

GAME MANUAL



EPILEPSY WARNING

PLEASE READ THIS NOTICE BEFORE PLAYING THIS GAME OR BEFORE ALLOWING YOUR CHILDREN TO PLAY.

Certain individuals may experience epileptic seizures or loss of consciousness when subjected to strong, flashing lights for long periods of time. Such individuals may therefore experience a seizure while operating computer or video games. This can also affect individuals who have no prior medical record of epilepsy or have never previously experienced a seizure.

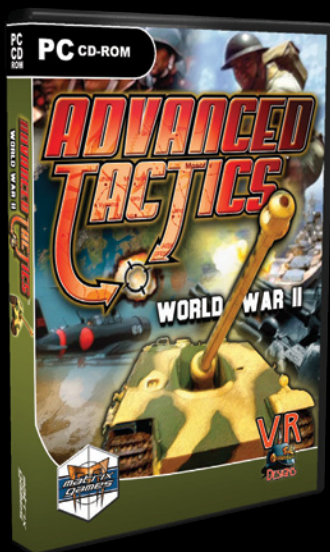
If you or any family member has ever experienced epilepsy symptoms (seizures or loss of consciousness) after exposure to flashing lights, please consult your doctor before playing this game.

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PRECAUTIONS DURING USE:

- Do not sit too close to the monitor. Sit as far as comfortably possible.
- Use as small a monitor as possible.
- Do not play when tired or short on sleep.
- Take care that there is sufficient lighting in the room.
- Be sure to take a break of 10-15 minutes every hour.

THE POSSIBILITIES ARE ENDLESS!



Advanced Tactics™ is a versatile turn-based strategy system that gives gamers the chance to wage almost any battle in any time period. The first module in this series is Advanced Tactics™: World War II, which allows gamers to hop into a Panzer and storm across Europe. Complete with a streamlined interface and an addicting style of gameplay, Advanced Tactics offers a unique and infinitely replayable experience for any strategy fan.

You decide what your towns should produce, which HQs receive reinforcements, how your chain of command is formed, what sort of troop mixes you put in which unit, if you use air, land, or sea strategies or maybe even call in the paratroopers – the possibilities are endless! Almost any type of strategy or tactic can be used effectively in Advanced Tactics™.



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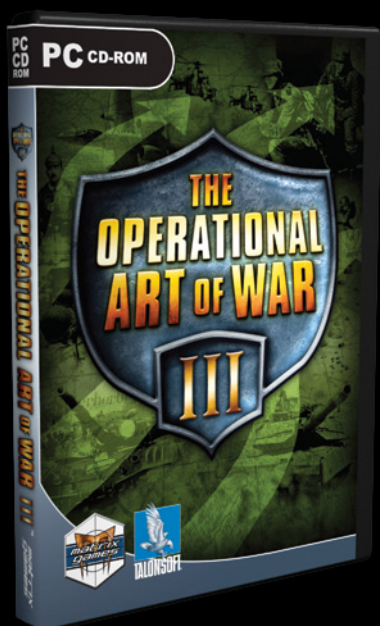
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MASTER THE ART OF WAR!



- Incorporates an updated anti-armor combat model, Norm Koger's farewell gift to the TOAW engine, which allows for hits to be made against weaker side armor.
- Enhanced play by email (PBEM) security, removing exploits of previous versions of TOAW.
- Enhanced PO functionality. Substantial improvements made to make the PO, when properly set-up by a scenario designer, play much smarter.
- Support added for scenario and era specific graphics, sounds, and music. Ships with several sets of default files, but is "mod-friendly" for those who wish to customize these items in their game.
- More Hotkey support, as well as several new UI enhancements.
- More advanced game options, affecting supply and fog of war.
- Turn logging enabled, both graphical and in text, to assist in the creation of "After Action Reports" by players eager to show the community their greatest victories or most embarrassing defeats!
- Memory management issues with previous versions of TOAW under Windows XP have been solved.
- Several improvements on the combat system, so that low movement rate scenarios play better.
- Over three dozen additional fixes to bugs remaining from previous TOAW versions!
- Two terrain tile sets included, the original set and a high contrast version, with easy switch installers to change between the two.
- French and German language support.
- All of the Classic TOAW scenarios from Century of Warfare are included, along with 130 of the best scenario designs of the last 5 years.



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1.0 WORLD WAR 2: TIME OF WRATH™

Thank you for purchasing World War 2: Time of Wrath!

1.1 MINIMUM SYSTEM REQUIREMENTS

To play World War 2: Time of Wrath, your computer system must meet these requirements:

OS:	Windows XP, Vista
CPU:	1.2 GHz Intel or AMD
RAM:	512MB
Video/Graphics:	DirectX 9 Compatible video card with 64MB RAM
Sound:	DirectX 9 Compatible
Hard disk space:	600MB

1.2 INSTALLATION

Please ensure your system meets the minimum requirements listed above. To install the game, either double click on the installation file you downloaded or insert the World War 2: Time of Wrath CD into your CD-ROM drive. If you have disabled the autorun function on your CD-ROM or if you are installing from a digital download, double-click on the installation archive file, then double click on the file that is shown inside the archive. Follow all on-screen prompts to complete installation.

1.3 UNINSTALLING THE GAME

Please use the Add/Remove Programs option from the Windows Control Panel or the Uninstall shortcut in the games Windows START menu folder to uninstall the game. Uninstalling through any other method will not properly uninstall the game.

1.4 PRODUCT UPDATES

In order to maintain our product excellence, Matrix Games releases updates containing new features, enhancements, and corrections to any known issues. All our updates are available free on our website and can also be downloaded quickly and easily by clicking on the "Update" link in your Game Menu or by using the "Update Game" shortcut in your Windows START menu folder for the game.

We also periodically make beta (preview) updates and other content available to registered owners. Keeping up with these special updates is made easy and is free by signing up for a Matrix Games Member account. When you are signed up, you can then register your Matrix Games products in order to receive access to these game-related materials. Doing so is a simple two step process:

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We strongly recommend registering your game as it will give you a backup location for your serial number should you lose it in the future. Once you've registered your game, when you log in to the Members section you can view your list of registered titles by clicking My Games. Each game title is a hyperlink that will take you to an information page on the game (including all the latest news on that title). Also on this list is a Downloads hyperlink that takes you to a page that has all the latest public and registered downloads, including patches, for that particular title.

You can also access patches and updates via our "Games Section" (<http://www.matrixgames.com/games/>), once there select the game you wish to check updates for, then check the "downloads" link. Certain value content and additional downloads will be restricted to "Members Area" members. so it is always worthwhile to sign up there.

Remember, once you have signed up for a Matrix Games Member account, you do not have to sign up again at that point you are free to register for any Matrix Games product you purchase.

Thank you and enjoy your game!

1.5 GAME FORUMS

Our forums are one of the best things about Matrix Games. Every game has its own forum with our designers, developers and the gamers playing the game. If you are experiencing a problem, have a question or just an idea on how to make the game better, post a message there. Go to <http://www.matrixgames.com> and click on the Forums hyperlink.

1.6 NEED HELP?

The best way to contact us if you are having a problem with one of our games is through our Help Desk. Our Help Desk has FAQs as well as a dedicated support staff that answer questions within 24 hours, Monday through Friday. Support questions sent in on Saturday and Sunday may wait 48 hours for a reply. You can get to our Help Desk by going to <http://www.matrixgames.com/helpdesk>

1.8 WORLD WAR 2: TIME OF WRATH FEATURES

- Four Grand Campaigns (1939, 1940, 1941 and 1944) cover the full war in the European Theater, lasting up to 1948 for maximum flexibility
- Two Scenarios (Fall Weiss and Overlord)
- Simple and intuitive user interface with engrossing historical gameplay
- Hundreds of historical events such as Molotov-Ribbentrop Pact, Vienna Dictate, Lend-Lease, and many more.
- Play as any nation and as any combination of countries to experience the war through a unique perspective.
- Air and Land Combat, including Sieges, Interceptions, Strategic Bombardment, Air Recon, Fleet Air attacks, Bombardment.
- Enhanced naval system that includes Aircraft Carriers, Battle, Patrol and Submarine Groups. Managing fleets, convoys and raiders in Sea Zones.
- Advanced weather system simulates spring and autumn / rainfall and snow. Beware of General Winter! Weather conditions have a different effect on each country.
- Any combination of move and attack is allowed as long as Action Points are available.
- Technological race in research of new more powerful units.
- A simple yet immersive political point system for diplomatic relations – alienate enemies and solidify ties with allies

2.0 INTRODUCTION

World War 2: Time Of Wrath is a turn-based strategic game in which you take a role of the leader of an independent country (or an alliance of several countries) during the fragile and turbulent period of 1939-1948. By waging war on the land, in the air, and at sea, planning military production, exercising different diplomatic actions, and investing in new technologies, your will try to lead your people to ultimate victory.

The game is played on a hexagon map, each roughly 20 kilometers (about 12.5 miles) across, units are division/corps, and one turn lasts from one to four weeks, depending on the time of the year.

There are three main alliances: the Axis, Allies, and the Comintern (there are no minor alliances in the game). Victory is achieved by an alliance rather than individual countries, although an individual score for each country is calculated at the end of the game.

3.0 GLOSSARY

This glossary gives brief definitions of terms and acronyms used in the game and in this manual. All items in the Glossary are covered with more detail later on.

PP – Production Points. This is the main ‘currency’ in the game. Production Points are generated each turn in Cities and Resource hexes. You can spend PP to buy new units, invest in technology research, expand your strategic/naval transport capacity, etc.

DP – Diplomatic Points. These are used in Political Actions, each of which (either Internal or External) costs certain amount of Diplomatic Points. Each country gets a fixed amount of DPs each turn (this value usually won’t change throughout the game). Diplomatic Points can also be received as a result of certain in-game events.

Land Warfare Doctrine Level – This represents the overall doctrine used by Headquarters (HQs) and directly affects the effectiveness of all land units of the given country. Players have no control over when they receive the next level of Doctrine; this is simply hardcoded into the game for each country. The minimum Doctrine Level is 0, while the maximum is 5.

SMP – Strategic Movement Points. These are used to transport land units over great distances in a single turn. Each unit so transported will require a cost in SMPs; this cost changes, depending on the unit’s type. Any of these Points spent in a turn are returned the following turn; players may not accumulate unused SMPs.

STP – Sea Transport Points. These are exactly like SMPs, except they are used to transport units by sea (they are not used to invade; for that, see AIPs, below). They are also used to transport Supply (via convoys). Any of these Points spent in a turn are returned for the following turn; players may not accumulate unused STPs.

AIP – Amphibious Invasion Points. These Points are used to perform sea invasions. Loading a land unit into a naval unit costs given number of AIPs (depending on the unit’s type). Unlike the SMPs or STPs, they are NOT replenished the next turn after they’ve been used.

VP – Victory Points. Each city on the map is worth a certain amount of Victory Points. The Alliance that controls cities worth the most VPs at the end of the game wins the game.

AP – Action Points. These are used by land and air units to move or attack. A unit with no APs cannot move or attack.

ZOC – Zone Of Control. These are hexes adjacent to units.

Friendly Unit, Friendly-Controlled Hex – A unit or hex controlled by your country or any other country that is in your Alliance.

FOW – Fog of War. These are hexes that are not visible. The range of visibility into enemy territory can be set up with the Visibility Range option in the Preferences screen. See section 4.1 for details.

WORLD WAR 2 Time of Wrath

Info Box – This is a small box below the unit that contains all information about it, such as Strength, APs, Supply, and so forth.

4.0 STARTING A NEW GAME

When the game is started, the World War 2: Time of Wrath main screen will display. Select one of the options to continue:



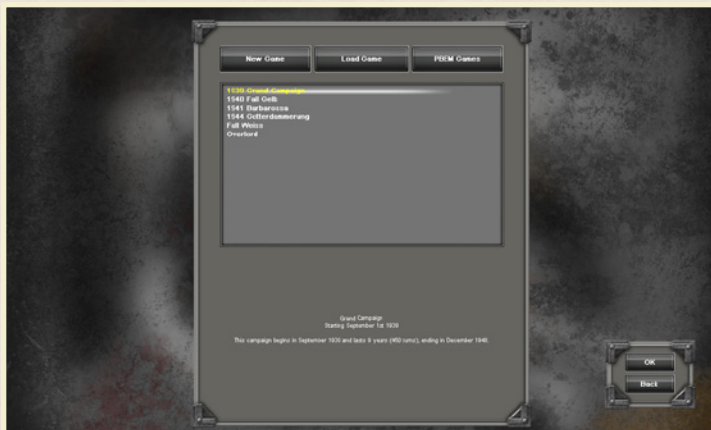
- **Start Game** – Begins a game. Also, will let you load any saved games.
- **Preferences** – Click to set in-game preferences.
- **About WW2** – Lists the credits of those who worked on the game.
- **Exit** – Returns you to your desktop.

To start new game, click the Start Game button.

Time of Wrath

WORLD WAR 2

The Game Screen will be displayed. Here, you can select whether you want to start a new game or load a saved game. By default, a New Game will be assumed, and all possible Campaigns (both original and self-made) will be listed:



Fall Weiss: Play this short 10 turn scenario on the fall of Poland first to familiarize yourself with the game.

Grand Campaign: This Campaign begins in September 1939 and lasts 9 years (450 turns), ending in December 1948.

1940 Fall Gelb: The fall of France. This Campaign begins in May 1940 and ends in December 1948.

1941 Barbarossa: Operation Barbarossa is about to begin... from June 1941 until December 1948.

1944 Gotterdammerung: Begins in April 1944, two months before Operation Overlord and ends in December 1948.

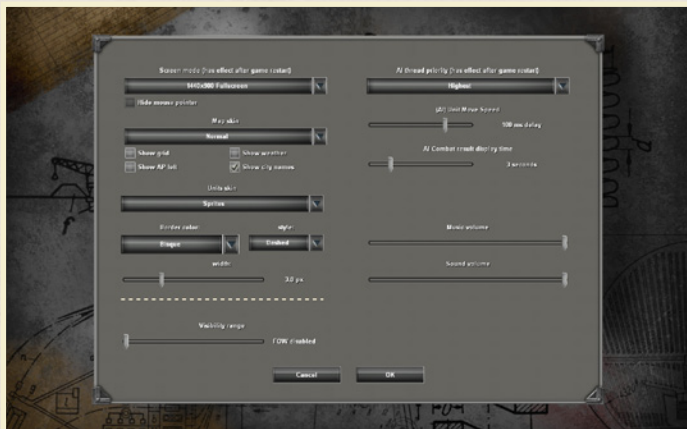
Overlord: Begins on June 6th, 1944 and lasts for 25 turns. A small introductory scenario that covers the Normandy landings and the subsequent drive inland.

To load a saved game, click Load Game and select the saved game from the list.

To start a new game, highlight the Campaign at left and click OK. To exit to the Campaign Selection screen, click Back. After a new Campaign is loaded, a Settings Screen will be displayed.

4.1 PREFERENCES

To set Preferences, click the Preferences button from the main screen.



Preferences may be set before a game is started or set during the game through the Options button. Some Preferences require the game to be restarted before they will take effect.

Here, you can set the following options:

Screen Mode: Select either Full Screen or Window (with resolution size). The game will need to be restarted for a change to take effect.

AI Thread Priority: Select Lowest, Below Normal, Normal, Above Normal, or Highest. The game will need to be restarted for a change to take effect.

Sound Volume: Select the slider and move it to the desired volume.

Music Volume: Select the slider and move it to the desired volume.

AI Combat Results Display Time: Select the slider and move it to the desired waiting time. This can be automatic (after a certain amount of time) or only on a click.

Units Skin: Select Figures (for 3-D figures), Counters (for iconic game counters), or Counters with Symbols (for NATO-style unit symbols).

Time of Wrath

WORLD WAR 2

Map Skin: Select Normal (for 3-D icons on the in-game map), or Classic (for a more “traditional” wargaming feel, with terrain represented by colored hexes, e.g. green for trees, brown for hills, etc.)

Show Grid: Turns on and off hex grid on map.

Visibility Range: Select the slider and move it to the desired range. This number will be displayed below the slider and indicates how far units are from each other before they are spotted. In other words, this is how FOW is controlled.

Border color: Select a border color, along with a width and style (solid, dotted, or dashed).

Show city names: Turn city names on the map on or off.

Show AP left: Displays the amount of APs (on the main map) that are left if the unit will move to a given hex.

(AI) unit move speed: How fast visible AI-controlled units will move on the screen.

4.2 SCENARIO SCREEN



When a new game is started, the Scenario Screen will be displayed. Starting statistics for all countries that are active in the selected Campaign will be listed at left; also, you can configure certain rules for the game here.

Time of Wrath

WORLD WAR 2

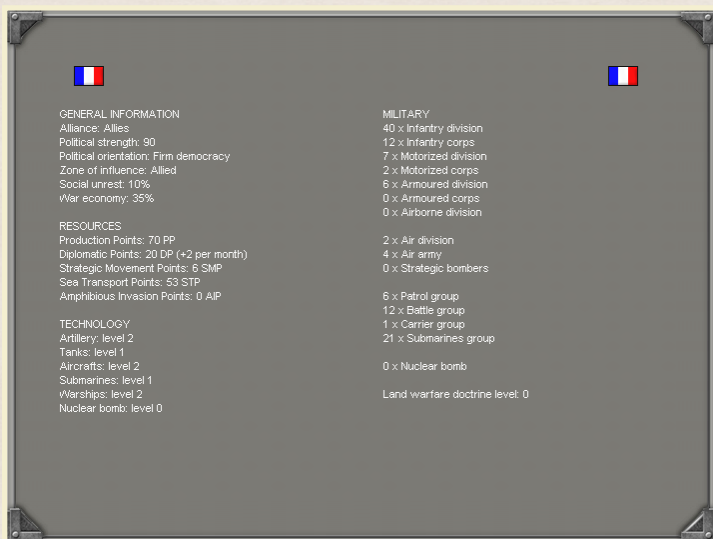
At left, all countries that can be played for the selected Campaign will be listed. If the Campaign is large, you can select any of the three filters above this list to narrow down your choices, as follows:

Classification Filter: All Countries, Major Powers, Regional Powers, or Other Countries.

Geographical Filter: All Countries, Africa, Asia & Oceania, Europe, North America, or South America.

Alliance Filter: All Countries, Axis, Allies, Comintern, or Neutral.

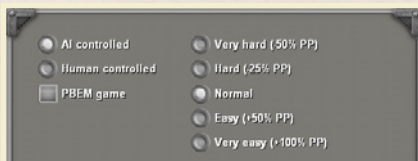
Once an option is selected from any of these three filters, the list will change to reflect this choice.



To the right, the selected/highlighted country's information will be displayed. For a complete description of these items, see section 15.2, Country Information.

Below the Country Information panel is a Settings panel, where you may specify certain rules for the selected country:

AI Controlled: Select to make this country computer-controlled. All



countries default to AI Controlled, but note that at least ONE country in the Campaign must be human-controlled in order to begin a game.

Human Controlled: Select to make this country human-controlled. At least one country in the Campaign must be human-controlled in order to begin a game.

PBEM Game: Here you can select the Player Number that controls the country and enter a game name.

Very Hard (-50% PP): Select for a truly difficult game; the country's PP total will be reduced by 50%.

Hard (-25% PP): Select for a more difficult game; the country's PP total will be reduced by 25%.

Normal: Select for a balanced game with no bonus or penalty given to the country's PPs.

Easy (+50% PP): Select for an easier game; the country's PP total will be increased by 50%.

Very Easy (+100% PP): For the tactician-challenged, or to give a new player a bonus in a hot-seat game with veteran players; the country's PP total will be increased by 100% (doubled).

You can select more than one country to be human-controlled. Use this feature to control Allied countries, or to play a hot-seat game with other (human) players on the same PC.

Once all selections are made, click OK to begin.

4.3 SEQUENCE OF PLAY

World War 2: Time of Wrath is a turn-based game; each player makes their action separately, during their own turn, and then passes control to next player, and so on. After all players complete their turns, specific actions are performed automatically such as calculating PPs and DPs, checking for Special Events, checking whether sea battles occur, and so on.

The Sequence of Play is determined in a following way:

1. Axis Countries
2. Allied Countries
3. Comintern Countries
4. Neutral Countries

The sequence in each Alliance is determined by the Political Strength value of each country (countries with a higher Political Strength value will play first, followed by the next highest, and so on). In case of equal Political Strength, the sequence is determined by the game automatically.

4.4 TURN LENGTHS

In standard game Campaigns, each turn represents one week.

4.5 END OF GAME CONDITIONS

The game will end when ANY ONE of the following conditions are met:

- Time runs out (all scenarios end after a certain amount of turns have passed);
- All human-controlled countries have surrendered;
- Only one Alliance (i.e. Axis, Allies or Comintern) is left; or
- No Alliance is left (very unlikely, but still possible).

Once a condition is met, the number of Victory Points from city occupation for each Alliance is calculated. The Alliance with the most VPs will win the game. In case of an equal number of VPs for one or more Alliances, a draw is declared. The following game results are possible:

- No Result (in this rare case, all three Alliances were eliminated).
- Draw (all Alliances have an equal number of VPs).
- Axis-Allied Draw, Comintern Defeat (when Axis VPs equals Allied VPs and this number is greater than Comintern VP total). Note that Axis and Allied VPs are NOT added together for this purpose.
- Allied-Comintern Draw, Axis Defeat (when Allied VPs equals Comintern VPs and this number is greater than Axis VPs). Note that Allied and Comintern VPs are NOT added together for this purpose.
- Axis-Comintern Draw, Allied Defeat (when Axis VPs equals Comintern VPs and this number is greater than Allied VPs). Note that Axis and Comintern VPs are NOT added together for this purpose.
- Axis Victory.
- Allied Victory.
- Comintern Victory.

Apart from the Alliance's total number of VPs, each country's individual VP amount is calculated. This total is a sum of:

- The Strength of all land, air, and naval units (both in map and in reserve) for that country;
- The unmodified number of PPs generated each turn by that country; and
- The current number of VPs from cities controlled by that country.

5.0 MAIN SCREEN



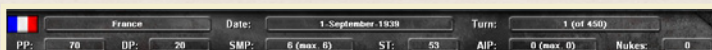
The Main Screen of the game has many features displayed, as follows:

5.1 NAVIGATING THE MAP

To scroll your view in the Main Display panel, move the map move cursor to the edge of the screen. You can click on the Mini Map to quickly get to other areas and use its buttons to change your view (see section 5.3, Mini Map Panel, for more details).

5.2 GENERAL INFORMATION BAR

The General Information Bar runs across the top of the screen. It will display current game information, including the date, number of turns left, the name of the current country, available PPs, DPs, SMPs (SMP max), STPs, and AIPs (AIP max), and if any Nukes are available.



Also, when the mouse cursor hovers over a button, a tooltip will display indicating the name of the button.

5.3 MINI MAP PANEL

The Mini Map panel appears in the upper right corner of the screen, allowing for quick navigation; simply click on an area of the map to zoom the main display there.

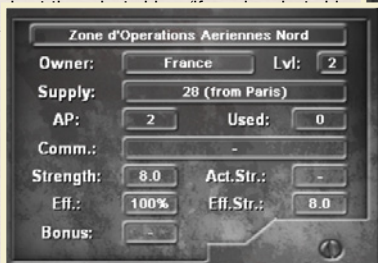
- The plus button (+) zooms the main display in.
- The minus button (-) zooms the main display out.
- The B button is the Border Mode button. Clicking this button will switch the type of borders displayed in the Main Viewing panel. The first mode draws borders between hexes CONTROLLED by different countries, while the second mode draws borders between hexes OWNED by different countries.



A note on the difference between CONTROLLING and OWNING:
 Hexes that are owned by a country are considered to be that country's national territory, and therefore are owned by it. However, another country may CONTROL that hex by occupying it (against the wishes of the OWNING country, of course!). For example, when Germany invades Poland, it will probably end up controlling Polish-owned hexes. The hexes will remain owned by Poland, but will be controlled by Germany.

5.4 HEX INFORMATION PANEL

The Hex Information panel, directly below the Mini Map panel, displays information



Time of Wrath

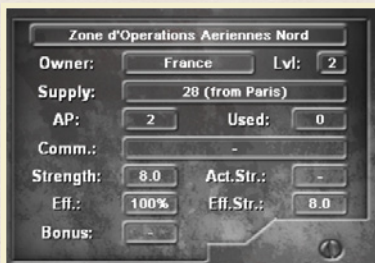
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In the Hex Information panel, certain actions may be available to the player within that hex; these buttons will be displayed at the bottom of this panel. The buttons that display will depend on whether or not the hex is friendly. See sections 8.0 (Land Unit Action Buttons – Friendly), 9.0 (Land Unit Action Buttons – Enemy), 10.0 (Air Unit Action Buttons – Friendly), and 11.0 (Air Unit Action Buttons – Enemy) for more information on what displays.

How the hexes in your game map are displayed is determined by the Normal or Classic selections in the Preferences window (accessed either before the game through the Preferences button, or through the Options then Preferences buttons in the game). Unit appearances are governed in the same location, utilizing the Unit Presentation option.

5.5 UNIT INFORMATION PANEL

The Unit Information panel, directly below the Hex Information panel, displays information about the selected unit. See section 10.1, Unit Information, for more information.



5.6 UNIT ACTION BUTTONS



In the Unit Information panel, certain actions may be available to the player within that hex; these buttons will be displayed at the bottom of this panel. The buttons that display will depend on whether or not the hex is friendly. See sections 8.0, 9.0, 10.0, and 11.0 for more information on what displays.

5.7 GAME BUTTONS PANEL

In the bottom right part of the screen is the Game Buttons panel. Here, various game functions may be performed:

Purchase: Allows the player to buy new units. For more information, see section 13.0, Purchasing and Deploying New Units.

Diplomacy: Allows the player to perform Diplomatic actions. For more information, see section 15.0, Diplomacy Screen.



Reports: Brings up a losses report. For more information, see section 16.0.

Options: Opens the Options menu.

Fleet: Allows the player to control fleet elements under their control. For more information, see section 12.0, Fleet Screen.

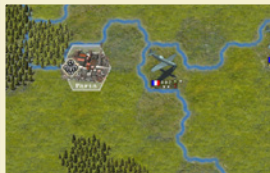
Research: Allows the player to conduct research in an attempt to improve their country's war-making abilities. For more information, see section 14.0, Resarching New Technologies.

Deploy Units: Allows you to deploy purchased units. For more information, see section 13.0, Purchasing and Deploying New Units.

End Turn: Ends the current game turn.

5.8 MAIN DISPLAY PANEL

The Main Display panel is where all the action in World War 2: Time of Wrath appears. It is made up of various hexes containing many different terrain types, as well as land and air units looking for a fight.



5.8.1 HEXES

Each hex is characterized by the following attributes:

Terrain Type. There are seven terrain types: Plains, Hills, Mountains, Forest, Jungle, Swamp, and Desert (a hex may also be considered a Coastal hex if it borders on a Sea Zone – see Sea Zone, below). Terrain affects unit movement and, depending on type, may give a bonus to defenders.

Presence of Rivers. Defending behind a river gives a bonus to the defender.

Owner. This is the country that owns the hex. The country may lose control over a hex to an enemy, but it will remain the owner. In other words, nothing can change who actually owns a hex. Hex ownership is changed only when a country surrenders (see , Surrendering Countries).

Controller. This is the country that currently controls the hex. Controlling hexes is important for Supply reasons, as Supply can travel to units only through friendly-controlled hexes (see 19.0, Supply).

Fortification Level. This value can range from 0 (meaning no fortifications) to 10 (with highly structured, painfully efficient, and deadly fortifications). Attacking units that occupy a fortified hex gives a penalty to the attacker; the better the fortification, the higher this penalty. Fortifications cannot be built OR destroyed in a game.

Weather. Gives information about the weather in the selected hex.

Sea Zone. This applies only to Coastal hexes. Each Coastal hex is linked with a certain Sea Zone. To invade a Coastal hex from the sea, you need an invading Fleet in a Sea Zone assigned to this hex.

Hexes can be occupied by units. Each hex may **ONLY** have one unit at a time in it – there is no stacking.

5.8.2 CITIES AND RESOURCES

Some hexes may contain Cities or Resources, which yield PPs to a country controlling the hex. There are four City types:



Main Supply Source



City (only)



Port and Main Supply Source



Port (only)

Each city has three values:

Supply value. The displayed value, e.g. 30(9), shows the current Supply amount for the current country; the value in parenthesis is called the “city’s own supply,” which is the amount of supply generated when this city is cut off from a Main Supply Source (for details of supply calculation, see section 19.0, Supply).

PP value. This is actually two values, with a slash separating them. The number to the left of the slash is the Current PP Value, while the number to the right is the Maximum PP Value. So, 1.0/2.0, indicates a Current value of 1 and a Maximum value of 2. The Current value may be reduced by Strategic Bombing; see section 7.2 for more details.

VP value. These are Victory Points and are important in determining winners.

Resources are generalized; they are not defined by type (e.g., coal, metals, oil, etc.).

5.8.3 LAND UNITS

There are seven land unit types: Infantry Divisions, Infantry Corps, Motorized Divisions, Motorized Corps, Armored Divisions, Armored Corps, and Airborne Divisions.

Note that the following images are 'Figures,' selected from the Preferences screen (accessed either through the Preferences button pre-game or through the Options and Preferences buttons in-game).



Infantry Division



Infantry Corps



Motorized Division



Motorized Corps

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Armored Division



Armored Corps



Airborne Division

Each land unit is characterized by the following attributes:

Name. The name of the unit. You may rename units if you want; see section 10.6 for more details.

Owner and Level. The owner of the unit and the Level (quality) of the unit. The Level can range from 1 to 5; the higher this number, the better the quality of the unit's equipment (weapons, vehicles, artillery, etc.) To upgrade Infantry, Motorized, and Airborne units to the next level, you have to research the appropriate technology.

LVI. Panzerkorps			
Owner:	Germany	Lvl:	3
Supply:	22 (from Minsk)		
AP:	7	Used:	0
Comm.:			
Strength:	8.6	Act.Str.:	75%
Eff.:	192%	Eff.Str.:	16.6
Bonus:	4%		

Supply. This represents the essential materials (food, ammo, spare parts, etc.) needed to keep the formation running at maximum efficiency. The minimum value is 0 (indicating the unit is cut off from Supply), while the maximum value is 30 (in standard Campaigns). A low Supply level means the unit will suffer lower effectiveness and less APs. The city listed after the Supply value indicates where its current Supply is coming from (if any).

Action Points. Used for movement and combat. In the beginning of each turn unit AP are replenished for each unit. The base amount of AP depends on unit type and level as well as the land warfare doctrine level of unit's owner. The table below shows the base AP level for land units:

Basic Action Points for land units							
Land warfare doctrine level	Infantry Division	Infantry Corps	Mot. Division	Mot. Corps	Pz. Division	Pz. Corps	Airborne Div
0	3	2	4	3	6	5	2
1	3	2	5	4	7	6	2
2	4	3	6	5	7	6	2
3	4	3	7	6	8	7	3
4	4	3	8	7	8	7	3
5	5	4	9	8	8	7	3

A unit's base APs are modified by its Supply level. A low Supply level will have a negative effect on APs.

Leader. Each country has a pool of 'unique' Leaders who, if assigned to a unit, will improve the effectiveness of it. Units with no 'unique' Leader gets no penalties. For more information, see section 8.3, Assign Leader.

Strength. The Strength value of the unit. The maximum Strength value depends on the unit type and level (e.g., a German Level 1 Infantry Division has the same basic strength of 1, just like a Russian Level 1 Infantry Division). The table below shows the maximum Strength value of land units:

Maximum strength of land units							
Unit Level	Infantry Division	Infantry Corps	Mot. Division	Mot. Corps	Pz. Division	Pz. Corps	Airborne Div
1	1	3	0.5	1.5	2	6	0.5
2	1.5	4.5	1.5	4.5	3	9	1
3	2	6	2.5	7.5	4	12	1.5
4	2.5	7.5	3.5	10.5	5	15	2
5	3	9	4.5	13.5	6	18	2.5

Effectiveness. This is how effective a unit is in combat. The minimum value is 1%; there is no maximum limit. The following factors influence a unit's Effectiveness:

- Land Warfare Doctrine Level (+10% per each Level)
- Leader (3% per Leader Level)
- Supply. A Supply level of 20 or more has little negative effect on Effectiveness; below 20 Effectiveness, a unit will fall more quickly and each point below 10 will seriously impact unit Effectiveness.
- Sea Bombardment. Effects of sea bombardment last only one turn.

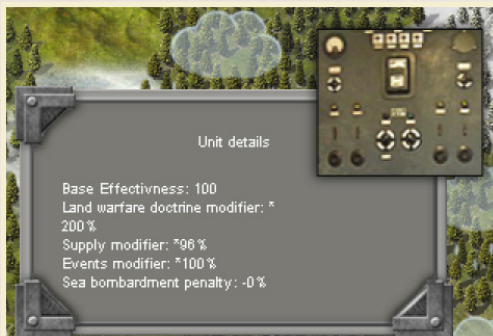
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You can see in details how effectiveness is calculated for unit by clicking “Unit Info” icon.

Effective Strength. This is current unit Strength multiplied by its current Effectiveness. This figure is used for all combat odds calculations.

Land units are displayed on top of the info box; this box contains all data about a unit, including Strength, APs, Supply level, Damage, Owning Country, and so on.



On top of this counter is a graphic icon indicating the unit type – infantrymen for Infantry Divisions and Infantry Corps, tanks for Armored Divisions and Armored Corps, trucks for Motorized Divisions and Motorized Corps, and paratroopers for Airborne Divisions. Air units are indicated with aircraft. These are illustrated at the beginning of this section.

Note that each country uses a different type of armored unit, so each will have their own unique icon if displayed as such.

Below this number is either an XX (indicating a Division) or an XXX (indicating a Corps).

To the lower right of the unit, a blinking dot may be seen; this means the unit has not participated in a multi-directional attack in the current turn yet. A blinking dot over an enemy unit similarly indicates that the enemy unit was not attacked from multiple directions in the current turn.

Three small dots on the right side of the info box, if lit, each represents a status as follows:

- If the top light is lit, the unit has APs to spend.
- If the middle light is lit, the unit has a low Supply level.
- If the bottom light is lit, the unit is under strength.

A star on the left side of the flag means that a unit has a Leader assigned.

5.8.4 AIR UNITS

Air units represent a country's aerial combat power (in the form of fighters, bombers, etc., all represented by an Air unit). There are three types: an Air Division, an Air Army, and Strategic Bombers. The first two are used to reduce the Strength of enemy Land units by direct bombardment, and to fight off enemy Air Divisions/Armies; Strategic Bombers are used to bomb enemy cities. Each Air unit is characterized by the following attributes:



Unit Name. The name of the unit. You may rename units if you want; see section 10.6, Rename Unit, for more details.

Owner and Level. The owner of the unit and the Level (quality) of the unit. The Level can range from 1 to 5. To upgrade an air unit to the next level, the Combat Aircraft technology must be researched up to the appropriate level. Higher levels of Air units are better at bombardment and fight better against enemy Air units.

Supply. This represents the essential materials (food, ammo, spare parts, etc.) needed to keep the formation running as best as possible. A low Supply means less APs, lower Effectiveness in air combat, and spotty bombardment of land units.

Action Points. The base AP for all types of air units is 2. APs are used to rebase Air units, attack other Air units, and bombard Land units.

Strength. Air Divisions have maximum strength of 4, while Air Armies and Strategic Bombers have maximum strength of 8. Unlike Land units, the maximum strength of Air units does not depend on their unit level.

Air units are displayed on top of a circular counter; this counter is color-coded depending on the side it is on.

On top of this counter is a graphic icon indicating the type of air unit it is.

- Air Division (two X's)
- Air Army (three X's)
- Strategic Bomber (no X's)

There are two numbers displayed below this icon. The number on the left is current Strength of the unit, and number on the right is the number of APs it has left.

Below this is either three X's (indicating an Air Army), two X's (indicating an Air Division), or no X's (indicating a Strategic Bomber).

5.8.5 SEA UNITS

For details on operating Fleets, see section 12.0, Fleet Screen.

5.9 HEX INFORMATION

Left click on a hex to select it. Any hex details will be displayed in the Hex Information panel to the right of the Main Viewing panel. If the selected hex is occupied by a unit, its details will be displayed in the Unit Information panel. Right clicking will deselect the hex.

Information that might be found there are as follows:

City: The city's name (if a city is present).

Info: The terrain type the hex occupies, as well as its X-Y coordinate location on the map.

Supply: The actual Supply level of the hex.

Fortification: The Fortification level, if any.

PP: The Production Points level of the hex, described as actual/total.

VP: The Victory Points for the hex (if it is a city).

Controlled by: The country that controls the hex.

Owned by: The country that owns the hex.

Weather: The weather currently affecting the hex.

City:	Paris
Info:	Plain (94, 97)
Supply:	Main supply source
Fortification:	-
PP:	15.0/15.0 VP: 5
Controlled by:	France
Owned by:	France
Weather:	good

6.0 LAND UNIT MOVEMENT AND COMBAT

6.1 MOVING LAND UNITS

To move a land unit, select it by left clicking on it. Its Movement Range will be highlighted. In this screenshot, the selected unit is a tank unit (double circled so you can see it easier; these double circles are not part of the interface). The shaded hexes are hexes it can move to in the current turn; green for spaces that will allow AP units left after the move and red for spaces that the unit will have no AP units left after the move.



Moving unit costs number of APs; this number depends on a combination of the terrain type(s) it moves over and the unit type. Moving into an enemy ZOC (i.e. between hexes adjacent to enemy units) costs extra APs. The table below displays the cost of movement:

Unit Type	Movement cost (AP)							enemy ZOC penalty
	Plain	Forest	Rough	Swamp	Hills	Mountains	Desert	
Infantry	1	1	2	2	2	2	1	1
Motorized	1	2	3	4	2	3	1	2
Armor	1	2	3	4	2	3	1	2

6.2 ATTACKING WITH LAND UNITS

There are two ways to attack enemy with your land units:

Attack directly, with one unit. To perform such attack, select a land unit and click on an adjacent enemy unit. Be aware that attacking from one direction is less effective, as the attacker receives a penalty.

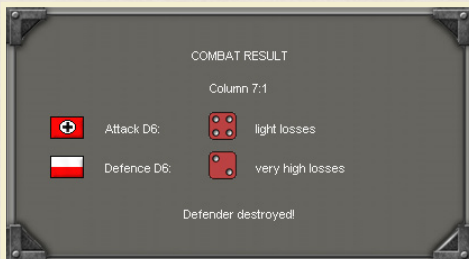
Attack from multiple directions. Each of your units may participate only in ONE such attack per turn (observe the blinking dot on unit counter to see if unit already participated in such an attack) and each enemy unit can be attacked this way only once per turn (this is also shown by a blinking dot next to it). To attack from multiple directions, left click on enemy unit, then left click on your valid adjacent units to add them to the attack (clicking on a unit again will remove it from attack). To confirm the multiple-direction attack, left click on the enemy unit. The attack will be executed immediately.

In the panel to the left, you will see statistics for the attack, including:



- What enemy unit is being attacked (e.g., “Assault on 16 Corps”);
- How many directions the unit is being attacked from (or only one if one unit is attacking);
- The total of the attacker’s Strength;
- The Defender’s Strength;
- The Attacker’s combat modifier;
- The Defender’s combat modifier; and
- The total odds for the combat, and what Column the combat is resolved on.

After an attack is executed, combat results will be displayed:



6.2.1 ATTACKER MODIFIERS

- 25% penalty for attacking an enemy armored unit, if no armored unit participates in the attack.
- Attacking from one direction gives a 25% penalty to the attacker.
- Attacking from two directions gives a 5% penalty to the attacker.
- Attacking from MORE THAN TWO directions gives a BONUS to the attacker (from 3 directions 5%, 4 directions 10%, 5 directions 25%, and 6 (maximum) directions 50%).
- If the defender is in a Fortified hex, the attacker will receive a penalty (9% per Fortification Level).
- Attacking across a river reduces an attacking unit's Strength by half.
- Rain decreases effectiveness by 10% and snow by 30% (those can be also modified for each country separately, so some countries can have this value lower or higher).

The effective Strength of all attacking units is multiplied by the Attacker Modifier.

All modifiers are cumulative.

6.2.2 DEFENDER MODIFIERS

Terrain: Defending in terrain other than plains or desert gives a bonus to the defender. Mountain hexes give a 100% bonus, hill hexes give 50%, and swamp, forest, city, or jungle hexes gives a 25% bonus.

Weather: Rain decreases effectiveness by 10% and snow by 30% (those can be also modified for each country separately, so some countries can have this value lower or higher).

Dig In: Units that don't do anything during the turn will "dig in" and gain a 5% bonus. The total bonus from digging in cannot be higher than 25%. If a unit moves, it loses the dig in bonus.

The effective Strength of the defending unit is multiplied by the Defender Modifier.

All modifiers are cumulative.

6.2.3 COMBAT ODDS

Odds are calculated by dividing the final Attack Strength by the final Defense Strength.

Minimum odds are 1:1 (rounding up if necessary) and maximum are 7:1 (rounding down if necessary).

- 7:1 odds gives the attacker the best chance to utterly wipe out the targeted enemy unit.
- 6:1 or 5:1 odds gives a good chance to destroy the enemy unit, or at least inflict heavy losses on it.
- 4:1 or 3:1 odds will inflict some losses on an enemy, but the attacker will take more losses on average than the defender.
- 2:1 or 1:1 odds attacks are risky, as the attacker may take heavy losses or even get destroyed in the attack.

Attacking with odds lower than actual 1:1 (e.g 4.6 / 5.0) will still be displayed as 1:1, but a special rule will be applied: the defending unit will NEVER take losses in such an attack!

6.2.4 LAND UNIT RETREAT

After each attack, a check is made to see if the defending unit decided to retreat.

Units that are defending in Cities AND are Fortified will NEVER retreat.

The base Retreat Chance is 100% minus the unit's actual Strength divided by its Maximum Strength. So, if unit after an attack has 45% of its Maximum Strength, its base Retreat Chance is 100% - 45%, or 65%.

This chance is then modified by two factors: terrain (mountains decrease the Retreat Chance by 50%; Forest, Jungles, Swamps, and Hills decrease it by 25%) and attack odds (4:1 is

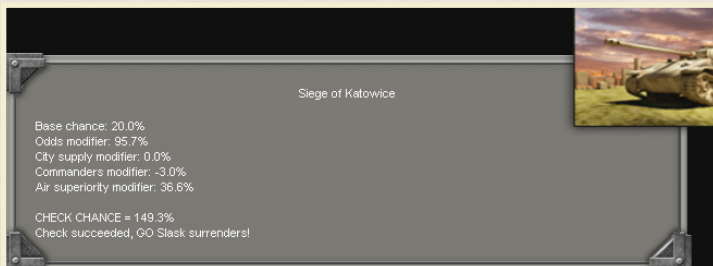
neutral; higher odds increase the defender's Retreat Chance and lower odds decreases this chance). Attacking with 1:1 odds reduces retreat chance to zero.

If the defender fails its Retreat Check, it attempts to retreat. It will retreat 1 hex in a direction opposite to attacking units. If there is no valid hex to retreat to, the unit will surrender (and thus, be eliminated).

Air units can be attacked by land units. Air units defend with a very low Strength value, representing the few security troops and crews available, scraped together into an ersatz fighting unit. This value is always the same and does NOT depend on the actual Strength of the air unit. This combat is resolved as a special check; if this check fails, the Air unit is Overrun and eliminated immediately. As you can see, Air units are very vulnerable to Land attacks (even when attacked by a single level 1 Infantry Division), so remember to keep them away from the enemy.

6.2.5 CITY SIEGE

City Siege is a special rule implemented to ease assaulting a city.



When a unit defends in a city and all adjacent land hexes are occupied by an enemy unit, there is a chance that the defending unit will lose a level. If the defending unit is at level one, a successful Siege calculation will force the defending unit to surrender.

When calculating a siege following aspects are taken under consideration:

- Base chance,
- Strength of attacker and defender,
- Supply,
- Leader, and
- Air superiority.

Sieges are always calculated at the end of the turn.

7.0 HEX ACTION BUTTONS

By selecting a hex, Action Buttons for that hex will display in Hex Information panel. There are four buttons: Unload Land Unit from Amphibious Fleet, Strategic Bombardment, Mulberry Harbor, and Air Recon.



7.1 UNLOAD LAND UNIT FROM AN AMPHIBIOUS FLEET



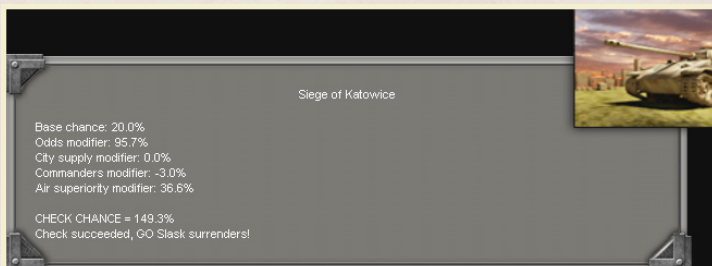
This action can be performed in a Coastal hex only. You have to have a fleet containing amphibious units in a Sea Zone adjacent to the selected hex. Upon unloading a Land unit, a check is made whether the invasion was intercepted by enemy Fleets. Fleets from adjacent Sea Zones will also join in to intercept an invasion. An interception chance is counted separately for each Fleet. Also, an intercepted Fleet can avoid an attack (a special algorithm is applied to calculate this; the player has no influence on the interception decision).

If the invasion was NOT intercepted, or the intercepting fleet was defeated, units can unload. When unloading, another check is made; the invading unit may as a result take some losses or even get destroyed (again, the player has no control over this). Always take this into account when planning a big sea invasion. Use amphibious invasions to open new fronts, but remember that unloaded units should immediately take over a city (preferably a Port city); otherwise, the next turn they will run out of Supply and possibly be destroyed by the enemy very quickly. Air superiority and shore bombardments are crucial for invasions, as they allow you to soften enemy garrisons in a Port prior to unloading your units and attacking it.

Note that the Amphibious Invasion action should be used to land on enemy-controlled territory. To move units by sea between friendly-controlled ports, use the Sea Transport movement action.

7.2 STRATEGIC BOMBARDMENT

This action is available only on enemy-controlled Cities. You have to have a Strategic Bomber within range (40 hexes or less). If you have more than one Strategic Bomber unit, the strongest one will be selected for the attack (this rule calculates Strength as Strength Points plus the unit's Level). If there are units with the same Strength, the closest one will be selected. It is not possible to select the attacking unit manually.



After clicking the Strategic Bombardment button, the bombing will be executed immediately. The effectiveness of the bombardment depends on the bomber's Strength Points and Level. Successful Strategic Bombardments will reduce the PPs in the targeted enemy city. These lost PPs will recover at a rate of 1 per turn.

Strategic Bombers can take losses during an attack. The following factors influence these possible losses:

- The Strategic Bomber's Level (+1 bonus for each Level).
- The Artillery Technology Level of a country that controls the City (-1 per Level; this is considered anti-aircraft (AA) fire).
- Enemy air superiority over the bombarded City hex. If enemy has no air superiority, this value is 0; if enemy air superiority exists, this value can range from -1 to -4.

7.2.1 CALCULATING AIR SUPERIORITY OVER A HEX

Air superiority for a hex is calculated in the following way: the Strength of all friendly Air units in range is divided by the Strength of all enemy units within range (Strength = Strength Points + Level). Strategic Bombers are not considered in this calculation (only Air Divisions and Air Armies are).

7.3 MULBERRY HARBOR



Mulberry Harbors are special units which may be deployed only in coastal hexes. They are very expensive but are indispensable if making an invasion.

Mulberry Harbors provide supply for friendly units for two months from deploying.

7.4 AIR RECON

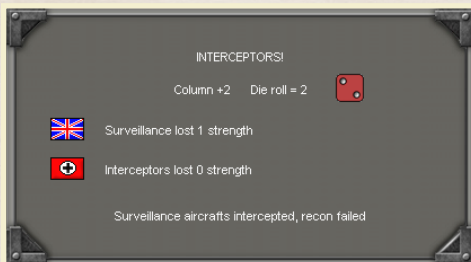


Air Recon is a very useful feature, which allows a player to uncover Fog of War.

Air Recon can only be used on enemy hexes. The amount of uncovered hexes depends on the Air Technology level of the country performing the Air Recon. So, at level one, only adjacent hexes will be uncovered, whereas at level five it the area revealed will be five hexes wide.

Hexes will then remain uncovered until the beginning of the next turn of the country performing the Air Recon. So, if Germany conducts Air Recon, all revealed Hexes will remain revealed until the beginning of the next turn.

When performing Air Recon, enemy Air Units might try to Intercept the scouting unit. If they succeed, no hexes will be revealed.



If Interception fails, the Intercepting unit might lose Strength points. Units whose Strength is equal or less than 50% of its maximum Strength WILL NOT perform Interceptions.

8.0 LAND UNIT ACTION BUTTONS (FRIENDLY UNITS)

By selecting a hex occupied by one of your own land units, the following Action Buttons appear in the Unit Information panel:



8.1 UNDO MOVEMENT

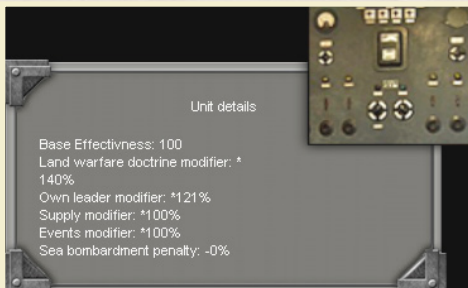


This allows you to cancel the last move of the currently selected unit.

8.2 UNIT INFORMATION



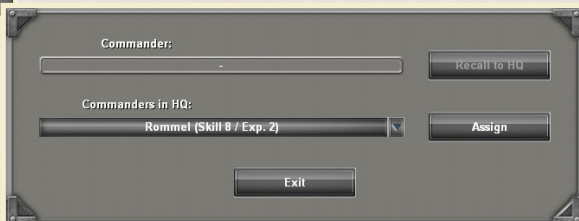
This will display a popup window displaying detailed information on how the Effectiveness of the unit is calculated.



8.3 ASSIGN LEADER (COMMANDER)



This will open a popup window from which you can assign/recall a Leader to/from a unit. Assigning a Leader will increase the unit's Effectiveness.



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Units with a Leader attached to them are considered to be HQ units. HQ units can be identified on the game map as having a star icon next to them.



Other friendly units in range (within 3 hexes) that do not have a Leader assigned to them receive a bonus from this HQ unit. The bonus depends on the Leader's skill and the range to the HQ.

If a unit has more than one HQ in range, a combination of the Leader's skill and the range will determine the best HQ to use. Units with no HQ in range display "No HQ unit in range" in the Unit Information panel.

The HQ Leader bonus is calculated at the beginning of the turn, so assigning a Leader during one turn will only begin to affect units on the next turn.

Each country has its own pool of Leaders. To assign a Leader, select his name from the drop-down list. There are two numbers in parenthesis next to the Leader's name, separated by a slash; the number to the left of the slash is the Leader's skill, while the number to the right of the slash is the Leader's Experience (see below for more on Leader Experience).

To assign a Leader, click a unit on the map and then click the Assign Leader button. Select a name from the drop-down list and click Assign. To change your mind and not assign a Leader, click Exit.

To recall a Leader from the unit, click the Recall to HQ button. The Leader will then be available in the pool the next turn.

Leaders also have an Experience attribute. All Leaders start with 0 Experience. When a unit a Leader is attached to (either direct command or via 'HQ link') takes part in combat, a check is made. If the check succeeds, the Leader is awarded one Experience point. For a defending unit, this chance is 30%; for attacking units, it is 10% (but attacks can be from many directions, so if the attack is from 3 directions, three independent checks, each at 10%, are made). A Leader's Experience is translated to higher unit effectiveness (1 Experience Point = 1% bonus to Effectiveness). The maximum Experience a Leader can accumulate is 20 points.

8.4 REPLACEMENTS



This will open a popup window which allows you to replenish the Strength of a reduced unit. The following conditions apply:

- The unit cannot move and/or attack in the current turn to receive replacements;
- Units out of Supply cannot receive replacements; and
- Units with a low Supply can receive replacements, but only to a certain level.

Replacing unit Strength costs Production Points. However, replacing the Strength Points of an existing unit costs MUCH less than buying a new unit with the same Strength.

8.5 UPGRADE LEVEL



By clicking this button, you can upgrade the selected unit to the next Level. The following conditions apply:

- Level 5 units cannot be upgraded, as this is the maximum possible Level;
- You have to research the necessary Technology to a Level that will allow upgrading;
- The unit cannot move and/or attack in the turn it upgrades; and
- You have to have enough PPs available for the upgrade.

Upgrading units is slightly ineffective PP-wise. For example, a Level 5 Armored Division (with a base Strength of 6) will cost you several percent more PPs than three Level 1 Armored Divisions, which count for the same base Strength. However, by upgrading to higher Levels, you benefit from concentrating large Strength in a smaller number of units, which allows you to punch holes in enemy lines (and then to flank them with lower-Level units), or more easily conquer important cities defended by strong enemy units.

8.6 UPGRADE TO CORPS



This allows you to upgrade a Division to a Corps (with the exception of Airborne Divisions, which cannot be upgraded). A unit that has moved and/or attacked during the current turn cannot be upgraded.

8.7 STRATEGIC MOVEMENT



This allows you to immediately move a land unit to a friendly-controlled City. The following conditions apply:

- You must have enough SMPs available;
- The unit cannot move and/or attack in the current turn to use Strategic Movement; and
- Units out of Supply can't use Strategic Movement.

After clicking this button, all valid hexes to which the unit can be transported will be highlighted on the map. Highlighted Cities are friendly-controlled Cities that had a land connection over friendly-controlled hexes to the selected unit at the beginning of a turn. Left click on a highlighted hex and the unit will be moved immediately; right click to cancel Strategic Movement.

Transporting Corps-sized units costs more SMPs than transporting Divisions. Also, the unit type has an influence on cost: transporting Armored units is the most expensive, while transporting Infantry is the least expensive.

8.8 SEA TRANSPORT



Use this action to transport a unit between friendly-controlled Ports. The following conditions apply:

- The unit must have at least one AP;
- You must have enough STPs available; and
- The selected unit must be in a friendly-controlled Port or adjacent to one.

If all conditions are met, clicking this button will remove the unit from the map. It will then appear in the Naval Screen, in the appropriate Port as a Naval Transport unit. It can then be moved to another Port and unloaded there.

Transporting Corps-sized units by sea costs more STPs than transporting Divisions. Also, the unit type has an influence on cost: transporting Armored units is the most expensive, while transporting Infantry units is the least expensive.

8.9 AMPHIBIOUS TRANSPORT



Use this action to load unit into amphibious fleet, which can then unload on any coastal hex on the map. The following conditions apply:

- The unit must have at least one AP;
- You must have enough AIPs available;
- The selected unit must be in a friendly-controlled Port or adjacent to one; and
- The Unit must have Supply level of at least 2/3 of the maximum level.

If all conditions are met, clicking this button will remove the unit from the map. It will then appear in the Naval Screen, in the appropriate Port as an Amphibious unit. It can then be moved to a Sea Zone and unloaded on a Coastal hex.

8.10 PARADROP



This action is available for Airborne Divisions only. Select the Division, then click this button, and a range of highlighted hexes will be displayed (up to 20). Select the hex to drop the Division into and it will immediately do so. The following conditions apply:

- The unit cannot move and/or attack in the current turn to execute a Paratroop; and
- The unit must have Supply level of at least 2/3 of the maximum level.

When an Airborne Division paratroops, a casualty check is made, based on friendly and enemy air superiority over the target hex and a random factor of air activity (which is modified by air superiority in some part).

This results in determining losses for the Division. If your side has total air superiority, the Division will suffer no losses; if the enemy has total enemy air superiority, the Division may suffer very heavy losses when dropped.

Remember that at the end of the turn, the unit should have a land connection to a valid Supply source. Dropping a unit far behind enemy lines can lower its Supply level and thus very vulnerable to attack.

8.11 RENAME UNIT



This allows you to change a unit's name.

8.12 DISBAND UNIT



This action will disband the selected unit permanently. This is useful when you'd like to get rid of some low-level, weakened unit with 0 Action Points that blocks access to a hex.

Disbanding a unit will give 50% PP of its actual value.

9.0 LAND UNIT ACTION BUTTONS (ENEMY UNITS)

By selecting a hex occupied by an enemy land unit, the following Action Buttons appear in the Unit Information panel: Air Strike, Shore Bombardment, and Nuclear Attack.

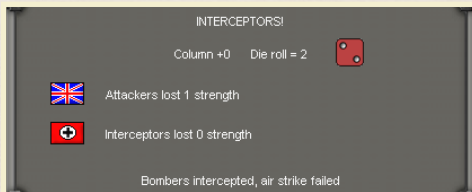
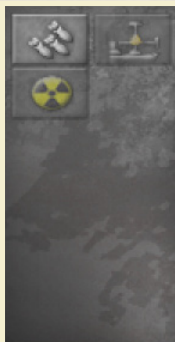
9.1 AIR STRIKE



Clicking this button will perform an Air Strike. You have to have your own Air unit within range (20 hexes or less).

The strongest Air unit will be selected first to perform the attack (Strength = Strength Points + Level); if two or more units have the same Strength, the closest one will be selected for the attack.

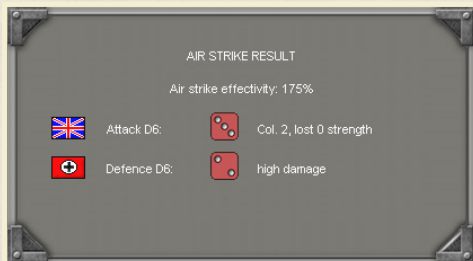
If there are any enemy Air units within range, one will try to intercept – you will get this information while hovering the mouse over the Air Strike button. The strongest enemy Air unit in range is selected first for the interception attempt. However, Air units with a Strength lower than half of its maximum will NOT be selected for interception (as this most likely would mean a suicide mission).



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After clicking the button, your unit will try to execute the Air Strike. If an enemy unit has been designated to intercept, an air combat result will be displayed. If your unit suffers more losses than interceptors – bombers will divert and air strike won't be executed. If there were no interceptors or interception failed, an air strike will be performed on selected unit.



An Air Strike may reduce the Strength of an enemy land unit. A die is rolled to determine the losses, which are then modified by the Air Strike's effectiveness. The following factors influence an airstrike's effectiveness:

- The Strength Points of the Air unit (12.5% per Strength Point, up to 100% for a Strength 8 air unit);
- The Level of the Air unit (+25% per Level);
- The Supply of the Air unit (there are penalties for a Supply level under 15);
- The terrain in the targeted hex occupied by the unit being bombed (Cities, Mountains, Hills, Forests, Jungles, and Swamps will all reduce an Air Strike's effectiveness).

9.2 SHORE BOMBARDMENT

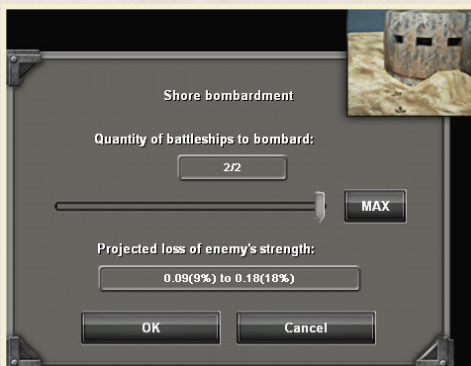
This action allows you to bombard an enemy land unit on a Coastal hex with your Battleships. The following conditions apply:

- Can only be performed against an enemy unit in a Coastal hex;
- You must have at least one Battleship that has not bombarded in the current turn in a Sea Zone adjacent to the selected hex; and
- An enemy unit can be bombarded from sea only ONCE per turn.



After clicking this button, a popup unit will appear allowing you to select the number of Battleships that you'd like to take part in the attack.

Shore bombardment reduces an enemy unit's Effectiveness for one turn (only). The amount of Effectiveness that is reduced depends on number of Battleships used in the bombardment, as well as a die roll.



9.3 NUCLEAR ATTACK

This button allows you to drop a nuclear bomb on an enemy unit. The following conditions must be met:

- You have at least one nuclear bomb available; and
- You have a Strategic Bomber unit in range (40 hexes).
- Dropping a nuclear bomb has following effects:
- The targeted enemy unit is eliminated;
- If the targeted enemy unit occupied a City, the City suffers a PP loss. This loss cannot be recovered; and
- Social Unrest in the attacked country grows by 20%, while Social Unrest in allies of the attacked country grows by 10% (for more on Social Unrest, see sections 13.0 and 15.2).



10.0 AIR UNIT ACTION BUTTONS (FRIENDLY UNITS)

By selecting a hex occupied by your own air unit, the following action buttons appear in the Unit Information panel.

10.1 UNIT INFORMATION



Shows information for the selected Air unit.

10.2 REPLACEMENTS



This button opens a popup window which allows you to replenish the Strength of an Air unit. The following conditions apply:

- The unit may not have rebased or attacked during the current turn;
- The unit must be in Supply to receive replacements; and
- If the unit has a low amount of Supply, it can only receive a certain number of replacements.



Replacing Strength Points will cost Production Points, depending on how many you replace. Simply move the slider to set the number of Strength Points to replace, or click the Max button to replace the maximum number possible. Replacing Strength Points in an existing Air unit will cost MUCH less than buying a new Air unit with the same Strength.

10.3 UPGRADE LEVEL

By clicking this button you can upgrade unit to next level. Following conditions apply:

- Level 5 units cannot be upgraded, as this is maximum level;
- You must research Combat Aircraft technology to a Level that will allow upgrading; and
- The unit may not have rebased or attacked during the current turn.
- You have to have enough PPs for an upgrade.

Simply highlight the unit to upgrade, then click this button (if available). The unit will then upgrade to the next level, as long as the above conditions are met. The unit will also lose the rest of its turn.

10.4 UPGRADE TO AIR ARMY



This action allows you to upgrade an Air Division to an Air Army. The unit may not have rebased or attacked during the current turn in order to upgrade. Simply highlight the Air Division to upgrade, then click this button; the unit will automatically upgrade to an Air Army, and will lose the rest of its turn.

10.5 REBASE



This action is the only way to move an Air unit to another hex. Only Air units that did not attack during the current turn can be rebased. The rebase range is 40 hexes for Air Divisions and Armies, and 80 hexes for Strategic Bombers.

Simply select the Air unit to rebase, click the Rebase unit, and select the hex to move it to. Air units may move to any kind of terrain hex.

10.6 STRATEGIC MOVEMENT



This allows you to immediately move an air unit to a friendly-controlled city. The following conditions must be met first:

- You must have enough PP available;
- The unit cannot move and/or attack in the current turn to use Strategic Movement; and
- Units out of Supply can't use Strategic Movement.

After clicking this button, all valid hexes to which the unit can be transported will be highlighted on the map. Highlighted cities are all friendly-controlled. Left click on a highlighted hex and the unit will be moved immediately; right click to cancel Strategic Movement.

10.7 RENAME UNIT



Allows you to change the Air unit's name.

10.8 ATTACK ENEMY FLEET



This allows an Air Unit to attack an enemy fleet in a specified sea zone. Attacks can be made in any sea zone within 20 hexes of the Air Unit.

After clicking this button a new window will pop up, where you will make the necessary selections.



After pressing Attack button and if enemy fleet is in chosen sea zone, an attack attempt is made. Chance of spotting enemy fleet depends on Attackers Air technology, Air unit strength and Defenders naval technology levels.

If Air Unit finds enemy, it has ten trials to hit Naval Unit. Each chance is equal to 5% multiplied by actual air unit's strength (so Air Army with 8 points of strength will have 40% chance to deal damage). Successful check deals 1 point of damage to a random naval unit in enemy fleet.

Every time when a check for attack on naval unit is made, it is also checked if an Air unit is damaged. Chance of hitting Air unit is equal to Defender's Naval technology multiplied by Air Unit's actual strength. If an Air Unit is hit, it loses 1 point of strength.

There is also a special rule. If Defender's fleet includes Air Carrier then naval technology level is increased by one for every Carrier (there is no upper limit).

10.9 DISBAND UNIT

This action will disband the selected unit permanently. This is useful when you'd like to get rid of a weakened/low-level Air unit that blocks access to a hex.

Disbanding a unit will give 50% PP of its actual value.

11.0 AIR UNIT ACTION BUTTONS (ENEMY UNITS)

By selecting a hex occupied by an enemy Air unit, the following Action Buttons appear in the Unit Information panel:

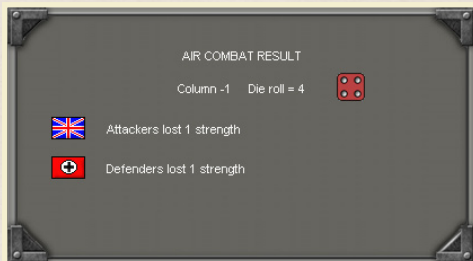
11.1 AIR COMBAT



Use this action to send your fighters to destroy enemy Air units. You have to have your own Air unit in range (the strongest unit will be selected first; it cannot be selected manually). After selecting the enemy Air unit and clicking this button, the Air Combat is resolved.

The following conditions influence air combat:

- The Strength Points of both sides (+1 point for each Strength Point);
- The Levels of both sides (+1 point for each Level); and
- The Supply level for both sides (a low Supply will result in a penalty).



A total for both the attacker and defender is calculated. The attacker's score minus the defender's score determines the column used in the Combat Result Table. The minimum column is -4 (showing total air superiority for the defending unit), while the maximum is +4 (showing total air superiority for the attacking unit). Then, a die is rolled to determine the losses for both sides.

11.2 NUCLEAR ATTACK



See the Nuclear Attack section (9.3) in the Land Unit Action Buttons section for more details.

12.0 FLEET SCREEN

Access the Fleet screen by clicking Fleet button in the main screen.

Fleet

12.1 OVERVIEW

The Fleet screen shows a map of Sea Zones and Ports. The map can be scrolled by moving the mouse cursor to the edge of the screen.



12.2 SEA ZONES AND PORTS

Sea Zones are represented on the map as blue rectangles with small unit icons and numbers, showing the number of friendly naval units of given type in the sea zone.

The icons in Sea Zones are, from left to right and top to bottom: Aircraft Carriers, Battleships, Cruisers, Submarines, Transports, and Amphibious Fleets. The number to the left of the corresponding icon shows how many ships of that type are in the Sea Zone. This is the total number of ships, regardless of the number of Fleets present.

BB	0	SS	0
CV	0	TP	0
CA	0	AP	0

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Ports are represented by anchor icons, and are color-coded depending on who controls them:



Allied



Axis



Comintern



Neutral

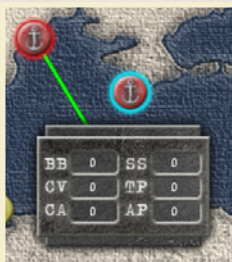
Your Fleets are going to be either at sea (in a Sea Zone) or docked (in a Port). You can move them from a Sea Zone to Port and vice versa. If a Fleet is in a Port, the Port will have a highlighted anchor icon to distinguish it from empty Ports.



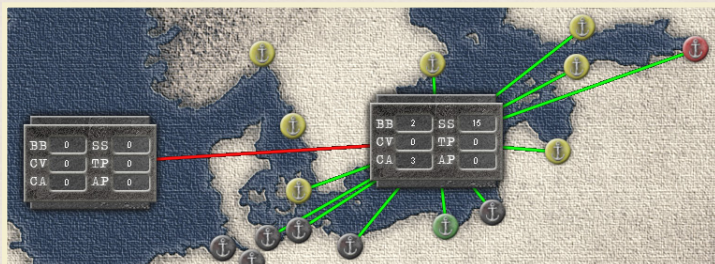
The Port at left is highlighted; the Port at right is not. Therefore, there is a Fleet in the Port at left.

To select a Sea Zone or Port, simply click on it. All friendly-controlled Fleets in that selected Sea Zone or Port will then appear in a drop-down list in the lower left part of the screen (the Fleet Display panel).

Furthermore, by clicking a Port, a line will be drawn to the Sea Zone that the selected Port has access to.



Similarly, clicking a Sea Zone will draw lines to all Ports that the selected Sea Zone has access to.



12.3 FLEET DISPLAY PANEL

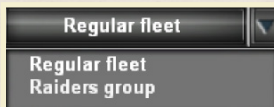
At the top of this panel is the name of the Fleet currently selected (in the Sea Zone or Port). This will also show the number of ships in that particular Fleet, in parenthesis. Click the drop-down arrow to see or select additional Fleets (if any are present).



Once a Fleet is selected, below the Fleet Name will be a display of ships. This display will show a maximum of two rows of eight ships each. If more than 16 ships are in the displayed Fleet, click the Up and/or Down buttons at right to scroll through the list.

12.4 REGULAR FLEETS VS RAIDERS GROUPS

Each Fleet can operate in either one of two modes: Regular Fleet or Raiders Group. In the lower left part of the Fleet Display panel, you can click the drop-down arrow to assign the currently-selected Fleet as either of these modes.



Regular Fleet. A Fleet in this mode acts as a single formation; its goal is to seek battle with enemy Regular Fleets and Raider Groups. Whenever it encounters either of these enemy Fleets, a sea battle occurs and all ships will take part in the battle. A Regular Fleet can deal greater losses to intercepted Convoys (even destroy the entire convoy) than a Raiders Group, but Regular Fleets have less of a chance to actually encounter a Convoy than a Raiders Group. This is due to a Convoy Detection check, made for friendly Fleets in the same Sea Zone as an enemy Convoy. A Raider Group's Convoy Detection Check is made for EACH ship in a Raider Group, whereas the Check is made only once for an entire Regular Fleet.

Raiders Group. A Fleet in this mode is in fact a group of individual units operating separately in a Sea Zone (they are grouped as a 'Fleet' only to facilitate their overall management). Ships in this formation will not seek battle with Regular Fleets or Raiders; instead, they will limit their attentions to hunting only Convoys. Their chance of finding a Convoy is much better than that of a Regular Fleet, but losses dealt to a Convoy will be less than those dealt by a Regular Fleet. This mode is better for countries with smaller Fleets that would not survive any kind of decisive battle with stronger opponents. The disadvantage of this mode is the fact that when a Raider Group is detected, even by a small Fleet, it has virtually no chance to survive.

12.5 FLEET ORDERS PANEL

To the right of the Fleet Display Panel is a grouping of buttons used to issue orders for the currently-selected Fleet.



For details on these buttons, see below.

12.5.1 MOVE FLEET

This action is possible for a Fleet that has not moved in the current turn.

First, select a Fleet either in a Sea Zone or in a Port. Then, click the Move Fleet button.

After clicking the button, click on a Sea Zone or Port that you want the Fleet to move to. Available Sea Zones and Ports will be highlighted. Note that a Fleet can move either one or two Sea Zones per turn.

Straits limit Fleet movement, as follows:

- To move between the Baltic Sea and the North Sea, Copenhagen must be friendly-controlled.
- To move between the Southern Atlantic and the Western Mediterranean Sea, Gibraltar must be friendly-controlled.
- To move between the Eastern Atlantic and the Black Sea, Istanbul must be friendly-controlled.
- To move between the Eastern Mediterranean and the Persian Gulf, Suez must be friendly-controlled.

An “M” next to a Fleet's name means that it has moved during the current turn.

Whenever a Port City is occupied by enemy units, all friendly
Fleets there move automatically to the nearest Sea Zone.

12.5.2 REPAIR GROUP

This allows you to repair a group of ships. The group must be in a Port and it must be damaged for this option to be available. Select the damaged group from the Fleet Display panel and click this button to conduct the repair.

Each damaged point on a group costs a certain number of PPs to repair, depending on the group type. These costs (per point) are as follows:

Carrier Group: 18 PPs

Battle Group: 16 PPs

Patrol Group: 13 PPs

Submarine Group: 12 PPs

12.5.3 RENAME FLEET

This allows you to change the name of the Fleet. Select the Fleet you want to rename, then click this button and change its name, or cancel if you change your mind.

12.5.4 TRANSFER GROUPS

This allows you to move selected groups to another Fleet, or to create a brand-new Fleet, in the same location (either a Port or Sea Zone). First, select the group you wish to transfer, then click this button. Next, from the drop-down menu, select either Create New Fleet or another Fleet (if any). Confirm the transfer or cancel if you change your mind.

12.5.5 RENAME SHIP

This allows you to change the name of an individual ship. Only one ship must be selected to make this button enabled. Select the ship, click this button, then change the name. Or, cancel if you change your mind.

12.5.6 DISBAND SHIP

This will decommission the ship and send it to the scrap heap immediately. NO PPs will be retrieved from this action.

Unlike disbanding a Land unit, disbanding a ship grants you a bit of your investment back (representing scrap metal and guns that can be used elsewhere). Disbanding a ship will give you (ship HP * repair cost per 1 HP) PPs. So, disbanding a Battleship that has 2 HP will give you $2 * 4 = 8$ PPs.

12.5.7 UNLOAD

This button is enabled only for Transports in Ports. By clicking it, the loaded land unit carried by the Transport will appear on the map again (and the Transport will vanish). The land unit is unloaded in the Port directly, or if the Port is occupied by another land unit, it is unloaded into any unoccupied hex that is adjacent to the Port. If there is no valid unoccupied adjacent hex, a message is displayed that unit cannot be unloaded there.

12.6 NAVAL UNIT TYPES

There are six naval unit types, as follows:

12.6.1 CARRIER GROUP

This group represents 1 Air Carrier and 5 Destroyers.

Max Hit Points: 10

Destroys 2 to 10 STPs from any encountered Convoy.

Very Good at detecting enemy ships/Fleets.

Special Ability: Has a good chance to detect and attack enemy units in the same Sea Zone. For every level of Group owner's Naval technology, the Carrier group has a chance to attack the enemy without retaliation. The chance of hitting an enemy ship is equal to the Carrier group owner's naval technology multiplied by 3%. If an attack is successful, then target is losing Strength Points equal to Carrier group owner's naval technology.

This is the most expensive group you can buy.

12.6.2 BATTLE GROUP

This group represents 1 Battleship and 5 Destroyers.

Max Hit Points: 8

Destroys 1 to 5 STPs from any encountered Convoy.

Poor at detecting enemy ships/Fleets.

Special Ability: Can bombard enemy land units in Coastal hexes.

12.6.3 PATROL GROUP

This group represents 1 Cruiser and 3 Destroyers.

Max Hit Points: 5

Destroys 0 to 5 STPs from any encountered Convoy.

Average at detecting enemy ships/Fleets.

12.6.4 SUBMARINE GROUP

This group represents 4 Submarines.

Max Hit Points: 2

Destroys 5 to 10 STPs from any encountered Convoy.

Average at detecting enemy ships/Fleets.

Special Ability: Has a chance to detect and attack enemy ships in the same Sea Zone by surprise. Each submarine have 1% chance for each Submarine technology level to hit random enemy ship.

This is a single attack in which the enemy CANNOT return fire.

This is the least expensive group you can buy.

12.6.5 TRANSPORT FLEET

Transports cannot be built; instead, they are created when a Sea Transport action (see section 8.8) is conducted for a land unit.

Max Hit Points: 1

They cannot intercept Convoys.

They have no detecting capabilities whatsoever.

When the Transport is destroyed, the land unit loaded on it is destroyed as well.

12.6.6 AMPHIBIOUS FLEET

Amphibious Fleet units cannot be built; they are created when an Amphibious Transport action (see section 8.9) is conducted for a Land unit.

Max Hit Points: 1

They cannot intercept Convoys.

They have no detecting capabilities whatsoever.

When the Transport is destroyed, the land unit loaded on it is destroyed as well.

12.7 MANAGING CONVOYS

Click the Convoys button from the Fleet screen to bring up the Convoy Management screen. A list of convoys is displayed; use “Up” and “down” button (or mouse wheel) to scroll the list of convoys. This list is just a plan of convoy execution. Not every convoy from the list may be executed.

Convoys are always executed according to the list order. If necessary, you can position a convoy on the list by using one of four buttons (move up, move down, move to top, move to bottom). The Delete button removes a convoy from the list.



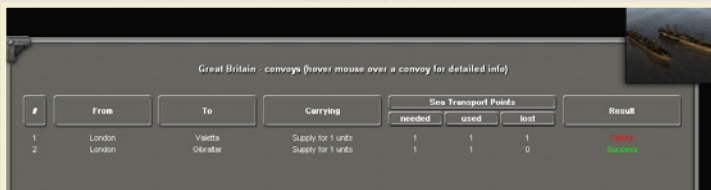
There are two types of convoys: a supply convoy and a resources convoy. The former carries supply from supplied port to non-supplied port; the latter carries Production Points from your country to another country. Use the Change Type button to change the convoy's type between the two.

The New Convoy button allows you to create a new convoy. After clicking this button, click the departure Port then click the arrival Port. Clicking the right mouse button cancels the creation of a new convoy. After creating the convoy, it is displayed on the list.

12.7.1 CONVOY EXECUTION SUMMARY

Convoys are executed in the end of a turn. They may carry Supply or PPs. A Convoy Execution Summary window will be displayed if you had at least one Convoy scheduled during the turn. By hovering the cursor over the convoy, you will see detailed information about the Convoy's

route and losses taken (if any). If the Convoy was not executed, you will see an explanation why.



Great Britain - convoys (hover mouse over a convoy for detailed info)

#	From	To	Carrying	Sea Transport Points			Result
				needed	used	lost	
1	London	Valetta	Supply for 1 units	1	1	1	Failed
2	London	Gibraltar	Supply for 1 units	1	1	0	Completed

12.8 DEPLOYING NEW NAVAL UNITS

By clicking “Deploy New Ship” button, a list of purchased naval units is displayed. Select unit by clicking on it and then left-click on a highlighted port to deploy it. You can deploy naval units in your own ports only (i.e. deployment is not possible in your allies’ ports).

12.9 SEA BATTLES

The possibility of a Sea Battle depends on units that are in the Fleet. Before everything else, at least two enemy Fleets must be in the same zone. Then a check is made to see if any were able to detect the enemy fleet.

A Sea Battle is preceded by Carrier Group and/or Submarine Group special attacks (see 12.6.1 and 12.6.4).



If only one fleet has a Carrier Group, there is a chance that there will be no naval battle.

The base chance of a battle is equal to 20% plus 20% for each naval technology level of the Fleet with Carriers, plus 1% for each Carrier, minus 20% for each naval technology level of the Fleet without Carriers.

If one of the Fleets has no other group except Submarines, there is a 50% chance minus 1% for each group that there will be no naval battle. If both fleets are only Submarines, then the chance is equal to 100% minus 1% for each group.

If no special rule holds true, a Naval Battle begins.

Naval Battles are started by the Fleet with the most Carrier Groups; if there are an equal number of Carriers or there are no Carriers present on either side, then a Naval Battle is started by the Fleet with the higher naval technology level; if they're equal, then it's started by the larger Fleet; if both have the same amount of groups, then the Naval Battle is started by the country with higher priority on the country list.

Fleets will fire at each other alternately; if in one Fleet all groups already fired, then the rest of the groups in the enemy Fleet will fire.

Each group has a 3% chance multiplied by its naval technology level to hit a random enemy group. Each hit has 50% base chance plus 10% for each naval technology level for dealing one point of damage.

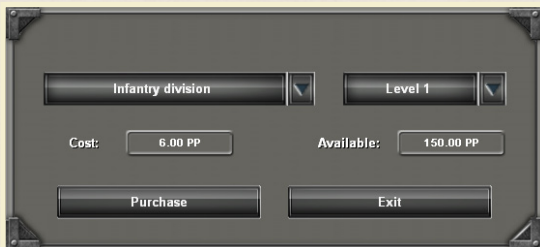
Transports and amphibious are not able to fire on enemy groups but might be a target.

Each naval battle can last one turn; there is also a 75% chance for second, 50% for third, 20% for fourth and 5% for fifth turn.

13.0 PURCHASING AND DEPLOYING NEW UNITS

Clicking the Purchase button in the Game Buttons panel will open a new window in which you can purchase new land, air, and naval units as well as SMPs, STPs, and AIPs.

Purchase



Click the left-hand drop-down menu to select a unit type. The drop-down menu to the right lets you select a Level for the current unit; only Levels you have researched will be available. The cost of the currently-selected unit and Level is displayed in the middle of the window, along with your total number of PPs remaining.

Click Purchase to buy the unit. You may buy as many units as you have PPs to spare, but keep in mind that keeping some PPs in reserve to 'save up' for more expensive units, or to help rebuild damaged units, may be in order. Click Exit when you're finished.

Notice that each subsequent SMP, STP, or AIP purchased is more expensive than the last one bought.

Purchased land and air units are transferred into a Reserve Pool, from which they can be placed on a map using Deploy Units button.

When this button is clicked, any purchased units from previous turns will display. To deploy a unit from this list, click it to select it, then click Deploy Unit. Click Exit to return to the game if you don't want to deploy any more units.

Deploy Units

The following conditions govern where a new unit may be deployed:

- For countries that are not at war, a unit can be deployed to any City or hex adjacent to a City hex.
- For countries that are at war, a unit can be deployed to any City controlled by it country that has maximum Supply level coming directly from a main Supply source, or to a hex adjacent to this same City.

13.1 HOW PRODUCTION POINTS ARE COLLECTED

PPs are collected by a country during the end-of-turn sequence. The following rules are used to calculate the amount of PPs collected:

- Resource hexes yield their full PP value to the hex's controller.
- Cities that are owned yield their full PP value to the hex's controller.
- PPs from cities that are occupied (i.e. controlled but NOT owned) yield 15% of their total PP value to its current controller.
- PPs from cities that were annexed as a result of surrendering (i.e. are owned by a given country, but were not owned by this country at the beginning of the game) are distributed in the following way:
 - 25% of its PPs go directly to its current owner.
 - 25% of its PPs are distributed among countries that waged war with its original owner; these PPs are distributed according to the victory share.

After PPs are calculated for a country using the above rules, they are modified by three factors as follows:

- **Social Unrest.** The Social Unrest number is a percent that is subtracted directly from 100. So, if Social Unrest is 30, the modifier will be 70% ($100 - 30$).
- **War Economy.** This number is a percentage that acts as a direct modifier. So, if a country's War Economy is equal to 40, the War Economy modifier will be 40%.
- **Difficulty Level** If a country is played with Very Easy difficulty, the modifier is 200%; at Easy: 150%; Normal is 100%; Hard 75%; and Very Hard 50%.

After everything is applied, the modified PP amount is collected by a country.

PPs can be saved from turn to turn.

13.2 UNIT UPKEEP

Every unit's Strength Point cost a specified amount of PPs of upkeep every turn. The default is 0.1 PP for each Strength Point, but this may vary for a specified country.

PPs needed for unit upkeep are deducted during a turn immediately after collecting them.

14.0 RESEARCHING NEW TECHNOLOGIES

Clicking the Research button in the Game Buttons panel opens up a Research window.

Research



Time of Wrath

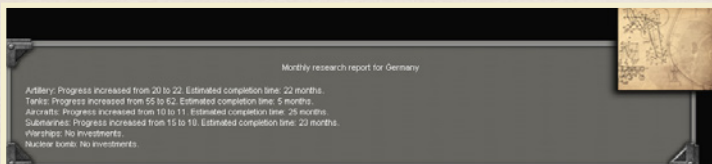
WORLD WAR 2

You can invest in six different Research fields: Artillery, Tanks, Combat Aircraft, Submarines, Warships, and Nuclear Bombs. Each field may have from zero to three 'Light Bulbs' invested in it at a time.

A Light Bulb is a general expression of your country's research efforts in that particular category; the more Light Bulbs there are, the more effort your scientists are making in that particular project, towards the next attainable level. The current level for that category is displayed as well.

You can buy a Light Bulb in each category. The cost for the next one is listed next to the category's Buy button. As long as you have the requisite PPs available, and there aren't already three Light Bulbs in that category, you can buy another one by clicking the Buy button.

Each Light Bulb will generate a random amount of progress in the category (research reports are displayed after all countries finish their turn).



When next level is achieved in a given field, all investments in this field are zeroed.

The different Research fields, and what they affect, are as follows::

- **Artillery.** Allows the building of higher-level Infantry (including Motorized Infantry) units, which in turn allows you to upgrade existing units to higher levels.
- **Tanks.** Allows the building of higher-level Armored units, which in turn allows you to upgrade existing units to higher levels.
- **Combat aircrafts.** Allows the building of higher-level Air units, which in turn allows you to upgrade existing units to higher levels.
- **Submarines.** Increases the to hit chance of submarines in sea battles.
- **Warships.** Increases the to hit chance of all other naval units (everything besides Submarines) in sea battles.
- **Nuclear Bombs.** The penultimate military weapon of World War II; it's possible for any country to build this, but is extremely expensive to develop and most likely will only be attainable by resource-rich countries. This field has only two levels, 0 and 1. Achieving level 1 will automatically add one nuclear bomb to your arsenal every month.

15.0 DIPLOMACY SCREEN

Clicking the Diplomacy button in the Game Buttons panel will bring up the Diplomacy screen.

Diplomacy

15.1 OVERVIEW



The main part of the screen contains a map with capitals of the countries you can make diplomatic overtures towards. Each capital is color-coded as follows:



Axis country

Time of Wrath

WORLD WAR 2



Allied country



Comintern country



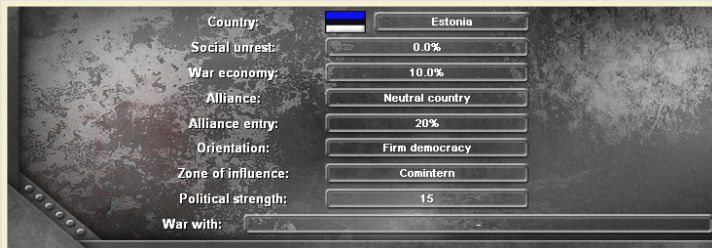
Neutral country

In the lower left corner, the number of Diplomatic Points (DPs) you have for the current turn is displayed. Each action takes a certain number of Points, which can be 'saved' from turn to turn to 'buy' more expensive actions down the road. Click the OK button to exit from the Diplomacy screen and return to the game.

Below each symbol are two numbers. The left one is that country's Political Strength, while the right one is that country's Alliance Entry Level. See below for details; these are but two (albeit important ones) of the country's Diplomacy ratings.

15.2 COUNTRY INFORMATION

To get information on a particular country, click its capital. In the lower left panel, information on the selected country will appear:



Country Name: The name of the country is followed by its Social Unrest and War Economy levels:

Social Unrest: This value ranges from 0% to 100% and modifies the PPs that country collects each turn. For a Social Unrest value of X%, that country will only collect a percentage of their total PPs equal to $(100 - X)$. This percentage value can increase as a result of different diplomatic actions and/or events. It will decrease by 0.5% each turn.

War Economy: This value ranges from 0% to 100% and modifies the PPs that country collects each turn. When a country is at peace, this value won't change. When it is at war, though, it will grow by certain amount each turn (faster in Regimes, slower in Democracies; see Political Orientation, below).

Alliance: Shows the alliance to which the selected country belongs. This also shows if the country is the alliance's leader. There are only three alliances in the game (Axis, Allies, and Comintern); creating other alliances is not possible. A country not in any of these alliances is considered a neutral country.

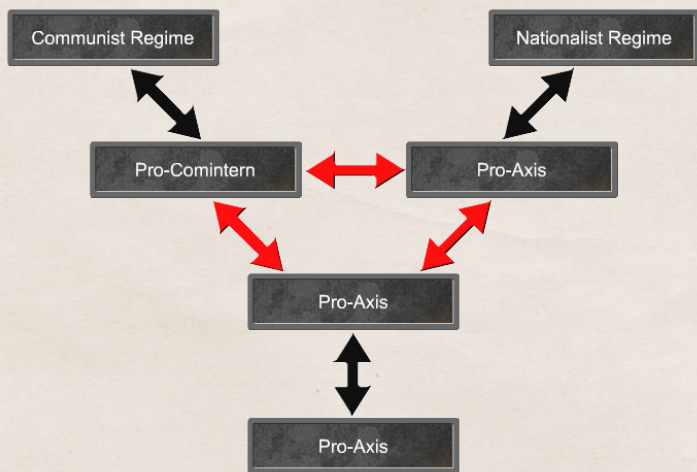
In the game, the term "neutral" does not mean the country will stay out of the war, but rather that the country will stay out of the main alliance. Neutral countries can be at war with each other or with any alliance.

Alliance Entry: This value is displayed for all countries on the map as the rightmost number. It ranges from 0% to 100% and shows how close the country is to joining its alliance. It can be increased or decreased as a result of diplomatic actions and special events. So countries can only join one Alliance, and other countries can only try to keep them from joining it?

And reaching 100% means automatic entry? Does it have to be at 100% for one full turn or anything else special?

Political Orientation: This determines which alliance a country will join when it reaches 100%. It is also a key factor in determining the costs of different diplomatic actions or their success chance.

There are six orientations in the game.



The red arrows indicate that there is an impact on the country's Social Unrest. Black arrows indicate no such impact. So, there are costs (or benefits, depending) if a country changes its orientation.

Refer to this chart to better visualize the descriptions below.

The orientations are:

Communist Regime. This closed country is fully run by a Communist government. It can't get much more Red than this, but can become partially Democratic by changing its orientation to Pro-Comintern. Communist Regimes that are neutral will join the Comintern when their alliance entry reaches 100%.

Nationalist Regime. This closed country is run by a Fascist government. It may become partially Democratic by changing its orientation to Pro-Axis. Neutral Nationalist Regimes will join the Axis when their alliance entry reaches 100%.

Firm Democracy. A Democracy is a free nation, but can be weakened by changing to Pro-Allied. Neutral Firm Democracies will join the Allies when their alliance entry reaches 100%.

Pro-Axis. This is still a Democratic country, but with possibility of becoming a Nationalist Regime. It can also change to Pro-Allied or Pro-Comintern. Neutral Pro-Axis countries will join the Axis when their alliance entry reaches 100%.

Pro-Allied. This represents a Weak Democracy. It may become stronger and turn into a Firm Democracy or change to Pro-Axis or Pro-Comintern. Neutral Pro-Allied countries will join the Allies when their alliance entry reaches 100%.

Pro-Comintern. This is a Democratic country, but leaning towards Communism with the possibility of becoming a Communist Regime. It may also change to Pro-Axis or Pro-Allied. Neutral Pro-Communist countries will join the Comintern when their alliance entry reaches 100%.

Zone of Influence: The country can be in a Zone of Influence of any of the three main alliances. Declaring war on a neutral country in an alliance's Zone of influence will automatically make this country join that alliance.

Political Strength: This has an effect on the country's initiative in a game turn, but more importantly, it tells how difficult is to influence the country. This is an important factor in determining the base cost of diplomatic actions towards this country.

Status: Whether the country is at war or not.

15.3 DIPLOMATIC ACTIONS (OWN COUNTRY)

By clicking on your country's capital, four Diplomatic Actions become available. To perform them, you have to have enough DPs. The base cost of a Diplomatic Action (in DPs) for your own country is equal to the Political Strength of your country. This value can be then modified (increased or decreased) depending on the type of Action and - usually – the Political Orientation of your country.

15.3.1 DELAY ALLIANCE ENTRY

This Action is used to attempt to decrease the Alliance Entry for your country. This action is very cheap for Democracies, reasonable for Communist or Pro-Communist countries, and expensive for Nationalist Regimes and Pro-Axis countries. The following conditions apply for delaying your alliance entry:

- The country must be neutral (not in an alliance), and
- Its Alliance Entry rating must be greater than 0.

This Action can only be performed once per turn

15.3.2 HASTE ALLIANCE ENTRY

Use this Action to increase the Alliance Entry rating of your country. This is cheaper for Regimes or Pro-Axis/Pro-Communist countries, and expensive for Democracies and Pro-Allied countries. The following conditions apply for hastening your alliance entry:

- The country must be neutral (not in an alliance), and
- Its Alliance Entry rating must be greater than 0.

This Action can only be performed once per turn

15.3.3 PARLIAMENTARY ELECTIONS

Use this Action to change the Political Orientation of your country without negative consequences. Be aware, though, that changing the Orientation in a way which will change its Alignment (Pro-Axis \leftrightarrow Pro-Allied, Pro-Comintern \leftrightarrow Pro-Axis, or Pro-Comintern \leftrightarrow Pro-Allied) will cause a reduction of your country's Alliance Entry level. The following conditions apply for holding Parliamentary Elections:

- The elections can be held only ONCE in a single game;
- Elections are NOT possible for Communist/Nationalist Regimes;
- The country must be neutral (not in an alliance); and
- The country MUST NOT be at war.

15.3.4 CHANGE POLITICAL ORIENTATION

Use this Action to change the Political Orientation of your country. Be aware, though, that changing the Orientation in a way which will change its alignment will cause a reduction of your country's Alliance Entry level. Changing your Political Orientation with this Action will cause an increase of Social Unrest within your country. It will increase even more if you're

changing its Orientation AND its Alignment. The following conditions apply for changing your country's Political Orientation:

- This Action is available only once per turn;
- Your country must be neutral (not in an alliance);
- Your country's Social Unrest must be lower than 75%; and
- The country MUST NOT be at war.

15.4 DIPLOMATIC ACTIONS (OTHER COUNTRIES)

By clicking on a capital other than your country's, three Diplomatic Actions become available. To perform any of these Actions, you have to have enough DPs available. The base cost of the action (in DPs) is the Political Strength of the selected country. This value can be then modified (increased or decreased) depending on the type of Action and - usually - the Political Orientation of both your country and the selected country.

15.4.1 DECLARE WAR

This Action immediately puts you at war with the selected country. If you are in an alliance, your allies will automatically join the war on your side. The following conditions apply for this Action:

- You cannot directly declare war on a country that is a member of an alliance; instead, to go to war with that particular country, you will have to declare war on their alliance leader;
- You cannot declare war on a country with the same or similar Political Orientation as yours; and
- Declaring war on a country that is in a Zone of Influence of another alliance will cause the targeted country to join that alliance; you will then find yourself at war with all members of that alliance.

The base cost (measured in DPs) of declaring war is the Political Strength of the target country. This value is then multiplied by a modifier whose value depends on the alliance (or whether or not they are an alliance leader) and the Political Orientation of both the country that declares war and the country on which war is declared. The following table shows the value of this modifier:

Cost modifier of DECLARE WAR action. 'X' means that declaring war is not possible.						
Country that is declaring war	Country on which war is declared					
	Leader of Comintern	Leader of Axis	Leader of Allies	neutral, with orientation: pro-commie or communist regime	neutral, with orientation: pro-axis or nationalist regime	neutral, with orientation: pro-allied or firm regime
Comintern Leader	X	0	0	X	0	0
Axis Leader	0	X	0	0	X	0
Allies Leader	100	75	X	100	50	X
Comintern member	X	200	200	X	100	100
Axis member	200	X	200	100	X	50
Allies member	200	200	X	100	100	X
neutral, with orientation: pro-commie or communist regime	X	50	50	X	25	25
neutral, with orientation: pro-axis or nationalist regime	50	X	50	25	X	25
neutral, with orientation: pro-allied or firm regime	150	150	X	100	100	X

The modifier number is the percent that the Base Cost is modified by. Therefore, a zero (0) means you can declare war without cost; 100 means there are no changes to the Base Cost, 50 means the Base Cost is halved, and so on.

Declaring war has also another effect: it increases the Social Unrest in the country that declares war. Social Unrest will grow by a fixed value, which depends on the same factors as the ones described above. These values are described in the table below:

Basic Action Points for land units							
Land warfare doctrine level	Infantry Division	Infantry Corps	Mot. Division	Mot. Corps	Pz. Division	Pz. Corps	Airborne Div
0	3	2	4	3	6	5	2
1	3	2	5	4	7	6	2
2	4	3	6	5	7	6	2
3	4	3	7	6	8	7	3
4	4	3	8	7	8	7	3
5	5	4	9	8	8	7	3

15.4.2 EXERT PRESSURE

This Action represents diplomatic efforts made by your country to influence the Alliance Entry value of the selected country. When performed on a country with a similar Political Orientation as yours, this will INCREASE the Alliance Entry level of the targeted country. When the Alliance Entry reaches 100%, the target country joins the alliance appropriate for its Political Orientation. If the alliance is at war, it automatically joins the war on its new allies' side.

When this is performed on a country with a different political orientation than yours, it will DECREASE the Alliance Entry; however, in this case the Action may fail (which means no change in its Alliance Entry).

The following conditions apply:

- The country must be neutral (not in an alliance); and
- This option is available once per turn per target country per alliance of the country performing this action. For example: if Germany (Axis) exerts pressure on Romania, no other Axis countries may use this action on Romania in the current game turn (the Allies and/or Comintern still can, however).

If you exert pressure on a country with a different Political Orientation than yours, the failure chance is the Political Strength of the targeted country (if they are a Firm Democracy or Regime), or half of its Political Strength (in all other cases). Also, the cost of this Action is, in such cases, 50% greater.

15.4.3 COUP D'ETAT

This Action represents an attempt by your country to change the Political Orientation of the target country by brutally replacing its ruling government with one that has a Political Orientation closer to your country's. The following conditions apply:

- The country must be neutral (not in an alliance);
- The country **MUST NOT** be at war; and
- If the target country's Political Orientation exactly matches yours, this Action is not allowed.

This Action is always risky. The chance of success is a combination of the Political Strength and the Political Orientation of the targeted country. When a coup d'etat attempt fails, it causes the following effects:

- The targeted country's Political Strength is increased by 10;
- The Political Strength of the country that failed the attempt is reduced by 5; and
- The Alliance Entry of the targeted country is increased.

When the attempt succeeds, the Political Orientation of the targeted country is changed one step closer to yours, but its Alliance Entry takes a moderate drop.

The cost of this Action is the Political Strength of the targeted country multiplied by 2.5.

16.0 REPORTS

The Reports button in the Game Buttons panel will provide you with a detailed analysis of losses dealt and taken by country. These losses are instrumental in determining who gets the most 'shares' for defeating a country – see 16.1 for more details.

Reports

Select a country from the drop-down menu at the top of this window to display the results for different countries.

17.0 ENDING A TURN

To end your turn, click the End Turn button in the Game Buttons panel.

End Turn

After the last country ends its turn, the game makes a series of checks and calculations before beginning a new turn. Some special events may be activated and sea battles can occur. The most important of these end of turn activities are described below.

17.1 SURRENDERING COUNTRIES

A check is made for each country to see if it surrenders. A country surrenders when it is at war and loses all Victory Points it owns. Cities that are not OWNED by the country (but are only CONTROLLED) DO NOT count for this, so for example, if Germany controlled a pocket in Russia with one Russian City worth 1 VP in it, but loses all VPs that it owns within its borders, it would automatically surrender at the end of the turn.

Raise of social unrest in country that declares war. "X" means that declaring war is not possible.						
Country that is declaring war	Country on which war is declared					
	Leader of Comintern	Leader of Axis	Leader of Allies	neutral, with orientation: pro-commie or communist regime	neutral, with orientation: pro-axis or nationalist regime	neutral, with orientation: pro-allied or firm regime
Comintern Leader	X	20	50	X	0	0
Axis Leader	0	X	10	0	X	0
Allies Leader	50	35	X	20	10	X
Comintern member	X	0	20	X	0	30
Axis member	40	X	40	0	X	5
Allies member	70	60	X	25	15	X
neutral, with orientation: pro-commie or communist regime	X	30	40	X	15	25
neutral, with orientation: pro-axis or nationalist regime	10	X	25	5	X	10
neutral, with orientation: pro-allied or firm regime	70	40	X	30	30	X

The surrendering country loses all Land, Air, and Naval units. All of its Supply sources are also converted to normal cities.

When a country fights more than one country (say, in an alliance) and surrenders, the conquering countries divide up 'shares,' or credit, for the conquest. Any shares in victory are calculated for each country that waged war against the surrendering country. These shares

are calculated based on losses dealt to the surrendering country by all countries that waged war against it. The country with the biggest share is considered the victorious country and is displayed in the surrendering message (for example “Germany surrenders to USSR” means that USSR was victorious country over Germany).

You may check at any time how many losses each country is dealt by clicking the Reports button in the main screen. These shares are remembered for calculations of Productoin Points.

The ownership of all hexes the surrendering country owned is transferred to the current controllers of these hexes. Ownership of all remaining hexes is transferred to the victorious country.

Surrendering is the only way in which hexes can change ownership.

When surrendering country is an alliance leader, leadership of the alliance is passed on to the alliance member with greatest political strength. When the last alliance member is eliminated, alliance is eliminated and cannot be revived. When only one alliance is left, the game ends

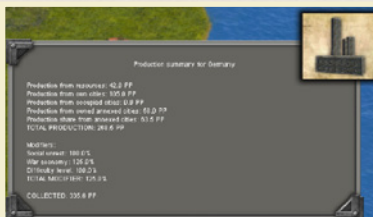
17.2 COLLECTING PRODUCTION POINTS

All countries collect PPs at the end of the turn and a Production Summary is displayed.

The following information is displayed:

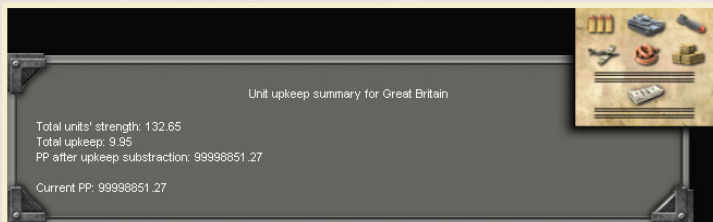
- **Production from Resources:**
The total number of PPs your country collected from Resource hexes you own/control.
- **Production from Own Cities:** The total number of PPs your country collected from your own Cities (that is, those Cities from within your country's borders, NOT cities your country occupies).
- **Production from Occupied Cities:** The total number of PPs your country collected from Cities you occupy (that is, those Cities that are not within your country's borders).
- **Production from Owned Annexed Cities:** The total number of PPs your country collected from Cities you own that have been annexed.
- **Total Production:** The total amount of PPs from the above categories.

After Total Production, you will find all Modifiers listed that will affect your total PPs collected. The Total Modifier is the cumulative modifier from all of these.



At the bottom, “COLLECTED” is displayed, and indicates the total number of PPs your country collected after modifiers are applied. These are the PPs you can spend in your next turn.

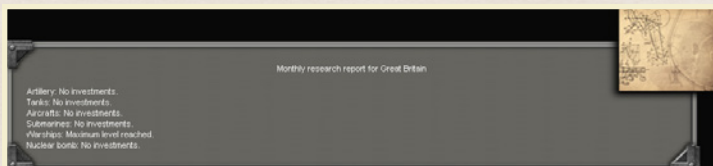
17.3 UNIT UPKEEP



After Production Points are collected, the game immediately calculates the amount of Production Points required to upkeep your units. The more units you have, obviously, the higher this cost will become. The number of Production Points you earned for the turn will be displayed, followed by the total PP upkeep cost. Then, you will see how many PPs you have AFTER Unit Upkeep is subtracted.

17.4 RESEARCH PROGRESS

Progress in Research is determined at the end of every turn; a report is displayed during the end of turn process.



The estimated completion time for each category is displayed. Each Light Bulb in a Research category generates a random value of 1 to 6 Progress Points.

If progress was made in a category, the information displayed will indicate this. All categories, except for Nuclear Bomb, requires progress to reach 100; when it does, a new Technology level is achieved in that category.

The Nuclear Bomb technology requires 800 progress in order to achieve it. For more details on Nuclear Bombs, see section 9.3.

18.0 SPECIAL EVENTS

Special Events may be generated at the end of every turn (e.g. the 'Completing Ribbentrop-Molotov pact' event).



Usually, an Event has several options for a player to select. These options offer different ways of dealing with the Event, each of which usually has drastically different possible outcomes. To view these, hover the cursor over each option button for details. Some options will cause Special Events to execute for other countries.

In a PBEM game, events for all human players are displayed for the last human player. If he doesn't want to make a choice, he can save the game and send it to another player.

19.0 SUPPLY

Supply is important for units and allows them to perform actions. Low supply has a negative effect on units.

19.1 CALCULATING SUPPLY

- First, Supply is calculated in each City that is controlled by a country or its allies. This is done in the following way:
- Cities that are Main Supply Sources (MSS) owned by a country get maximum Supply. If the country is an alliance, then all of an alliance leader's MSS act as if they were the MSS of this country.

- Cities that have a land connection over friendly-controlled hexes with any MSS get full Supply.
- Supply Convoys are executed. A Convoy Arrival Port gets the amount of Supply carried by the Convoy.
- Cities that have a land connection over friendly-controlled hexes with a Port in which a Convoy arrives get the Supply Value carried by the Convoy (unless their own Supply Value is higher – this applies when the Convoy took losses and managed to carry only a minimal amount of Supply).
- Cities that don't have a connection with a valid MSS either directly by land or via a Convoy will generate a certain amount of Supply on their own. This value is shown in parenthesis in the Hex Information panel (section 5.4) when a City is selected from the Main Screen.
- Supply goes from Cities directly to units, traveling at the speed of a Motorized unit. Units will get Supply from the nearest City (nearest in terms of APs of a Motorized unit, not in terms of the physical number of hexes necessarily). The Supply Value that unit receives is the Supply in the City minus the distance (in terms of APs) from that City. For example, the nearest City for German Infantry Division is 9 Action Points' worth of Motorized unit movement away. The City has maximum Supply of 30. Therefore, this division's Supply will be $30-9=21$.

19.2 LOWERED SUPPLY

A unit that has lowered amount of supply:

- Has a lowered efficiency,
- Has lowered APs,
- Has their column during a battle shifted downward,
- Has lowered Air Strike modifier,
- Has lowered maximum Replacements, and
- Might be impossible to perform strategic redeployment.

19.3 OUT OF SUPPLY

A unit that has been surrounded and is without access to a city inside the cut off area becomes out of supply. For each turn when unit is out of supply its Effectiveness and APs are reduced by 1/3.

20.0 WEATHER

At the beginning of every turn, weather is calculated. For each hex there is a separate chance for rain or snow to occur. Both atmospheric conditions affect battles and movement costs.

Also, each country can be differently affected with the scale of changes; in other words winter is more harmful for hexes in the Mediterranean than it is for hexes in Finland.

21.0 MULTIPLAYER

World War 2: Time of Wrath allows two multiplayer modes, Hot Seat and PBEM.

21.1 HOT SEAT

Hot Seat is a game that is played by more than one player on the same computer. Before the game, players should decide who controls which country and when its turn comes, take control over that country until the end of the turn. All players should be aware of Reports, Events, and Naval Battles after the last player's turn.

21.2 PBEM

PBEM is a kind of game with a maximum of 8 players; each of them plays on their own PCs.

The first thing to do is to decide who plays which country. Then in the scenario setting screen, one of the players (preferably the one playing as Germany, as in most scenarios this country moves first), should select his country, then check PBEM game checkbox. New fields will appear; one for the Player number and a second one for the game's name. Select countries and choose player numbers until all players have been assigned.

Remember that a player can be chosen only if country is set to be controlled by a human. Also PBEM game can't be started as long as there is no proper name.

Once the first player finishes his move and clicks the End Turn button, a message will pop up with information to whom the save game should be sent.

PBEM games can be found in Drive:\Path\World War 2 Time of Wrath\data\pbem\ with the folder by the name given in the Scenario Setting screen. It is best to zip the whole folder and send it to the player indicated in the pop up message.

Only the last player can see the naval battles, but all other players will receive reports about it at the beginning of their turns.

22.0 HOTKEYS

22.1 GAME SCREEN

P – Purchase

F – Fleet

D – Diplomacy

T – Research

R - **Reports**

U – Deploy Units

Esc – Options

Q – End Turn

22.2 PURCHASE SCREEN

Esc – Exit

Enter – Purchase

22.3 FLEET SCREEN

C – Convoys

D – Deploy new ship

Esc – OK

22.4 CONVOY SCREEN

Enter – New convoy

Esc – Exit

22.5 DEPLOY NEW SHIP SCREEN

Esc – Exit

Enter – Deploy unit

22.6 DIPLOMACY SCREEN

Esc – OK

22.7 RESEARCH SCREEN

Esc – OK

22.8 REPORTS SCREEN

Esc – OK

22.9 DEPLOY SCREEN

Esc – Exit

Enter – Deploy unit

22.10 OPTIONS SCREEN

Esc – Resume game

22.11 END TURN

Enter – Accept

Esc – Cancel

22.12 CONVOY SUMMARY SCREEN

Enter – OK

22.13 BEFORE SEA BATTLE SCREEN

Enter – OK

22.14 SEA BATTLE SCREEN

Enter – Next

Space – Auto

Enter – End Battle

22.15 SELECTED LAND UNIT

A – Assign Leader

I – Unit Info

S – Replacements

L – Upgrade Level

C – Upgrade to Corps

M – Strategic Movement

22.16 ASSIGN LEADER

Enter – Assign

Esc – Exit

22.17 REPLACEMENTS (LAND AND AIR)

M – MAX

Enter – OK

Esc – Cancel

22.18 SELECTED AIR UNIT

I – Unit Info

S – Replacements

L – Upgrade Level

C – Upgrade to Corps

M – Strategic Movement

B – Rebase

N – Attack Fleet

22.19 FLEET ATTACK

Enter – Attack

Esc – Cancel

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