!!!**

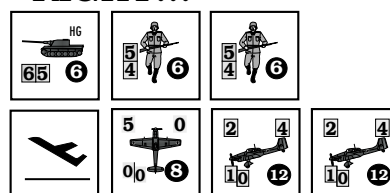


Two points of supply can be stored in a city, one on an airfield. It is not allowed to stack goods in a hex that does not contain a city, an airfield, or an HQ (which can transport 5 points of supply).

Every city contains an airbase. This feature neither increases the maximum number (2) of supply points that can be stored in the city, nor increases the maximum number (3) of aircraft that can stack there.

There is no stacking limit for air units assigned to a battle hex or other mission, and there is no stacking limit for ships at sea.

**RIGHT!!!**



#### 4.2.1 Overstacking

This may occur temporarily during movement. Overstacking is strictly forbidden at the beginning and at the end of a move. In some cases the game situation can cause overstacking that cannot be corrected by further movement.

## Penalties:

- Air units: see 7.4.5
- Land units: eliminate excess units off the moving stack (owner's choice of units)

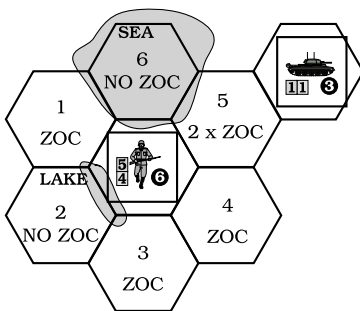
**Example:** Two land units in the same pocket have to retreat (see A 7.4.4.5). There is only one hex to retreat into and it is already occupied by 2 friendly units. Further retreats are not possible. The owner selects one of the retreating units to be eliminated.

## 4.2.2 Reduction of Stacking Limits

It is possible to decrease the stacking limit in an enemy airbases, and even to make the airbase useless, by scoring hits during a tactical air bombardment (see 7.3.5.b).

## 4.3 ZOC (Zone of Control)

Every land unit has a Zone of Control that includes both the land hex the unit is in and all land hexes directly adjacent to that hex. Technically, this is a land ZOC, but in these rules the term "ZOC", by itself, usually means a land ZOC; Air ZOCs are discussed in section 4.4.



In the picture above the German infantry exerts no ZOC into hex 2 (because of the lake hexside) and none into hex 6 (because it is an all-sea hex). Both the German unit and the British Tank exert a ZOC into hex 5.

Exceptions: Engineers, partisans, naval units, and air units do not have a ZOC. Units in a battle hex do not exert a ZOC before the battle is resolved, but when the battle is over the surviving units exert a ZOC after all retreats have been conducted (see 7.4.4.5).

A ZOC does not extend into either neutral or forbidden areas. For example, French land units exert no ZOC into areas controlled by Italy as long as Italy stays neutral.

### 4.3.1 Effects of a ZOC

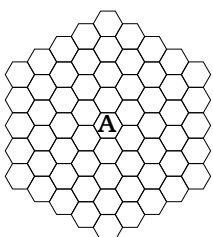
An enemy ZOC blocks any supply and any transportation of goods. This blockage can be overcome only by occupying the blocked hex(es) in question with your own units.

Friendly ZOCs do not affect friendly units.

Enemy ZOCs can cause certain reaction movements (see 7.3.2.d and 7.4.4.6).

## 4.4 Air ZOC

Every air unit on an airbase (and not when flying a mission) exerts an Air ZOC into every hex within a radius of 4 hexes (see graphics below), including the hex the unit is in. The terrain type of the hexes does not matter. When counting the 4-hex radius, do not count the hex the air unit is in.



Aircraft on land missions do not have an Air ZOC. The search radius of a radar station is 4 hexes. So is the search radius of both ships and aircraft at sea, except that on the European map the search radius of both ships and aircraft at sea is 6 hexes.

Ships and aircraft in a battle-marked hex cannot possess a search radius or exert an Air ZOC.

### 4.4.1 Effects of an Air ZOC

Both enemy ships and aircraft trying to pass through an Air ZOC or through the search radius of a radar station, a ship, or an aircraft, can be searched for (see 7.2.1.a). If searched for successfully, these units can be engaged in combat. If an air mission is being attempted, and the air units doing the mission move through an Air ZOC on the way to the target but the target hex is outside of the Air ZOC, the air units exerting the ZOC can search for and intercept the airdropping units on their way to the target. Air ZOC interceptions are ad hoc actions and do not allow "calling in" other fighters from airbases that have to cross a larger distance than 4 hexes. The major reason why UGG put in the Air ZOC concept is that long range strategic bombers could otherwise avoid enemy fighters by attacking mission hexes that are out of range for the enemy fighters.

## 4.5 Declarations of War

Players can declare war, agree upon armistice, or surrender, or make peace agreements at any time. Italy can join the war at any time its player wishes. There are special conditions for both the USA and the USSR (see 11.3.3 and 17.3.).

A country at war with any other country, no matter how small or weak that other country is, is not considered neutral. A country that has been conquered cannot be declared war on without a declaration of war on its conqueror.

## 4.6. Victory

All scenarios have Victory Conditions (see scenario books). If players agree on a campaign game starting from any of these scenarios, use the Victory Conditions of the campaign game instead.

If you combine *Empires of Apocalypse* games the following Victory conditions apply:

- The Axis has to conquer all Allied Major countries in the game except the USA.
- The Allies have to conquer all Axis Major countries in the game.

If the above conditions are met by one side the game immediately ends with a decisive Victory for that side.

Otherwise the Axis wins a marginal Victory if no Axis Major country has been conquered by the end of 1945. If none of the conditions above is met at the end of 1945, the game ends in a draw.

## 4.7 Fog of War

Inspecting enemy stacks is not allowed. However, it is allowed to inspect the kind of terrain that is beneath a stack. It is also allowed to look underneath the game markers. In other words, it is not allowed to use game markers to hide a top unit. If units are involved in combat, they **must** be visible to the opponent.

## ① 5. Getting Started

### 5.1 Setting Up

Empires of Apocalypse works best for two to five players, but it can also be played solitaire. After players agree either on a scenario or on a campaign game, Sides are chosen.

Each nation gets set-up instructions for every scenario, given on separate sheets. These sheets describe the order of battle of the various countries. A neutral country that is attacked by an Axis Power or that declares war on an Axis country is set up and played by the British Empire. Conversely, a neutral country that is attacked by an Allied Power or that declares war on an Allied country is set up and played by the Italian player.

### 5.2 The Game Turn

Each game-turn represents one month of real time. The Side that won the initiative for that turn conducts all its "active" actions first, and the other Side conducts some "reactive" actions along the way; then the two Sides swap roles.

## 5.3 The Phase Sequence

The following list shows the Sequence of Play for the game:  
Actions are carried out in strict accordance with the following order.

### 5.3.1 Outline Sequence of Play

## 6. Preparation Phase

- 6.1 Place Reinforcements
- 6.2 Weather Check
- 6.3 Initiative

## 7. Actions of the Active Side

- 7.1 Reorganization
  - 7.1.1 Flip HQs, Remove Marker
  - 7.1.2 Supply Check
  - 7.1.3 Repair Hits on Land Units
  - 7.1.4 Rail Movement
  - 7.1.5 Rebase Aircraft
  - 7.1.6 Engineers Finish Installations

### 7.2 Naval Phase

- 7.2.1 Naval Movement Phase

Note: The Non-active Side may intercept all of the following missions of the Active Side:

  - 7.2.1.a: Patrol Missions
  - 7.2.1.b: Convoy Movement
  - 7.2.1.c: Strategic Movement
  - 7.2.1.d: Submarine Missions
  - 7.2.1.e: Sea Supply\*
  - 7.2.1.f: Evacuation\*
  - 7.2.1.g: Shore Bombardment\*
  - 7.2.1.h: Naval Land Combat
  - 7.2.1.i: Port Attacks
  - 7.2.1.j: Invasions\*
  - 7.2.1.k: Minelaying\* /Minesweeping\*

\* Reaction by Non-active Side always possible.
- 7.2.2 Naval Combat Phase
  - 7.2.2.1 Submarine Combat
  - 7.2.2.2 Air-to-Air Combat
  - 7.2.2.3 Air-to-Sea Combat
  - 7.2.2.4 Surface Combat

### 7.3 Land Movement Phase

- 7.3.1 Engineer Activity
- 7.3.2 Land Movement by the Active Side
- 7.3.3 Units Hunting Partisans
- 7.3.4 Reserve Movement by the Non-active Side
- 7.3.5 Air Movement by the Active Side
- 7.3.6 Air/Sea Reaction by the Non-active Side
- 7.3.7 Interception Segment (Active Side)
- 7.3.8 Active Side “A” Counter Flip

### 7.4 Combat Phase

- 7.4.1. Attacking Force Supply
- 7.4.2 Air Combat Segment
- 7.4.3 Naval Combat Segment
- 7.4.4 Ground Combat Segment
- 7.4.5 Return Non-active Side
- 7.4.6 Return Active Side
- 7.4.7 Check “OUT” Units for Elimination

### 7.5 Exploitation Phase

- Movement of Tank Units
- Movement of Reserve Units

## 8. Repeat as above,

Starting with 7 but swapping roles (that is, the Side that was Non-active now becomes Active, and vice versa).

## 9. Partisan Phase

- 9.1 Hunt Partisans
- 9.2 Partisan Assaults
- 9.3 Gain New Partisans

## 10. Conquest

### 11. Political Phase

### 12. Production

### 13. Research

This sequence must be followed strictly, so that logical errors do not arise. For example, units without supply cannot be repaired. If repair were done before the supply check, the absence of supply would go unnoticed. Exception: If there is a paragraph with a letter instead of a number, the Active Side has the choice about the order in which to conduct the actions specified in that paragraph. Paragraphs not in the list above allow the same freedom.

## ① 6. Preparation Phase

### 6.1 Reinforcement Placement

In this phase, all players place their new units due to arrive that month. Units must be placed in cities within its nation’s home countries. Note: the stacking rules have to be taken into account. If there are more units than can be placed according to stacking limits, the excess units must wait until next month.

## ② 6.2 Weather Check

**The designer recommends reading the weather rules later. Nearly all scenarios start with clear weather. Information on the charts and tables is not modified by clear weather.**

Take a look at the Weather table. The USSR player rolls for the weather with one D 6. He then cross-references the result with the column for the current game month. Below the month’s entry is the abbreviation for the weather condition. Note the different weather zones. These can be found on the game map. The names of the weather zones can be found along the weather zone frontiers. Weather zone frontiers run through hexes, not along hexsides. Hexes containing two types of weather are always considered to experience the more restricting type. The different kinds of weather are listed below, in order from the best possible weather to the worst:

- C = Clear; no clouds or slightly cloudy
- R = Rain; rainy with overcast
- M = Mud; muddy with pouring rain
- W = Winter; winter weather
- B = Blizzard; Siberian arctic winter
- MS = Monsoon; constant tropical rain, worse than mud. This type of weather exists only on the Asia map, within the northern and southern monsoon zones.

*Designer’s Note: The word “clear” also describes a terrain type. In both cases this name expresses that there are no modifiers caused by that particular feature or situation.*

The exact effects caused by certain types of weather are determined by using the enclosed tables. The following is just a brief overview.

**Example:** The weather roll is “1” in October. The “1” is cross-referenced into the October column. Result: Polar, winter; Arctic, mud; Temperate, mud; Mediterranean, mud; Subtropical, mud; North Monsoon, monsoon; South Monsoon, clear.

### 6.2.1 Weather Effects

Similar conditions on the weather table have the same effects. Movement: the movement costs / weather table states the different movement costs needed to enter a certain terrain type in a certain weather. For example, it costs 1 movement point to enter a clear terrain hex in clear weather. In rain it costs 2, in mud 3, in winter 2, and in blizzard 3 points. The “a” signals an exception: for Russian land units, it costs only 2 movement points to enter a clear terrain hex in blizzard. The table works the same for other terrain.



If you trace supply through weather zones with different weather conditions the worst case is taken.

*Designer's Note: The use of the tables will be explained in various examples with definite numbers. Different numbers change the result but never the general application of the rule.*

**Clear** weather is regarded as standard, causing no modifiers.

**-Search Rolls -2/1 (rain):** Searches are reduced by 2/1, i.e. ships can only be found with a number reduced by 2 (the number after the slash ("1") refers to submarine). Example: A ship is found with a 10 or less in clear weather, but an 8 or less in rain. Submarine are found with a 3 or less in clear, but a 2 or less in rain. Other weather is treated the same way. The other modifications are:  
-4/2 in both mud and winter, -5/3 in both blizzard and monsoon.

**-Air Combat -1:** The air combat differential (see 7.2.2.2) is decreased by one. Example: In clear weather, a fighter with an air-to-air rating of 6 fights a fighter with a rating of 5; The battle differential is +1/-1. Rain weather causes the differential to change to 0/-2. The air combat differential decreases to -2 in mud and winter and to -3 in blizzard and monsoon.

*Designer's Note: simply decreasing the air-to-air ratings (to 5 and 4 respectively in the example above) would still result in a battle differential of +1/-1. First determine the air combat differential by subtracting air-to-air ratings, then decrease the differential.*

**Land Bombardment Factors Air/Shore -1:** This refers to both the strategic and tactical bombardment factors of bombers. For instance, a bomber with a strategic factor of 3 and a tactical factor of 2, would now have 2 and 1 respectively. This modification also applies to the shore bombardment factors of ships. These factors are halved in mud and winter, quartered in blizzard and monsoon.

**Bombardment Factors 1/2:** The bombardment factors are divided by two and rounded down. For instance, a tactical bomber of strength 3 will be reduced to strength 1. ( $3 : 2 = 1.5$ , rounded down to 1)

**Bombardment Factors 1/4:** The bombardment factors are divided by four and rounded down. For instance, a tactical bomber of strength 3 will be reduced to strength 0. ( $3 : 4 = 0.75$ , rounded down to 0)  
**Air-to-sea Bonus -1:** This reduces the +3 air-to-sea bonus of naval air bombers to +2 in rain. The other modifications are -2 for both mud and winter, -3 for both blizzard and monsoon.

**Land Attack Strength -1:** Decreasing the amount of strength by 1 makes land attacks harder. A unit that has an attack strength of 4 in clear weather, will have its strength reduced to 3. Defending factors are not affected.

**Length of Supply Line:** The maximum length of the supply line is reduced from 5 to 3 in mud, blizzard, and monsoon, to 4 in winter. Also, roads no longer offer the same capabilities as railroads. All that they are able to do is extend supply lines by 2 hexes. (For more information, see 7.1.2).

**Sea is Frozen:** Sea hexes and continental lake hexes in the indicated weather zones are frozen. In Europe, only the route along the Norwegian coast remains free of ice (because the Gulf Stream carries warm water there from the Caribbean). Furthermore, all coastal hexes around the Baltic Sea are frozen. The only ice-free port on the Baltic Sea is Kiel. In winter, a supply line can be drawn over frozen hexes. Leningrad can be supplied that way. These routes are untraversable for ships. Land units cannot enter frozen all-sea hexes.

**No Invasions:** It is not possible to land on enemy coastal hexes in winter or blizzard weather. However, a player can land on coastal hexes that are controlled by associates, unless these hexes are frozen.

**Frozen Rivers and Swamps:** When rivers and swamps are frozen, their usual effects on movement do not apply. In this case, units attacking over a river suffer no disadvantage, and swamps become clear terrain.

**Blizzard:** This is the worst weather you can get. The abilities of all units are extremely limited. The effects of a blizzard are much more severe than those of winter:

- **Bombardment Factors 1/4:** Bombardment factors are divided by four. Bombers that have a strength of less than 4 are unable to go on any mission at all, because rounding of fractions is always downward.
- **No Surprise:** The effects of a sea-surprise do not apply. It is still possible to surprise an opponent, but the weather does not allow anyone to take advantage of this condition.
- **"A" - Check Air Missions:** In blizzard, air units are exposed to extreme stress. If they either are in the process of a mission or are rebasing, they may become "A" (= aborted), because the weather puts too much strain on them. After a mission, a D 6 is rolled once for each unit. If the number is even the unit becomes "A". This result is then added to other already existing damages. If the unit already had the status "A", the additional "A" makes it "D" (=damaged).
- **Sea is Frozen:** The areas that freeze are mostly the same ones that do so in winter. However, both the entire Baltic Sea and the coast of the Black Sea are now included. There is only one route in Europe that is not frozen: the one along the Norwegian coast up to Murmansk. Any kind of transport by sea in Europe can be run only via Narvik or Murmansk. Continental lake hex sides (hexes that have a lake as border) are frozen. Land units can now move, attack and draw supply lines across them. All sea hexes still remain impassable.

## Multiple Weather Zones

When tracing supply through multiple weather zones with different weather, determine maximum supply trace length by the worst.

## ② 6.3 Initiative

### 6.3.1 General Initiative Procedure

After determining the weather, each Side rolls a D 6. The Side with the highest modified die roll gets the initiative for the current game turn (= 1 month). If it is a tie, the Side that did not have the initiative last month gets it for this month.

### 6.3.2 Modifier for the Initiative Roll

The modifier for the initiative roll is shown by a marker on the Initiative Track that ranges from -5 to +5. This track is to be read from the Axis point of view. Positive numbers indicate a bonus for the Axis, negative numbers indicate a bonus for the Allies. Only one Side gets a bonus. The following actions can produce a bonus:

- If a Side invests 5 points of supply, the initiative bonus marker is moved by one box in its favor.

*Example: Initiative modifier: +2 (2 bonus points for the Axis). The USA invests 5 points of supply. The new initiative modifier is +1.*

- Conquering some locations (cities containing a factory or RP number, capital cities, and minor countries) is worth an extra bonus point (see 10.3.1).
- When a previously neutral minor power enters the war, this action produces one bonus point for the reinforced Side.
- When a major power enters the war, it produces 3 bonus points for the strengthened Side.

In all the preceding cases, the marker is moved on the track, but not past +5 or -5.

### 6.3.3 The Use of Bonus Numbers.

Only one Side has bonus numbers. The start bonus is found at the beginning of each scenario in the Scenario Book. Other such numbers are always merely added into the running total. Only one marker indicates the current bonus status. Bonus numbers can be used to improve the initiative rolls of your Side and are used in the following

way: Before the initiative roll it must be declared whether bonus numbers will be used and, if so, how many. A Side cannot use more bonus numbers than it has.

**Example:** The Axis has a bonus of +3 and decides to spend two. The bonus is reduced to one. Now, an extra modifier of “2” is added to the D 6. for the Axis roll.

The Allies roll a 5, the Axis a 4. The Allies have the unmodified initiative. Because of the bonus spent on the die roll, the German roll is raised to 6, so that the Axis takes on the initiative. If the Allies want a re-roll, the bonus numbers that the Axis used still apply.

The Side without the initiative can demand a re-roll. In this case, the first result will be ignored and both Sides simply roll again. The modifiers that applied to the cancelled roll apply again. At most one re-roll is permitted. **After the re-roll the side that demanded a re-roll must alter the initiative balance by one in favor of the other Side, regardless of whether the re-roll was successful.** Hence, a player with a disadvantage of -5 cannot demand a re-roll because the opponent cannot have an advantage of more than 5.

## 6.3.4 Automatic Initiative

Each time you plan to declare war on a neutral Major country or attack it without a declaration of war, this intention has to be announced before the initiative is determined.

If you announce such an intention, no initiative rolls are conducted. Your Side automatically obtains the initiative this turn (and is, accordingly, the first to move). The marker on the bonus track for initiative is adjusted by 3 in favor of the attacked side.

## 1 7. Active Side Action Segment

The Side that won the initiative now begins its Action Segment. It is named the Active Side. The other Side is named the Non-active Side. What these names signify is that the Non-active Side cannot do anything but react to moves of the Active Side.

### 1 7.1 . Reorganization

#### 7.1.1 Flip HQs , Remove Markers

HQ counters with their reverse Sides showing are now turned front-side-up. Any upgrade markers are removed from the units to be upgraded (see 13.1). After this latter change, such units automatically have increased battle strength, which can be used immediately.

#### 1 7.1.2 Supply Check

Supply is checked twice per turn, between those checks no supply status change is possible.

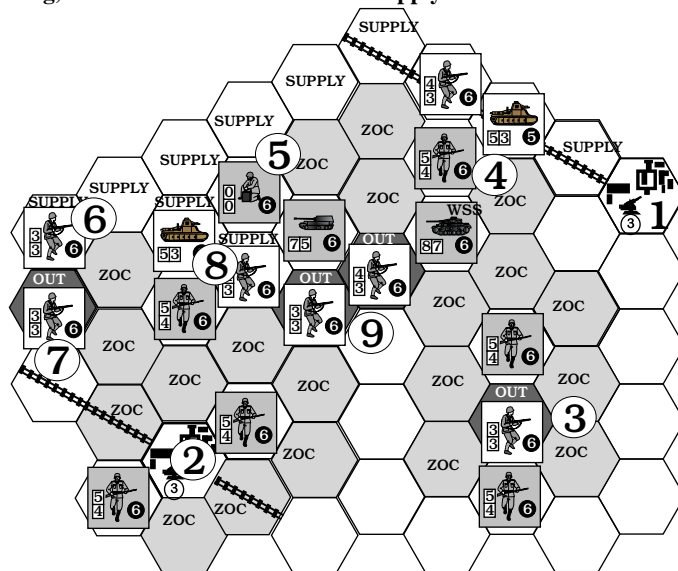
Supply for any unit is provided by **cities** located either in the unit's home country or in a country aligned to the unit's home country. From there it can be transported either by rail over any distance or by ship via supply counters. Any non-isolated city in either the home country or a country aligned to it can be a supply source. A supply source can give supply to an unlimited number of friendly units that are in regular supply from it, without spending supply counters. Note: Any city in a BE Home country is a supply source for the Allies. Any city in Non-European colonies like Egypt, Algeria, or Libya is no supply source for either side.

A unit is in supply when it can trace an uninterrupted line, at most 5 hexes long (in bad weather, less), connecting to a friendly railroad that then runs back to the unit's supply city. This status is hereafter called regular supply. Do not count the hex the unit is in, but do count the railroad hex. The maximum length of a supply route depends upon the weather. In winter, the route is limited to 4 hexes, in both mud and blizzard, it is limited to 3 hexes. A road serves in the same way as a railroad, in clear weather. A road cannot function like a railroad in any weather other than clear. If there is weather other than clear, the supply-extending capability of the road is reduced to increasing the length of the supply route by only 2 hexes along the road.

Supply lines that run through un-negated enemy ZOCs (see 4.3) are 'cut' (interrupted). This situation means that the dependent unit is out of supply and is flipped face down. "Out" is printed on its backside to indicate its status.

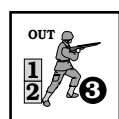
A city works as a supply source in connection with its environment. If a city cannot trace an uninterrupted connection line over land to at least 6 friendly controlled hexes it is isolated and cannot serve as a supply source, regardless of how many supply counters it can trace to.

**Exception: A city that has a factory and that is surrounded by enemy ZOCs but can trace an uninterrupted line, at most 5 hexes long, to a resource can be used as a supply source.**



**Example:** The picture illustrates a supply check from the French' point of view. France is on the Active Side here.

- 1 This city works as a supply source, because it is not isolated.
- 2 This city cannot function as a supply source, because it is surrounded by enemy ZOCs and so is isolated.
- 3 This French infantry is out of supply because of the enemy ZOCs surrounding it.
- 4 This German infantry exerts a ZOC into two hexes of French railroad. This ZOC does not interrupt the French railroad supply line running through those hexes because of the French units that occupy them. So the railroad still functions as a supply line.
- 5 This German engineer unit exerts no ZOC and cannot interrupt the supply path.
- 6 The French infantry is in supply, because it can trace a supply line of 5 hexes to a railway that is connected to a supply source.
- 7 This French infantry is out of supply, because the uninterrupted path to that same railroad needs 6 hexes (one hex too many). The alternative route to the southern railroad hex cannot be taken, because: (A) the city that the railroad originates from is not available as a supply source, and (B) the railroad is interrupted by an enemy ZOC.
- 8 This French tank unit negates the enemy ZOC that is cutting the supply path of the French infantry. So both units can trace a supply path of 5 hexes maximum to a railway that is connected to a supply source.
- 9 Attentive readers please check out why the French units placed here are out of supply.



#### 7.1.2.1 Effects of Being Out of Supply

Attack strength of land units is divided by 4. Both defense strength and movement allowance are divided by 2. The strength of “zero” units is not affected.

**Example:** A German 5-4-6 (5 =attack strength, 4 = defense strength, 6 = movement allowance) infantry is out of supply. Its defense strength is now  $4/2=2$ ; movement allowance  $6/2=3$ ; and attack strength  $5/4=1.25$ , rounded down to 1. The altered strength is indicated on the back of the counter.

The hits needed to eliminate out of supply units are still equal to the defense strength on the unit's front side.

When an aircraft is located on an airbase that is currently out-of-supply, it cannot go on any mission, except to rebase. A ship in an out-of-supply port cannot sail on any mission, except to transfer to another port. Such units are marked with an empty oil barrel; it serves as out-of-supply marker for both ships and aircraft. If the aircraft or ship becomes engaged in combat while out of supply (it cannot do so voluntarily), its combat factors are reduced by 2. If its combat factors are reduced to zero or below, it cannot return fire if attacked.

### 7.1.2.2 Use of a Supply Marker

A unit that is unable to get supply from a city can draw a supply line of normal length (and then via rail) to a supply marker. This supply point is used up in the process. One supply point can supply a maximum of 5 units. All different types of units (land, air, sea) can be combined. Alternatively, one supply point can provide both basic and attack supply to one unit, not more (see 7.4.1). In some areas on the map, supply points are the only means of supply. These are all areas from which no supply path can be traced via rail to a supply source. Typically, such a situation will occur either in Africa, on islands, in a "pocket", or in a beachhead after an invasion.

### How to move supply counters?

Anywhere you can get unlimited supply (the ranges of your National Pool), you can plop down a supply counter, as long as it is a city hex, airfield, or there is an HQ there. It need not be a hex on a railway. Note it can only occur during a friendly Movement or Exploitation phase (however, see 3.7). As a result you should be able to pick up and put down these counters more or less at will within your supply net during these phases, so long as they end up in one of the three legal locations or back in the pool. You do not "move" them like regular ground units, they just "teleport." An exception would be if you were striking out into the unknown, i.e. more than 5 hexes from a road or railway, in which case the HQ could carry them. (Do not forget that the 5 hexes range is modified by weather and map scale). Of course ships can carry them across water, and planes can also carry them - bombers 1 point, and strategic bombers 2 points. And of course any supply counter you place on the map must come from your National Pool.

### 7.1.2.3 Minor Supply Source

A city can serve as a minor supply source, conferring the advantage that all land units located within 5 hexes around the city are not checked for elimination as long as no enemy land unit appears within 10 hexes of these units.

On small islands without a city, an airport can be used as a minor supply source. Such a minor supply source allows only the following: (a) land units are not checked for elimination (see 7.4.7) as long as no enemy land units appear on the same land section (island); and (b) aircraft can fly naval patrol missions only to search, not to attack (see 7.2.1.a.3).

### 7.1.2.4 Naval Supply

Supply lines are not traced over all-sea hexes. Hence, naval units at sea do not trace supply lines to ports. They just take their supply with them. To ease play, there are no supply counters stacked on ships. The transport of supply counters to a target port is irrelevant for the supply of the ships themselves. To keep ships moving standard supply generated by a nation's supply sources is sufficient and inexhaustible. If ships are engaged in battle with enemy ships, a supply counter is taken from any national supply pool of that ships' country to "pay" for that battle. Ships on a mission are never out of supply. However, ships in port may become unsupplied, if the port they are in does (see 7.1.2).

### 7.1.2.5 Attacking Force Supply

One additional supply point has to be paid by the attacker for each battle vector marker placed, from that National Pool of the country placing the marker to which the battle hex is connected. The payment is delayed until the Land Combat Phase begins (see 7.4.1).

## 7.1.3 Repair Hits on Land Units

Units in supply can be repaired with saved replacements (RPs). One RP for each hit is needed to repair either an infantry or a cavalry unit. Two RPs for each hit are needed to repair either a tank, a mountain infantry, a paratrooper, a marine, or an artillery unit. Units that have been repaired have their combat strength increased and hit-markers removed accordingly. RPs are distributed from the National Pool in the same way as supply. Thus only units in supply can receive replacements.

### ① 7.1.4 Rail Movement

Both land and air units are given the opportunity of moving an unlimited number of hexes along a railroad line uninterrupted by an enemy ZOC. If the railroad runs through an un-negated enemy ZOC, transport is possible only up to, not into, the point of interruption. The limitation is ignored if the enemy ZOC is negated by a friendly unit. Enemy units of any kind on a friendly railroad hex disrupt the railroad there. To start rail movement, units must be on a railroad hex. Rail movement may end in an enemy ZOC if the hex is occupied by a friendly unit. If you want to rail move a unit that is not on a railroad hex it can be moved to the nearest eligible railroad hex. Record the movement points expended temporarily with a blue number on top of the unit. Subtract this number from the unit's MPs before moving that unit in the Land Movement Phase (see 7.3.2).

The number of units that can be moved by rail depends upon the country's rail capacity:

USA	4
USSR	4
Germany	2
Italy	1
Finland	1
France	1
China	1
Japan	1
UK	1

Special additional capacity: in Africa, 1 each for France and the British Empire; in India, 1 for the BE; in Australia, 1 for the BE; and in Japanese-occupied areas in China, 1 for Japan.

Associated countries can lend rail capacity to each other, for example Germany and Italy have a combined rail capacity of 3 if Italy is at war. The only rail capacities that can be captured are the ones in Africa. Rail capacity increases can be produced (see 12.2.2).

### ① 7.1.5 Rebase Aircraft

Players can move each of their aircraft from a friendly airbase, to another friendly airbase. The aircraft has its usual range doubled for this activity. Air units that have been rebased can also fly missions during that month. The stacking limit may not be violated. Rebased aircraft does not cost supply. At the end of this segment, aircraft of the Active Side that have been patrolling at sea return to home airbases and are then marked as being unable to fly a mission until the following turn.

## 7.1.6 Engineers Finish Installations

Installations finished in this round are now ready for use. Each installation that will take more time to finish is marked with a blue construction marker displaying the number of rounds the construction still needs. Installations that are already being worked on have now progressed by one month, and that progress is marked.

*Example: A fortress (6 turns' building time) that was started last month will now be marked with a blue 5-point hit-marker.*

### ② 7.2 Naval Phase

#### 7.2.1 Naval Movement Phase

In principle, all ships can move up to a maximum of 4 sea zones. The zone of the port that the ship starts in counts as the first of these zones.

**Note:** The exception below for double-zone ports.

We distinguish between active and standard missions.

**The Standard missions** are (a) convoy movement and (b) strategic rebasing. They can use the ships' full range (4 sea zones).

**Active missions** can either range up to 30 hexes (regardless of sea zones) or be conducted anywhere inside an adjacent seazone. These missions can be: port attacks (by either ships or submarines), patrols (raider), shore bombardment, invasions, evacuations, sea supply, minelaying, and minesweeping.

## Double-zone ports

From ports that are at a border between two sea zones, ships can move directly into the neighboring sea zone without counting the sea zone they started from. These ports are: Scapa Flow, Kiel, Brest, Plymouth, Messina, and Reggio. Submarine may stay an unlimited time at sea. Ships can end movement at sea, but cannot stay at sea for more than two months. Thereafter, they must return to a port immediately without doing anything but defend themselves against enemy units. Ships that already are at sea one month are marked with an out of order-marker. Ships can move either individually or in groups.

## Naval Missions

The Active Side needs to announce what missions its ships are conducting only when the mission is executed, not before.

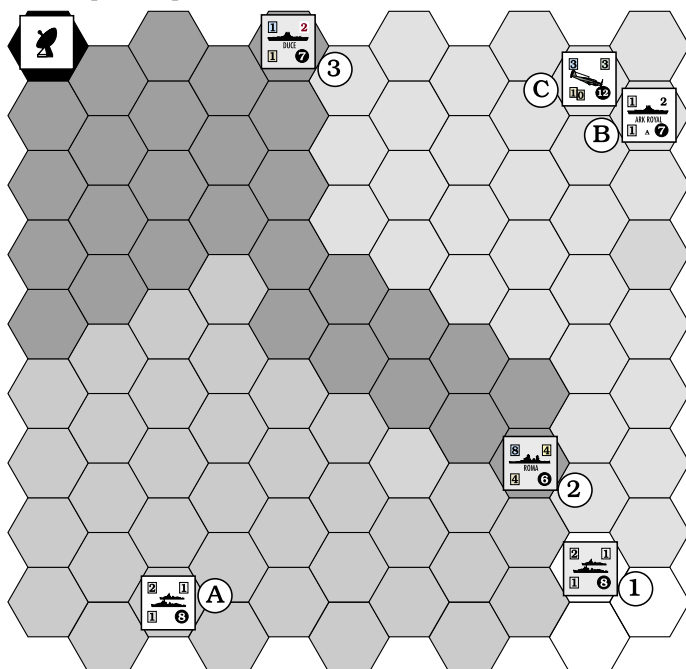
## 7.2.1.a Patrol Missions

### 7.2.1.a.1 Patrol Missions with Ships

Patrol missions with ships are active missions (see 7.2.1.). Ships that undertake these missions position themselves in sea hexes. From there they have a search radius (see search table) within which they are able to search and intercept enemy ships. In order to engage enemy ships in combat, they must be successfully searched for. **Only one combined search roll is allowed, for all friendly ships and aircraft within six hexes.** In other words, **overlap of such search zones does not increase their effect.**

Regardless of whether there is one search group in a search zone or a large number of search groups, there is only one search roll possible due to ships and aircraft. After a search has failed, the moving group can pass through the rest of the search zone unsearched.

Exceptions: Search zones of both radar stations and Air ZOCs may overlap with those of aircraft and ships, and roll for a separate search each. If the approaching unit is operating within range of ships on an active mission (see 7.2.1.), the latter can do a search as well. The search zones of radar stations and Air ZOCs extend only 4 hexes on the European map.



**Example:** Italian ships grey, and BE ships white

1. The Italian DD cannot be searched for because it is not within a search radius.

2. The Roma can be searched for either by the British DD (A), by the Ark Royal (B) or by the British bomber (C). Searching by all of them is not allowed, because search zones cannot overlap.

3. The Duce can be searched for by both the radar station and the Ark Royal, because search zones of ships and radar stations may overlap. The same is true for the British bomber and the radar station.

If the approaching unit is operating in range of an active mission (see 7.2.1), it too can do a search. Whichever unit arrives first has the right to do the first search.

## Deflecting Patrols

If a numerically superior patrol stack is engaged in combat, it need not commit more ships than the enemy fleet consists of (but it must commit at least as many). The rest can move to an adjacent hex and remain on patrol.

**Example:** The British Empire patrols with 4 DDs, 2 BCs, and a CV. They are searched for and engaged in combat by a German BC and a DD. The British player delegates only 1 BC and 2 DDs to battle that group. The other ships move one hex away and remain on patrol. So they can search for the second German group: Three transports full of troops!

### 7.2.1.a.2 The Search Table

In order to search for enemy ships, a D 20 is rolled by the searcher. The search factor indicated in the table is the highest number that can be rolled on a D20 and still find the enemy ships. A higher roll than the indicated search number means that the enemy ships have not been detected and so that it is not possible for the searching group to engage them in combat.

The various unit types have different search numbers. Radar stations also have a smaller search radius. An Air ZOC is exerted by all aircraft on an airbase. Any aircraft or ship passing that area can be searched for. The search may be executed only once per airbase even if there is more than 1 aircraft on that base. **Ships in port do not have a search radius.**

Search numbers are separated by a slash: for example, 14/3. The first number indicates the number to use to find ships or aircraft. The second number is used to search for submarine. If there is no second number, a search for submarines is not allowed.

The search factor is affected by the current weather condition in the search hex. To find the correct factors, look in the corresponding section of the search table.

#### 7.2.1.a.2.1 Other Modifiers

If there is no symbol or letter written after the number, each radar level the country has developed is added to the search number.

**Example:** If you have developed radar level one, your CV's best search factor is 15. If your country has developed submarine level 3, you can also add your country's radar level to your submarine's search factors.

- An asterisk ( \*) adds one factor for each of your country's submarine levels.
- An "a" adds 2 factors to your submarine search factor for each sonar level of your country. Each submarine level of the country whose submarine are searched for has to be subtracted.
- A "b" applies only for a radar level greater than two.
- A "c" helps CVs and aircraft to find submarine. Each of your country's radar levels adds 2 to your search factors.

Note: The modifiers above apply only to the number directly before the letter or symbol.

- In addition, all searches are made more difficult by 3 in enemy or neutral coastal hexes and by 5 in Norwegian fjords.

For a ship to find a unit in a fjord in clear weather, a 5 or less must be rolled.

**Example:** The British player has a group of ships, including one CV, near Taranto. He would have a search factor of 14 in clear weather. In mud, the factor decreases to 10. Our example is mud and the British Empire has a radar level of 2. The Italian player now moves within the British search radius and finds himself in a coastal hex. The search number is calculated as follows:  
Search factor as affected by weather minus coast penalty plus radar level ( $10 - 3 + 2 = 9$ )  
The search is successful if a 9 or less results from rolling the D 20.

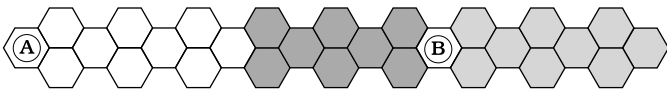
## 7.2.1.a.2.2 Radar Station Searches

Radar stations can be set up only by nations that have reached a radar level of two or more. These stations search on their own for enemy ships and aircraft within their 4 hex search zone. If units are detected, the radar station notifies units (friendly to the radar station) that are in range and uses them for interception maneuvers. These are any friendly ships in SPEED range, and any friendly aircraft, including fighters, who would normally be in range to fly to that hex.

## 7.2.1.a.3 Patrol Missions with Aircraft

A land-based bomber with air-to-sea bombing factors larger than "0" can fly to a sea hex within its range to search for ships. From that sea hex, it has a search radius of 6 hexes. An aircraft can stay at sea until the next Rebase Segment (7.1.5) in which its Side is Active. While at sea, it can attack any ship(s) it locates that is within its range of its home airbase. Carrier combat groups (CVs with their aircraft) act similarly, treating the sea hex that the CV has stationed itself in as the home airbase of its air component.

An aircraft can use its full range to fly to a patrol hex. If an approaching enemy group is outside of the aircraft's movement allowance (as counted from, but not including, the searching aircraft's home base), the aircraft can still search, but it cannot attack the group. In other words, the search radius cannot be used to extend aircraft range. If the search roll was successful, other units within range can be called in to attack the approaching group.



**Example:** A naval bomber with a movement allowance of 12 hexes patrols in hex B, exactly 12 hexes away from its airbase in hex A. The bomber can conduct a search in all of the grey hexes. Because of the limitation due to the bombers movement allowance, it can attack only those enemy ships found in the dark grey hexes.

*Player's Note:* Remember, the owner of the searching unit decides when the search roll is done. Choose a position where a maximum number of friendly units can be called in if the roll is successful.

## 7.2.1.a.4 Raider Missions

Raider missions are run in exactly the same way as patrol missions, but raiders attack only enemy convoys, because it is not their aim to obtain or to maintain total control of a zone. They avoid confrontations with stronger enemy combat units. Raiders are marked with a blue 5. This means that the maximum number needed to search for them is decreased by 5.

**Example:** A CV detects ships by rolling 1 to 14 in clear weather. To detect a raider it must roll a 1 to 9.

Raiders can both search for and attack convoys, but they are not allowed to search for a group that contains neither transports nor river craft. Raiders cannot be used to support friendly missions. They cannot become involved in a battle, even if it takes place within their reaction radius.

## 7.2.1.b Convoy Movement

Convoys are standard missions (see 7.2.1). Transports and river craft can ship cargo to/and/or from either ports or coastal hexes. In this activity they can be escorted by DD, BC and/or CV units. The loading capacity of both transports and river craft indicates the maximum

storage space available. The loading capacity of transports is 5 and of river craft is 1. Different types of goods and units require different amounts of capacity:

- Replacements, resources, supply and material: 1 point of capacity each
- All land units: 1 point of capacity per point of attack strength or defense strength, whichever is greater.
- Tanks and artillery: 2 per point of strength
- Engineer units: 2 points each
- Air units: 5 points each

**Transshipment capacity** is the total number of loading points of cargo a transport or river craft can transport including all loading and reloading actions within one turn (unloading is not counted for transshipment capacity). Transports have a transshipment capacity of 10, river craft of 2. The maximum number of loading points that can be loaded and unloaded (total) in a port equals ten times the port's capacity. In a coastal hex, only one point can be loaded and only one unloaded.

**NOTE:** If you decide to unload and reload **without a port** of destination, even once, you cannot make use of the transshipment capacity. Because it takes a lot more time to unload and reload without the proper equipment, you can unload and reload only up to your loading capacity.

In order to get units that exceed the loading capacity of the transporting ships on their way the units can voluntarily take hits to reduce their size. These hits are changed into replacements credited to the National Pool.

**Example 1:** A transport is carrying a 4-3-6 infantry. That means that it can additionally carry 1 point of material.

**Example 2:** The Axis wants to transport a 7-5-6 tank unit. Only two Italian transports with a combined loading capacity of 10 are available. The unit, however, needs a loading capacity of 14. In this case it is possible for the unit to receive two hits and so reduce its space requirement by 4. It could then be transported without a problem. The hits produce 4 replacements (RPs), which are credited to the National Pool. In the next round, they can be transported to the target and used for unit repairs.

If the convoy's destination is not further away than 2 sea zones or 30 hexes, it can return to its home port after a mission. If the destination is further away, the convoy will end up in a different port. On the way, it is possible to load and unload freight up to transshipment capacity.

**Example:** A British transport leaves Edinburgh with 2 points of material. It sails to London and unloads 2 points there. In London it loads a 5-4-6 infantry (5 points capacity) which is transported to Bordeaux. The transport unloads the infantry there and loads 3 points of supply. These are shipped to Glasgow. This totals 10 points of transshipment capacity. More transshipment is not allowed this month.

Transports and river craft (with or without cargo) can move into any hex on its way, in order to pick up any friendly naval unit there that hasn't yet moved, before continuing the mission. If it does, the rendezvous takes place before any search by the enemy is carried out. Escorting warships cannot leave the convoy to pursue other missions. Transports or river craft arriving at a friendly controlled port automatically unload there.

Troops which were convoyed during the naval phase, can move during the following ground movement phase if the convoy was in the range of an active mission. If the range was longer they are considered to have not MPs left after arrival.

## 7.2.1.b.1 River Craft

River craft function in much the same way that transports do. Exceptions: A river craft can move only 10 sea hexes, is not allowed



to end movement in an all-sea hex, and has only one point of loading capacity. Because the loading capacity of a river craft is 1, the number on the upper part of the river craft counter indicates the number of river craft it represents. A river craft can move up to 20 hexes on a river. It can exit from an enemy ZOC; however, it must stop as soon as it enters one. If a river craft moves into the ZOCs of two enemy units at the same time, its cargo will be eliminated. Even if without cargo, the craft will have to stop. River craft cannot move into all-sea hexes in mud, winter, or blizzard weather. Frozen rivers and continental lakes also cannot be entered. If a river craft begins a month in a hex that will freeze during that month, it gets stuck there until the ice melts (mud, rain, or clear following winter weather). If a river craft moves along a river, its owner must choose a destination hex where it ends movement. The exact positioning is necessary to allow enemy units to capture it. If an enemy land unit enters a hex containing one or more friendly river craft, the owner of the land unit has to check for each of them with a D 6. Even numbers mean that the river craft is captured by the enemy, odd numbers that it is destroyed.

## 7.2.1.c Strategic Movement

Strategic movement is a standard mission (see 7.2.1).

Ships that are placed in a sea zone by strategic transfer cannot conduct a search. The transferred ships, upon entering a sea zone, can be searched for by patrols and submarines already there. The ship that is being searched for must roll a “search” die to determine whether it was taken by surprise, but does not actually search. The strategic transfer of a (loaded) convoy is not allowed.

Ships that end their strategic move at sea are marked by turning the top ship upside down. This action is done to mark that they are not on patrol and may not conduct searches for enemy ships passing them.

**Note: The flipped ship is not aborted in this situation!**

## 7.2.1.d Submarine Missions

Submarine position themselves in sea hexes and have a 6-hex search zone, just as patrols do. There is no time limit for submarine at sea. In contrast to surface ships, each submarine searches individually. More details, see 7.2.2.1.

## 7.2.1.e Sea Supply

Sea supply is an active mission (see 7.2.1). A standard convoy transfers goods and supplies (no units) to a friendly port. If the destination hex is either a port in an enemy ZOC or a coastal hex (without port), a battle vector marker must be placed, pointed toward the side of the coastal (or port) hex opposite to the sea hex from which the convoy will enter the coastal (respectively, port) hex. The opponent can now react. The outcome of the battle determines whether the supply comes through.

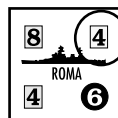
## 7.2.1.f Evacuation

Evacuations are active missions (see 7.2.1). The removal of a unit from land onto a transport or river craft, if either from a port that lies in an enemy ZOC or from a coastal hex, is called an evacuation. Move the ship to the appropriate hex. A battle vector marker must be placed in that hex, pointed toward the side of that hex opposite to the sea hex from which the first such ship entered that hex, to allow the enemy reaction moves.

1) in an evacuation, the troops are embarked after the Naval Combat Segment (if any). They cannot be sunk as a result of naval combat (in the evacuation hex), just stranded.

2) In the land movement phase, land units to be evacuated are moved to the chosen coastal hex, if not already there. After all combats (if any) are over in the hex, the survivors are moved to friendly ports within range of an active mission. Not all land units in a hex need to be evacuated.

Reserve land units of the defender can try to hinder the evacuation. The combat resolution is delayed until the land combat phase (see 7.4.3.); however, the land unit(s) to be evacuated can retreat to the ship(s) after one combat round, up to the ships' loading capacity. This movement ends all land combat for the unit(s).



## 7.2.1.g Shore Bombardment

Shore bombardments are active missions (see 7.2.1).

BC and/or DD units can support friendly land units that are engaged in a battle against enemy land units in a coastal hex. Shore bombardment without the presence of friendly land units is not allowed.

Procedure: In the naval movement phase, the Active Side moves the ship(s) that is (are) to conduct shore bombardment to within 6 hexes of the coastal hex(es) where the land combat(s) it (they) will support can occur. The combat resolution is delayed until the land combat phase. (see 7.4.3.)

## 7.2.1.h Naval Land Combat

Naval land combats are active missions (see 7.2.1).

Certain targets (aircraft, radar stations, coastal batteries, and targets that are relevant for naval operations ) can be attacked from the air during the naval land combat phase. This attack can be conducted by either aircraft or CVs.

*Example: An airbase can be attacked to cancel the Air ZOC of the aircraft there, in order to keep them from conducting a search for ships. A radar station can be attacked for the same reason. A coastal battery can be suppressed to allow naval operations in the hex.*

Air missions not directly related to naval missions cannot be conducted in the naval land combat phase. They have to be delayed until the air mission segment of the land movement phase.

## 7.2.1.i Port Attacks

Port attacks are active missions (see 7.2.1). Ships in ports can be attacked either by enemy aircraft carriers or by land-based bombers with naval factors in range (CV 6 hexes, bomber normal range). Bombers that are flying sea patrols cannot attack ports. A D 20 is rolled, as if searching (see 7.2.1.a.2 ), to determine whether any ships in the port are taken by surprise when attacked. If a number higher than a defending ship's search number is rolled it is taken by surprise. The usual naval surprise effects apply (see 7.2.2.7.a)

If any CV present in the port is surprised, it cannot launch aircraft. Consequently, its air component is unable to defend it (or anything else in the port).

If the attacking bomber(s)/CV(s) are successful in taking their opponent by surprise, they can be moved 10 hexes after the attack. If they are unsuccessful, they must remain in a position no more than 6 hexes away from the attacked port until the next friendly naval movement phase. BCs or DDs that accompany a port-attacking CV are treated in the same manner.

Ports can also be attacked by submarine (see 7.2.2.1.d ) BCs, and/or DDs (see 7.2.2.4 ).

## 7.2.1.j Invasions

Invasions are active missions (see 7.2.1). Additionally, the invasion must be started from a port. A land unit debarking from a transport into an enemy coastal hex, and its transport, are invading. The invading units must be marked with a battle vector marker, pointed toward the side of the enemy coastal hex opposite to the sea hex from which the first transport entered that hex. The combat strength of all invading land units (except Marines) is halved, because they are quite vulnerable during debarkation. **In coastal hexes with no enemy unit counter, local defense units too small to be represented in this game defend the hex. The defense strength of such units is 0. They are considered to be normal units, and so both weather and terrain modifications are to be applied. If a strength 0 unit receives a hit, it is eliminated. An out-of-supply strength 0 unit has its defense strength reduced to -1.**

Units that have just landed and that have won their combat can move half their movement rating (at most) during the exploitation phase (see 7.5). They are not allowed to attack a second time. Tanks can take part in invasions, but no tank battle marker may be placed (see 7.4.4.7). The combat resolution is delayed until the land combat phase. (see 7.4.3.)

### 7.2.1.k Mines

Mines obstruct the movement of enemy ships. Friendly ships know the passage through a minefield and are not hindered. Every ship that enters a hex containing an enemy mine is checked immediately for hits. AD 6 is rolled. An even number results in an "A" for the ship; odd numbers have no effect. Additionally, the ship can receive more hits, from a coastal battery or enemy ships present in the hex (or both). Ships suffering "A" results must delay applying them until other results due to naval combat inflicted on them in that hex have been applied. The "A" results from mines are taken after naval combat is over.

Every nation is given a supply of mines. Players can freely place mines in coastal hexes and/or ports under their control. They can remove the mines during the active sea movement phase and place them in another coastal or port hex under their control, or they can conduct a new minelaying mission this turn. There can be only one minefield per hex.

#### 7.2.1.k.1 Minelaying Missions

Minelaying missions are active missions (see 7.2.1). A player must conduct a minelaying mission to lay a minefield in an enemy coastal hex or in an all-sea hex. All surface ships can be used to transport the mines into the minefield target hex. A battle vector marker is placed there (direction irrelevant). The enemy can provoke a naval battle if it has a reaction force there. If the minelayers are forced to retreat from the hex, then the mission is a failure, and the minefield is put out of play, but can be rebuilt (see 7.2.1.k.3). If the minelayers are not forced to retreat from the hex, the minelaying mission succeeds, and the mines are placed in the hex.

#### 7.2.1.k.2 Minesweeping Missions

Minesweeping missions are active missions (see 7.2.1). The Active Side can try to sweep enemy mines, by moving ships into their hex, but only if it is then free of enemy warships. This process can be disrupted by the enemy — the Non-active Side just moves ships that are already within reaction radius (see 7.2.1.1) into the hex that its targeted mines are in (and must include any ship(s) already there). If there are ships of both Sides present, a battle occurs, and, unless the minesweeper drives away all enemy ships after one battle round, the minesweeping mission is a failure. The ship(s) that conducted it will be checked for "A" results caused by mines. These hits are in addition to those caused by naval combat. There are no hits caused by the mines when the ships entered the hex. The mission is a success if the hex is free of enemy ships after one battle round or if no battle occurred, and in that case the mines are now removed without causing any damage to the minesweeping ships. Minesweeping missions are not possible in hexes and/or ports already containing enemy warships.

#### 7.2.1.k.3 Restrictions for Mines

Mines lost and/or swept by the enemy can be "bought back" for 3 points of material. Mining a neutral port so that no ship can sail into the port without risking setting off a mine is a declaration of war on that neutral country.

*Note: A country that is not permitted to declare war on a country is also not permitted to mine ports of that country.*

#### 7.2.1.1 Non-active Side Air/Sea Reaction

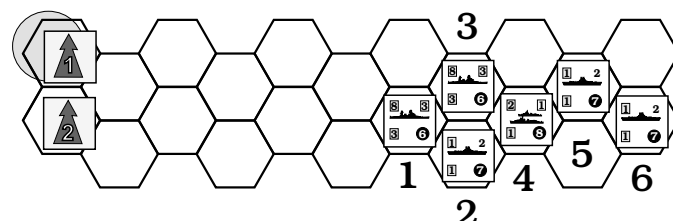
The Non-active Side cannot initiate its own missions; all it can do is react to the actions of the Active Side.

One activity by the Active Side that always allows reaction is the placement of a battle vector marker onto a coastal hex. The reaction occurs during the air/ sea coastal reaction phase of the Non-active Side (see 7.3.6). Ships within a 10-hex range (their so-called reaction radius) can take part in such battles, and so can any aircraft within its own range. The ships and aircraft are placed in battle boxes and the combat is postponed until all ships (including CVs) and aircraft have been committed; as a result no committed ship or aircraft can take part in more than one reaction battle per phase. Submarine do not qualify for such reaction.

Any other reaction depends upon whether searches by patrolling ships, aircraft, radar, and Air ZOCs are successful. Whenever a ship moves through an enemy search zone, whether voluntarily or forced, it can be intercepted if it is successfully searched for. This situation can also arise during the return to the nearest eligible port in the case of an "A" result. Interceptions are resolved immediately and can happen at any time (see 7.2.2). Other naval combats or naval related combats are conducted during the naval combat phase. A single ship or aircraft can take part in several combats caused by search rolls.

If a naval battle occurs because of a successful search, any or all available ships within range, from either Side, can join the battle. A ship's reaction radius is not relevant: each ship with a speed rating sufficient to reach the hex is eligible to join the battle. Every ship may take part in an unlimited number of interception battles per month (see 7.2.2.6).

*Example: Battle 1 arises in a coastal hex; battle 2 was initiated by means of a successful search in a sea hex. In battle 1, the reaction radius applies; in battle 2, the speed rating applies.*



*BC "1" is allowed to join battle 2, because it is within 6 hexes (its speed rate). BC "3" is ineligible to join battle 2, because it is outside its own 6-hex range. CV 2 can join, because its speed rating is 7. DD "4", because its speed rating is 8, can also join battle 2. Ships "5" and "6" cannot join in, because their speed ratings are insufficient. All of the ships listed above can join battle 1, because each is within reaction radius. Any ship east of them is ineligible to react into a naval battle, unless there was a successful search to initiate a battle.*

### 7.2.2 Naval Combat Phase

A Naval Combat Phase consists of the sequence in which combat involving naval units is resolved. It can occur after every successful interception at the intercepted Side's option, at the end of the Naval Phase, and during the land combat phase, as stated in the Sequence of Play. If the naval combat is surface combat (see 7.2.2.4) the ships must be in the same hex.

**The execution of naval combat in connection with land combat is delayed until the land combat phase (see 7.4.4).** Such naval combats include the following: shore bombardment, invasion, evacuation, and CV missions against targets on land.

#### 7.2.2.a Naval Interception

There are two kinds of naval combat: one, a group of ships reaches its destination hex and becomes engaged in combat there: a battle vector marker is placed, and the combat is conducted in the naval combat phase. Two, occurs when ships are searched for and become engaged in combat on their way to their destination hex: **this latter occurrence is called interception combat; it is executed immediately after a successful search** (unless the detected group decides not to continue its movement, in which case the combat converts immediately into a naval combat of the first kind); after one round of combat, the moving group can try to get rid of the patrol by continuing on its way (see 7.2.2.6); and the placing of a battle vector marker is at the discretion of the Active Side.

#### 7.2.2.b Multiple Battle Rounds

On the journey to its destination hex, a unit may pass through several search zones, each of which can result in a separate interception battle (see 7.2.2.a). If a search is successful, every ship or aircraft able to reach the battle hex can participate in the battle. In this way both ships and aircraft may be used several times a month. If a unit is found, the opponent can intercept with the searching group that found the enemy and can also move in other ships that are within their radius, using

maximum movement allowance, also called speed rating (indicated by the number in the bottom right-hand corner of the unit counter - e.g., 8 for a DD).

After each battle round, each side can either flee or pursue. The Active Side decides first. The group that wishes to flee moves first. Both the fleeing side and the pursuers can split into different groups. If there is more than one type of ship in a group, the slowest ship determines the movement allowance for that group. If the other side wishes to pursue, it can search after the attempts to flee for each fleeing group are announced. For this roll, the movement allowance of the slowest ship of each fleeing group is subtracted from the search number of the pursuing group. If a fleeing group is found, the pursuing group has successfully chased it, and a new battle round begins. If a fleeing group is not found, it has lost its pursuers and can continue on its way. The pursue search rolls are made before any moves are actually executed. For example a fleeing DD cannot first move 8 hexes and state “now I am out of the 6 hex search radius and you cannot search me”.

This pattern is repeated every time a group enters a search radius, until either it reaches its destination or it is destroyed. If the fleeing Side breaks up its ships into more than one group, and if the pursuing group finds two or more of the fleeing groups, the pursuing Side must choose either to pursue only one group (pursuer’s choice) or to split up its forces into more than one pursuing group, because one pursuing group cannot pursue more than one fleeing group. Sometimes this seems like “running the gauntlet”. A group can change its destination while on the move, because of high casualties. This decision is at the acting player’s choice.

Alternatively, each side may decide to stay at the battle. New searches will be necessary, but no speed rates have to be subtracted from the search number.

The pursuit search rolls are made before the fleeing groups actually make the fleeing move, only after a pursuit search roll fails the fleeing move is executed.

***Example:** An Italian DD with a movement allowance (speed) of 8 and an Italian BC with a movement allowance of 6 have survived a battle against a superior British fleet. The Italian units now try to escape. The British player does a search with 10 minus 6 ( 10 is the search number of the British ships, 6 is the movement rating of the Italian BC) and must roll a 4 or less to find the Italians again.*

**For a chase, the pursuer’s speed must be at least as high as that of the slowest unit in the group that it is chasing. A BC can not catch up with a fleeing DD.**

During the naval combat phase, battles initiated by naval missions are carried out in the following order:

1. Submarine combats
2. Air-to-air
3. Naval - Air
4. Surface

## 7.2.2.c Combat Supply for Naval Battles

For each started naval battle, **each side** has to pay one point of supply, but that one point of supply pays for all further battles generated by pursuit or interception that involves only ships that took part in the original battle.

## 7.2.2.d Naval Hit Results

“A”, “D”, and “E” results affect a ship directly. Listed numbers affect the cargo of a ship that has been hit. If a transport or river craft is carrying different types of cargo, the Cargo table is consulted. Roll a D 6 and find the actual cargo type. If one cargo type is not on the ship, simply proceed by taking the next in line. Move from top to bottom. If you reach the end, begin again from the top. If there is not enough cargo of the specified type, proceed with the next one and so on. If there is less cargo on a transport than the number of hits scored, the excess hits are ignored.

7.2.2.d CARGO TABLE	
D6	Cargo
1	UNIT
2	RP
3	MAT
4	SUPPLY
5	RESOURCE
6	OIL RESOURCE

### 7.2.2.1 Submarines (Submarine)

Each submarine has a 6-hex search zone just like a patrol. Each submarine positions itself in a sea hex and lies in wait for enemy units. If a moving enemy convoy enters its search radius, the submarine is eligible to conduct a search. Each submarine searches individually and separately from every other submarine in its sea hex. This is a major difference to the search procedure with surface ships.

Each submarine picks a target. If the search is successful, the number and types of the enemy ships is revealed. Their load is placed hidden underneath the ship’s counter. Then the submarine is allowed to conduct a ‘first shot’ attack on the ship that it found. If the submarine hits the ship, the ship can not return fire, but other ships in the convoy can. A first shot attack can be directed against any ship in the stack, (at the submarine owner’s option) except BC and CV (see below).

### Wolfpack Tactics

Submarine in the same sea hex that did not conduct a successful search can support the attack, but do not have the advantage of a first shot. Note: **The wolfpack-tactic is not allowed for nations with a submarine-level less than 1 (see 13.4, research).**

After the ‘first shot’ attack and the escorts’ return fire (counter-roll), each non-finding submarine picks a target. The defending player (the Active Side) then assigns escorts that are not under attack to fight whichever ‘wolfpacking’ submarine the defender chooses.

The wolfpack tactic works only for submarine positioned in the same hex. Submarine are not allowed to call upon submarine or ships in different hexes for help.

Unlike other naval battles submarine cannot call in others ships or aircraft for help. Submarine cannot spot and search for other submarine.

### Submarine Attacks on BC or CV

1st case: DDs present

The submarine’s owner rolls a D 6.

5 or 6: the submarine evaded the DD’s and can shoot at its chosen target.

Lower results mean that the submarine must fight a DD instead.

4: DD fires first, and if it hits, the submarine does not get to shoot back.

1-3 Submarine vs. DD combat is conducted simultaneously. Submarine lose their first shot attack.

2nd case: No DDs present

5-6 the submarine can shoot at its chosen target.

4: BC/CV fires first, and, if it hits, the submarine does not get to shoot back.

1-3 Submarine vs. BC/CV combat is conducted simultaneously. Submarine lose their first shot attack.

The convoy ships are not allowed to initiate a search for the submarine.

If no submarine searches successfully the convoy passes unharmed.

### 7.2.2.1.a Submarine vs. Ships

The submarine vs. ships table is used whenever submarine attack surface ships. Two D6s are rolled and the results are totaled. The sum is cross-indexed into the table with the attacked ship’s type. (See the modifiers specified in the next section.)

### 7.2.2.1.b Ships vs. Submarine

















The ships vs. submarine table is used whenever surface ships attack submarine. Two D6s are rolled and the results are totaled. The sum is cross-indexed into the table with the attacking ship's type.

The following modifiers are used:

'\*' Refers to the ship owner's sonar level, '\*\*' refers to the ship owner's radar level, both refer to the submarine owner's submarine level. Sonar/radar levels are added to the sum, submarine levels are subtracted from it.

Except in the two cases specified above (first shot attacks and a 4 when attempting to evade the DD's), each submarine shot is considered simultaneous with its corresponding return fire from a ship, and both are rolled before either takes effect.

**Example:** A British Empire convoy consisting of 1 transport, 4 river craft, and 2 DDs (as escorts) enters the search zone of three enemy submarine, 2 German and 1 Italian. The German submarine can find with a 12 maximum (submarine level 2), the Italian with a 10 maximum (submarine level 0).

				 2	
				 2	 5
<b>British</b>					
 3	 2	 4	 0	 0	
 1	 1	 10/20	 1	 3	
 4	 4	 4			
<b>German</b>				<b>Italian</b>	

The first German submarine rolls a 7 and is successful. The second rolls a 13 and finds nothing. The Italian rolls an 10 and is successful.

The submarine that located the convoy inform the other one. Now, the British convoy has to reveal its ships and their cargo.

The German submarine that found uses its first-shot attack against the 3-DD. The second German submarine takes on the transport. The Italian submarine attacks the 4 river craft. German submarine 1 rolls a sum of 8 with two D6. Therefore, the 3-DD suffers a "D" and cannot return fire. German submarine 2 rolls a 9, which produces a "5 E". The number refers to the number of destroyed cargo points. In this case, the transport's cargo, 5 points of material, are completely destroyed – and, because of the "E" the transport is eliminated.

**Remember: If a transport or a river craft is carrying different types of cargo, the cargo table is to be consulted see 7.2.2.d.**

The Italian rolls a 6, which results in two destroyed river craft. Which cargo is affected is determined on the cargo table. With a roll of 2 x "5" two resources are destroyed. The other two river craft and their cargo are left unharmed.

Now, the remaining DD can fire at the submarine. It rolls a 7 and fires at the second German submarine. The British sonar level is 1 and the German submarine level is 2, so the result is 6 (7+1-2= 6). This means that all submarine are left undamaged. If the DD had fired at the Italian submarine( level 0) the result would have been an 8 which would have produced an "A".

This example shows how important high sonar and submarine ratings are in submarine combats.

All interception submarine combats are over after one battle round. There is no pursuit.

**Example:** If a transport carrying a plane suffers a "2" result from a submarine attack the plane is "D". (Each number translates into one "A"; 2 x "A" = 1x "D").

### 7.2.2.1.c Moving Submarine Attack Warships at Sea

If a lone submarine detects a warship unit and decides to attack, it cannot call in other submarine units in its hex to take part in the combat.

*Designer's Note: Submarine usually lie in wait for their prey and try to slip away unnoticed after firing their torpedoes. Because submarine are slow, especially if submerged, the slow-moving convoys make ideal targets for them. A naval task force consisting of warships is considerably faster than a submarine unit. Against them, the "wolfpack" tactic will not work, because submarine move too slowly to set it up.*

### 7.2.2.1.d Submarine Attacks in Ports

Submarine can try to sneak into a port to fire torpedoes at the ships there. A submarine attempts this by moving to the hex, picking a target, and rolling one D6. On a result of 1 or 2, it succeeds: the submarine fires torpedoes and slips away unnoticed. On a higher result, the defender initiates a DD attack (with its port defense, not modified by sonar, see 7.2.2.1.b). In addition, every capable ship in the port can fire at the submarine. If the submarine survives this, it can still fire torpedoes at its target and get away. If the enemy is taken by surprise (occurs only when a neutral country is being attacked; a naval surprise check is not made), the action is successful on a 1, 2 or a 3.

### 7.2.2.1.e Attacks Against Submarine in Ports

Submarines in ports are lying safely in submarine pens. If the pens are attacked by bombers or CV units they have an armor class equal to the strength of the local coastal battery. As usual, a surprise check is made.

### 7.2.2.2 Naval Air-to-air Combat

Now the air combats are executed. For instance: A CV fighter engages an enemy naval bomber.

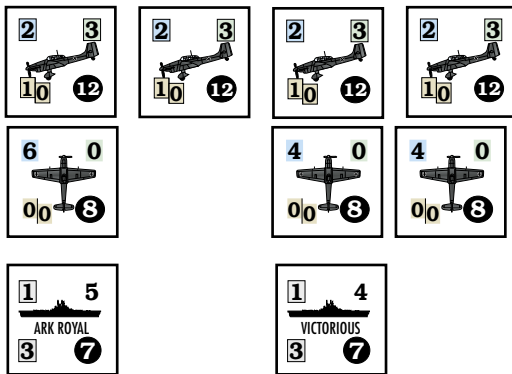
Both Sides can use any land-based aircraft or CV(s), in range for assistance. Both Sides set up aircraft and/or carriers. If there are any carriers present, their owner(s) must specify (simultaneously and hidden) whether they function as bombers or as fighters. One round of air-to-air battle is executed before the actual air-to-sea combat.

In the first round only, the fighters battle each other, and they do so in the order of their air-to-air strengths. If one Side has more fighters than the other, the surplus fighters can be used against other enemy fighters in any order their player wishes. The air-to-air rating number is in the upper left-hand corner of the unit counter. The difference in strength between attacker and defender (called air combat differential) is now determined. Two D6 are rolled, and the air combat results table (7.4.2.1) is consulted. All combat is considered to happen simultaneously for game purposes. The Active Side pro forma shoots first, then the Non-active Side returns fire (highest against highest, then second-highest against second-highest, and so forth, with surplus aircraft getting one free shot at any enemy fighter). The targets of the surplus fighters are selected before any combat takes place. The combat results are all applied after one round of combat is over. The target of a surplus fighter has to be selected before all mandatory combats in that round and cannot be changed no matter what the outcome of the mandatory combat in that round .

*Designer's Note: The air combat differential, not the air-to-air rating, is what is affected by weather (see 6.2.1).*

All fighters that have survived one round of combat now get to deal with the enemy bombers. Fighters can engage the bombers in any way they choose - each targeted bomber can be shot at more than once, but each attacking fighter can fire only once. The bombers are not allowed to help each other. Bombers that are not under attack do not take part in the combat.

All units that have survived the air battle can continue their missions.



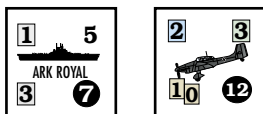
**Example:** It is the Axis turn, and a British Empire fleet is attacked by one strength-6 fighter, two strength-4 fighters, and four naval bombers (each having an air combat strength of 2 and a naval bombardment strength of 2). The British Empire fleet has one strength-5 and one strength-4 CV at its disposal. The CVs are accompanied by one strength-7 BC, but it cannot interfere in air-to-air combat. Both CVs function as fighters. The strength-6 fighter fights the strength-5 CV, one strength-4 fighter fights the strength-4 CV, and the remaining strength-4 fighter is assigned to the strength-4 CV as well. The strength-6 fighter has a +1 differential against the strength-5 CV (6-5=+1). The player rolls a 10 which has no effect. The strength-5 CV fires back with a -1 differential (5-6=-1). Its player rolls a 6 which produces an “A” result on the air combat table. The strength-6 fighter must return to the nearest friendly airbase. The strength-4 fighters have an air combat differential of 0 against the strength-4 CV, and vice versa. The first rolls a 6, which produces an “A” and the second rolls a 4, which produces a “D”.

Together, these result in an “E”. This means that the carrier’s 4 CV aircraft is destroyed. The carrier ship herself may later be a target for the naval bombers in this battle. The 4 CV is marked with a blue “three-hit” Hit Marker.

The 4 CV can now fire back once. (In case of there being several Axis fighters, the 4 CV has to shoot at the strongest). A 2 is rolled; this eliminates one strength-4 fighter of the Axis.

After one round of fighter combat, the surviving fighters can attack the enemy bombers once.

The ones left are a strength-5 CV on the British Empire Side and a strength-4 fighter on the Axis Side. The latter is no longer of any use to the Axis in this battle, because the British Empire did not bring bombers into this battle.



The strength-5 CV can choose any bomber as a target and attack with a differential of +3 (5-2=+3). A 7 is rolled producing an “A”. The attacked bomber can fire back with a differential of -3. An 11 is rolled. This has no effect on the 5 CV.

Bombers cannot assist each other in combat, because they are much slower than fighter, so the other Axis bombers can do nothing to help their companion.

## 7.2.2.3 Air-to-Sea Combat

Bombers that have survived naval air-to-air combat can now attack the ships. Each bomber can choose any ship as its target. The target can defend itself with anti-aircraft guns and can also call for one other ship to give anti-aircraft assistance (except that the total anti-aircraft artillery strength against any one bomber cannot exceed 5), and no ship can fire more than once during the bombing).

Bombers that have their air combat factors rejected by AA cannot attack, the +3 air vs. naval bonus does only apply if at least one factor survives AA fire.

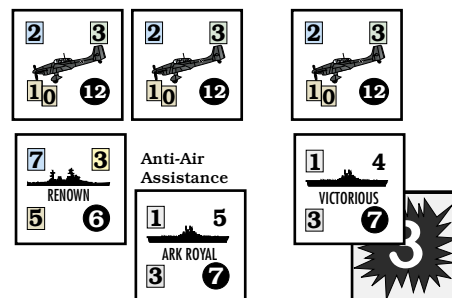
Two or more bombers can combine their tactical factors to attack one target together (see also 7.4.2.2).

**Example** (continued from above): 3 Axis bombers made it through and will now attack the ships. Two bombers choose the strength-7 BC Renown, which has an anti-aircraft artillery strength of 3; the third bomber chooses the strength-4 CV Victorious, which has an anti-aircraft artillery strength of 3. Thus, the BC has an anti-aircraft artillery strength of 5 (with the anti-aircraft assistance of the Ark Royal) and the CV has an anti-aircraft strength of 3.

A D6 is rolled, and the result is read off the anti-aircraft table. The results indicate the number of air-to-sea bombardment factors (number in the top right hand corner of the counter) of the attacking bombers that are thwarted. A ship under attack can fire its anti-aircraft guns only once, regardless of the number of attacking aircraft. The anti-aircraft gunner can choose any attacking aircraft as a target. The result on the anti-air table indicates the thwarted air-to-sea factors. If anti-air fire negates more factors than the targeted bomber possesses, the excess factors can be spread among other attacking bombers. If a bomber’s air-sea bombardment factors are totally negated, that bomber must stop attacking for this combat round. (Any naval air bonus factors only apply if a bomber gets through with at least one factor).

It can attack again if there is another combat round. Numbers combined with letters “A” or “D” abort or damage, respectively, the one targeted bomber. The affected aircraft still absorbs thwarted factors. Excess factors are again spread among other attacking bombers.

The surviving aircraft can either combine their bombardment factors or use them separately.



**Example** continued: A 2 is rolled for the CV, which has no effect on the bomber attacking it. The BC thwarts 3 bombardment factors and obtains an “A” result by rolling a 5. The first Axis bomber is aborted and takes 2 of the thwarted air-to-sea factors with it. The second bomber absorbs the excess thwarted factor. This all leaves only one factor to attack the BC.

Surviving bombers compare their naval combat strengths with the armor class of the target. Sea modification factors A-Q are listed in naval combat chart I (naval combat strength versus armor class).

The naval combat strength of all aircraft and carrier aircraft is calculated by adding a bonus of 3 to each aircraft’s air-to-sea factor. This bonus is called the air-to-sea bonus and can be modified by weather (see 6.2.1) The armor class of a BC or a DD equals its surface strength rating in the upper left-hand corner of the unit counter.

CV armor class is its air component rating plus 1. The armor class of transports, river craft, and submarine is 1. There is no armor class with a factor less than 1.

In our **example**, the air-to-sea bonus enhances the strength of the first bomber to 4 and that of the second bomber to 5. The armor class of the Victorious is 5. Naval combat strength of 4 (bomber) vs. armor class of 7 (Renown) results in an “L” for the BC, 5 against 5 gives an “I” for the CV. The results are determined by rolling two D6s on naval combat chart II (final analysis table), using column I for the CV and column L for the BC in this case. An 8 is rolled for each. Because of their different armor classes, the CV becomes “2D” while the BC is only “A”.



The numbers on the tables apply to transports and their cargo. The number indicates how many hits the transport's cargo receives or how many river craft are eliminated.

However, in this example there were no transports.

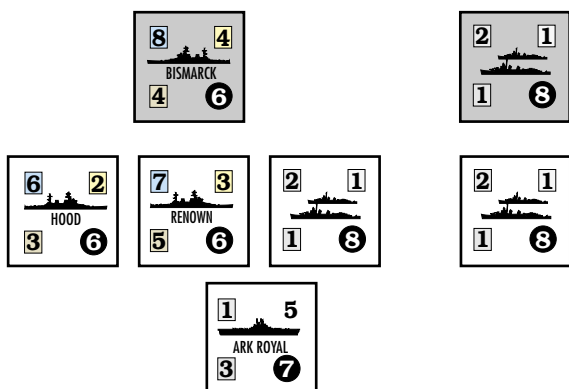
## 7.2.2.4 Surface combat

Both Sides reveal all of their ships to each other; then targets are selected. Each ship can fire only once. Each can, however, be fired upon several times. Firing is done simultaneously- if a ship receives a hit it can still fire back in the same round. Before the dice are rolled it must be specified exactly who is firing at whom. The Active Side names its targets first, the Non-active Side second; then the Active Side fires first, the Non-Active Side second; and finally the Active Side takes losses first, the Non-active Side second. In case of surface battles no combination of factors is allowed (in contradiction to air sea battles), fire must be executed separately. Reason: This rule is to illustrate the need of high calibre shells in order to penetrate a heavy armor in surface combat.

If one Side has more ships than the enemy, it can select ships to stay away from battle up to the number in excess. These ships can neither fire nor be fired upon.

*Designer's Note: This allows 'screening' to protect vulnerable or important ships, such as transports or CVs.*

Once again, the naval combat strength is compared to the armor class of the target. The naval combat strength is its surface strength rating. There is no air bonus.



**Example:** Surface combat between Germany (strength-8 BC Bismarck and strength-2 DD) and the British Empire (strength-7 BC Renown, strength-6 BC Hood, strength-3 DD, strength-2 DD, strength-5 CV Ark Royal).

The British Empire picks the German DD as a target for its strength-2 DD, and the German BC for its other three ships. The CV is ordered to stay behind. Germany picks the strength-7 BC as a target for its BC and the strength-2 DD for its DD. (Both commanders chivalrously follow the principle of 'picking on someone your own size'). The British Empire receives combat modifications due to consideration of the strengths of its ships. It gets a "J" for surface strength of 7 against armor class of 8, a "K" for surface strength of 6 against armor class of 8, an "N" for the 3- DD, and an "I" for the 2- DD; Germany gets an "H" for the BC and an "I" for the DD. The British Empire rolls a 7, a 5, and a 9 against the BC and a 5 against the DD.

The German DD is not hit. The BC gets a "D", an "A" and a miss. The hits are combined to an "E" and eliminate the German BC. The German BC rolls a 10 in return, which eliminates the British Empire's BC. The German DD rolls an 8. This results in a "D" for the British Empire DD. Because the surviving German DD flees unharmed, the naval combat is over after just one round.

A special situation arises when fleets try to attack enemy ships in ports with their surface strength. The sequence of events is the same as in normal surface combat, but in the process of sailing into the port, the

attackers may run across mines and/or have to face coastal batteries both of which will affect them before the actual surface combat takes place (see 7.2.2.8); and no surprise is possible.

Furthermore, a surface battle in a port ends after one round. Then the attacking ships have to leave the port and take a patrol position within 6 hexes of the port.

## 7.2.2.5 Naval Air or Surface

Without successful search rolls there is no naval combat. If there are aircraft or CVs present, there will first be naval air combat. The search table indicates different search values for ships and aircraft/CVs. Those for ships are lower, because ships are less likely to detect enemy ships. If the search rolls are sufficiently low to detect enemy units with aircraft/CVs but not low enough to detect with ships, no surface combat will occur.

**Example:** A 12 is rolled in clear weather. This would have been sufficient for a search group containing aircraft or CVs to initiate a naval air combat. But it is not sufficient for a group containing only BCs or DDs- neither to find enemy ships, nor to initiate surface combat.

A 10 or less can result in surface combat. **Combat can be started by any player whose search was successful. If no successful searcher decides to initiate it, combat does not occur.** If you conduct a successful search to initiate a surface combat it is the searching players choice if you start a surface combat or stay away from the hex with the enemy fleets and do a naval air attack on the enemy fleet instead. Remember that the side who arrived at a location first (usually the non-active side) always has the first choice to make a search roll.

## 7.2.2.7 Surprise

A surprise means that only one Side detects the other. In surface combat the player whose search was unsuccessful is surprised and has the following disadvantages: the opponent's combat modifier is increased by one ("I" becomes "H"), and the player's own is decreased by one ("I" becomes "J"). There are no modifiers better than "A" or worse than "Q", so an "A" remains "A" and "Q" remains "Q".

Also, the Side that surprised the enemy can avoid a naval air battle and enforce a surface battle immediately (but the usual search conditions must still be met (see 7.2.2.5)).

## 7.2.2.7a Naval Air Surprise

A successful search may lead to a naval air attack against an enemy fleet. A second requirement must be met in order to take the enemy by surprise: the attacking carrier/aircraft unit must pass its target's Air ZOC without being detected. Even a fleet with no carrier gets an Air ZOC (see 7.2.1.a.2) for this check. If the Air ZOC search fails, the defender is surprised; if it succeeds, the defender is not surprised.

The detrimental effects of a naval air surprise are very significant:

- No land based aircraft can be called upon for help.
- Each ship can defend itself with its own anti-aircraft strength only; it cannot receive assistance from other units.
- In ports, the anti-aircraft gun strength is halved (rounded down).
- The air-to-air differential for each intercepting fighter is reduced by two (if an aircraft had +1, it now can only fire with -1). The opponent's differential is left unchanged. (That only affects CVs already present because land based aircraft cannot interfere, see above).
- The air-to-sea component of each attacking unit is doubled. If, with the naval air bonus, its air-to-sea strength exceeds 9, the surplus can be used to attack either the same ship again or a different ship. The attacker can wait, though, to see the result of the first battle before choosing the second target.

During a port attack, the defender can (unless surprised) use fighters stationed at the port's base.

A nation with a high radar level cannot be taken by surprise easily (see 13.6). When a neutral nation is attacked by a nation (or nations) that has (have) been at war for at least one month, the neutral nation is always taken by surprise (see 14.0).

### 7.2.2.8 Coastal Batteries

Any port can have a coastal battery installed. It is then part of the port. It cannot be destroyed; it can only be captured. A different type of coastal battery can be built as part of a fortress; such a battery will be destroyed if the fortress is destroyed. Coastal batteries have no effect on land units. The coastal battery fires once when enemy ships enter its hex. It has a strength of 1 to 9 and can either focus its strength on one ship or divide it between several.

When entering a port, a player can use both DDs and BCs to partially protect transport ships from enemy battery fire, in the following way: coastal batteries normally have the right of the first shot; if firing at transports, however, the coastal battery gives up the right of the first shot to the other side. It must withstand the fire of the escorting ships before it is allowed to fire. An "A" result is enough to suppress a coastal battery (negate its strength). Coastal batteries are not destroyed in combat. If a coastal battery is suppressed, it is not able to fire at all that month.



## 7.3 Land Movement Phase

The Active player now conducts all land activities.

### 7.3.1 Engineer Activity

During this movement phase, engineers can do construction. In order to avoid confusion, it is a good idea to conduct engineer work at the beginning of the movement phase, although engineer activities can be done at any time during the land movement phase. Engineers can move into battle hexes. If the attack frees the hex from enemy forces, the engineer activity already begun is successful, otherwise it was in vain.

Engineers can exercise the following abilities on map features or constructions:

#### a) Repair Single Blue Hits

If an engineer unit has two or more movement points left after reaching the destination hex, it can repair single hits. It costs an engineer unit two movement points to repair each single hit. Because this kind of repair takes place during movement, single hits in 2 different hexes can be repaired this way; of course, movement costs to enter each new hex must be paid for.

Alternatively, an engineer unit with enough MPs left can join a battle to repair single hits on map features or constructions there. In a battle hex an engineer unit counts against the stacking limit. If the attackers still occupy the battle hex after combat, the single hit is repaired. If the attackers retreat, the single hit is not repaired, all remaining engineer MPs are considered to have been used up in the process.

In the following paragraphs, the engineer either starts in or first moves to the destination hex and then spends the stated material there. In contrast to a single-hit repair, the engineer does not need movement points for the following procedures:

#### b) Repair Double Blue Hits:

By the engineer unit spending one point of material the double hit is repaired. Repairing the double hit ends that engineer's activities for that month. A double hit cannot be split into two single hits.

**Note: engineers cannot repair any red hits on land units. This can be done exclusively by the expenditure of RPs (see 7.1.3).**

#### c) Build forts and airbases:

Three points of material are spent. The fort or airbase that is under construction is placed upside down on the hex. At the start of the next month it will be considered finished and turned face-up.

#### d) Build radar stations:

The sequence of events is the same as that for forts and airbases, except that a radar station costs 4 points of material.

#### e) Build fortresses:

The method is again the same; however, fortresses without coastal batteries cost 6 points of material and take 6 months to be built. The engineers must stay there the entire time. Building progress is marked with the blue number markers. A fortress with a coastal battery costs 8 points of material and takes six months to build. The two additional points are to be paid during the last round of construction.

#### f) Convert railroad gauges

One engineer moving normally (not strategically) along a railroad converts the track in the hex(es) that it enters into the desired size, merely by using up its movement points. An engineer can join a battle hex to convert a railroad gauge there in the same way as described under single hit repair.

### 7.3.1.1 Restrictions on construction

Airbases cannot be constructed in mountains, swamps, deserts, mountain- forests, or forbidden areas (e.g., the Qatarr depression). Forts and fortresses cannot be constructed in swamps. Only one construction can be built in any one hex. Forts and fortresses can be built in cities (however, fortresses cannot be built in fortress cities). A "Maginot-type fortress" is what is built in a city; a standard fortress is what is built on other terrain.

### 7.3.1.2 Engineer Supply

During construction, the engineer unit must be in supply to make progress. If it is not supplied in some month, there is no construction progress during that month. Material needed for construction must be brought to the construction site for its use. Normal supply rules apply for moving material to a construction site. For instance, if a player plans to build something in Africa, the proper material must be moved there. In isolated areas that cannot be reached by rail, special supply-, material-, and RP- pools can be established.

### 7.3.1.3 Attacks on Constructions

If the enemy attacks the construction hex, the installation can be finished if the enemy attack fails. If the enemy occupies the hex after combat, all started installations are destroyed and the invested material is lost. Completed radar stations, forts, and fortresses cannot be captured. Therefore, if a radar station, fort or fortress hex is captured by the enemy Side, the construction is automatically destroyed. Completed airbases are not destroyed, but captured.

### 7.3.1.4 Aids for Engineers

No more than two engineers can help each other; two that do help each other must be in the same hex. If two engineers have one movement point left each, they can repair a single hit together. Two engineers helping each other reduce the construction time of a fortress to three months. If a hex contains more than one double hit, engineers up to the stacking limit of 3 can repair one double hit each at the same time.

## 7.3.2 Land Movement (Active Side)

Land units can move according to their **movement allowance** (the right-hand number on the counter). A cost in **movement points (MPs)** must be paid for every hex that is entered. The cost depends upon both the type of terrain in that hex and the weather prevailing there. (If a weather-zone border runs through a hex, the weather that is less favorable for any particular activity applies to that activity in that hex). The actual costs can be found on the movement costs/weather table. If a unit uses up its movement points, it cannot move again in that month. For instance, a unit with 6 movement points can move through 1 rough hex (2 MP), 2 clear (1 MP each) hexes, and an additional clear hex (1 MP) by crossing a river (+1 MP). If a unit does not have enough movement points to enter a certain hex, the unit cannot move into that hex.

The only exception is the "**always-one-hex**"- rule: A unit that has not yet moved at all can move **one** hex (except into terrain prohibited to that unit) and cease movement, even if it does not have enough movement

points to enter the hex normally. The unit is not allowed to do any other activities during that month (such as sabotage or hunt partisans). That is also true for hexes containing enemy low flying aircraft.

## 7.3.2.a Effects on Movement

A unit's ability to move is halved when it is out of supply. Normally, the costs are the same for all types of units. **Certain types of weather or terrain, however, are more favorable for certain types of units.** Russians are better equipped for extreme winter weather (blizzard) and, therefore, pay only 2 movement points for entering a clear hex in that type of weather. Cavalry and mountain infantry also move faster in certain terrain types.

**The terrain entry costs change with the weather (see movement cost/weather chart).** The costs to enter a clear hex are as follows: 1 point in clear weather, 2 points in rain, 3 points in mud, 2 points in winter, and 3 points in blizzard.

## 7.3.2.b Initiating Land Battles

**If a unit enters a hex that contains an enemy unit, it must stop and fight.** In such a case, a **battle vector marker** is placed in the hex (if there is not one there already), pointing at the side of the hex opposite that through which the unit entered. The orientation of the arrow indicates the main direction of the attack, i.e. the battle vector marker is pointing the same way the attacking unit moved. The involved units are taken from the map and placed into the box on the battle chart displaying the number of that battle vector marker. More units can later move into the battle hex, but the orientation of the battle vector marker is not changed. Each Side can place up to three land units inside the battle hex. After a unit joined a battle hex it is not allowed to leave it before combat ends.

**Note:** Movement points cannot be saved. Any points left at the end of a month are lost. Also, movement points cannot be transferred to other units. Jumping or skipping hexes while moving is not allowed. A move that causes a unit to initiate or join an attack by entering a hex containing enemy units cannot be retracted.

## 7.3.2.c Strategic Movement

### A Movement along a road or railroad

Movement through a hexside along a railroad or a road always costs the clear-terrain rate (for the weather in the hex entered), even if the hex entered actually contains more difficult terrain.

### B Strategic Movement

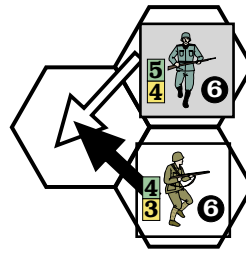
It is also possible to move along roads and railroads strategically. Strategic movement costs only half as much as regular movement. That means that a unit with 6 movement points can move (strategically) up to 12 hexes in clear weather. Strategic movement is not possible from, through, or into a hex within an enemy ZOC, even if it is occupied by a friendly unit. A double hit on a railroad or a single hit on a road makes strategic movement similarly impossible into, through, or out of the hex in which the road or railroad suffered the hit(s). Strategic movement is only allowed into, through, and out of friendly-controlled hexes.

## 7.3.2.d Blocks

There are certain moves that enable a unit of the Non-active Side to react into the path of a unit of the Active Side and force it into combat. Such a "block" combat is conducted just as any regular battle is. The Non-active unit is still considered the defender and so does not have to pay any supply. This reaction move results from the fact that units affect not only the hex they are in but also adjacent hexes in their ZOC. A move directly from a hex that is in the ZOC of an enemy unit into an empty hex that is in the ZOC of the same unit, without going through any intermediate hex, can be blocked by that unit. A move into an enemy ZOC during an invasion of an empty hex can be blocked by any unit exerting that ZOC. The non-moving player decides whether to block.

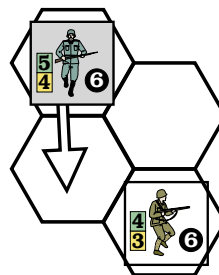
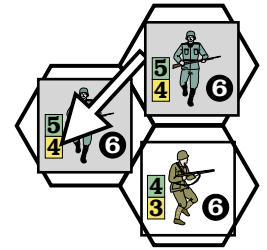
### Case studies of blocks:

A white arrow indicates a **move** and a black arrow a **block**.

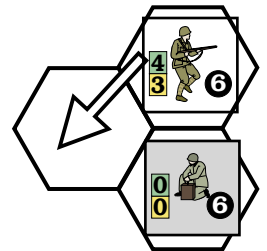


1. Block, because the German Infantry moves directly from an enemy ZOC into another, empty hex controlled by the same unit.

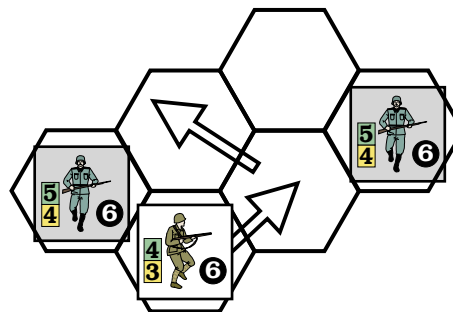
2. Not possible to block, because the hex being moved into is already occupied by a unit friendly to the moving unit.



3. No block, because the hex from which the unit is moving is not in the ZOC of the unit that wants to block.



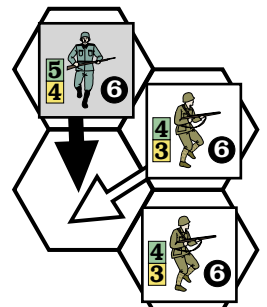
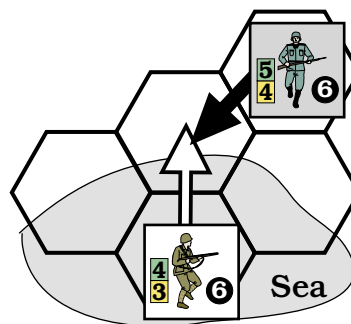
4. No block, because the engineer unit has no ZOC.



5. No block, because the hexes that the French Infantry moves from and to are not in the ZOC of the same enemy unit. Case study 5 shows a method of avoiding enemy blocks.

6. Possible to block, because the friendly ZOC of the second US infantry does not negate the enemy ZOC.

7. Possible to block, because the unit invades into an enemy ZOC.



Blocks are carried out by the Non-Active player. The decision whether to block must be made immediately, before the Active player decides whether to do anything further with the unit being moved.

If the move empowering a block has already caused or joined a battle (by moving onto a friendly unit already in the hex), the block can be used as a defender's option for reinforcing this battle. In case that a battle has been initiated by the attacker, a battle vector is placed. From the direction of the battle vector marker you can see if the move qualifies for a block. So in case of a battle the Non-Active player's decision if to block or not can be delayed until the active move is finished.

Units already engaged in battle cannot block.

The Active player can block the reserve movement (see 7.3.4) of the Non-active player. In that case, the Active player is still considered the attacker. Units advancing from tank battles can be blocked.

## ② 7.3.2.e Sabotage

Land units can have the same effect as tactical bombardment (see 7.3.5.b). If it is likely that an enemy will capture a hex soon, objects in the hex can be quickly destroyed beforehand. A land unit stationed in the hex can hit an object there by spending two movement points. (This is a kind of “scorched earth” warfare.)

For the effects of the hits, consult the hit effects table (7.3.5.b). No enemy supply can be destroyed by sabotage of friendly railroads or resources.

## ② 7.3.2.f The Use of Headquarters (HQs)

Headquarters represent the staff's leading formations. The staff's influence can be used in battles in the following way: If a HQ is in range of a battle, **one** attempt can be made to support one land unit in that battle. “In range” means that the HQ must be able to trace a supply-line into the battle hex (see 7.1.2). The player attempts to provide the support by rolling a D6; on a result equal to or less than the red number on the HQ counter, the support is successful. This red number is called the command level of the HQ. If the roll is successful, the unit's combat strength is increased by one: if it is attacking, the attack strength is increased; if it is defending, the defense strength is increased. If the HQ roll is higher than the indicated command level, the HQ fails to influence the combat. After this attempt the HQ is flipped face down, regardless of whether it was successful, to show that this HQ cannot give support again this month. It will be turned back during the next friendly reorganization-phase (see 7.11). More than one HQ can attempt to affect the same battle. The defender must make all the attempts at HQ support that it wants first, then the attacker.

A **tank HQ** can additionally move like a tank unit during the exploitation phase.

A **naval HQ** has the ability to additionally influence a naval battle: if successful, it increases the air component of a CV or the surface component of ships it is stacked with. This support is limited to a maximum of 5 friendly ships per successful HQ. The naval HQ is transported by any of the ships in the group, this is the “flagship”. If the flagship suffers any damage the HQ will immediately relocate to an unharmed friendly ship in the same group (HQ owner's choice). If no ship in the group remains unharmed, the HQ is eliminated. HQs are also able to take charge of reserve units (see 7.3.4).

## ② 7.3.3 Units Hunting Partisans

The occupying force can order units to fight partisans. To reach the hex where partisans are hunted, partisan hunters can use rail movement. Their land movement points are halved. Also, no hex where partisans are hunted is allowed to be at the front line or next to units that are an enemy of the partisan hunters. The hunters marked with an out of order-marker and afterwards cannot be used for any other mission. It does not even exert a ZOC - the lack of a ZOC represents the fact that the unit is not really where it is placed on the map but instead is occupied with roaming the territory hunting for partisans. The hex on which it is placed indicates nothing more than where it will return after having completed the “partisan sweep”. However, the unit does prevent partisan attacks in both its own hex and all adjacent hexes. If an enemy unit reaches a hex on or adjacent to the partisan hunter, the partisan hunt is immediately over. The marker is removed and the unit regains normal status immediately.

Another kind of partisan sweep is to move the land unit into a hex occupied by an enemy partisan division. No battle vector marker is placed, and no supply needs to be paid. A partisan hunter can hunt partisans only in the country the hunter is in - for example - to go hunting for partisans in Belgium is not allowed with a hunter currently positioned in France.

Combat resolution against the partisans is delayed until both Sides have finished their Action Segment and have reached the hunt partisan phase (9.1).

## ② 7.3.4 Reserve Movement by the Non-Active Side

### 7.3.4.1 Preparing for Reserve

The Active Side can place units that are not being otherwise used ‘in reserve’ by moving them into or next to a hex containing a HQ as long as the hex is not next to one containing an enemy land unit. The number in the center of each HQ indicates how many reserve units it can command. You may move more units adjacent to the HQ, however these additional units cannot be placed into Reserve until the end of the Exploitation Phase (7.5). These units can potentially be used in the Non Active Players Reaction Phase (7.3.4.2).

Units that already were in reserve at the beginning of the movement phase may now be marked with reserve markers.

These indicators they are available to move in this turns exploitation phase, - even if the HQ moves hereafter during the movement phase.

*Player's note: As reserve markers you can use any marker with nothing printed on the backside (Morsecode... or the reserve markers on the USA political phase chart (Cold Days in Hell). Place them on the reserve units. To prevent anyone from mistaking those markers for what they show topside make sure not to flip these markers over!*

### Penalties for Reserve

Units who are moved in reserve are not allowed to do anything else during their current turn's movement phase.

Units that are to move during the exploitation phase are not allowed to do anything else but move into reserve during the movement phase of the turn before and cannot move at all during the movement phase of the current turn.

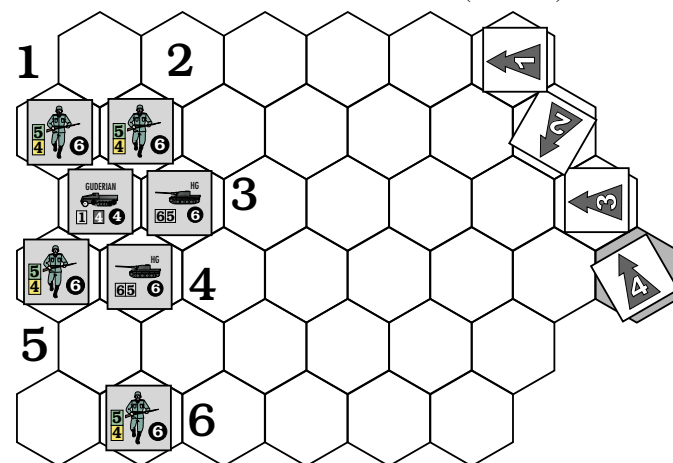
Reserve units still have a ZOC. If they move, block, or are attacked, however, they lose reserve status immediately. They also lose reserve status if the HQ they are subordinated to moves or is eliminated and they are not marked with a “reserve” marker.

An HQ under attack, can initiate reserve moves onto itself.

### 7.3.4.2. Non-active Side Reserve Movement

After the opponent has in turn become the Active Side and has finished moving, the Non-active Side can move units that were in reserve. They can be placed in a battle hex, if it is within their range (movement rating).

Reserve units are moved in order to place strong units in important battles. On their way, reserve units can move through enemy ZOCs, but **not through battle hexes**. If the reserves provoke a block (see 7.3.2.d), the Active player can block and so start another battle. The reserve unit will be considered as the defender (see 7.4.1).



*Example: The Allies conduct four land attacks in a front section near the German HQ Guderian. In its reserve segment the Axis, as the Non-active Side, can react to these attacks. The German HQ may*

take charge of four of its reserve units and chooses unit numbers 1 through 4. Unit 5 is not ready for reserve movement, because no battle hex is within its movement allowance and because the HQ has already exceeded its limit. Unit 6 is not in range of a HQ and is not eligible to use reserve movement. Unit 1 can reserve move into either battle 1 or battle 2, each of which is within the 6-hex range of its movement allowance. Unit 2 can reserve-move into battles 1, 2, or 3. Both German tank units (3 and 4) can also choose between battles 1, 2, and 3. None of the units shown can be moved into battle 4, because it is a forest hex and so more than 6 movement points are needed to reach it.

The HQ is not able to use its command level to increase the combat value of any unit, because it is not able to trace a supply line (maximum 5 hexes) to any of the battle hexes.

We now move forward to Germany's next turn's active movement phase. Unit 5 has not been moved and can now be marked with a reserve marker. It does not move in this movement phase. In Germany's next exploitation phase, it will be ready and able to move.

All reserves must be committed to battles during the Reaction phase. Committing them later to wait for the outcome of a tank battle and commit them after the active player has announced new tank battles is not allowed. There is one exception to this rule: If a tank battle has been announced against a formerly neutral country that is now surprised it is not possible to commit reserves to tanks battles with units of the surprised country (see 14.0). If during the pursuit of such a surprise tank battle units of an already active non surprised country are attacked, that country may move in any available reserves now. (Because the surprise rules hindered them to do so earlier) Example see 7.4.7 tank battles, at the end of the second example.

## ① 7.3.5 Air Movement by the Active Side

Now the Active player sets up his aircraft for land missions. Aircraft can fly to target hexes within the range of their movement allowance. After completing their mission, they can use their full range again, to return to a friendly airbase. Naturally, air movement is not affected by terrain. Any aircraft units that are not aborted and are in supply can fly missions, even if they flew in the non active Side's phase of that turn or have already been used in the active Side's naval phases of that turn.

### Possible Missions

- Combat Ground Support
- Tactical Bombardment
- Strategic Bombardment
- Airbase Attack
- Low-Flying Aircraft
- Air Transport
- Paratrooper Missions
- Escort / Interception
- Rebasing
- Air Sea Reaction by Non Active Side

The designation of such missions and the associated flying of aircraft to hexes occur now, but the execution of all such missions is delayed until the combat phase.

**When calculating the bombardment factors of more than one aircraft, add their factors first, then account for the effects of terrain and/or weather. This rule applies to all missions where aircraft may combine factors.**

*Example: The weather is mud, so aircraft have their bombardment factors halved. Four bombers conduct a combined tactical bombardment with factors 1, 3, 3, and 4 adding up to 11. This is halved to 5.5 and rounded down to 5.*

When counting several penalties to air units they are applied in the following order: Terrain, then weather, thereafter any specials.

## ① 7.3.5.a Combat Ground Support

Bombers, strategic bombers, and fighters with tactical factors can fly this mission. The tactical factor of an aircraft is indicated by the first (or only) number in the bottom left-hand corner of the unit counter. The aircraft are placed in existing battle hexes. An aircraft that has survived one round of air combat unharmed can add its tactical factors into the battle, up to the combat strength of the friendly front land unit involved (attack strength for the attacker, defense strength for the defender). The sequence of events is the same as that for shore bombardment. Only one aircraft per Side per battle round can be used.

## ① 7.3.5.b Tactical Bombardment

This mission can be conducted only by the Active player. For eligible targets, see the hit effect table, 7.3.5.b. A battle vector marker is placed (see 7.3.2.b). After one round of air-to-air combat, the surviving bombers prioritize the targets in the hex and bomb them. To do this, roll a D6 and consult the tactical bombardment table. The attackers can either combine their tactical bombardment factors or attack separately.

Targets must be declared before the attack. Cross-index the number of available tactical bombardment factors with the result of the die roll. The numbers on the tactical bombardment table show the number of hits. The die roll result is modified by one in the attacker's favor, if the defender did not intercept the mission with fighters.

Surplus hits can be spread onto other targets in the same hex. The list below explains the use of the **hit-effects table** by showing the effect of some definite numbers of hits. All hits are cumulative. If not stated, no additional hits may be scored on a target.

**Railroad:** One hit means no rail movement, two hits means no strategic movement plus one point of material is needed for repairs. Three hits mean the same as two, plus one point of supply, taken from the National Pool, is destroyed. A double hit cancels rail movement of units. The functioning of a railroad as a supply line is not at all affected by hits.

*Designer's Note: If a railroad is attacked, not only the physical track is attacked, but also trains and stations not represented in this game. If the attacker scores three hits, those abstracted features and the supply stored there are affected. As there are no supply counters visible in the attacked railroad hex, 1 point of supply has to be subtracted from the National Pool (see 3.7).*

**Road:** 1 hit means no strategic movement.

**Supply / material** can be bombed directly only when it is actually present in a hex. One point of supply per hit is destroyed.

**Airbases:** Every hit reduces the airbase's capacity by one. Three hits destroy it completely.

**Ports:** Five hits make a major port (no capacity number) unusable; fewer have no immediate effect, but are recorded for future supplementation by marking them. An unusable major port must have all its hits repaired to be usable again. It is possible to accumulate 'extra' hits on a major port (beyond the necessary 5) so that engineers will need longer to get the port back to usability. It is not possible to accumulate more than 10 hits on a major port.

Other ports: Every hit reduces the capacity by one. As soon as the accumulated hits reach the printed capacity the port is destroyed.

**Radar stations:** Two hits destroy it; fewer have no effect. A destroyed radar station is removed from the map and placed into the force pools. Additionally, a radar station loses its ability to conduct a search on its own as long as it is under attack, except that it can conduct a search for the attacking aircraft. This is different from the situation for Air ZOCs, which are immediately negated by airbase attacks (see 7.3.5.d).



**Bridges:** If railroads or roads cross rivers on bridges, the river's normal effect on movement is ignored. Railroads or roads are always considered to cross a river, even if this is not perfectly displayed on the map. If either a road next to a river hexside receives a hit, or a railroad next to a river hexside receives 2 hits, the bridge is destroyed. Then the river again becomes an obstacle. It costs one extra point of material to repair the railroad.

## ② 7.3.5.c Strategic Bombardment

This mission can be conducted only by the Active player. For possible targets, see below. A battle vector marker is placed (see 7.3.2.b). After one combat round, surviving bombers declare their priority of targets in the hex and bomb them. The strategic bombardment factors are used, not the tactical. The strategic bombardment strength is the second number in the bottom left-hand corner of the unit counter. Fighters, carrier aircraft, and even some bombers have no strategic bombardment strength. Surplus hits can be placed on other strategic targets in the same hex.

The list below shows the effects of hits (also stated in the hit effects table). Supply, material and ports: see 7.3.5.b.

**Factories:** Every hit destroys one point of the factory's monthly production. The first three hits destroy replacements, the fourth affects supply, and the fifth eliminates material. An "E" destroys the factory completely. If supplies or material are bombed, they are destroyed with the first hit. An advanced factory cannot be eliminated through strategic bombing (except by a nuclear bomb). The bombed production, however, is always destroyed, even if the total factory capacity of a country has not been fully used because of a shortage of resources. If an upgraded factory receives an "E" result it is downgraded to a regular factory.

*Designer's Note: This rule ensures that a player cannot weasel his way out by saying that the production is done in a factory other than the one that has been bombed.*

Bombed factories produce less, or even nothing at all, depending on the number of hits.

**Resources:** Every hit destroys one resource point for one month. Another hit on the same resource destroys one point of material, two more hits destroy one supply point.

**RP (Replacement) cities:** Every hit destroys one point of RP production for the month. RP Production of cities that have not been activated yet (12.2) cannot be destroyed by strategic bombardment.

## ① 7.3.5.d Airbase Attack

Only the Active Side can conduct this mission. The target is an airbase containing enemy aircraft. A battle vector marker is placed (see 7.3.2.b). All aircraft stationed on the airbase are possible targets. They cannot fly missions during this round. Fighters stationed on the attacked airbase can intercept the attack and start an air combat. Also, fighters from other airbases in range can join in and help defend. The Air ZOC of the attacked air units is immediately negated during and as a result of the airbase attack. They do not make an Air ZOC search roll against the attacking air force. There can be Air ZOC searches by aircraft from bases not under attack. The Non-active Side can conduct Air ZOC searches with them after the Active player has declared all his airbase attacks.

After the air combat is over, the airbase is bombed by the surviving attackers according to the tactical bombardment table (see 7.3.5.b). One hit produces an "A", two hits a "D", and three hits an "E". Hits previously received must be taken into account (see 3.1). The attacker must specify which aircraft are attacked by which bombers. If, during the bombardment, the attacker scores more hits on a targeted aircraft than the number necessary to destroy it, all such extra hits can be passed on either to other aircraft there (targeted or not), or to a railroad, or to any other tactical target in the hex, as the attacker chooses - the only restriction is that all aircraft on an airbase must be destroyed before any extra hits can be passed on to the airbase itself.

## 7.3.5.e Low-Flying Aircraft

Any aircraft can fly this mission, which enables that aircraft to fly to a hex within range without placing a battle vector marker. These missions cost no supply. The aircraft remain in that hex until the beginning of the next air phase in which they belong to the Active Side, at which point they return to an airbase (see 7.3.5) (if they cannot do so, they are removed). Starting with the aircraft's arrival, all enemy land units entering or already in the hex lose two movement points. If low flying aircraft are intercepted by enemy fighters, either when flying to their mission hex, when in their mission, or when returning, a battle vector marker must be placed by the Active Side and must be paid for by the intercepting side.

Low-flying aircraft cannot be used for the rest of the month of their return.

*Example: The British Empire executes low-flying aircraft missions to a hex in France in July 44. The aircraft must remain at this place of action until the Allies are Active again. If the Axis enters the hex during its land movement phase, each land unit has to pay 2 additional movement points; if it cannot do so, it cannot enter. In August 44, the BE aircraft return to an airbase and cannot be used for another active mission that month.*

## ② 7.3.5.f Air Transport

Replacements, supply, material, paratroopers, and mountain infantry can be transported by air, in bombers or in strategic bombers, to hexes within the bombers' ranges. These aircraft cannot carry any bombs or perform any combat missions. A bomber (12 MPs) can carry one point of load (regardless of whether it has any strategic bombardment factor); a strategic bomber (20 MPs) can carry two points of load. Neither CVs nor fighters can be used for air transport. Paratroopers and mountain infantry cost one point of load for every point of their attack strength. Paratroopers are able to be split up into smaller units for air transport. If there are not enough aircraft available for transport, a unit can detach RPs as if taking one or more hits on purpose (see 7.2.1.b). If either a paratrooper or mountain infantry unit detaches RPs in order to be transported, the RPs are credited to the appropriate National Pool. Paratrooper units can be dropped into any hex; mountain infantry cannot. In order to transport a mountain infantry unit the aircraft must terminate its flight on a friendly airbase. If an aircraft carrying a non-personnel load receives one or more hits from anti-aircraft artillery and/or gets involved in air combat, its load may be damaged. If the aircraft gets an "A", the load will not reach its destination and must return with the aircraft to the airbase from which it started. If the aircraft receives an "E" or a "D", the load is destroyed.

Supply (but not material or RPs) can also be dropped. If a player tries to drop supply without an airbase the supply might either be captured by the enemy or be destroyed. Paratroopers that took casualties can be repaired by air-dropping smaller Para units into their hex.

## ② 7.3.5.g Paratrooper Missions

If an aircraft carrying a paratrooper unit receives an anti-aircraft artillery hit, the number (see 7.4.2.2) indicates not thwarted bombardment factors but instead hits received by the paratroopers. Remember, bombers lose their bombardment capability when transporting.

Paratroopers must attack after landing. Occupied hexes have defenders. Unoccupied hexes defend with strength 0 (see 7.2.1.j). Aside from that, the sequence of events is the same as in normal land combat. If paratroopers are dropped onto a fortress or fort, they fight for one round without suffering the terrain's disadvantages. If, in the first round, the paratroopers succeed with an "R" against the defenders, the fortress or fort is destroyed. Otherwise, the terrain bonus comes back into effect starting with the second round. A paratrooper mission into an enemy ZOC does not trigger a right to block. A battle vector marker must always be placed for a paratrooper mission in order to make reserve movement possible for the defender.

A paratrooper unit can be broken down into smaller units. For instance, one 4-4-4 paratrooper unit can split into two 2-2-4 units.

### ① 7.3.5.h Escort/Interception

All air missions can be either escorted or intercepted by fighters in range. It is not necessary to distinguish between escorts and interceptors. All fighters of one Side attack enemy bombers as well as protect their own. If there are no fighters in the hex there is no air-to-air combat. Bombers do not fight each other.

### ① 7.3.5.i Rebasing

Each aircraft that has flown no mission during the air movement segment can now fly double its standard range to an airbase. This 'double-range-rebase' counts as its air mission for this segment.

### ① 7.3.5.j Combination of Missions

Several different Air missions by different aircraft against the same hex can be combined. Both strategic and tactical bombardment missions can be flown against the same hex. Only one battle vector marker is placed and only one point of supply is needed for all attacks against the same hex. In the same way, attacks on airbases can be combined with ground support. There are a lot of combinations possible- even executing more than two missions against the same hex may be considered. The Active Side must clearly specify which aircraft are conducting which missions against which targets (and the priority among those missions) before any die is rolled, in order to enforce the desired specification. No aircraft can conduct more than one air mission at the same time.

### ① 7.3.6 Air/Sea Reaction by the Non-active Side

The Non-active Side can conduct only sea, ground support, and escort/-interception missions. The Non-active Side can only join only in battles initiated by the enemy and/or try to intercept low-flying aircraft.

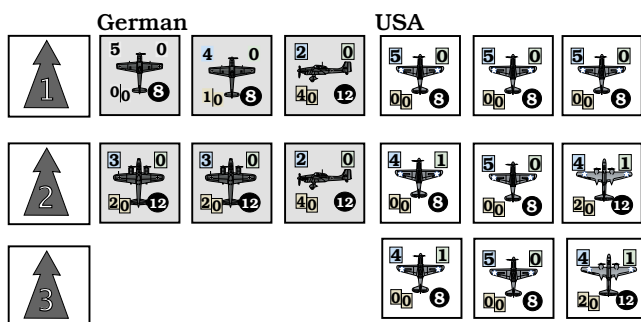
The Non-active Side does not allocate any aircraft until after the Active Side has specified all of its air missions except its counter-interception missions and double-range rebases.

### ① 7.3.7 Interception Segment (Active Side)

The Active Side can hold back either all or part of its fighters, in order to react to actions of the Non-active Side. The Active Side is not allowed to place fighters in battle hexes that already contain friendly aircraft. In other words, using this segment to reinforce aircraft already engaged is not allowed. The Active Side can fly fighters only into battle hexes containing only enemy aircraft.

*Designer's note: This rule has been instituted in order to keep the Non-active Side from flying aircraft risk-free into enemy battle hexes empty of enemy aircraft.*

Bombers cannot be placed during this segment. After the Active Side has finished placing all the fighters desired, no more air movement by either Side is allowed before combat.



**Example:** The USA has reacted to Axis air missions by placing fighters into battle 1 and fighters and a bomber into battle 2. In battle 3, the USA supports its ground troops. The Axis now conducts its interception segment as follows: Fighters are placed into battle 3. The Axis is not allowed to reinforce battles 1 and 2.

### 7.3.8 "A" Counter Flip Active Side

After (but only after) the Active Side has used all its aircraft, it can start repairing aborted aircraft, (flip counters upside down free of charge) but not any aircraft or ship aborted within the current active Action Segment.

### ① 7.4 Combat Phase

At this point, land, air, and naval combats start.

#### Order of Combat

- 1 Air missions (including CVs)
- 2 Tank battles
- 3 Other land battles

Following this Order of Combat, the attacker chooses the order in which the battles are fought. Once a battle vector marker has been selected, all combat within that battle is conducted (in rounds) until that battle has been resolved, before going on to the selection of another battle vector marker. Within an individual battle, combat follows this basic sequence:

- 1 Air-to-Air Combat
- 2 Air-to-Sea Combat
- 3 Surface Naval Combat
- 4 Land Tank Combat
- 5 Other Land Combat

### ① 7.4.1 Attacking Force Supply

Basic supply is sufficient for defending units, but the attacker's (Active player's) supply needs are significantly higher. He will usually spend one point of attack supply for every battle vector marker placed. The Active player is always considered to be the attacker, regardless of who initiates the battle.

If the attacker attacks without spending attack supply, the strength of all attacking units is reduced by half - even artillery, aircraft, and ships. Fractions are rounded down by unit.

Exception: the Non-active Side must pay one point of supply for battles involving its naval units.

*Designer's Note: The fact that in land battles only the attacker, not the defender, has to spend supply is a significant difference from naval combat (see 7.2.2.0).*

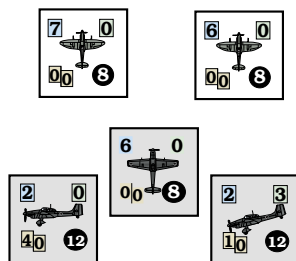
**Special Case:** One point of supply, **paid immediately**, is sufficient to provide attack supply and basic supply to any one unit (but at most one worldwide) which would otherwise be out of supply (see Morsecode Tutorial battle 6, 7.1.2.2).

### ① 7.4.2 Air Combat Segment

#### 7.4.2.1 Air to Air Combat

**Only two rounds of air-to-air combat are executed in any one battle.** During the first round, only the fighters battle each other, according to their air-to-air strengths. If one side has more fighters than the other, the surplus fighters can be used against other enemy fighters in any order their player wishes. The air-to-air rating is the number on the top left-hand corner of the unit counter. The difference in strength between attacker and defender, the **air combat differential**, is now determined. Two D6 are rolled, and the air combat results table (7.4.2.1) is consulted. All fighter combat by both Sides within one battle happens simultaneously. Pro forma, the Active side rolls first and the Non-Active side rolls second. The combat results are applied after the round of fighter combat is over.

During the second round of air combat for the current battle, fighters that have survived the fighter round of air combat unharmed 'take care' of enemy bombers. Fighters can engage bombers in any combination they choose. Bombers are not allowed to support each other. Bombers that are not under attack do not take part in the air combat. Each target can be hit more than once, but each aircraft can fire only once.



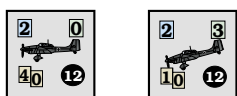
**Example:** Two British fighters, strength 7 and strength 6, are attacking a German group of three: one strength 6 fighter and two strength 2 bombers. First, the fighters battle each other. Air combat differentials: 7 minus 6 equals +1 for the British strength 7 fighter, 6 minus 7 results in -1 for the German.

The second British fighter fires with a 0 differential. The air combat table is consulted and two D6's are rolled. The British rolls are 7 = 'A' and 6 = 'A', added up to 'D'. Rolling a 3 the German scores a 'D' against the British strength 7 fighter.

Now, the surviving British strength 6 fighter takes on one German bomber. The German naval bomber can neither be attacked nor help its companion.



The air combat differential is 6-2 = +4 for the British and 2-6 = -4 for the German. Rolling a 2 produces an 'E' against the German bomber. The German hits nothing by rolling a 6. The remaining German bomber may continue on its mission.



After this second round of combat, all air units that have survived the air battle unharmed can continue on their missions.

## ① 7.4.2.2 Anti-Aircraft Artillery

If an air combat is executed over a city, one enemy bomber that has survived the air combat can now be fired upon by anti-aircraft guns located in the city, by consulting the anti-air table. The strength of the city's anti-aircraft artillery is displayed on the map. (See also anti-air fire of ships, 7.2.2.3). A city's anti-aircraft strength can target any one enemy bomber surviving over that city. Fighters flying on interception / escort missions cannot be targeted. A D6 is rolled and cross indexed with the strength of the anti-aircraft. The results indicate the number of thwarted bombardment factors. Numbers combined with letters „A“ or „D“ abort (respectively, damage) the targeted aircraft. The targeted aircraft absorbs any thwarted factors first.

If more bombing factors are thwarted than the target has, the surplus factors are scored on other surviving bombers of that same Side.

## ① 7.4.2.3 Air Missions

After both air-to-air combat and anti-aircraft fire have been resolved and implemented, air missions are conducted. Air missions interacting with land combat (e.g. combat ground support) are executed together with the land battles.

## ② 7.4.3 Naval Combat Segment

### 7.4.3.1 Air-to-sea Combat

See 7.2.2.3

### 7.4.3.4 Surface Combat

See 7.2.2.4

**Note:** Each Naval combat not caused by a search roll ends after only one battle round.

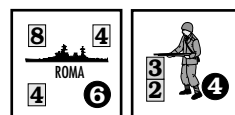
**Note:** All interception battles are conducted during the naval phase (see 7.2.2.b).

## ② 7.4.3.5 Shore Bombardment Procedure

Only one ship can be used for assistance in each of the battle's combat rounds. It does not have to be the same ship in the every combat round. Only the ship's shore bombardment factors left after negative modifications (due to weather and/or terrain) are taken into account. In the weather effects chart the modifiers can be found under the

category **land bombardment factors**; for terrain, see **air/shore**. Shore bombardment factors have the same weather and terrain modifications which apply to the land bombardment factors of bombers.

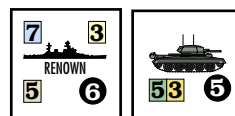
Furthermore, the supporting shore bombardment factors can never exceed the combat strength (attacking unit's attack strength, defending unit's defense strength) of the unit(s) that they are assisting. Thus you cannot provide support for a unit with a defense strength of 0 (zero). For calculating the maximum shore bombardment factors allowed, the effects of hits, and of terrain and/or weather on the land unit's combat strength have to be taken into consideration. Although the combat strength of a land unit can be increased, the shore bombardment factors supporting it cannot.



**Example 1:** The Italians are defending a coastal hex with a 3-2-4 infantry that is being assisted by a BC with a shore bombardment strength of 4. The terrain is rough, the weather is

clear. Consult the terrain combat effects chart (7.4.4.4). Because of the terrain the defense strength is raised to 3. Nevertheless, the BC can only use 2 factors, because the unmodified defense strength of the Italian infantry is only 2 and the shore bombardment factors must never be increased above the land unit's pre-bonus level (after any reductions - the latter are applied first). The modified combat strength of Italy is 5.

We now assume that the Italian infantry took one hit in the first combat round. The combat continues, with the infantry's defense strength decreased to 1 for the second round. It is raised to 2 by the terrain. The Roma can now, however, spend only one shore bombardment factor for support, so the modified combat strength for Italy has decreased to 3 in the second combat round.



**Example 2:** The British Empire attacks with a 5-3-5 tank and is supported by a BC having a shore bombardment strength of three. The weather is mud, the terrain is Bocage. The British tank

unit's attack strength is decreased by 3 points, 2 for the terrain and 1 for the weather, to a final strength of 2. Hence, the BC's usable shore bombardment factor cannot be more than 2. The three it has are modified by the weather. The weather effects chart states, "land bombardment factors x 1/2 for mud". This reduction also applies to shore bombardment.  $3 \times 1/2 = 1,5$  rounded down to 1. This 1 can be added to the attack strength of the tank. The final attack strength of the tank unit is 3.

## ① 7.4.4 Ground Combat Segment

### 7.4.4.1 Land Combat

The Active Side selects the order in which ground combat will be resolved. Once a battle vector marker has been selected, ground combat within that hex is conducted in rounds until that battle has been resolved, before going on to the selection of another battle vector marker. After the battle is over all surviving unit are placed back onto the map and the battle vector marker is relocated to the battle chart.

Before each round, the attacker secretly selects a front unit for that round, then the defender selects and displays a front unit. Next the attacker displays the selected front unit. Then the defense strength of the Non-active Side's front unit is subtracted from the attack strength of the Active Side's front unit. The result is called the land combat differential.

**Example:** A defense strength of 4 subtracted from an attack strength of 6 produces a combat differential of +2.

Now, the attacker rolls a D6. The result is looked up in the land combat chart. The first number displayed indicates the number of hits taken by the attacker; the second the number of hits taken by the defender.

Red hit markers showing the number of hits taken are placed below the damaged unit. If the number of hits equals the points of defense strength, the unit is eliminated. Hits that have been received are subtracted from both the attack and defense strength.

Example: A 5-4-6 Infantry with 2 hits has an attack strength of 3 and a defense strength of 2 left.

## ① 7.4.4.2 Retreats

An “R” after a hits result indicates that all of that Side’s surviving units must retreat. At the owning Side’s choice, however, those units can retreat in different legal directions. Exception: if one of the player’s units voluntarily takes an additional hit, the ‘R’ is cancelled. After each round in which neither Side was forced to obey an uncanceled ‘R’ result, first the attacker, then the defender must be asked whether he wants to retreat voluntarily. If the attacker decides to retreat, the defender cannot retreat. If one Side has all its land units eliminated during a round, all ‘R’ results from that round are cancelled. For how to conduct a retreat, see 7.4.4.5.

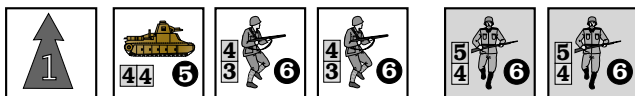
“R” Results on Fortifications An “R” result, against defenders in a fort or fortress destroys the fort or fortress, regardless of whether the defenders obey the “R” result or take an additional hit.

*Designer’s note: This procedure simulates the results of artillery fire or bombardment against fortifications. There is no extra table for this purpose.*

## 7.4.4.3 Multiple Combat Rounds

There may be several rounds in one battle; each battle lasts until the units of one Side retreat or are eliminated. After the front units have been selected, each Side simultaneously lines up all its other units behind its front unit, then simultaneously reveal them. A new front unit can be selected at the beginning of each round, by swapping the positions of that unit and the former front unit; the order of the other units in the line may not be changed. Units behind the front unit do not strengthen the fighting unit by any means, except that one artillery unit that is not the front unit can add its combat value to that of the front unit. If a Side receives more hits than the front unit can absorb, surplus hits are passed on to the next unit in line. (Keep in mind that a unit that has suffered as many hits as its defense strength is reduced to defense strength zero and that way is immediately eliminated). Surplus hits cannot be scored on supporting ships and aircraft. If there are no land units in the battle hex to take surplus hits, the surplus hits have no effect. A zero-strength unit generated by a paratroop or invasion is not eliminated until it has taken a hit.

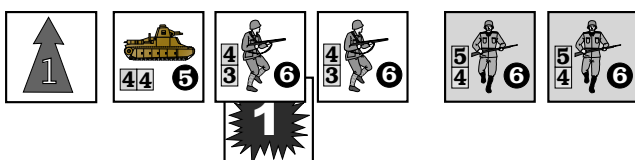
### Example



### Combat Round 1

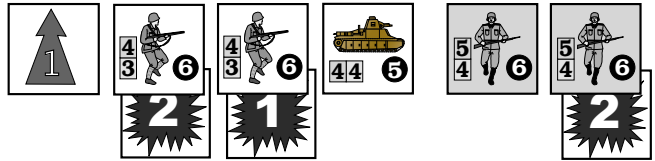
Two 5-4-6 German infantry attack two 4-3-6 French infantry and a 4-4-5 French tank in a clear hex.

Battle vector marker Number 1 is placed in the hex. The units are taken away from the map and put into the corresponding box on the battle chart. The front 5-4-6 German unit compares its attack strength of 5 with the front French unit’s defense strength of 3, yielding a +2 differential. The German player rolls a 4, which means that the French infantry receives one hit (looked up in the land combat chart). Neither Side retreats. Because one of the defending units received a hit, its defense strength is now only 2, and its attack strength is reduced to 3. The French player exchanges the positions of his two infantry so that the differential is still +2.



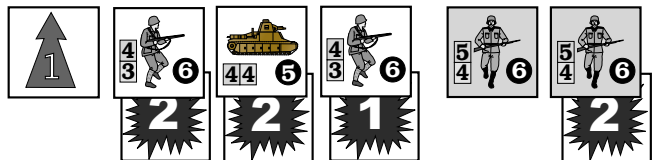
### Combat Round 2

In the second round, the German player rolls a 2. This means 2 hits on each Side. For the 3rd round, the undamaged units are fighting each other. The combat differential changes to +1.



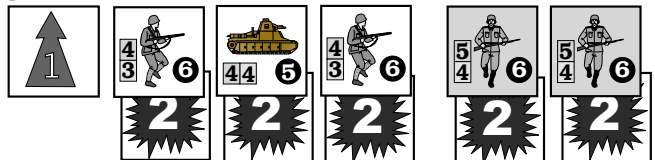
### Combat Round 3

The German rolls a 6; this means that the French unit receives one hit and an “R”, so the French are told to retreat. The French player, however, is determined to stand his ground and decides to take a second hit instead. For the 4th round, the French player moves his less damaged infantry up front. The differential is now +3.



### Combat Round 4

A 1 is rolled and produces one hit on the French and two hits on the German. This changes the combat differential to +2. No change of positions.



### Combat Round 5

The next number rolled is a 3. The French has to take one hit and is eliminated. Germany has to take one hit and is instructed to retreat. The German player decides to do so, because otherwise his infantry would be eliminated. Also, his other infantry is in bad condition.

## 7.4.4.4 Terrain Effects on Combat

In addition to the effects of the weather being experienced in the hex that a unit is in (see 6.2.1), the type of terrain in that hex also modifies its combat strength. Note: Modifiers for swamps, rivers, and channel intensive are to be ignored in Winter and Blizzard because those features will be frozen (see 6.2.1) All terrain modifiers are listed in the **terrain combat effects** chart and are explained as follows, in alphabetical order:

**Air/shore (-1, 1/2)** refers to restrictions on the tactical and strategic bombardment factors of aircraft and on the shore bombardment factors of ships. These restrictions affect both attacker and defender.

**A fortress hexside** (not mentioned in the terrain effects chart) The hex sides with the fortress lines printed on them function as a fortress; the other hexsides in that same hex lacking the fortress lines are of the type printed.

**Arm (-1, -2, -3)** means that, a tank unit suffers degraded performance because of the current terrain and has its combat strength decreased by either 1, 2 or 3 points. This applies to both attacker and defender.

**Artillery, no (no Art.)** means that no artillery unit can support a battle in that terrain (sand, mountain, swamp).

### Attacker (Attack penalties)

- Units attacking across a river have their attack factors reduced by one.
- Units attacking on mountain terrain have their attack strength halved (exception: Mountain Infantry, see below).
- Bocage is a special terrain type in Normandy, France. It consists of hedgerows so thick that it produces serious problems for tanks, resulting in a -2 to the combat factor of each tank unit in Bocage terrain.



**Channel Intensive** -2 Arm, +1 other Defenders.

**Defender +1** means that, in each combat round, the front defending unit is treated as having one additional defense factor (minor city, fort, rough, forest).

**Defender ignores retreats** means that the defender can disobey an 'R' without having to pay an extra hit.

**Defender, other (1+, +2, +3)** means that all defending units of any type other than the one(s) specifically mentioned are treated as having that many additional defensive factors.

**Japan + 1** means that Japanese units in hexes of that terrain type are treated as having one additional offensive factor and one additional defensive factor.

**Mountain infantry units** in the mountains attack with normal attack strength and defend with a +1 advantage. Mountain infantry in rough, glacier, and mountain- forest terrain benefits from a +1 bonus to both attack and defense strength.

**Straits hexside** this disadvantage for the attacker always applies if a straits hexside (black double arrow) is defended by one or more enemy units. Marines suffer only a -2 attack penalty across a straits hex side. If there are no defenders present, land units simply move across, paying two extra movement points.

**Terrain, other in hex** if attacking minor cities, the attacker has to apply the modifier of the terrain the city is built on.

Any modifier for terrain will always be applied before the weather modifier.

**Example:** A bomber with a tactical bombardment strength of 3 is used for an attack on a rough hex in mud. First one factor is subtracted because of the rough terrain, then the remaining bombardment strength is divided by two because of the weather. So in the end, there is one bombardment factor left for use.

Fractions are retained until it is time to round. The combat factor is always rounded down just before it is time to look at a table or to calculate a combat differential. If the order had been weather modification before terrain modification, no factor would have been left in the example above.

## Cumulative Factors

All effects are cumulative. That means, that, if more than one modifying factor exists within one hex, you have to add up all modifiers.

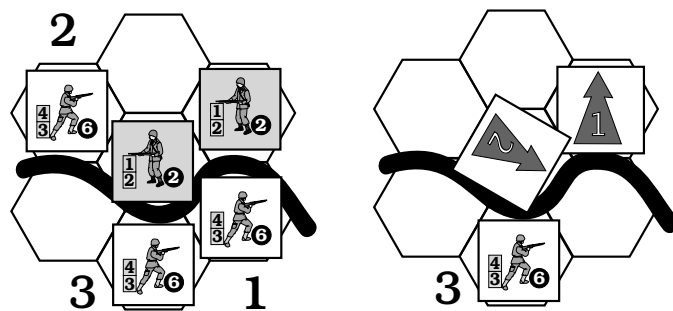
Note: Forts and fortresses add their strength to the terrain.

Exception: A Maginot-type fortress with anti-air artillery and coastal battery, when built in a city, replaces (rather than adds to) the original modifiers of the city. The strength of both the coastal battery and the anti-aircraft artillery for such a city is that of the fortress, not that of the underlying city. If the fortress is destroyed, the modifiers of the city come into effect again.

### Examples demonstrating cumulative factors:

1. Bastia is a minor city on Corsica, located in a rough hex. The defender gets a +1 terrain bonus for the city and another +1 bonus for the rough terrain, for a total of +2.
2. A fortress city with a fort has a total bonus of +4 for the defender.
3. A fort in rough terrain produces a total defense bonus of +2, all factors added together.

**Example (below):** US infantry '1' attacks in battle 1 across a river and therefore has its attack strength reduced to 3. US infantry '2' is not attacking across the river and so suffers no decrease of its attack strength.



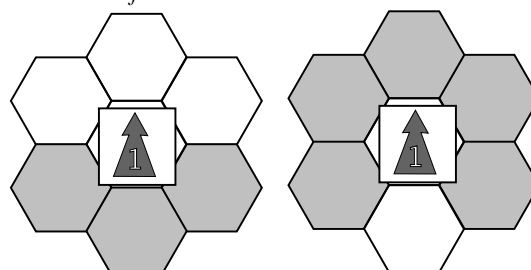
Once the direction of the battle vector marker has been determined other units can be added. If US infantry '3' wishes to join battle 2 it must attack across the river. To show this disadvantage the unit is given a blue 1 marker for the duration of the combat.

**Designer's Note:** This type of marker is used to distinguish between units attacking across a river and those that are not doing so.

## ① 7.4.4.5 Retreat after Combat

Whenever a Side obeys an 'R' result or voluntarily retreats, and more than one unit is retreating, keep in mind that retreating units are allowed to move into different hexes. A retreat means that all units of one Side that were involved in the battle have to retreat -no unit of that Side is allowed to remain in the battle hex- but they do not all have to retreat together to the same place. Units cannot retreat through enemy units. In particular, if a battle vector marker is placed in a hex, there still exists a front line that divides that battle hex. No unit is allowed to 'retreat' across that front line and hence 'through' enemy units.

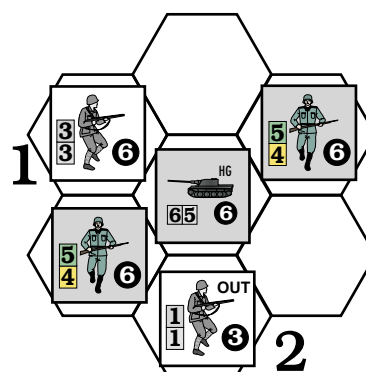
**Player's Note:** Once a main attacking direction is defined, other units can join the combat. After a lot of combats it may happen that nobody remembers where the units came from. Therefore, retreat directions are defined by the main attacking direction distinguishing between the attacker and the defender.



Attacker Retreats

Defender Retreats

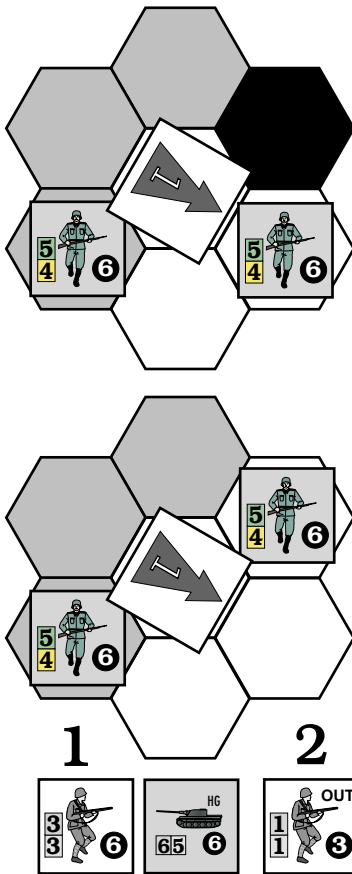
Units can retreat onto the grey hexes. Retreats are not allowed onto the white hexes. In other words, retreats through the enemy front line are strictly forbidden.



**Special case:** If two groups of units from the same Side are separated from each other by a group of enemy units, units from one friendly group are not allowed to 'beam over' to the other group across the front line dividing the battle hex. When two groups from the same Side are separated by an enemy front, they can join the same battle hex, but the enemy forces must be placed between the two friendly groups to keep them separated.

**Example:** French unit '2' is out of supply and needs to become connected to the French forces so that it can stock up on supply again. If attacking alone, it almost certainly would be eliminated, because of the combat odds.





French infantry '1' attacks in an (unwise) attempt to establish a connection to unit '2'. The main direction of battle 1 is defined by that attack and is indicated by the direction of the arrow on the battle vector marker. Now French unit '2' joins the battle. To show, on the battle chart, that the units are separated by an enemy front, place the German tank unit between them. Because the French units have no chance to win that battle, each will have to retreat after combat (if it is not eliminated). Unit '2' cannot retreat into the grey hexes, as unit '1' does, because it cannot retreat "through" the German unit. Hence there never was any chance at all for the French units to connect.

If the German infantry had been one hex south of the example position, French unit '2' would have been prohibited from retreating into either the black hex or the grey hexes, because of the front line.

Furthermore, retreat is not allowed into any hex occupied (at the instant of the retreat) by enemy units, and hence, in particular into a battle hex not yet resolved. Finally, no unit can enter the same hex twice during the course of its retreat.

A retreat can be conducted into any adjacent hex; however, retreat directions have to be chosen according to the following priorities:

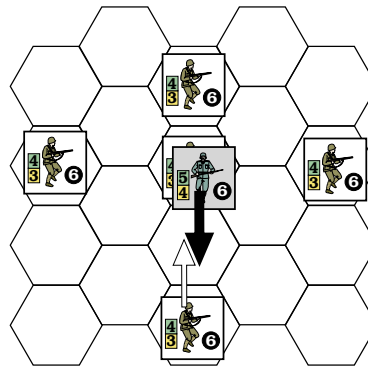
- 1) hex neither in enemy ZOC nor violating stacking limits;
- 2) hex not in enemy ZOC but violating stacking limits;
- 3) friendly occupied hex in enemy ZOC and not causing overstacking;
- 4) friendly occupied hex in enemy ZOC and causing overstacking
- 5) hex in enemy ZOC, not friendly-occupied.

Ground units that retreat form up into 'retreat groups' in whatever combination the owning player desires; each retreat group stays together throughout its retreat (except for possibly dropping off units when overstacking requires continuation of a retreat) and completes its retreat before the next retreat group starts retreating. Each aircraft (whether fighter or bomber) that was supporting the Side that is now retreating must choose one retreating unit and retreat along with it throughout the retreat process, rather than returning to an airbase. If a retreat causes over-stacking in a hex, the retreat group drops off as many units as will fit into that hex (owner's choice) and then continues to retreat according to above priorities until stacking limits are met, if possible; any unit that cannot find a way to meet stacking limits is eliminated. Aircraft have stacking limits only when returning to an airbase.

#### ① 7.4.4.6 Counter Attacks (Reaction and follow-up battles)

A group that retreats into an enemy ZOC that is not occupied by a friendly unit (case 5, above) can be forced into an immediate battle. If the retreat group belongs to the Active Side, all (or some) enemy units that exert a ZOC on that hex can force a 'reaction' battle by immediately moving into that hex. If the retreat group belongs instead to the Non-active Side, the Active Side can force a 'follow-up' battle in the same manner. Such a battle is resolved in the usual way. **Keep in mind that the Active Side is always considered the attacking**

**Side.** Because units can retreat after an attack as well as a defense, in a reaction battle the retreat group is the attacker; in a follow-up battle it is the defender.



**Example:** A German infantry unit has to retreat from a battle with a US infantry unit. The battle hex is surrounded by enemy ZOCs, so the infantry has no alternative to retreating into an enemy ZOC. Now the US infantry involved can initiate a reaction battle, but only by doing so immediately.

#### 7.4.4.7 Tank Battles

The Active Side can place a tank battle vector marker in any or all battle hexes that contain friendly tanks that did not use up all their movement points in the process of entering the battle hex. If a tank is victorious in such a battle it can follow its opponent and cause one or more new battles (called 'pursuit' battles). Also, in tank battles the Active Side can raise its land unit stacking limit to 5 units per hex.

In a tank battle, the tanks count the movement points they have left after moving into the chosen battle hex. If there are two or more left, a tank battle marker can be placed. One point out of the remaining movement points is paid to initiate this tank battle.

**Example:** If a tank has 5 movement points after moving into the chosen battle hex, it has to pay one for the tank battle and so has 4 left. The tank battle marker is placed in the battle with the 4 upright.

Now, if the defender retreats after one combat round, the tank can pursue him. It pays the movement cost for the new hex entered and another extra movement point for the new battle. (If the pursuer does not wish to initiate another tank battle, but a standard battle, he does not pay the extra movement point).

*Continuing our example from above: If it is a clear hex, the tank has two movement points left. The new tank battle marker is therefore placed with the 2 upright.*

**The Active player has to pay another point of supply for the new battle** (see 7.4.1).

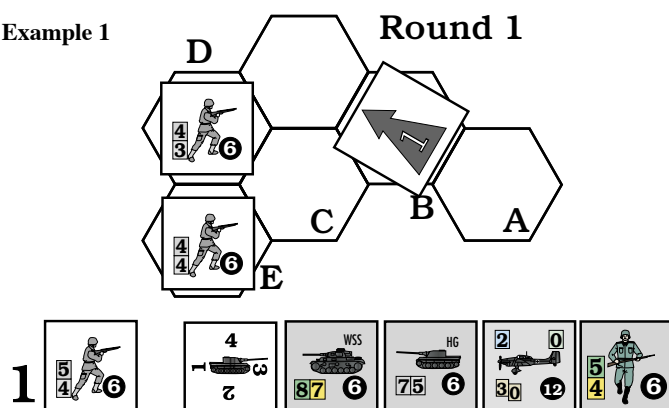
The attacker can follow a retreating defender as long as there are still points on the tank battle marker. Not all units have to follow. Single units can be left behind to protect supply lines. After the movement, a new battle may arise, but, if the tank unit does not have at least two movement points left (one to spend on calling a tank battle, and one for the minimum that can be on a tank battle vector marker), it can only be a "normal" battle. A new tank battle cannot be initiated with one single point because two points are always needed. **If more than one battle round is fought, the marker must be reduced by one at the beginning of every additional round.** A tank HQ can also be taken into battle. Only tank HQs are able to influence tank battles with their command level (see 7.3.2.f). Players do not have to pursue retreating units; they can instead attack new units that have not been involved up until this point, by moving into any adjacent hex that they have the movement points to enter. When there is more than one tank in the battle, they can split up. This is a way for new tank battles to arise. Aircraft that have survived the air combat can move with the tanks and attack together with them. If there are enemy aircraft moving with a retreating unit, a new air combat round may arise. The same may happen when land units retreat to an airbase with aircraft that have not been used until this point.

In addition, non-tank units, such as infantry, can be taken along on the pursuit if they have the same amount (or more) of movement points as at least one of the tanks in the pursuing group. Any unit or units in a pursuing group that has (have) fewer movement points than the one that has the most is marked with a blue marker that shows how many movements points fewer it has. Each Side's front unit can be changed in each new battle round. If the attacker's new front unit is ever not a tank, the tank battle marker must be removed. It is not possible to put that marker back in a later round of that same battle, or to use it in another battle in the same Ground Combat Step. The stacking limit changes back to the usual 3 for the remainder of that battle if a non-tank unit is ever used as the attacker's front unit. If this limit cannot be met, only a tank can be used as the front unit. In other words, the stacking limits can be raised to five only if a tank unit is chosen as the front unit in the first round, and can remain at five only as long as some tank unit remains the attacker's front unit.

## Restrictions for Tank Battles:

- Tank battle markers cannot be placed on fortresses, mountains, mountain-forests, glaciers, swamps, or jungles.
- Tank battles cannot pursue into other battle hexes.

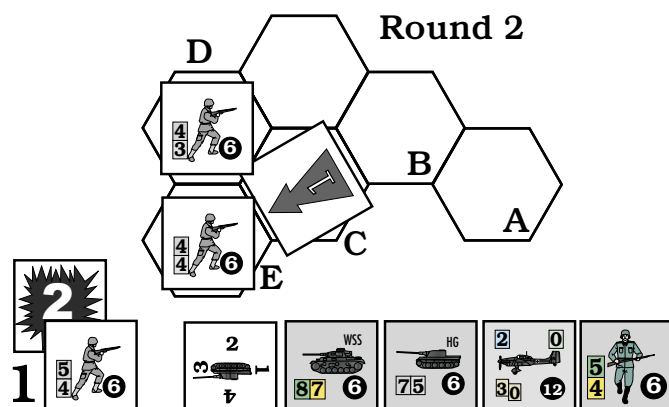
### Example 1



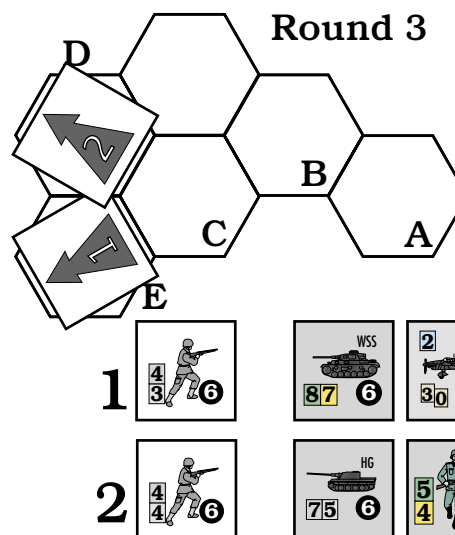
**Round 1.** The German player starts a tank battle by moving a tank unit from hex A into hex B, where it attacks a US 5-4-6 Infantry unit. It pays one point of supply.

Two movement points, one for moving into hex B and one for initiating the battle, are taken off the W-SS-tank unit. The same amount is taken from all units on the same Side involved in that battle.

The tank battle marker is turned now, showing the 4 side up.



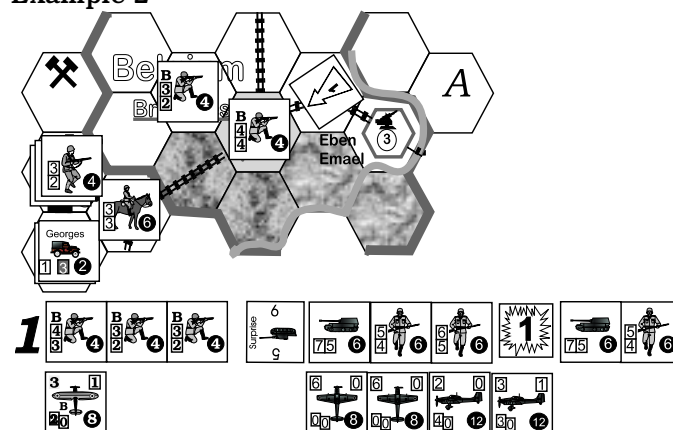
**Round 2:** The US unit received two hits in the battle and retreats to hex C. The German units pursue and therefore must pay one point of supply for the new battle and two movement points for entry. The strength 8 tank now has 2 movement points left and the tank battle marker is set with the 2 up. The aircraft used in the first combat round joins in this battle. The US unit is eliminated during this round.



**Round 3.** The German player now splits up his tank units and attacks the US units in hexes D and E. Each combat costs 1 point of supply and 2 movement points. After the combat ends, there cannot be any new tank battles because there are no movement points left for either tank unit.

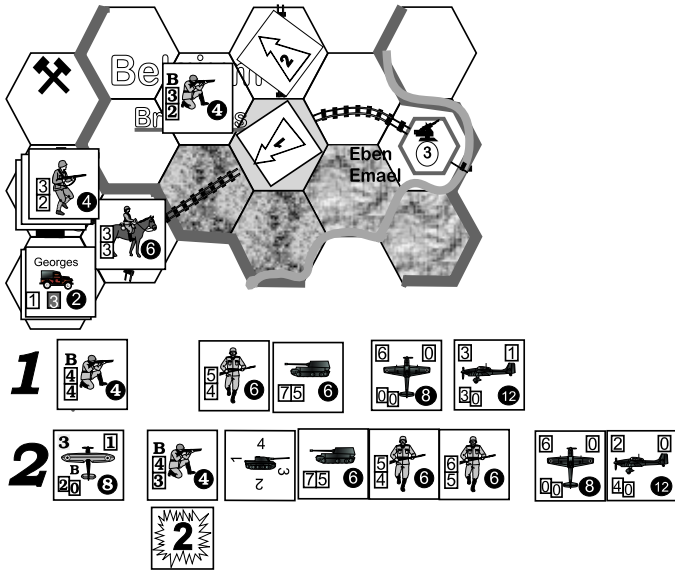
A special situation arises when your opponent fell victim to a surprise-attack. In this case, tank battles increase their maximum distance. It costs no movement point to initiate the first round of a tank battle. Also, for entering the hex of the first attack, no movement points have to be spent. A surprise tank battle marker with the number 6 upright can be placed. So it is possible to perform penetrations 6 hexes deep (theoretical maximum) into enemy territory. (Only the first hex entered does not cost movement points. You cannot move through the entire country and thereafter initiate a second round of tank battle).

### Example 2



Germany attacks neutral Belgium which has to suffer the effects of surprise (see 14.0). The river modifier is ignored, the combat values of all German units increase by one, no movement points have to be paid in the first tank battle, and the first hex entered costs no MP, so the tank battle marker is placed with the 6 upright. Two other German land units join in during the movement phase, raising the stack to its maximum limit of 5 land units. Those latter two units have one movement point less, because they come from hex A. This decrease is indicated by a blue 1 marker which is placed between the units with different MPs left and the other units.

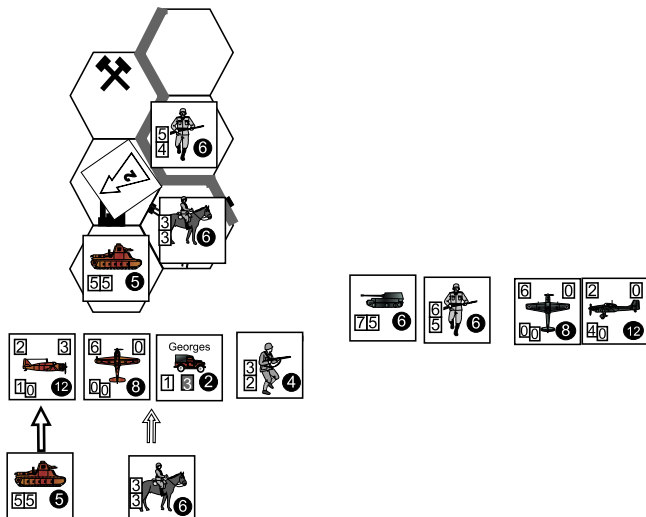
Assume that all aircraft survive air-to-air combat. Both players arrange their front units for land combat. Belgium has 2 points of defense strength and no additional points from the aircraft because it is serving as a fighter. Germany has the attack strength of its tank increased by one, to (now) 8 strength points because of surprise. Only one bomber can be used to support ground combat. The



bomber with 4 tactical bombardment factors is selected, and it has these factors increased to 5 (by surprise). This gives a total of 13 for the Germans.  $13-2 = +11$ . There are no stronger values than +8 on the land combat chart. Therefore the +8 column is used. Germany rolls a 2 and scores two hits on the Belgians, eliminating the first Belgian unit. The Belgians fight another round with the next land unit put up front. A new battle round causes the tank battle marker to be reduced by '1', so now the 5 is put upright. The combat value remains +8. This time a 6 results in "0-4R". This eliminates the second Belgian unit, places two excess hits on the next and leaves the surviving Belgian no choice but to retreat (otherwise it too, would be eliminated). The Belgian chooses to retreat to the hex north of Bruxelles. The Belgian fighter retreats together with its infantry. Germany now decides to split up the tank battle as follows and to pay two new points of supply:

### Battle 1

*The above units attack Bruxelles (a tank with at least one point on the tank battle marker must be in the stack to do so). The front unit is changed to infantry, causing the tank battle marker to be removed. Because battle 1 has changed into a normal battle, we take no further interest in it in this example of a tank battle.*



## Battle 2

The tank battle marker is adjusted to 4, by paying one point for entering a new clear hex. Remember: because of surprise, no movement point is paid to initiate the new tank battle. First, one round of air combat takes place. Belgium has an air-to-air strength of 3; Germany has its fighter's strength increased to 7 (by surprise). This gives an air combat differential of +4 for Germany and of -4 for Belgium. Both roll a 6 which makes the Belgian "D" and leaves the German unaffected. The overwhelming Germans eliminate the already badly hit Belgian infantry and proceed one hex attacking

*the next Belgian infantry and also paying another point of supply. The tank battle marker is now adjusted to 3 and the Belgian infantry is eliminated by rolling a 2. The Germans proceed another hex towards the French border near the French units in Lille. Moving another hex makes the tank battle marker decrease to 2. Now the Germans attack the French units in Lille (2 aircraft, 1 Infantry and the HQ Georges) and pay another point of supply. One infantry is left behind to protect the supply lines. The surprise effects are over, because France already is at war. One movement point must be paid to enter the hex and one to initiate the battle.*

*Because the tank unit has no movement points left, no new tank battle maker can be placed. France reacts to this with a block. Its cavalry joins in reinforcing the battle (see 7.3.2.d). Alternatively, the Cavalry or the tank in the hex south of Lille could have been ordered by the French HQ Georges to do a reserve move.*

*Remember, usually you cannot commit reserves during the pursuit of a tank battle. This is an exception. The French may commit reserves now, because the surprise rules hindered them to help the Belgians. Since France is not surprised and the subject of tank battle turned from a surprised country to a non surprised country reserves can be committed. The outcome of the battle is not discussed here.*

*Designer's Note: This example is very specialized. But it is very close to the situation in the France 1940 Scenario of MORSECODE ...\_. Understanding the tank battle is crucial. It is one of the most important instruments in the game, and, as seen in the example above, can have decisive effects. A third, very easy example of a tank battle can be found in the tutorial, MORSECODE ...\_ scenario book page 30.*

#### ① 7.4.5 Air/Sea Return Phase Non-active Side

The Non-active Side moves its aircraft back to their bases. Each air unit that cannot land in conformance to the stacking limit (perhaps because of the enemy's having either captured some of your airbases or reduced their stacking limits) has its range extended until it can reach the nearest friendly airbase with free space where it lands aborted. This "A" effect is in addition to any hits received in combat (see 3.2). If the range must be more than doubled to reach a base with free space, the aircraft adds a "D" instead of an "A" and, if not eliminated, is placed in the air repair pool. If no free airbase space at all is available the aircraft is eliminated. In addition, ships that have taken part in land battles (shore bombardment, invasions, or CV Missions in land hexes) are either moved back to their starting ports or sent on patrol missions no more than 10 hexes away. If victorious, ships can (alternatively) stay at sea. During these moves ships can be searched by enemy patrols, radar stations, and Air ZOCs. If the returning ships have been involved in combat against enemy ships, the latter cannot conduct a search roll and vice versa.

#### ① 7.4.6 Air/Sea Return Phase Active Side

The Active Side proceeds as specified above. Airbases or ports that have just been captured can also be used.

### ① 7.4.7 Check “OUT” Units for Elimination

Now, a second supply check is made in the same way as the first one but only for units that were out of supply at the first supply check. Land units that are still out of supply receive hits by rolling a D6. See elimination check table for modifiers. Every modifier decreases the number of hits caused by the D6 elimination roll. If the die roll is equal to or less than the reduction no hits are received.

**Example:** Out-of-supply units in a fortress (-3) and not in an enemy ZOC (-1) have the elimination die roll reduced by 4.

## ① 7.5 Exploitation Phase

Tanks can move again. Movement works exactly in the same way as it does in the movement phase (see 7.3). **Units that wish to move during the exploitation phase have to be in supply at the beginning of that phase and are checked again now.** They cannot be moved into enemy-occupied hexes. No combats can be initiated. Movement into enemy ZOCs is permitted. However, moves that the opponent

could try to block, are not allowed - instead they are cancelled. Tanks can now go into reserve by positioning themselves either on or next to a HQ into hexes that are not in an enemy ZOC (see 7.3.4).

Non-tank units that were in reserve at the beginning of the turn and have not yet been moved (indicated by their being still marked with reserve markers) can now move. Units that have instead acquired reserve status during the course of the turn cannot be moved during the exploitation phase. Units eligible to move out of reserve status, that now move, immediately lose reserve status. Units not moved during the exploitation phase, carrying reserve markers but not now adjacent to a HQ, now lose reserve status and get their markers removed.

Units that have invaded this turn (see 7.2.1.j.) and won their combat can move half their movement rating (at most) during the exploitation phase.

## 8. Repeat as above for the Non-active Side

starting with 7.

**When you reach this point in the game, the 'Active' status of the initiative Side ends and it becomes Non-active. The Non-initiative Side becomes the Active Side. The phase sequence is repeated by the new Active Side in exactly the same way as described above. After that, the game continues with the partisan phase.**

## ② 9. Partisan Phase

Partisans are active in all countries that are partially or completely occupied. Partisans are neither represented by counters nor located in specific hexes within their country. They can attack anywhere in their country, and the survivors 'hide' afterwards.

Order of Events in the Partisan Phase:

### 9.1 Hunt Partisans

The units that have been ordered to hunt partisans (7.3.3) start action. They use their attack strength to attack partisans. This strength is affected only by supply and weather, not by terrain. The units can be assisted by aircraft in the same way as during normal land attacks. Partisans always defend themselves with combat strength 0. Use the land combat chart (7.4.4.1). The first number indicates the hits that the partisan hunter receives. The second number indicates the number of destroyed partisans. If partisans are instructed by the combat result to retreat, one extra partisan is eliminated instead. No more partisans can be eliminated than there are in the country, so surplus hits are wasted - killing partisans "in advance" is not possible. If there is more than one weather condition in the country, the worst always applies to this partisan-hunting combat resolution. If the partisan-hunting unit is a W-SS unit, the partisans suffer one more hit than the result shown in the combat table, even if they are divisions. Fighting by or against partisans costs no supply.

***Example:** The weather is clear and there are 7 partisans in France. The occupying forces order two 3-2-4 Italian infantry units to hunt these partisans. The Italians attack with +3 and the partisans defend with 0 so the combat differential is +3. The occupying force rolls a 6 and then a 2. That means that the first infantry eliminates 3 partisans, while the second eliminates 1 and receives 1 hit. Three partisans remain for their assault segment.*

### 9.2 Partisan Assaults

The surviving partisans can now 'attempt acts of sabotage' (assault). Each partisan can assault only once per month. The player in charge of the partisans picks the sabotage hexes and the number of partisans assaulting each. The sabotage hexes must be in territory behind the enemy front line (but not in an enemy ZOC). For a partial list of the possible targets of partisan assaults, see hit effect table 7.3.5.b. The additional targets for partisan assaults are:

- Forts
- Aircraft (by partisan divisions only)

Hits have the same effect as bombardment (except on forts, which must receive 3 hits to be eliminated - fewer have no effect).

One die per sabotage hex is rolled on the partisan assault table. The first combat result number indicates the partisan losses: the number of partisans assaulting that hex is reduced by that number. The second combat result number tells the number of hits that the partisans score.

***Example** (continued from above): The 3 remaining partisans attack a railroad hex and roll a 3. The railroad hex receives 1 hit and 2 of the partisans are lost.*

### 9.3 Gain New Partisans

In all partially or completely occupied countries, the surviving partisans (if any) now are reinforced by new partisans (which each such country receives each month). Cross index the country with its war history year on the 'partisans per month' table. Year zero is the calendar year of the country's entry into the war. The listed data gives the number of new partisans to arrive now.

***Example:** It is now 1944. Italy was conquered by the Allies in 1943. It joined the war in 1940. Italy is looked up under the Major Power column and receives 4+ D6 new partisans because it is in the 5th calendar year after its war entry. The Axis player rolls a 4, so Italy receives 8 new partisans this month. Any year after the 5th year produces the same partisan numbers as the 5th year does.*



### 9.4 Partisan Divisions

Partisans can be converted into partisan divisions during the partisan assault phase. 5 partisans can be combined into 1 partisan division. A division of partisans is represented by a counter and operates in the same way as an infantry unit. It has 6 movement points and both an attack- and defense strength of 0. It is affected by weather and terrain in the same way as other units. It is always in supply. It is placed immediately upon formation in any enemy controlled hex behind the front line that does not:

- lie in an enemy ZOC, and/or next to a partisan hunter;
- contain a resource, a city, a fortress, a fort, a port, an airbase, a railroad, and/or a road;
- contain an enemy unit.

Partisan divisions cannot move, attack, or do sabotage during the month of their creation. They can attempt sabotage in the next month, by entering hexes in the same manner as land units. There they can destroy targets by spending movement points. (See sabotage 7.3.2.e). Aircraft cannot rebase out of an airbase hex in response to a partisan division entering it. Such aircraft must absorb the hits scored by the partisan division(s), but are not affected by surplus hits from non-division partisans conducting sabotage in the same hex.

Partisan divisions can attack enemy land units. The land units fight with their defense strength. If a division of partisans receives a hit in a battle it is disbanded. It breaks down into 5 single partisans, which are then reduced by the number of hits the division received. The surviving partisans are credited to the country's partisan pool and can be used in the next month. Partisan divisions not in a hex containing an enemy land unit can also break down voluntarily into 5 single partisans, but only at the beginning of the partisan assault phase. The resulting non-division partisans can then be active during that month. A partisan division exerts no ZOC except in the hex it occupies. Although a railroad hex that received a double hit is not interrupted as a supply path, a railroad hex that has a partisan division placed on it is. The interruption is negated by a friendly land unit that moves into that hex and stops during the land movement phase, on partisan-hunt duty. No battle vector marker is placed and no supply is paid; the combat is postponed until the hunting side's partisan phase, and the partisan division can neither move nor disband.

### 9.5 Uprisings

Partisan divisions can try an uprising in a formerly defeated country. If the partisans succeed in taking the capital by freeing it from enemy occupants, and occupy it themselves, they can convert their troops into regular troops of the defeated country. Both five single partisans or



one division of partisans are worth one RP each. The country is now regarded as re-conquered and its forces join the former occupant's enemy Side.

## ① 10. Conquest

### 10.1 Control

At the beginning, each country controls every hex in its own territory. Control changes immediately upon fulfillment of various conditions, as follows:

- Control of a hex changes to a country on the other Side when a land unit of that country is in that hex and no land unit of the previously controlling Side is in that hex.
- Control of a hex also changes to a country on the other Side when a land unit of that country exerts a ZOC upon that hex while it contains no unit, or ZOC exerted by a land unit, of the previously controlling Side.
- When both Sides exert a land ZOC into a hex that has no land unit, friendly naval or air unit, or city in it, the status of that hex changes to 'uncontrolled'.
- When both sides exert a land ZOC into a **city hex** that has no land unit (or friendly naval or air unit) in it, that hex remains under the original control.
- Finally, control of a hex that is not in supply by the controlling Side, contains no friendly ZOC, unit, or city, and is in supply by the other Side changes to the country of the other side that has the closest land unit.
- Aircraft and ships cannot gain control of hexes. They are only able to prevent an enemy ZOC from gaining control of a hex. If an enemy land unit occupies either an airbase or a port not occupied by a friendly land unit, the aircraft and ship(s) there become "A" and must rebase to the nearest port(s) and airbase(s) respectively. If already "A" when the enemy entered, they now become "D" and are sent to the repair pool.

### ② 10.2 Loot

If control of a city changes to the other Side, there may be an opportunity to loot it. (sometimes, it is not possible for the defender to either remove or destroy everything). A D6 is rolled, modified by a +1 bonus for every RP number that is printed in the city and a +2 bonus for every factory in the city; and the result is looked up in the 'Loot' table.

The loot points resulting indicate the amount of loot taken. The type (supply, RP, or material) of the first loot point is selected by the looting country, the type of the second by the looted country, and so on in alternation. The looted country must pay all loot points out of its National Pool.

*Example: Germany occupies Paris. The German player rolls a 4; 2 points are added for the factory and 3 for the RPs, making the modified die roll 9. The German player gained 5 loot points. Germany chooses supply for the first loot point, France material for the second, the German RP for the third, France supply for the fourth and Germany material for the 5th. The German player has looted 2 points of supply, 2 points of material and 1 RP. The French player must pay these out of France's National Pool into into that of Germany's.*

If the country does not have any of some item, this item cannot be chosen and something else must be taken instead as long the looted country has something left. If it has not enough to make full payment, it pays what it can and the deficiency is tough luck on the looters. Factories are destroyed whenever control of a city changes. Anti-aircraft guns and coastal batteries are never destroyed; instead, they are owned by whichever Side is the only one to have a land unit in that city.

### ② 10.2.a Pillage

If there is supply, material, resources, and/or RPs present in a non-city hex from which all friendly land units retreat as a result of combat, these goods cannot be retreated together with the units. A D6 is rolled for each good present in the hex. An even number means that the good

is looted by the capturing country, an odd number that it is destroyed. If the hex from which the units retreat is a city, the capturing country can either pillage, or loot and then pillage, at its own discretion.

## ① 10.3 Conquest of Countries

### 10.3.1 Major Countries

The Major countries in the Empires of Apocalypse Series are: The British Empire (a special case), China, France, Germany, Italy, Japan, the USA, and the USSR. In general a Major country is conquered only when all its cities fall under enemy control. However, some Major countries have other terms of conquest.

At this point in the turn, if a country meets the above requirements for conquering a Major country on the other Side, then the armed forces of the latter country, and *all* its units in production, are removed from the game. Furthermore, the conquering country can use the loot table on all those cities in the country that were not yet under its control. Then, each remaining point of supply, material, and RPs is pillaged.

### ① 10.3.2 Minor Countries

All Minor countries (the ones that are not in the list in 10.3.1) are conquered as soon as the conditions stated below for that country are met; the turn is interrupted and the process described in 10.3.1 for Major countries is applied to the conquered Minor country immediately, the usual course of the turn is resumed.

#### ⑤ 10.3.2.a Norway

Norway is conquered if both Oslo and Narvik fall under enemy control. (In MORSECODE ...\_ there is no Narvik; therefore it is sufficient to conquer the capital, as long as MORSECODE ...\_ is not combined with 'Cold Days in Hell').

#### ⑤ 10.3.2.b Switzerland

Switzerland made special preparations to slow down a potential aggressor. If Switzerland is attacked, all railroad hexes in Switzerland are immediately destroyed by placing double hits on them. Costs for the terrain must be paid in full by the aggressor. Additionally, Switzerland can never be surprised.

#### ⑤ 10.3.2.c Spain

Spain is conquered if Madrid and 2 other Spanish Hex Cities fall under enemy control.

#### ⑤ 10.3.2.d Turkey

Turkey is conquered if both Ankara and Istanbul fall under enemy control.

#### ⑤ 10.3.2.e Greece

Greece is conquered if both Athens and Crete fall under enemy control. When playing with Cold Days in Hell alone it is sufficient to conquer Athens.

#### ⑤ 10.3.2.f Poland and Yugoslavia

Poland and Yugoslavia have been conquered, if the conquering Side (usually Axis) collected 5 Collapse points during the conquest phase of a game turn (details: see Poland- Yugoslavia Collapse Chart).

Each objective conquered by the conquering Side results in the listed amount of collapse points. Every full 5 eliminated Polish or Yugoslavian land units result in one collapse point for the conquering Side. (Less than 5 eliminated units, ships, and aircraft do not result in collapse points.)

**Collapse points are:**

for Warsaw or Belgrade:	3
for a Major City or an RP city:	1
for a Minor City:	1/2
for 5 eliminated land units:	1

### 10.3.2.g Islands and Island groups

These are conquered if all their cities and ports fall under enemy control.





## 10.3.2.h Luxembourg

is conquered when its single hex is occupied by an enemy unit.



## 10.3.2.i All other Minor countries

Any Minor country not called out specifically earlier in this section is conquered as soon as its capital is captured.



## 10.3.3 The British Empire

The British Empire is called a Major power rather than a Major country because it consists of several Home countries, each of which must usually be conquered individually, as if it were a Major country.

*Example: the UK Home country is conquered when all cities in both Great Britain and Northern Ireland are under enemy control, but conquest of the UK does not by itself cause conquest of any other BE Home country (except when playing MORSECODE ...\_ alone). The British Empire (Major Power) is considered conquered only when each of its Home countries whose capital is on a map in use has been individually conquered. If part of a BE Home country, but not its capital, is on the maps in play, and the UK is conquered, then that other country is immediately treated as having been conquered by the same country that conquered the UK. The BE Home countries are: India and the independent Commonwealth countries Australia, Canada, New Zealand, and South Africa.*



## 10.3.4 Italy

Italy is conquered when all of its factories are enemy controlled; Italy then suffers the normal effect of conquest as described in 10.3.1, above. Italy is politically unstable, so there is another possibility to eliminate Italy's status as a major power: a coup against Mussolini. A coup against the 'Duce' will arise, if Rome, as well as any other Italian industrial city (a city with a factory symbol), and all of Italian North Africa are controlled by the Allies. The German-aligned remnant of Italy, described below, becomes a Minor country. This remnant is called RSI Italy, a short form for "Republic Salo Italy", and the Germans, having later rescued Il Duce, eventually install him as its figurehead leader. (Salo, a small city in northern Italy not represented on the MORSECODE...\_ map, became its capital).

A coup against the 'Duce' can also arise if the Allies meet two of the three above mentioned requirements and, in addition, have ten units more than Germany in Italy, Sicily, and Sardinia. (Aircraft, ships, engineers, and militia do not count.) Both tanks and W-SS units are counted double. If there is a coup of either type against the 'Duce', the Italian rolls a D 6 for every unit both on the map and in production:

- 1-2: The unit remains in place, loyal to RSI Italy.
- 3-4: The unit is eliminated.
- 5-6: The unit deserts to the Allies.

Follow the same procedure for every point of supply, every point of material, and every RP that Italy had in reserve. Aircraft and ships that have deserted are replaced by de Gaulle units of the same strength if possible, and must immediately rebase to Allied bases. They are marked with blank markers.

*Designers Note: Since there are no specific Salo units in the Counter mix de Gaulle units will be used to mark which Italian units are controlled by the allies.*

If land units belonging either to RSI Italy or to Germany are stacked with deserting units, a Ground Combat Step (conducted with deserted Italian units only) interrupts the usual sequence of play, starting immediately after all determination die-rolls. In this case, the deserting units always count as the defenders. No supply needs to be distributed to this type of combat. The fighting continues until one Side either retreats or is destroyed. German units in reserve (stationed next to HQs) can immediately take action against deserting Italian units in every hex within their movement range. The sequence is the same as in the reserve movement segment (see 7.3.4). The Allies cannot help deserting Italian units.

*Designer's note: In terms of history, Germany was prepared for what was, seen from their point of view, an Italian "treachery".*

All former Italian controlled hexes that

- a) are occupied neither by German or remaining Italian RSI Axis troops and
- b) do not lie in the ZOC of either German or remaining Italian Axis troops and
- c) can be supplied by Allies powers

now become controlled by the Allies. Then formerly-Italian material and/or replacements that now are under Allied control are discarded. The British Empire receives Italian resources that are now controlled by the Allies. Allied-controlled factories in Italy are destroyed. Factories and resources that are still Axis-controlled now belong to Germany. The remaining replacement cities in the rest of Italy are the RSI's only reinforcement sources.

Germany also takes over the rail capacity and the mines. Germany can buy surplus mines up to the Italian maximum. Former Italian mines cannot be placed outside the Mediterranean Sea and are not available to the Allies.

The deserting land units remain in the game for one more month. If any are in an occupied country and control the capital, that country is liberated at the end of the month and the Italian forces are replaced by units from that country (of the same strength, if possible). Otherwise the Italian deserters are taken off the map, in which case they produce two pro Allied partisan units per point of attack strength in the country they are currently in. Every month, partisans appear in both parts of Italy. Pro Allied partisans appear in RSI Italy, pro Axis partisans appear in Allied controlled territory in Italy. Their number is rolled with a D 6 and is modified by the year of war entry (see partisan tables). The method is to roll once for each part of Italy as if it were all of Italy.



## 10.3.5 France

France is conquered when all cities fall under enemy control. Another way to "deactivate" France is to install a Vichy government. In this case the Axis first needs to collect collapse points. The Axis receives collapse points for each conquered objective per the France Vichy installation table. These points are added up. Half a point is subtracted for every full 5 French land units in France, and half a point for every full 5 aircraft in France. Tanks count as two units for this calculation, militia and engineers as zero units.

Two points are subtracted if the Axis demands the French fleet. Fractions are rounded down. The Axis can roll a D6 once per game, at any time during the political phase, to install a Vichy government. If the roll is less than or equal to the collapse points, a Vichy government is installed instantly; if the roll exceeds the collapse points, no Vichy government is installed, and France can be defeated only by being conquered.

*Example: Germany controls Paris (2 +0,5 for the factory), Lille (0,5+0,5 for the factory) and Brest (1). This equals 4.5 points altogether. 1.5 points are subtracted for 16 French land units in France, 0 points for the four remaining French aircraft. This produces 3 collapse points. Under these circumstances, Germany must roll a 3 or less with a D 6 in order to install a Vichy government.*

*Designer's Note: This procedure was included in the game to show the political dilemma France was in when Germany's imminent victory over France became evident. One French faction, the "Free French" under General de Gaulle, wanted to continue fighting on the British Side. Another faction wanted to improve France's fate by negotiating with the enemy. This latter group worked with Germany and installed a government located in the south-central city of Vichy. The possibility of either success or failure in such negotiations is simulated by the rule.*

If the 'Vichy-roll' succeeds, France will be divided. The main part of France becomes German-occupied territory. The area in the south-east of France (marked with an orange line) becomes "Vichy France" with Vichy as its capital.

If the Axis successfully demanded the French fleet, every ship will be checked with a D 6. An even number destroys the unit, an odd number leaves it unaffected. The surviving ships are now replaced by similar Italian ships. Details how to handle Vichy after its installation can be found in MORSECODE...\_.

## V 10.3.6 The USSR

As soon as the Axis controls every USSR city found on both the European map and the Big Hex map of Scandinavia, the USSR collapses. Each month spent under these circumstances the Soviet player has to roll a D6 during the Political Phase. If he rolls a 5 or 6, its 'game over' for the Soviet Union. The Axis controls all territory formerly occupied by the Soviets. The remaining Soviet territory becomes neutral. The amount of partisans to appear each month is halved.

As soon as Japan controls every USSR city found on the Asia map, the USSR Asia territory surrenders to Japan. USSR cities on the Big Hex Map Ural Siberia are ignored here.

When playing with both Cold Days in Hell and Pearl Harbor, both of the conditions listed above have to be met in order to achieve the listed results.

## 2 10.3.7 Liberation

(Liberation = reconquest.)

A country is liberated by taking its capital away from the conqueror. The Axis can liberate countries formerly conquered by the Allies, the Allies can liberate countries formerly conquered by the Axis.

Directly after liberation the respective country is reactivated. Reactivation means the units of the country are returned to the force pool and become available for production again to be paid from the sources under control of the liberated country. Partisans of that country remain until the entire territory of the liberated country is free from enemy occupied territory.

## 2 11. Political Phase

### 11.1 Diplomacy

Every Major country has a clearly defined political orientation. Japan, Italy, as well as the smaller Axis-associates Finland, Rumania, Hungary, and Bulgaria, will sooner or later be entering the war on the Axis side. Before Activation of an Axis-associate Germany and Italy may enter the territory of Romania, Hungary, Finland and Bulgaria as if they have Axis march status. The Soviet Union and the USA will inevitably join the Allies. Nations whose political orientation is not as clearly defined are orientated towards either Axis or Allies. There are five interim conditions for Nations having not yet decided, a total of 7 conditions:

#### Allied

This country is part of the Allies. The forces of this country are controlled by the Allies. The goods of this country are available to the Allied war effort. If not otherwise agreed among the Allies, the British Empire handles the country.

#### Allied March

Up to 10 Allied units can

- cross the country
- station land units, ships, and aircraft there
- draw supply lines across it
- attack enemy territory from there.

#### Pro Allied

The Nation is neutral but sympathizes with the Allies. The Minor country agrees to trade with the Allies.

#### Neutral

The Nation is strictly neutral and does not sympathize with any Nation.

#### Pro Axis

The Nation is neutral but sympathizes with the Axis. The Minor country agrees to trade with the Axis.

#### Axis March

Up to 10 Axis units can

- cross the country
- station land units, ships, and aircraft there
- draw supply lines across it
- attack enemy territory from there.

#### Axis

This country is part of the Axis. The forces of this country are controlled by the Axis. The goods of this country are available to the Axis war effort. If not otherwise agreed among the Axis, Italy handles the country.

Every Nation has a certain diplomatic level as well as a certain political orientation to begin with (see below). At the beginning of WW II in September 1939 the Axis and Allies possess twenty diplomatic points each. Other scenarios: see there.

To influence a Nation towards a certain political orientation diplomatic points have to be spent by the Axis and Allies respectively (diplomatic level of the Nation to be affected = number of diplomatic points to be spent). These points are subtracted immediately and a D6 is rolled. The die roll result indicates the number of points that the Nation in question changes towards the desired orientation. Exception: 1 means an unsuccessful attempt. Then the opposite Side reacts by also rolling a D6. The political orientation does now change towards the desired orientation of the opponent. (This time, rolling a 1 does not mean an unsuccessful attempt.) Only one try per Side per month for one and the same Nation is allowed.

As soon as one Nation reaches the status 'March', the only way to change this is by means of an immediate counter-action. If that fails or if no counter-action takes place, the Nation remains on 'March' for the rest of the game - as long as the respective associate(s) do(es) not try to get this Nation on his/her Side completely, also for the rest of the game

**Example:** Belgium has a diplomatic level of 5 points and the political status '-7 pro Allied' at the beginning of the war in September 1939. The Allies spend the necessary 5 diplomatic points and try to change its orientation into 'Allied March'. The French Player (acting for the Allies) rolls a 6, which means that Belgium does now have the political status '-13 Allied March'. Germany reacts for the Axis and does also invest 5 points for the Axis. Germany rolls a 2, which results in '-11 Allied March'. Belgium stays on 'Allied March'. Regarding diplomacy the Axis is now prevented from taking action in Belgium. The Allies can operate in Belgium at their leisure. They can even try and attack Germany. They can also try, later, to bring Belgium on their side completely. If they are successful, all Belgian troops will then be under Allied leadership. All Belgian goods will be available to the Allies.

Use any game marker not needed otherwise to mark the diplomatic status of a country on the diplomatic status chart. A political influence on the mother country does also influence her colonies.

Initial status at the beginning of WW II:

Nation	Status	
The Netherlands	pro Allied	(-6)
Belgium	pro Allied	(-7)
Portugal	neutral	(0)
Yugoslavia	pro Allied	(-9)
Greece	neutral	(0)
Norway	pro Allied	(-6)
Sweden	neutral	(1)
Iraq	pro Axis	(7)
Persia	neutral	(3)

Spain	pro Axis	(6)
Turkey	neutral	(2)
Afghanistan	neutral	(0)
Switzerland	neutral	(0)
Ireland	neutral	(2)
Vichy	neutral	(0)
(after installation by the Axis)		

The following minors conduct a random die roll at the given dates in favor of:

Yugoslavia	April. 1941	‘Allied’
Iraq	Jun. 1941	‘Axis’
Iran	Dec. 1941	‘Axis’
Greece	Jan. 1941	‘Allied’

These die rolls do not cost anything. They are the results of a historical change in politics. If the listed Minor already is at war, no die roll is conducted.

If a Nation is attacked, its diplomatic points are automatically added to those of its associates. As soon as the Nation becomes controlled by one Side, whether by means of an attack of the opposing Side, or through conquest, the controlling Side adds the diplomatic points of the Nation in question to its diplomatic point total. (The diplomatic points the country is “worth” according to the Countries diplomatic value chart). No points are received if the country is taken over by diplomacy.

If a country is attacked and conquered in the same game turn only the conqueror receives diplomatic points.

*Example: Germany attacks Belgium in May 1940 but doesn't conquer it before July. Therefore, 5 diplomatic points are added to the Allies' points in May, Germany makes 5 points for the Axis in July. If Germany had conquered Belgium in May, it would then have received the 5 Belgium points and the Allies nothing.*

The newly received diplomatic points can be used, of course, to influence other Nations towards the ‘right’ direction. If one Nation manages to bring another Nation on its side via diplomacy, the new ‘possessor’ does not get the newly won diplomatic points because otherwise this ‘bribery’ would have been free of cost.

## 11.2 The Waffen-SS

Germany is allowed to choose one W-SS unit per year to be built, it's strength being within the limit set by Germany's research level. If a once chosen W-SS unit is eliminated it may be build again without restrictions.

Available units are:

Tank: 6-5-6, 7-6-6, 8-7-6, 9-8-6; Inf: 6-5-6, 4-4-5; Cav: 4-4-9

None of the above may be built via procedure 11.2.1 below.

The costs of W-SS units are equal to the costs of equivalent normal units.

*Note: even an SS tank unit cannot have an attack strength higher than indicated by Germany's research level. So you cannot choose a unit you may not have according to your research levels.*

### 11.2.1 Recruiting of W-SS units in occupied countries

In Axis-occupied countries in the European Theater of Operations (ETO), the Axis is allowed to put up one W-SS unit per country by paying diplomatic points. Instead of paying for the production costs with material etc., those units will be paid for with diplomatic points.

*Example: 1) Norway has been occupied in 1940. Germany is now allowed to put up one 3-3-4 W-SS infantry. Instead of paying 3 RPs, Germany pays 3 diplomatic points.  
2) Germany cannot raise a W-SS unit for India if conquered by Japan.*

The unit is placed as usual on the production chart. It appears 3 months later as a reinforcement. Hits on and building of an eliminated W-SS unit are paid for with RPs, as usual.

Available units are:

Inf: 8 x 3-4-4, 1x 3-3-6 (P), 1x 4-4-4 (FR), 2-3-4 (B)

None of the above may be built via procedure 11.2. in previous chapter.

*Designer's note: This rule simulates the German Waffen- SS mobilization in European countries occupied by Germany.*

## 11.3 USA Political Phase

The USA started the 1930s as a strictly neutral nation. It gradually changed its attitude while watching the war develop and then became more and more entangled in the war as it went on.

The USA starts with its war production at the “0” level for both the Atlantic and the Pacific. At the end of every odd month, the USA increases its ‘Eastern USA’ (Atlantic) production (for the ETO — European Theater of Operations) by one level. At the end of every even month, the USA increases its ‘Western USA’ (Pacific) production (for the PTO — Pacific Theater of Operations) by one level. More details for the PTO will be available in the ‘Pearl Harbor’ scenario book. When playing the ETO (MORSECODE ...\_Triumph & Fall of the Desert Fox, Cold Days in Hell) only, ignore PTO production, and vice versa.

### 11.3.1 US Declarations of War

If the USA ETO production level reaches 27 or higher, the USA can try to declare war on the Axis at the ETO. The USA can be at war at one theater of operations and at peace at the other. How to handle the PTO, see Pearl Harbor scenario book.

To declare war to the Axis the USA must roll less or equal on a D 20:

Level	Roll
27	5
28	10
29	15
30	Automatic

If the die roll is higher than the numbers specified above the USA must decrease its production level by 3. Only one try per month is allowed.

*Designers' note: This procedure simulates a political process necessary for a declaration of war in a democracy.*

The USA cannot do any declarations of war, nor move any BC or CV, before it is at war with the Axis.

### 11.3.2 Declaration of War Modifiers

-each Axis declaration of war on a neutral country (including on a neutral USSR) increases the US production level of the current theatre by one. Declarations of war on a neutral country by a neutral Italy are regarded as Axis declarations of war.

-each Allied declaration of war on a neutral country (including on a neutral Italy) decreases the US production level of the current theatre by one. Declarations of war on a neutral country by a neutral USSR are regarded as Allied declarations of war.

**Notes:** A production level below “0” is treated as “0” when the amount of production is being calculated.

- A country is counted only in the theatre where it is attacked. If a country possesses territory on both the ETO and the PTO this is handled separately.
- A country at war with any other country, no matter how small or weak that other country is, is not considered neutral.

**Special:** If more than one Nation of a side declares war on the same neutral country, the USA treats that joint action as if only one country had declared war.

- In the case of an attack on a neutral nation in 1939 or 1940, the effects can be more drastic: Roll a D20, and subtract from the result the number of turns already completed (including the current turn). On a result of 0 or higher, USA production changes by one (extra) level in the appropriate direction. For neutral nations without troops (Denmark, Luxembourg), no automatic shift occurs, but there is a die roll anyway, and so there can be a shift after all. Also, if the USSR declares war on an Axis associate, and a (separate, similarly modified) die roll is "0" or higher, USA ETO production is decreased by one (possibly additional) level.

### 11.3.3 Events

#### A Random Events

##### 1. Elections

November 1940: The US President is elected. The candidates are Roosevelt and Willkie. A D6 is rolled.

1-2: Willkie wins; US production level is decreased by 2.

3-6: Roosevelt wins; US production level stays the same.

*Designer's note: Willkie was a known Isolationist and against US involvement in WWII.*

##### 2) Axis Active submarine roll

Once in a game during the political phase the USA can choose this option. All Axis submarine in seazones on mission are counted. **Do not count any Axis submarine in ports or in production.**

Roll a D20. If the D20 is equal or lower than the Axis active submarine number the USA production level is increased by one. If it is higher than the Axis active submarine number the USA production level is decreased by one.

*Note: The USA player is not allowed to inspect Axis stacks. If the USA player starts counting Axis submarine he is committed to roll the D 20 whether he likes it or not.*

#### B Other Events

-each Event increases the USA ETO production level if the Axis does a 'bad deed' and decreases if the Allies do a 'bad deed'. Italy always counts as Axis; the USSR counts as Allied.

For the same event only one modification can be done, unless otherwise specified.

*Example: Italy conquers South Africa, it is recaptured by the BE and thereafter again conquered by Italy. Only one shift on the USA production level occurs.*

#### The USA gains one level if:

- Axis invades the UK (see 7.2.1.j Invasions, Axis ground troops try to conduct an Invasion of the United Kingdom)
- Axis conquers UK (see 10.3, Conquest)
- Axis installs Vichy
- Axis conquers France
- Axis conquers BE Home Country. The USA gains one level for each of Australia, Canada, India, New Zealand, and South Africa if conquered by the Axis.
- Axis blocks the Suez Canal. If an Axis land unit exerts a ZOC on any hex adjacent to the Suez Canal, then it has blocked the Suez Canal (counts only once per game), and the Canal becomes impassable for any Allied ship. If the Allies control any hexes adjacent to the Suez Canal, then the Suez Canal is impassable for any Axis ship (there is no production change for this condition).
- Axis conquers Gibraltar
- Axis conquers Moscow, Stalingrad, Leningrad, or Baku. The USA gains one level for each of these cities taken by the Axis.
- Allies support attacked neutral. If a neutral minor country is declared war on by the Axis, the Allies can support the neutral by sending military units there. At least 5 units (land and air combined) must be in that country for the Allies to get credit for support. The units will be counted during the political phase. The modifier can be claimed for each qualifying neutral minor, but at most once for each.
- Italy declares war on the Allies. This is covered by section A, however it is mentioned as a reminder here.

- First strategic bombardment by Axis. The Axis is the first to conduct a strategic bombardment of a city having a factory or RPs. Strategic bombardment of targets outside such a city (for example: resources) is not counted; neither is any tactical bombardment.
- First merchant ship sunk by Axis
- The Axis is the first to sink a merchant (a transport carrying resources or oil resources only) ship.

#### The USA loses one level if:

- Allies declare war on Italy
- Allies conquer Italy
- USSR declares war on Germany or Italy (counted only once in the ETO)
- First strategic bombardment is done by the Allies. The Allied Side is the first to conduct strategic bombardment of a city having a factory or RPs. Strategic bombardment of targets outside such a city (for example: resources) is not counted; neither is any tactical bombardment.
- First merchant ship sunk is sunk by the Allies.
- The Allied Side is the first to sink a merchant ship.

### 11.3.4 USA Actions

The USA player must publicly announce all options, and the USA must be at the level shown in the indicated Theater(s) in order to choose an option. Only one option can be chosen per turn, and each can be chosen only once, except when otherwise specified. **All USA actions (except #29) are considered chosen, and all restrictions therein, even those on quantity, are lifted as soon as the USA is at war with both Germany and Japan.**

If the number of turns elapsed is equal to or higher than the number listed at the option the USA may choose the option behind without any penalties. If the USA wants to choose an option before that time, roll a D20, and add the number of turns already completed. If the result is equal to or lower than the option number the USA production level is decreased by one. USA production level stays the same if the result is higher than the option number.

#### Actions:

- 8 intern a French or Minor's ship (possible only once, at most, during the game). The US player now owns the ship. Any Axis attack on this ship from now on constitutes a declaration of war on the USA.
- 9 Replace BE Iceland garrison. BE must withdraw troops marked "IS" there, USA occupies Iceland with at least one land unit. From then on, any Axis attack on Iceland is regarded as a declaration of war on the USA.
- 14 Give 5 or less DD to BE. (possible once (at most) in the entire game). The DD's strength is decided by the USA player. Thereafter replace them by equivalent BE DDs.
- 16 Provoke Naval incident. (possible once (at most) per month) After this option is chosen any time that a USA ship passes a search zone of Axis ships/submarine, or vice versa, a D20 is rolled. If the result is exactly 1, the same search procedure is started as if the Axis were at war with the USA: A successful search starts a battle; that battle ends after one combat round and is not the beginning of a war between USA and Axis. Each Naval incident leading to a battle increases USA production level by one. Each search zone can be checked only once per month. Further ships passing the same search zone are ignored.
- 17 Repair BE ships. The USA can repair any number of damaged BE ships.
- 18 Produce BE ships. The USA can produce any number of BE ships.
- 23 Produce BE aircraft. The USA can produce any number of BE aircraft
- 24 Lend Lease 5 points\* to BE. The USA can lend-lease a maximum of 5 points each of resources, RPs, supply, and material to the BE. These must be transported on transport ships of a country that is at war with Germany.
- 25 Lend Lease 5 points\* to USSR. Same as above, the USSR however must be at war with Germany.
- 26 Transport 3 points of BE /USSR goods. The USA can transport 3 points of BE/USSR resources, supply, material (no RPs, no troops)

by ship. This ability supersedes the restrictions of #24. Any Axis attack on these (except one provoked by a Naval Incident Search Roll) constitutes a declaration of war on the USA.

27 Technology Transfer with BE (see 13.12.).

29 Escort BE convoys. USA DD(s) can escort BE transport(s) and fight against any Axis attacker. Any such Naval combat is not a declaration of war by either side (superseding #26 and #30) and it does not affect the USA production levels.

30 Transport 6 points of BE/USSR goods (option #26 has to be chosen first). The USA can transport 6 points of BE/USSR resources, supply, material (no RPs, no troops) by ship. This ability supersedes the restrictions of #24. Any Axis attack on these (except one provoked by a Naval Incident Search Roll) constitutes a declaration of war on the USA.

- “Points” are either Recourse Points, Supply Points or Materials, or any combination of these for a maximum of 8.

The US Political Phase for the Pacific is explained in detail in the Pearl Harbor Scenario Book.

## ① 12. Production

### 12.1 Determination of Production Potential

Resources are needed for production. They are processed in factories into **replacements (RPs), supply, and material**. These are the three basic goods needed to produce units.

Every factory has the capacity for 3 resources to be processed into replacements. The total “production capacity” of a country is calculated by multiplying its number of factories by 3.

*Example: The British Empire has 5 factories in the UK. This results in a production capacity of  $5 \times 3 = 15$  for the British Empire.*

A country can process only as many resources as it has total factory capacity. The factory capacity to be used need only be as high as the amount needed for resources that get through to the factories. With these figures it can be determined how many RPs are available for production. A factory must receive at least one resource in order to be productive.

Additionally, every productive factory produces 1 point of material as well as supply. For supply production, you have to distinguish between oil and other resources. Each oil resource processed in a factory produces 1 point of supply plus one RP. It takes three of the other types of resources, all processed at the same factory, to produce 1 point of supply (as well as 3 RPs). Fractions are rounded down per factory. Exception: Major powers always get at least one point of supply even if fewer than three resources total have made it through. If no resources at all have reached a given factory, that factory is isolated and produces nothing. Besides factories, there are RP cities. They have red numbers printed on them which indicate the number of RPs produced every month.

#### 12.1.1 Peace Production

The USA and the USSR cannot use their on Map production while they are neutral.

The USA starts with a production of 0 and activates according to the procedure stated in 11.3.

The USSR has a fixed production of 12 RPs, 2 supply and 2 material per month as long as the USSR counts as neutral. The USSR continues to count as neutral if the USSR is at war with a Minor or Japan. The USSR ceases to be neutral if the USSR is at war with Germany and/or Italy.

The USSR can add any resources to be conquered from minors to its peace production or use trade (see 17.7).

### 12.2 RP-Activation

As soon as a Major country is at war, single RPs (replacement points) are activated month after month for that power (see RP Activation Table). The extra RPs are activated according to that table one after the other in the listed order from top to bottom, every month of the war. A control marker of the Major Power in question shows their progress. If an enemy unit enters an RP city the RPs are deactivated. They will be received again, if the city is recaptured by the original owner or an ally. RPs will not be activated for the conquerors.

**Exception: The Soviet Union is allowed to activate all of its RPs as soon as it is attacked by Germany. If, on the other hand, the Soviets attack the Axis, Russian RPs have to be activated singly.**

Minor countries activate all their RPs immediately after entering the war. If they are able to survive against a major power for one month, they can use their full construction capacity immediately.

During the production phase all RPs activated up to the month before that phase can be used.

*Example: July 1940: Germany and the BE have activated 10 RPs each. Italy, having only been at war since June, has activated 2 RPs, one of which it is allowed to use during its production phase.*

*Example: Germany has 9 factories with a total capacity of 27. 24 resources get through to the factories, 4 of them oil. I.e. this month the factories produce 24 RPs, 9 points of material and 10 points of supply.*

*The RPs that are produced in Germany's RP cities are added.*

The results of strategic bombardment by the enemy are subtracted from the above numbers, not from the factory's capacity. Remaining goods can either be used for the production of new units or be saved.

Some players suffer especially from the lack of supply. A player can trade in the production of 5 points of material to get one point of supply. An exchange of already produced material is not possible.

A Major country cannot activate any RPs as long it is neutral.

### 12.3 Disbands

Any player can disband units. Militia units convert to one RP when disbanded; for tanks you get their respective amount of RPs which have been paid for their assembly (no supply, no material). These RPs can be used again for production next month. Any hits the disbanded units have are subtracted from their RP value.

### 12.4 Build Cost Table

Every unit costs a certain amount of RPs, supply, and material; these costs can be found in the build cost table. Each type of unit takes a different amount of time to be built.

*Example: If Germany starts building 1 tank, 1 fighter, and 1 infantry in September, the tank will be finished 8 months later (in May of the following year), the fighter will be ready 5 months later (in February), and the infantry will be available 3 months later (in December).*

Since construction never takes longer than one year, the units that are being built are simply placed in the box of their finishing month. At the beginning of that month the units are taken out as reinforcements.

In the RP column of the build cost table you will find “St.” or “2 x St.”. **St. is an abbreviation for strength.** “St.” means that it costs the unit's attack or defense strength (whichever is higher) in RP numbers to build the unit. “2 x St.” demands twice that amount.

*Example: A German 7-5-6 tank unit costs 14 RPs, 2 points of supply and 1 point of material.*

The strength of an aircraft carrier (CV) always refers to her air component (indicated by the red number on white background in the upper right-hand corner of the counter). This number indicates both size and capacity of the air deck as well as the strength of the aircraft on it. Also, a hull is needed for both CVs and BCs. A hull costs 5 RPs,



1 point of supply, and 1 point of material. That is why  $4 \times \text{strength} - 5$  is written next to the costs on the table. The 5-point RP cost of the hull is subtracted from the RP cost established by multiplication.

**Example:** A British CV with an air component of 5 consequently costs  $4 \times 5 = 20 - 5 = 15$  RPs, 2 points of supply, 3 points of material, and a hull.

Both DD strength and BC strength refer to the surface combat component of these ships. This number is written in the upper left-hand corner of the counter.

For engineers, there is a 2/1 RUSS entry under RP costs. This means that while regular engineers of all other nations cost 2 RPs, Russian engineers only cost 1 RP after the USSR is at war with Germany.

**Radar stations, forts, fortresses, and airbases are not built during the production phase.** They are constructed by engineers at the desired location during the Land Movement Phase (see 7.3.1).

RPs, supply, material can be saved up in order to build units in later months.

## 12.5 Repair

Damaged ('D') aircraft and ships can be repaired during the production phase, at half the usual RP cost. Fractions are rounded up. Supply and material do not have to be paid. Repair takes one month for aircraft, two for ships. Repaired aircraft are released the next month.

**Examples:** repairing a bomber costs 4 RPs; repairing a strength 5 CV costs 8 RPs. ( $4 \times 5 = 20$ ,  $20 - 5 = 15$ ,  $15/2 = 7.5$  rounded to 8).  
Note: the repair of the hull does not have to be paid for.

**If the air component was eliminated, the aircraft carrier can only be used again after the air component is restored.** This costs 2 RPs + the aircraft's strength in RPs and takes two months. If the air component of a CV is "D" these costs are halved and the CV is treated like a damaged air unit.

If a CV has its air component damaged or eliminated and its ship's body damaged, it must undergo both air and ship repair. First, the ship's body is repaired in two months, during which time the ship is marked with a blue number indicating how many hits the air component has suffered. (3 for an eliminated air component and 2 for a damaged air component). After that the air component has to be repaired (see above).

### 12.5.1 Alternative Repair Procedure

Two 'D' ships or aircraft having the same combat values can be repaired as following: '2D = 1A + 1E' this means that nothing has to be paid but one ship/plane is to be eliminated. The other becomes 'A' and is to be placed on any friendly controlled port/airbase within the owners country.

## 12.6 Rail capacity

Rail capacity can be built for 10 points of supply plus 20 points of material for each increase of rail capacity by one. Each takes 6 months to build, and only one at a time can be built. Indicate this construction by placing a railroad marker on the month in which manufacturing will be finished. Immediately upon installation of a Vichy government in France, Germany can buy any or all of the functioning rail capacity of France (not including any still in the process of being produced) for 5 points of supply plus 10 points of material per point of capacity. Whatever amount is purchased becomes usable 3 months after purchase - any unpurchased is discarded. The rail capacity cannot be purchased if France is conquered instead.

## 12.7 Mulberries

A Mulberry is an artificial port and counts as a major port. "Mulberry" was the code name for the artificial port the Allies used in Normandy. In this game this code name is used as an overall name for artificial ports. The loading capacity of three transports is needed to move it. **Once moved somewhere, a Mulberry cannot be moved again.** If an

enemy unit controls the hex it is in, the Mulberry is destroyed. Also, once a Mulberry is activated it will immediately be destroyed when bad weather (mud, winter, blizzard, monsoon) occurs in its weather zone. A Mulberry can be emplaced in any coastal hex.

It can be carried along with troops during an invasion. If the invasion fails, however, the Mulberry is automatically destroyed.

## 12.8 Factories

Factories can be set up to increase a country's production maximum. This makes sense, of course, only if the country can provide enough resources. Setting up a factory costs 16 RPs, 4 points of supply, and 4 points of material. Construction takes 12 months.

The cost and construction time mentioned above is halved if a factory eliminated by enemy strategic bombardment is reconstructed.

Some costs can be saved by using the industrial capacity of conquered nations. If a nation is conquered, all its factories are eliminated. However, the conqueror can use the industrial capacity to build one new factory in each conquered country at half the normal price.

Prerequisite: the country must have an industrial capacity of a least one factory (for example, France or Poland).

*Designer's Note: If a country is conquered, some part of the former industrial capacity is captured by the conqueror. The advantage: The conqueror is paying only half the normal costs for a new factory.*

## 12.9 Advanced Factories

These are more expensive than regular factories and can never be built at half price (see above). To build a completely new factory is possible as well as an upgrade of a standard factory. Either way, construction takes one year.

In the case of an upgrade, the difference in build cost (8 RPs, 2 points of material and 2 points of supply) between an advanced and a normal factory must be paid. Advanced factories have facilities for the production of synthetic oil. Because of this, each advanced factory produces one extra point of supply per round. This only applies as long as at least one resource can get through to the factory.

An advanced factory does not count as a supply source.

If an advanced factory receives an "E" as a result of strategic bombardment, it is downgraded to a regular factory. The occupation of the hex by enemy land units destroys both regular and advanced factories.

## 12.10 The Storage Pool Sheets

Any RP, supply, or material that has not been used for production or repair is now credited to the owning countries National Pool (see 3.7). Record your National Pool on the storage pool sheets in the scenario book. You can either place the current amount of markers there or simply note it.

## ② 13. Research

If you start a scenario as a Campaign game, countries can do research. Research is used to improve your country's ability on the use of particular arms of the service hereafter called **weapons**.

The starting level of a country can be taken from the scenario books of the games belonging to the *Empires of Apocalypse* series. Here, the **first number** indicates the progress of a nation in one particular weapon hereafter called **research progress**. This does not only regard scientific development but also the level of training the troops obtained in order to work with this particular weapon, as well as the skill of their leaders in handling that arm of the service.

**Note:** For certain fields of research a minimum level of development has to be reached before production starts.

The **second number** (if present) indicates the numbers on the D 20 that have already been bought in one weapon and is called research number. Costs for research are listed in the build cost table.

By investing in research, a country buys a 5% chance to develop better weapons (bought for 2 RPs, 1 point of supply, 1 point of material). We represent this 5 % probability by a number on a D 20. Each country has to start with No 1, every increase is marked or noted. Note your research number (numbers you have already bought and your countries maximum level is on) either on a sheet of paper or use the storage pool player aids card to do so.

When playing with **Cold Days in Hell** use the Research Chart. Mark your research progress with national control markers (flags). Mark the numbers on a D 20 your country has already bought on fields 1-18. Mark you country's research progress on the fields titled "level" below.

## Limitations:

Every Major country is allowed to buy one number per every 4 factories or part of 4 factories in production for that country per turn. Do not count isolated factories. Only 1 of these numbers can be bought to improve a particular weapon per month.

*Example: Italy possesses 4 factories and can buy one number per turn. The USSR possesses 10 factories and can buy 3 numbers per turn, these have to be placed on the research of 3 different weapons. Germany possesses 4 factories. Turkey joined the war on Germany's side. The total number of factories increases to 5 and Germany can buy 2 numbers per turn.*

Only factories present on the maps you play are counted.

*Example: The British Empire cannot research in Cold Days in Hell, for no British factories can be found on the Cold Days in Hell maps.*

At some point in the game a country can decide to see if it has developed a progress. In order to do so roll a D 20. If the roll is equal to or less than your noted research progress numbers, you have developed an improvement of the weapon desired. This is recorded and the numbers bought on that weapon are reset to 0.

If the die roll is higher the country has developed nothing. If the die roll exceeds the numbers bought, the surplus points are subtracted from these. The player suffers a set-back.

No country can buy more than 18 numbers on one weapon without rolling.

The development of a new level of V- Weapons, A-bomb, radar or sonar comes into effect immediately. All other research progresses: New improved units can be built the month after their research.

*Example: The British Empire has saved as much as 13 (a probability of 65 %) in research progress on fighters. Italy has 11. Both countries decide to check on progress now. Each player rolls a D 20. Italy rolls a 14. This is higher than its research progress, so Italy has not achieved a progress. Italy suffers a set back as follows: As the result exceeds its research potential by three points, these points are to be subtracted from it's 11 points - 8 points remain. The British Empire rolls a 12. Since this is within the research progress, the British Empire has developed successfully. Its fighter level increases by 1. The BE can start building better fighters with the beginning of the next month.*

## The significance of the respective fields of research and National peculiarities:

### 13.1 Arm /Tank

The level of development indicates the country's possible tank attack strength.

*Example: Your country has developed tank level 8. You can now produce tanks with a maximum attack strength of 8. Maximum tank research level is 9.*

*Note: Only Germany, the USSR and the USA are able to reach tank research level 9.*

*Example: Germany has developed strength 8 tanks and is now allowed to build all of these tanks. If reaching level 9 after that, it can start to build it's strength 9 tanks.*

### 13.1.1 Upgrade

As soon as a Major country develops a higher research level for tanks (raises the level of the strongest tank unit) all tank units, no matter how strong they are at the time, are allowed to be upgraded to the highest level before the upgrade - up to the amount of tanks existing among the counters of that Nation. Costs are 2 RPs per unit per level.

*Example: Germany has developed research level 9 for tanks. Maximum strength of a German tank being upgraded is 8 now.*

For such an upgrade you have to withdraw your tank unit in question into a city behind the front line during the movement phase. It is then marked with an 'X'-marker. The new tank unit is placed underneath, face-down. Now you pay the necessary amount of RPs.

*Example: To upgrade a strength 6 tank unit into a strength 8 tank unit you have to pay 4 RPs.*

To be upgraded, a unit must:

- be in supply
- have the necessary RPs in the same pool where the unit is.
- not be within an enemy ZOC
- be in a city
- not move during it's exploitation phase
- not be doing sabotage
- not have suffered any hits
- may not hunt partisans

If a unit is being attacked during it's upgrade-turn, it keeps it's former strength until above conditions can be kept for one turn. In addition, it's defense strength is reduced by 2. As soon as the above conditions are met, the X-marker will be removed during the 'remove marker' segment (see 7.1.1) and the unit will be replaced by the new and stronger unit.

### 13.2 Fighter

The research level indicates the maximum air-to-air combat strength of fighters that can be built (the number in the upper left-hand corner of the counter).

A new level of fighters also improves the bombers of that Major country. The numbers listed for bombers concern the maximum tactical or air-to-sea bombardment factors that can be built. In other words, you cannot build a bomber with the listed bombardment factors if you do not have researched the current fighter level.

Fighter level	Bombers
5	3
6	4
9 (German)	5
10 (All)	5

Germany has developed Jet fighters if it reaches level 9 on fighters. Thereafter Germany may build its Jet fighters and level 5 bombers. All other Major countries have to develop level 10 instead.

### 13.3 Submarine

Every submarine level increases the performing ability of submarines. **Search numbers and combat capabilities are increased.** The effects are shown either on the search table or on the submarine- combat tables. If the submarine level is raised, all of the country's submarine are immediately considered to be upgraded in performing ability. The maximum submarine level is 3. When this is reached, submarine can pick either a BC or a CV as a target, even with a roll of 3 on a D 6 (see 7.2.2.1). Additionally, the submarine are capable of escaping escorts. If the escorts want to return fire they have to do a sonar search for every single submarine in order to find it. Furthermore a research level of 1 is needed to apply Wolfpack tactics (7.2.2.1)

## 13.4 Long Range

Every 'Long Range' level improves the aircraft ranges by either 1 hex (fighters and bombers) or 2 hexes (strategic bombers). American strategic bombers with a range of 28 cannot be produced before the USA reaches a long range level of 4 which is also the maximum level. (Most strategic bombers have a printed movement rating of 20; only the USA bombers specified above have a printed rating of 28 instead). Strategic bombers with range 28 will not be improved by the long range level, they are already at their maximum.

## 13.5 V-Weapons

To use those weapons you must at least have developed V-Weapons level 6. V-Weapons allow strategic and tactical bombardment without having to use bombers. Die rolls are conducted at the 2-3 column on the tactical or strategic bombardment table. To conduct a V-Weapon attack simply specify the friendly controlled hex it will be started from. Then, specify a target hex within range and roll a D 6. The target can be any hex within 10 hexes of one's own territory. V-Weapons normally cannot be intercepted. They can be intercepted only after a successful radar search. If intercepted, they lose only their +1 bonus for non-interception. There is never air combat against V-Weapons. Three V-Weapon attacks per month are free of charge. Additional V-Weapons can be built for 2 RPs and 1 point of material. This takes two months. V-Weapons level 2 are better: Their range has increased to 20 hexes and their bombardment strength has increased by one category. These super V-Weapons can be installed one each on both ships and submarine and can never be intercepted. **The development of V-Weapons (minimum level 6) increases the anti-aircraft gun strength of a city by one point**, but not past 5 points. V-Weapons can be used as abstracts without counters if the owner wishes. V-Weapon Counters can be found in MORSECODE....

## 13.6 A-Bombs

An A-Bomb is ready to be launched with A-Bomb level 7 which at the same time is their maximum research level. The A-Bomb has to be transported by one strategic bomber to its target; it allows strategic and tactical bombardment together at the same time, conducted with a die roll on the respective tables at the best possible column, no matter how strong the transporting bomber may be. If an opponent tries to intercept the A-bomb, you do not have to point out the bomber that carries it or announce that you are conducting an A-bomb attack. Although you have to record that bomber unequivocally in writing on a sheet of paper before you start that mission.

*Note: If the notation is not unequivocal the pilot cannot find the target hex and will return to base.*

If a nation is in possession of V-Weapons as well as of an A-bomb, the V-Weapons are able to carry the A-Bomb.

For each month one A-Bomb is available. It can be saved for later use. The A-bomb bombards each possible target in the hex. This means it works as a massive group of strategic bombers and tactical bombers that attack every possible target in the hex.

## 13.7 Radar

Radar improves the search rolls of ships and Air ZOCs. Every player who has reached level 2 can build radar stations. Radar stations do searches on their own. If detecting enemy aircraft, all available friendly aircraft can rebase within single range before an air combat is activated. Radar stations work as a patrol allowing friendly ships to intercept approaching enemy ships (see 7.2.1.a). Also, radar increases the chances of both CVs and naval bombers, both in search for and in combat against submarine. The maximum radar level is 4. A research progress takes effect immediately.

## 13.8 Sonar

Sonar improves a player's chance of locating submarine. Also, it gives DDs a better chance to score hits against submarine. Maximum Sonar Level is 4. A research progress takes effect immediately.

## 13.9 Artillery

From June 1941 on, every nation except Japan and the USA is allowed to build one 2-1-2 artillery unit each. From September 1941 on the Soviet Union is allowed to build one artillery unit per year, up to the maximum of 3. The Soviet artillery is the only one to be winter experienced. Artillery cannot be moved onto the following terrain: Swamp, Mountain, Jungle, and Sand. This is valid for all seasons, even though 'Swamp' might be frozen in winter. If there is a road leading through one of these hexes you are allowed to move through that hex with your artillery but you are not allowed to fight there. (If the artillery unit is attacked anyway, it counts as strength "0" unit.)

Artillery units are the only land units allowed to add their strength to that of the front unit in combat (see 7.4.4.3).

Artillery units are not researched for.

## 13.10 The Russian Guards

The Soviet Union is allowed to form Guards. The procedure for this is as following:

The Soviet Union receives one point for every Soviet victory in a land battle. (Victory means winning a battle involving land units resulting in an Axis withdrawal or the total elimination of the Axis land units in the battle hex.) These points are marked on the Research Atomic Bomb/Guards-square with a National flag, as in a usual research progress. If the Soviet Union succeeds a 'research roll' on Guards, one Guards infantry unit can be chosen for production. First choice has to be Guards cavalry units, all of which can be built immediately hereafter. This means that all of them become available after: 4 x 4-3-7 Cavalry, see USSR red counter sheet. All following units: the USSR player's choice.

After a Guards unit has been selected for production the research marker is relocated to 0. The process is repeated for every new Guards unit to be selected for production.

No Guards tank unit can be developed that way (Guards tanks are produced in the same way as other tanks, but they have Guards abilities (Cold Days Scenario book 6.2.4). Their maximum strength is according to the current research level for tanks: see 13.1). The USSR may try to speed up this progress by investigating the usual amount of research points (see 13.0) into Guards 'development'. One regular research number gains 2 numbers of progress in Guards 'development'. The restrictions mentioned in 13.0 apply.

## 13.11 Italian Army Reformation

Italy cannot build any Infantry unit stronger than 3-2-4. To produce better troops Italy can reform its army. The procedure is the same as for USSR Guards.

Exception: Italy cannot speed its progress by investigating the usual research in the reformation of the Italian Army.

Italy receives all of its 4-3-4 and 3-3-4 infantry units available for production if a research roll on the reformation of the Italian army succeeds.

An Italian victory has to be won by Italian troops alone. Victories won with the help of either Germany or Axis associates are not counted. Neither are victories against strength "0" units. (Engineers do not count as strength "0" units here.) These units exist abstractly to defend against invasions (7.2.1.j) or paratrooper missions (7.3.5.g).

## 13.12. Technology-Transfer

Associated Nations are allowed to help each other with their respective developments. If one player develops a level on a particular weapon two or more points higher than his associate(s), the other is allowed to pay for only one number on a D 20 but is allowed to add 2. This paragraph does not apply to neutral Major countries. Exception: the USA can choose option 27 (see 11.3.5).

## ② 14.0 Land Surprise

Neutral countries that are attacked by countries currently at war suffer from the effects of being taken by surprise until they become part of the Active Side. The effects are:

- All enemy combat factors are increased by one. This applies to the attack strength of land units as well as both air combat and bombardment factors.
- Tank battles increase their maximum distance. Remember, initiating a new tank battle is free of movement points (MPs) if the opponent is surprised. For the first attack, no movement points have to be spent. Therefore, surprise tank battle markers with the number 6 can be placed. (see 7.4.4.7).
- Support of surprised countries by aligned powers is not allowed during the first Action Segment of the attacker that month.
- Rivers have no effect.
- Loot rolls +1

At the beginning of the 1939 game the following nations are at war: Germany versus France, the BE, and Poland; Japan versus China. That means none of these nations are surprised if attacked. The USSR cannot avoid “being surprised” by attacking small minors. In order to loose the status of “neutral” Major country it is necessary to be at war with at least one other Major country.

## ② 15. Resource Delivery Agreements

Besides political inclinations, countries also make agreements regarding the delivery of resources. The obligations may significantly oppose the political attitudes of some countries. If a country joins in the war on the other Side, all agreements between the now enemy countries are cancelled immediately.

Agreements already in place at the start of September 1939:

- Sweden must deliver its only three resources to Germany. Germany has to move them across the Baltic sea. In winter this is possible only via the ice-free port of Narvik. Except for RPs and enemy troops Sweden is not allowed to keep anybody from crossing its territory.
- Rumania has to deliver 3 points of oil-resources to Germany as long as Germany is not at war with the Soviet Union. As soon as this is the case, Germany has all 4 of the Rumanian oil-resources at its disposal.
- Yugoslavia has to deliver its two resources to Italy. This obligation ends as soon as Yugoslavia enters the political condition ‘Allied March’.
- The USA has to deliver 3 resources and 2 oil resources to Japan. These are taken from the Western USA production.
- The Axis minors have to provide their resources to Germany when Germany is at war with the USSR.
- Saudi Arabia has to provide its oil resource to the British Empire.
- Iraq has to provide its oil resource to the British Empire.

## V 16 Voluntary Rules Options

Players may agree to use some, all or none of these rules before starting the game.

### V 16.1 Air Suppression of Coastal Batteries

Possible air mission. Coastal batteries are suppressed by scoring 3 hits on the tactical bombardment chart. If the attacking bombers score fewer hits those have no effect.

### V 16.2 Ground Attack on Land Units

Possible air mission. This is a special case. It is very difficult to destroy units as large as a corps out of the air. To score hits against land units on the tactical bombardment chart, the tactical bombardment strength must be 5 times higher than indicated. Factors can be combined.

*Example: To have a tactical bombardment strength of 2 against a land unit, 10 points of bombardment strenght must be available.*

Alternatively divide your tactical bombardment strength factors by 5, round down fractions, and seek the correct column. Successful anti-aircraft fire reduces the effective air factors. A die roll that rejects 3 “Ground Attack on Land Unit” factors rejects 15 air factors.

## V 16.3 Limited Intelligence

In land combat units are no longer presented visible to the enemy only the front unit is displayed.

## V 16.4 Surprise Option

If one Side reaches an initiative bonus of 5 (+5 Axis, -5 Allies), one bonus point can be spent to try **one** land surprise attack. All attacks must have been declared before the surprise roll is tried. The player in question rolls a D6 with the following results:

1	attempt failed, defender achieves surprise instead
2-3	no effect
4-6	attack is conducted as a land surprise attack.

## 16.5. Italian Retreats

If an Italian land unit is instructed to retreat as a result of a land combat, it does not have the choice of taking an additional hit instead of retreating (see 7.4.4.2).

*Note: This is not malicious discrimination against Italy, but corresponds to the historic behavior of most Italian troops in WW II.*

## V 16.6. Political interaction

France and the British Empire may only co-operate in a limited way. Indeed, French aircraft and HQs cannot support BE units, French HQs cannot put in reserve BE units, French ships cannot lay BE mines, and French mines cannot be laid in BE ports. All the above is also true vice versa. Finally BE and French aircraft cannot use the same airbase. This rule refers to 17.0 below.

## 17. Political Interaction

### ① 17.1 Cooperation

Nations aligned to each other can cooperate. Cooperation means: Stack together in the same hex, support each other in battles, transport each other’s units, inform each other about search results, supply each other’s units, subordinate reserves to each other’s HQs, transfer research, in other words, troops of a cooperating nation are treated as units of your own nation in every way (except that they may be commanded by a different player, and they are both produced and replaced by a different National Pool).

When neutral, Italy is not aligned to the Axis. When neutral, the USA is not aligned to the Allies. The USSR cannot cooperate with the BE, the USA, and France

### ② 17.2 German-USSR Pact

The Soviet Union has to supply Germany with 5 resources. This obligation ends if both nations are at war with each other. The Soviet Union is also allowed to stop delivering if German units enter the territory of an Axis-associate not yet activated. Before Activation of an Axis-associate Germany and Italy may enter the territory of Romania, Hungary, Finland and Bulgaria as if they have Axis March status. As soon as Germany leaves that territory, though, the Soviet Union has to resume it’s delivery. If Germany conquers Poland it receives Western Poland up to the demarcation-line, the Soviet Union does then receive Eastern Poland and is allowed to occupy the Baltic nations.

*Designer’s Note: Germany and the Soviet Union did have a secret agreement regarding the division of Poland and the Baltic states.*

Other such agreements can be made at the start of each political phase, by mutual agreement.

### ② 17.3 German-USSR Declarations of War

Germany can, at any time, declare war on the USSR. The USSR can prepare its war-entry versus the Axis from January 1941 on. The USSR player randomly draws 3 blue markers as below (which are printed with numbers on one side only). These indicate the number of months after which it can declare war on the Axis at the earliest.

The markers to choose from are put together as following and are then laid face-down on the table:

1 x '2'; 2 x '3'; 2 x '4'; 2 x '5'; 2 x '6'; 1 x '7'.

The Axis will be informed about the drawing of the markers, the result will be hidden in an envelope, though. The Axis player will not be informed about the result until the Axis is at war with the USSR.

*Example: In January 1941 the USSR draws markers as follows: 1 x 5, 1 x 3, 1 x 7. This is added up to 15 months. The USSR can declare War on the Axis in March 1942 earliest.*

If the Soviet Union attacks Germany, it has to activate all of its RPs one after the other (see 12.2). If the Axis invades in England, the Soviets are allowed to roll a D 6, paying one diplomatic point. If the result is a 6 the USSR can start drawing markers at that time. Numbers from 1-5 do not have any effect other than losing the diplomatic point.

## ② 17.4 Political restrictions for Axis-Minors

All Axis-Minors except Bulgaria enter the war as soon as Germany declares war on the Soviet Union. Axis-associates that have been activated at one time stay at war. They will not be activated again for a different reason. Before Activation of an Axis-associate Germany and Italy may enter the territory of Romania, Hungary, Finland and Bulgaria as if they have Axis march status.

**Finland** does only have limited goals. It is not allowed to attack Leningrad. It can attack Schlüsselburg but cannot operate south of Schlüsselburg. This section north of Leningrad is called the Finnish sector. It includes Finland and any USSR territories north of the New and on the Scandinavia Big Hex-map. Only up to three German units are allowed into the Finnish sector (Exception: Norway). Aircraft do count, tanks are counted double. Every year after the attack on the Soviet Union this limit increases by one unit. If the Axis conquers Leningrad, the restrictions for Finland become invalid.

**Bulgaria** does have a non-aggression pact with the Soviet Union. It operates in the Balkans or against Turkey only. As soon as Yugoslavia becomes an enemy to either Germany or Italy, Bulgaria enters the war versus Yugoslavia. As soon as Turkey becomes an enemy to either Germany or Italy, Bulgaria enters the war versus Yugoslavia. With Bulgaria entering the war, it's resources become available to Italy.

**Hungary** also enters the war versus Yugoslavia as soon as Yugoslavia becomes an enemy to either Germany or Italy and it's resources are then also available to Italy.

**Italy** has to deploy Axis- Minors units to help Germany against the Soviets. Any unit marked as a reserve unit in the battle formation has not to be employed but can be used by Italy for its own purpose. Each Axis Minor has its own National Pool. Necessary supply or material can be provided by Germany or Italy.

*Designer's Note: Giving Italy control over Axis-Minors is introduced for game-purposes.*

## ② 17.5 Soviet declaration of war on Axis-Minors

The Soviet Union can express territorial demands on adjacent Axis-associated Nations. If these Nations decline (as is decided by Italy), the Soviet Union is allowed to declare war without this being a declaration of war on either Germany or Italy.

The territories in demand are:

**Finland:** Hango as a marine base, two hexes on the border at Leningrad, and the double-hex-line at the Karelian border, marked with an orange border line

**Rumania:** all territories between the two rivers ('Bessarabia'),

**Hungary:** the border hexes as well as the line of hexes behind those.

If the Soviet Union conquers the capital of an Axis-associate, this Nation will not be at war any more. It's territory will be under Soviet control unless conquered back.

To avoid being conquered by the Soviet Union Italy can allow the associates in question to surrender. This is possible during that Nation's second month at war with the Soviet Union and only if neither Germany nor Italy is already at war with the Soviets.

If a Nation surrenders, it automatically accepts the territorial demands of the Soviet Union. Units already stationed deeper in enemy territory have to be withdrawn. During its war with the Soviet Union the Nation in question can be supported by Germany as well as Italy with both supply and material but in no other way.

If the Nation surrenders, its RP-cities stay mobilized, its resources are available to Italy. Both Axis Major powers are allowed to station units there (no tanks!). Any loss taken by an Axis-associate during its war with the Soviet Union maintains. Losses can be replaced month after month with now-activated RPs.

The Soviet Union is allowed to accelerate its war-entry versus Germany by one month per Axis-associate it already made war to.

If the Soviet Union has not been drawing markers before then, it can do so one month in advance for each Axis-associate it has been at war with.

Both a territorial demand against an Axis associate or a declaration of war against are one event for the USA political phase.

## ② 17.6 Lend Lease

After their entry into the war it is possible for associated Nations to supply each other with goods without having to pay for them. Exception: The USA is allowed to deliver any good chosen by them via political option before their war-entry.

*Designer's note: The USA concluded 'Lend-Lease' agreements with the BE as well as the Soviet Union. The costs of these deliveries were agreed to be paid after the war.*

Lend Lease is possible between all associated Major powers. It is not possible between communists and nationalists, though. A Nation receiving Lend Lease deliveries is not allowed to offer Lend Lease to others. Monthly limitations are as following: 5 points of supply, 5 points of material, 5 resources, 5 RPs.

## ② 17.7 Trade

All Nations sharing the same political tendency can conclude temporary trading-agreements. Neutral Nations with 'Pro Axis' status trade with the Axis, 'Pro Allied' Nations trade with the Allies. South Americans trade with the Axis. This can be stopped by the USA, though (see US options).

The following exchange values apply:

2 points of supply = 3 points of material

2 points of material = 1 Resource

3 points of material = 1 Oil Resource

RPs cannot be traded with.

Any resource or oil not needed for their own production cannot be traded with by neither the USA nor the Soviet Union (see peace-production USSR, USA).

*Designer's Note: This would have meant Lend-Lease through the back door.*

Any ships/aircraft deployed for the transport of goods by air or by sea are not available for other tasks during transport. Transporting goods via ships of a neutral Nation costs one additional point of material. Obstacles: see the convoy-rules (7.2.1b).

To prevent Major powers from 'stuffing' a playerless Minor power and then bribing or robbing it, all goods delivered to such a Nation have to be used up. (i.e. everything received by a Minor power is taken out of the game.)



## 18. The Missing Chapter

This chapter has been removed. To assure compatability with previous EOA games; Morsecode..., Triumph & Fall of the Desert Fox, and Cold Days in Hell; its slot must remain blank. The same holds true for some subsections such as 7.2.2.6, 7.4.3.2 and 7.4.3.3.

## 19. The Map

In addition to the standard map scale, EoA uses a 'Big Hex' map scale for smaller maps and a Pacific map scale for the Pacific map. The Pacific map is also called Asia map.

The map scales affect movement, but do not modify combat.

### 19.1 Map Scales

Movement costs on the European map multiplied by 4 equal movement costs on the Big Hex map and 2 on the Asia map. Practically, this means that entering a Big Hex map containing other than clear terrain costs all movement points a land unit possesses. The features below show how certain ranges change on a 'Big Hex' map.

**Big Hex Region:** North-South alignment is not always in accordance with reality. Also, to have correct distances within the game, the transitions to the standard map scale had to be aligned accordingly.

*Designer's Note: Normally, the scale of the 'Big Hex' map should be smaller, regarding the connection to the European map and the Pacific map. The above mentioned dimensions have been introduced for reasons of playability.*

The Terrain Effects Chart on the Pacific map already shows the movement costs for the Pacific map in "Clear" weather. For any other weather consult the "Movement Cost/Weather" table on the Tables and Charts sheet. Double the listed amounts for Pacific scale or multiply them by 4 for Big Hex scale.

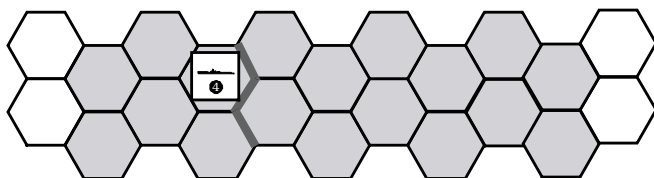
Exception: Jungle does not exist on the European map so the Pacific scale cost is already listed in the table.

For Naval Movement the movement allowance is counted in seazones not in hexes. Ships can move 4 seazones, no matter what map scale the seazone has.

### The Panama Canal

The North America map of Triumph & Fall of the Desert Fox and the North America map Part of the Pacific map shows an arrow with a connection to Panama. The Panama Canal and the surrounding land and sea area is not displaced on any map in EoA. We use it for movement purposes to cross between the Pacific and the European maps and the given locations. It is counted as 1 seazone for range purposes. The Panama Canal is considered to be US controlled. Axis naval units, including subs, cannot pass it after the USA enters the war or the USA chooses option 21 of the USA Political Phase to close the Panama Canal.

### Big Hex Standard Range



*The search radius of the submarine is 6 hexes on the European map but only 2 hexes on the Big Hex map and 3 hexes on the Pacific map. The example above is due only for maps that have both ranges printed on them.*

Ships do not have a search radius over a map edge nor do have aircraft an Air ZOC over a map edge. Ships have no reaction radius over a map edge.

**1st Example:** You have a patrol in hex 1024, Indian Ocean, Pacific Map. The search radius does not extend in western direction (Persian Gulf). You have no reaction radius from here on any hex in the near East map.

**2nd Example:** Your engineers have built an airbase in hex 1017 Pacific map. Aircraft there do not have an Air ZOC on any hex on the Near East map.

## 19.2 Crossing Borders to and from Big Hex Maps

### Big Hex

### Standard Range



*The aircraft flew from airbase 1 to its mission hex using up movement points as following:*

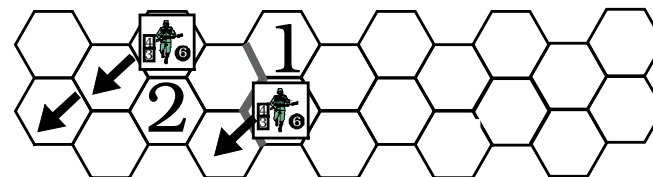
*4 hexes in European scale = 4 MPs plus 2 big hexes (2 x 4) = 8 MPs. This equals the aircraft's maximum range of 12 MPs. On its way back the aircraft pays 4 MPs moving back to hex 3 or 4 and again pays 4 MPs although moving into a European scale hex.*

Important: Movement cost changes to 4 MPs when crossing the Big Hex border whether you move into Big Hex scale or into European scale or into Pacific scale. (otherwise logical errors would arise, e.g. needing less MPs on the way back).

*If, alternatively, the aircraft would start from airbase 2, it would need 13 MPs to enter the mission hex. (5 MPs for the European scale hexes plus 8 MPs for the Big Hex scale hexes. Any aircraft having not enough MPs to reach a destination hex is not allowed to enter a Big Hex. Hence, any aircraft starting from airbase 2 is allowed to move to hexes 3 or 4 only. It misses one MP to move one hex further.*

### Big Hex

### Standard Range



To cross a Big Hex border in both directions land units need to fulfill 2 requirements:

- 1) have enough MPs left to pay for the movement cost of the target hex.
- 2) crossing such a border consumes all MPs, the unit is finished with movement thereafter.

Even if a unit does not match condition 1) it can still cross a Big Hex border with the "always-one-hex rule" (see 7.3.2).

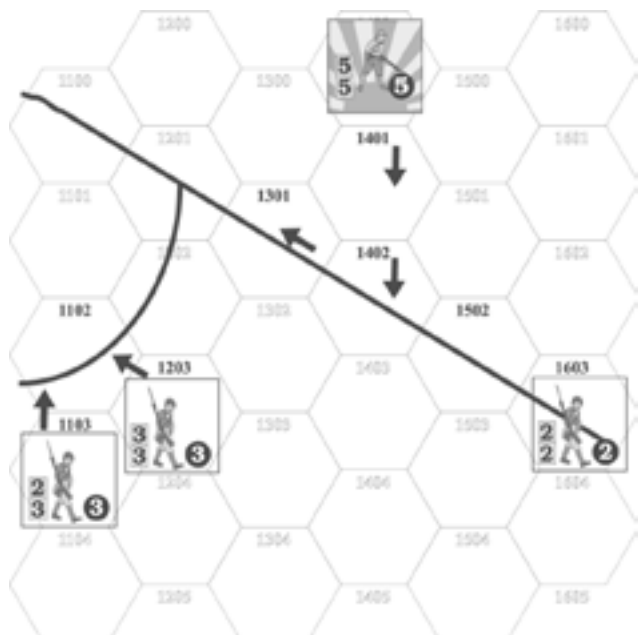
There are no direct land connections between Pacific and European map scale, there is always a Big Hex map between them.

The locations where to cross are indicated with arrows. You can cross at the arrows location and/or the railroad or road directly adjacent to them (if any). Sometimes the arrow description does not point to a hex directly at the border of the map you intend to enter but indicates a city that you will reach if you follow that direction.

## 19.3 No Extended Land Movement

Older versions of the EoA rules mention a special rule for Big Hex scale, allowing a special move if you still have MPs left. **That rule is no longer valid.**

If you have not enough MPs left to pay for the cost to enter a certain destination hex you cannot enter it. The only exception is the "always-one-hex rule" (see 7.3.2).



**Example:** A Japanese Infantry with 5 MPs has moved 2 clear hexes on the Pacific map (to hex 1402 via hex 1401). 4 MPs are used, one MP is left. By moving into hex 1401 it exerted a ZOC into hex 1301 which switched to Japanese control. With 1 MP left no further movement is possible except into hex 1301 by strategic movement along a road costing 1 MP only (see 7.3.2.c). Hex 1502 is not available for strategic movement because the Chinese Inf exerts a ZOC in it, negating Japanese control. So the Japanese Inf finishes its move in Hex 1301.

In the Chinese Action segment the 2 Chinese Inf move into hex 1102. Each of them has 1 MP left. They cannot move into hex 1202 so they use their MP (1+1= 2) to sabotage the road in hex 1102 and place a blue hit marker in hex 1102.

can increase his stacking limit up to 5 land units. A blue one-marker is placed with the 3-3-4 Inf to indicate that it has 1 MP less than the other units. China reacts with a block of one 2-2-2 Inf from Hex 1602. Finally both sides add air support from airbases in range. Japan pays one point of supply.

Air combat is executed: The Japanese fighter has +4 and the Chinese fighter -4, Japan rolls a "6" with 2 D6 and China scores a "7". The Chinese fighter is "D" and goes to the repair pool, The Japanese fighter is unaffected.

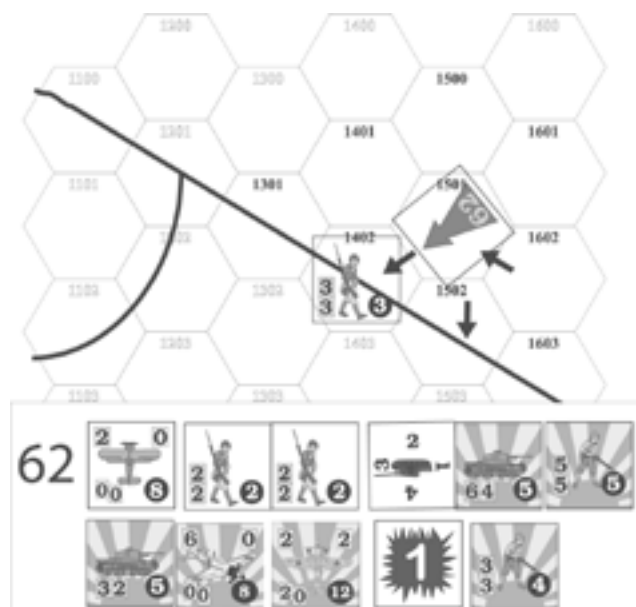
Land combat: Japan's front tank has 6 attack factors + 2 from air support by the bomber, 8 total, minus 2 for the Chinese front Inf resulting in a + 6 combat differential. Japan rolls a "6" causing a "0-3R". Japan takes no hit, the Chinese front Inf takes 2 hits and is eliminated. The second Chinese Inf takes the 3rd hit and has to retreat. It retreats to hex 1402 to stack with the Chinese 3-3-3 Inf in hex 1402.

Japan pursues: tank 6-4-5 and Inf 5-5-5 attack into hex 1402 accompanied by the aircraft. That costs 2 MP, since no MPs are left the tank battle marker is removed now, Japan pays one more point of supply. The 3-3-4 Inf must stay, it has only 1 MP left. The 3-2-5 tank does not attack but advances into hex 1502 instead.

The outcome is not discussed here. Assume now in the previous land combat Japan rolled a "5" instead of a lucky "6". The combat result would be a 0-2 eliminating the Chinese front unit but allowing the second Inf to continue fighting. That additional combat round reduces the tank battle marker to 1, not enough to make use of it anymore.

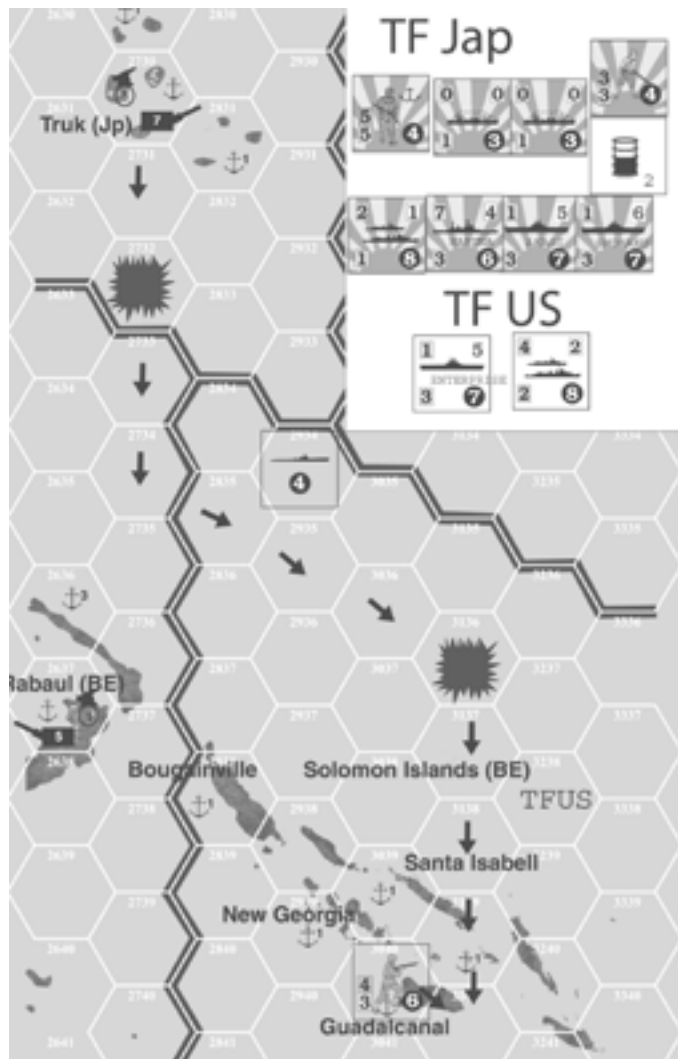
In order to avoid that problem, Japan could have used the 3-3-4 Inf to attack the Chinese Inf in 1602 (via hex 1601) before initiating the tank battle.

## 19.4 Examples for Pacific Map Scale



### Tank Battle

Hex 1501 contains 1 Chinese 2-2-2 Inf. Japan attacks from hex 1601 into hex 1501 with 1 x 6-4-5 tank, 1 x 5-5-5 Inf, 1x 3-2-5 tank. Battle vector # 62 is placed according to the attack direction. Japan decides this to be a tank battle. The units have 5 MP, 2 are needed for entering the clear hex, 1 more for initiating the tank battle, so the tank battle marker is placed with the 2 on top. Japan brings in 1 more 3-3-4 Inf from Hex 1500, remember in tank battles the attacker



## Invasion

A Japanese Task Force (TF) as displaced on the left leaves Truk to follow the path indicated by the arrows in order to reach Guadalcanal for an invasion of that island. The weather is Clear. On the way there it meets problems.

### Problem 1: The US sub in hex 2934.

Like other ships subs exert a 3 hex search zone on the Pacific Map. The Japanese TF enters the sub's search zone in hex 2732. Consult the Search Table (7.2.1.a.2). It lists a 10 or less to be rolled with a D 20 in order to detect enemy ships with a sub. The USA has researched sub level 2, simply add this to the maximum number. So a 12 or less needs to be rolled. The US player rolls an "11" and detects the Japanese TF.

The Japanese TF is displayed visible for the US player. The US player conducts his sub attack on the transport carrying the Marines.

A "7" is rolled with 2 D6. Cross index this result with the "Trns." Line and find a "3". This means the Transport is left unharmed (harmed below a level that is covered by this game but can continue moving), but the cargo suffers 3 hits. Since there is only one type of cargo the cargo table is not consulted. The Marines suffer 3 hits and is marked with a red "3" hit marker.

Now the Japanese return fire.

Consult the Ships versus Subs table. Japan has not researched any Sonar or Radar level.

The DD rolls a "10", the BC a "8", the 2 CVs a "9" and a "7". These results are reduced by 2 each for the US sub level. So we have an "A" for the DD, nothing for the BC, one more "A" for the CVs.  $2 \times \text{"A"} = \text{"D"}$ . Before it is placed into the repair pool the US sub has to return to the nearest base which we assume is off map. On the shortest possible way there the US sub is detected by a Japanese off map patrol which inflicts another "A" result to finally eliminate the US sub.

### Problem 2: The US Task Force in hex 3238.

The Japanese TF continues moving as indicated. In hex 3036 it reaches the search zone of the US Task Force. The US player delays his search till the Japanese reaches hex 3136.

Consult the search table. The US player rolls a 13 with a D20 and detects the Japanese TF. The Japanese roll a "11". Japan does not want to engage but the US player wants, so there is a battle. Nobody is surprised. To determine the kind of battle we have to look at the search results. Japan has no radar level. Since Japan's roll is lower than 14 it is good enough to initiate Naval Air combat, but higher than 10 so not good enough to initiate surface combat.

The USA has radar level 1 which increases the maximum numbers to 11 and 15, but that remains good enough for Naval Air combat but not for Surface combat.

So both sides organize their CVs for an air attack on the enemy TF. For this only the air component (upper right corner) is taken, the CV remains with the other ships. Both sides pay one point of supply from their National Pool, the Japanese may not use the supply on the transport.

The Japanese player uses the Shokaku as a fighter and the Akagi as a bomber, the US player uses the Enterprise as a bomber.

The Akagi's aircraft component gets to attack the enemy TF for no enemy fighters are present.

The Enterprise and the Shokaku fight a round of air combat. Consult the Air Combat Results table.

6-5 give +1 for the Shokaku and -1 for the Enterprise. Japan rolls a "7" resulting in an "A", the USA rolls a "3" for a "D". The US CV is marked with a blue "1" and the Japanese CV with a blue "2" to indicate the hits on the air component.

The Akagi now attacks the US ships and chooses the Enterprise (the CV is attacked while its aircraft are on a mission). The Enterprise is supported by the DD for antiaircraft fire. This totals to an AA strength of 5. Consult the AA table. A roll of "3" with 1 D6 rejects 1 air to sea factor. The Akagi maintains 4 factors + 3 for Naval Air, or a total of 7 factors. Consult Naval Combat Chart I: The Enterprise has armor class 6. 7 factors vs armor class 6 results in a "H" modifier.

We now switch to Naval Combat Chart II. Japan rolls a "9" which results in a "D" for Modifier "H". The "3" before the "D" is ignored because no load is present.

The Enterprise goes to the repair ship pool, because on the way to the next port nothing happens.

Let's assume the Japanese rolled a "9" with their initial search roll, good enough for surface combat. After the Naval Air segment is finished in the way as above, the Japanese ships can now engage the US TF into surface combat before the Enterprise is actually moved to the repair pool. The Enterprise is "D" meaning helpless and is a target for the Japanese. We do not discuss this here further.

Finally the Japanese TF reaches its destination and is now no longer opposed by enemy ships. The invaders disembark the Marine, the 3-4-4 Inf and the supply into hex 3140 on Guadalcanal. The US Inf in the adjacent hex blocks into the invasion hex. A land battle vector is placed, Japan pays one supply point from the 2 he brought with him. Terrain Jungle:

*The US Inf has a defense strength of 3 + 2 for Jungle, totals 5. The Japanese Inf is halved because of an invasion to 1,5 which is rounded down to 1. The Marines is not halved but has 3 hits, reducing its strength to 2. It receives + 1 for Japan in Jungle for a subtotal of 3. So Japan selects the Marine as his front unit.*

*Air support: The Shokaku has a damaged air component but the Akagi is available (the one factor rejected by AA was temporary for the previous combat but has no effect now). The five factors are halved because of jungle to 2,5, rounded down to 2.*

*Shore bombardment: The 4 Shore bombardment factors of the Haruna are halved to 2 because of Jungle.*

*Japans final attack strength is 7. 7-5 is executed on the +2 column of the land combat chart. Japan rolls a "4" which means 1 hit for the USA and no hit for Japan. A red 1 hit marker is placed underneath the US Inf. The USA retreats to hex 3040, hoping to continue with better conditions after arrival of US reinforcements.*

*Our example ends here.*

## Players Notes

The rules result in a large number of possibilities. It is impossible to mention all aspects of good play in only a few paragraphs. Any particular "winning strategy" is relevant only in the context of a game in progress. Therefore, the designer only gives a few hints.

## Air Warfare

Air superiority is crucial. The Side with air superiority is very likely to win the war. If your Side is superior in the air, use air-base attacks to suppress the enemy air forces. Concentrate your air force on crucial battles, especially tank battles. Without sufficient air support, your plans may become shattered dreams.

If your enemy is superior in the air, it is a good idea to keep your aircraft in the rear, far behind your front lines. That way, enemy air-base attacks are minimized in number and effect. Do not waste your fighters against superior enemy forces. If you are the Active Side, do not start air missions on your own (with the exception of areas where no enemy superiority exists).

Wait until the enemy has reacted to your attacks. Then, concentrate your fighters, in the Active Side's interception segment (7.3.5), against those parts of the enemy air force that are inferior to yours. This will probably result in significant enemy losses and can result in gaining air superiority for yourself.

Some missions are less effective than others. Combat ground support for your units is much more effective than direct destruction of enemy land units from the air. The ability to rebase allows you to concentrate your air force before starting your missions and so offers you the opportunity to gain air superiority at a certain location, even if the enemy has it overall.

## Naval Warfare

The superior Naval Powers are the Allies. If the Axis wants to invade the UK, it will need to do naval production of its own. A superior enemy navy can be partly countered by your air force. The production of bombers having air-to-sea factors will be helpful.

Another great danger to enemy naval power is submarines. Submarines are a major problem particularly for the British Empire which, must import most of its resources to be able to produce. A strong Axis submarine fleet can be countered by the BE's producing a lot of DDs and developing a high sonar level. Always escort your convoys with strong anti-submarine forces.

## Land Warfare

### Attack:

First of all, use the proper units to attack in each special type of terrain. Attacking cities and fortresses with tanks will lead to high casualties - it's infantry units that are designed to do that job.

Tank battles are the most important concept of the game. They allow deep penetrations into enemy territory and the formation of 'pockets' of enemy units. Once - surrounded by strong enemy forces, the units in these pockets face imminent destruction. Penetrations can also lead to early control of vital positions such as resources and important cities. Tank battles allow you to both concentrate your forces and indicate your major offensive direction. They must always be supported by a strong air force.

### Defense:

The Empires of Apocalypse system puts its emphasis on the offensive. To hold a clear hex against a superior force is nearly impossible in the long run. Certain strong points in terrain that favors the defender can, however, be held. Defense concepts are flexible. Have strong reserves behind the front assigned to your HQs. Weaker units should form a solid front, leaving no hex undefended. Here, reserves can be moved in and successfully defend vital positions, allowing the defender to dictate the emphasis. It is better to retreat if the enemy is superior than to stubbornly hold to a 'stand and die' tactic that will eventually attrition your forces into impotence. The enemy can pursue you with tank battles, but every new tank battle costs another precious point of supply. Supply is short, especially on the Axis Side. On the other hand, tank battles can reach vital positions that, if conquered by the enemy,

will cost you badly, so when necessary tank battles must be slowed down by fighting another combat round. Whether this latter tactic is worth the higher casualties of your troops must be decided on a case to case basis. If you stay forever on the defensive, you will surely lose the war. Seek out opportunities to counter-attack -- your enemy cannot be strong everywhere, unless the position is hopeless. Economics: saving production strategy planned is crucial. Remember, without sufficient supply, no offensive will go far. One way to save supply is by not producing a useless excess of supply-intensive units. You must figure out a major strategy of how to perform your actions. Then, decide which units or achievements are needed to give that strategy the best chance to succeed.

## Axis

Early in the war you have to decide to either invade the United Kingdom or prepare “Fortress Europe” against an oncoming Allied invasion. Both strategies require close cooperation between Germany and Italy. You have the advantage of the inner lines. Despite the general superiority of the Allies in number, you can achieve local superiority by rebasing cleverly and by using your railroad capacities. At the start, you are superior on the tactical offensive, but time will eventually switch the strategic advantage to the Allies. So do not waste your time. If you intend to invade the UK, it is more important to eliminate as many British units in France as you can than to defeat France quickly or to seize North Africa with lightning rapidity. You must plan ahead so as to have either a stronger navy or aircraft with air-to-sea factors. Your transport capacity must be increased. River craft will help you solve that problem, but they are extremely vulnerable to enemy attacks.

If you plan on a “Sitzkrieg” in “Festung Europa”, you must build defenses at the expense of flashy toys such as excessive armor, and of ships that will provide very little delay in relation to their cost. Air power, however, will rarely prove a waste, no matter what your strategy is.

## Allies:

At the start, the Axis on-map forces are superior, but you have the higher production potential. The most important consideration is, to achieve air parity quickly. Once that is achieved, you must fend off the death grip of the Axis submarines. When the USA enters the war, the tide will start to turn inevitably in your favor, but the USA forces are weak in the beginning, except possibly at sea, and they need time to get their war machine started, so the BE (from 1939) and the USSR (from Barbarossa) must fight a determined delaying action until the production might of the “arsenal of democracy” can make itself felt irresistibly.

Against the Axis advantage of the inner lines, you can play a trump card: your air force; so concentrate your efforts here first. Use this tool, combined with partisan warfare, to destroy the Axis railroad system. When invading, slow down Axis reserves with low-flying aircraft. Once you are on the strategic offensive, destroy Axis production with your superior strategic-bomber air fleets.

Next, you can and must gain uncontested control of the seas, but don't take doing so for granted - keep this need always in mind until your position is so overwhelming as to assure itself. Then use your superior external mobility and daunting naval fire-power to find and exploit the weak point in your enemy's defensive perimeter.

Finally, you can turn to the ground war, launching massive invasions whose sea support cannot be cut and whose air support is overwhelming. Often it is a good idea to get Italy out of the war quickly. Most Italian units are weak, but they are an indispensable stiffener for the Axis defense. If you leave Italy unharmed, you will soon find its units filling what would otherwise be exploitable gaps in the Axis wall around defense of Fortress Europe. Remember, Germany by itself cannot be everywhere, but you can invade nearly anywhere. If one invasion is not successful, you can still withdraw and try your luck at another time in another place.

## Design Notes

### The Map

On the map, names are often written in the national languages (for example ‘Normandie’). The rules book and the East front map mostly uses the English names (for example ‘Normandy’).

### Historical Accuracy and Playability

Empires of Apocalypse is a game series made by Cosim (Conflict Simulation) players for Cosim players. It is a compromise between historical accuracy and playability, but with an emphasis on playability. When designers develop a game that simulates history, they always simplify reality. Example: If the frontier of a nation runs (in actuality) through the middle of some hex on the game map, the designers give the complete hex to one country at the expense of the other.

Another example: we deliberately did not give the units a size designation (such as, for example ‘XXX’ for a corps). We also did not give the units identification numbers. The major concept is that it is up to the player, not history, to decide which units are to be built and where to place them. The quality of the units should depend on research progress. Exact unit identification is more important to games with a given historical setup and therefore a given Order of Appearance. Such games do have divisions or even smaller units. Most of the games with exact unit identification do not include a production procedure. The designers of the Empires of Apocalypse system are aware that a lot of Cosim players are familiar with unit numbers and exact locations and may miss them in Empires of Apocalypse. In the following paragraphs, the designers explain why Empires of Apocalypse is different.

The exact position at a certain time of a division or of a smaller unit may well be available.

The exact position at a certain time of a corps is much more difficult to determine. In most cases, the divisions belonging to a corps have been spread out. It is possible to give the exact position of the corps HQ, but not that of the units, which are in effect in a lot of different hexes! Also, corps vary very much in size. One may consist of only one strong division plus some battalions; another may comprise more than 9 divisions. New units become attached to corps, others are withdrawn. Furthermore, the nations represented have different views of what a unit should consist of. Examples: What the USSR calls an ‘Army’ corresponds to a German or Allied ‘Corps’. A lot of divisions, brigades, regiments, or even battalions operate independently, not attached to a corps. Most Axis units are chronically under- strength in the later years of the war.

For all these reasons, the designers have chosen to employ another concept. During the historical research, the designers determined what kind and amount of manpower, equipment, elite troops and other assets were present at a given time and a given location. The designers then evaluated all this information (influenced, naturally, by their individual points of view) and abstracted them into “strength-points” (in game terms). This distillation was then transferred into the OBs. If the units resulting from this process had been given historical corps number identifications, they would inevitably have been wrong in most cases and would thereby have annoyed Cosim players who know history. In the same way, it is specified at a certain time during the start of a scenario which reinforcements had been produced historically, up to that point. After that, it is up to the players to decide which reinforcements are to be produced in the game.

Not always are exact positions of units given. For example, the ‘Overlord’- scenario positions for the Allied units are “anywhere in the UK” - a designation that simultaneously re-creates the historical ignorance of the Axis command and avoids burdening the game with irrelevant information. Air units can rebase freely; land units are selected to invade France and can be organized directly into invasion task forces, together with ships. To keep a certain balance, the Axis Side can (first, but secretly) deploy some of its submarine freely, anywhere it expects the invasion. The ‘Sea Lion’ -scenario has been combined with the ‘France 1940’- scenario to give the Axis player more time to prepare the naval element of the operation.



Ships, HQs, and certain famous units have, by contrast, been given names, for emotional reasons and on account of positive reactions from the game-testers. Naturally, this practice causes historical-accuracy problems. For example: The Graf Spee was actually sunk in Nov. '39, but it appears in the MORSECODE...\_ tutorial. It is also possible in a scenario to build ships that had actually been sunk before the start of that scenario - the Hood, for example.

The 'Assault on Belgium'- demo uses a Jagdtiger as a tank picture, although this type definitely was not available as early as 1940. The idea is to use unit types that existed in World War II and are well associated in the public mind with what happened during the war years. We could not present the entire variety of types that took part, so we choose a few well-known ones to be representative. A PzII, for example, would look odd in a 1944 scenario. The Lehr was an elite division, not a corps, but most of the time it had strong subordinate units attached to it, so the strength assigned to it by the designers serves the credibility of the game. The USA did not possess a corps called 'Patton' in fact, but in the game the designers use that name to identify the tank units personally led by the famous general, to honor him this way.

To the designers' minds, convincing historical accuracy in a corps-sized game is not a result of mere exact positioning and exact unit-identification numbers. Though it may be important which forces were available in a certain area, it is more important that the game mechanism simulates the course of the war correctly, that it be possible to point out convincing analogues of the relevant characteristics of World War II, and that historical behavior (on the part of the players) leads to convincing (even if not exact) historical outcomes. The most important criterion for achieving playability is the provision of a maximum of strategic and tactical options by means of only a minimum of rules.

## Counter Pictures

The basic idea for counter pictures has been to make it possible to identify the unit type without further explanation. The Militia counter shows a guy with a pitchfork. This is a little designer's joke, meant to suggest that militia were inadequately equipped and not to offend any militia soldier with a charge of lack of bravery.

## Systems

The naval system combines a hex-based system with an area-based system. This double feature is achieved with the concept of the search radius. In practical terms, this combination means that ships are not statically positioned in the hex but merely placed there for playing purposes. They move within the search zone, a random chance of finding them is assigned. The naval system includes a flexible reaction mechanism that makes naval warfare mobile.

The concept of mobile warfare is crucial for both land combat and movement. Its basic instruments are the following game mechanics: combat within hexes, blocks, reserve moves, and (most important), the tank battle. The hex-based combat influenced by combat differentials has a lot of advantages over the proportion-rated systems, in which you attack a hex out of more than one of the surrounding hexes. Proportion-rated games need more than one fronting hex to obtain a ratio that gives a realistic chance of attacking successfully. As a result, an attacker attempting to employ a broad-front strategy would be at a disadvantage when attacking along the entire front line. The battle-vector-system, in contrast, makes it possible either to attack the entire front or to build a "Schwerpunkt" at a certain part of it. The concept expressed by the German word "Schwerpunkt" (center of mass), can be explained best as detecting the "solar plexus" of the enemy front and striking exactly there with an iron fist. Such an attack can be strengthened by tank battles and by supporting attacks from units stationed in flanking hexes. The defender can establish a defense "Schwerpunkt" by reacting with reserves. Both Sides can add naval and/or air support.

Air superiority is the decisive victory factor. If an offensive will fail or not is often decided in the air. Air forces can strike nearly everywhere and cripple enemy moves, enemy air forces, enemy navy, and enemy production.

The production system combines industrial capacity and available resources with forward planning. Players have to decide carefully which strategy to follow and, also, what to produce in the long run. Players have much more power to decide than any leader of a country in World War II. This is done on purpose to increase playability.

The concept of initiative is included to express certain turning points in the war. No Side can always have the initiative. Once the forces on one Side are exhausted the enemy will determine the actions. This leads to double moves, for example: Your Side had the initiative in the second Action Segment of one month and has the initiative in the first Action Segment the next month. A double move may be decisive. But remember: After your double move the next one inevitably will be executed by the enemy.

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