

“Today we are crushed by the sheer weight of the mechanized forces hurled against us, but we can still look to the future in which even greater mechanized forces bring us victory. Therein lies the *Destiny of the World*” – Charles de Gaulle

## Contents

1	Introduction .....	11
2	Getting Started.....	12
3	Starting a New Game.....	13
3.1	Axis vs. Allies Mode .....	14
4	Load Game Screen .....	15
5	Save Game Screen .....	17
6	Game Options Screens.....	18
6.1	Options Panels .....	18
6.1.1	Page1/Page2 Tabs .....	18
6.1.2	Page-1 Options .....	19
6.1.3	Page-2 Options .....	20
6.1.4	Save Button .....	21
6.1.5	Cancel Button .....	21
6.1.6	Names Button.....	21
6.2	Names Screen .....	22
6.2.1	Scenario Drop Down List.....	22
6.2.2	Country Drop Down List.....	22
6.2.3	Type Drop Down List .....	23
6.2.4	Unit List Grid.....	23
6.2.5	Save Button .....	23
6.2.6	Future Button .....	24
6.2.7	Close Button .....	24
6.3	Field Editor Screen .....	25
6.3.1	Name Field .....	25
6.3.2	Ok Button.....	25
6.3.3	Cancel Button .....	25
6.4	Future Names Screen .....	26
6.4.1	Country Drop Down List.....	26
6.4.2	Type Drop Down List .....	26
6.4.3	Name List Grid.....	27
6.4.4	Save Button .....	27

6.4.5 Add Button .....	27
6.4.6 Close Button .....	27
7 Main Map Screen .....	28
7.1 Main Map Panel.....	29
7.1 Map Regions Panel.....	30
7.1.2 Search Button.....	35
7.1.3 Zoom-in Button .....	36
7.1.4 Zoom-in Button .....	36
7.1.5 End Turn Button .....	36
7.2 Mini Map Panel.....	36
7.3 Action Menu .....	37
7.4 Information Panel .....	38
7.4.1 Region Identification Section .....	39
7.4.2 Region Details Section .....	39
7.4.3 Unit List Section .....	41
7.4.4 Unit Details Section.....	42
7.4.5 Production Queue Section .....	45
7.4.6 Unit Action Menu .....	45
7.5 Messages Panel.....	46
8 Gifting Units .....	47
9 Supply.....	48
9.1 Supply Screen.....	49
9.2 Supply Mechanics .....	50
9.3 Supply and Fuel Usage.....	52
9.3.1 Supply Usage.....	52
9.3.2 Fuel Usage .....	53
10 Home Ports .....	54
11 Units and Army/Fleets .....	55
11.1 Army/Fleet Grouping .....	56
11.2 Selecting Army/Fleets and Regions.....	57
11.3 Unit Symbols .....	57
11.3.1 Single Unit Army/Fleet .....	58
11.3.2 Multiple Unit Army/Fleets.....	60
11.4 Issuing Army/Fleet Move/Attack Orders.....	62

11.4.1	Readiness .....	66
11.5	Issuing Other Army/Fleet Orders .....	67
11.5.1	Army Orders .....	67
11.5.2	Air Fleet Special Orders .....	72
11.5.3	Naval Fleet Orders .....	76
11.6	Showing All Planned Moves (Hotkey “M”) .....	77
12	Production .....	78
12.1	Production Screen .....	79
12.1.1	Resource Section.....	80
12.1.2	Sort & Filter Section .....	82
12.1.3	Production List.....	83
12.1.4	Close Button .....	84
12.1.5	Manager Button .....	84
12.1.6	Summary Button.....	84
12.2	Production Manager.....	85
12.2.1	Resources Section.....	85
12.2.2	Category Drop Down List .....	85
12.2.3	Build Drop Down List .....	86
12.2.4	Qty .....	90
12.2.5	Repeat? Checkbox .....	90
12.2.6	Notes .....	90
12.2.7	Build Time .....	90
12.2.8	Saving or Canceling your Changes .....	91
12.3	Production Region Screen .....	92
12.3.1	Resource Section .....	92
12.3.2	Sort Drop Down List .....	92
12.3.3	Next/Prior Region Buttons.....	93
12.3.3	Production List.....	93
12.3.4	Adding New Production.....	94
12.3.5	Closing the Production Region Screen.....	95
12.4	Production Detail Screen .....	96
12.4.1	Resource List .....	96
12.4.2	Region Facilities Section .....	96
12.4.3	Item Specification Section.....	96

12.4.4	Item Build Details Section .....	103
12.4.5	Saving your changes.....	103
12.4.6	Closing the Screen .....	104
12.4.7	Deleting a Production Item .....	104
12.4.8	Updating a Production Item.....	104
12.4.9	Build Max Button .....	104
12.5	Production Summary .....	105
12.5.1	Sort Drop Down Box.....	106
12.6	Completed Production .....	106
13	Research.....	106
13.1	Research Screen.....	107
13.1.1	Resources Section.....	107
13.2	Technology Available for Research .....	108
13.2.1	Technology Name and Cost.....	108
13.2.2	Technology Help Button .....	108
13.2.3	Known Technology Button .....	108
13.2.4	Technology Available for Research Button.....	109
13.2.5	Future Technology Level Button.....	109
13.3	Technology Being Researched .....	109
13.4	Closing the Research Screen.....	109
13.5	Research Details Screen .....	110
13.5.1	Attribute Column.....	110
13.5.2	Technology Level Column.....	111
13.5.3	Returning to the Research Screen.....	111
14	Trade.....	112
14.1	Trade Screen.....	113
14.1.1	Resources Section.....	113
14.1.2	Trading Partners Section .....	115
14.1.3	Existing Trade Deals Section .....	115
14.2	New Trade Screen.....	116
14.2.1	Trading Partner Resource to Buy .....	117
14.2.2	Your Country Resource to Sell .....	117
14.2.3	Messages .....	117
14.2.4	Trade Specification.....	117

15	Diplomacy .....	118
15.1	Diplomacy Screen .....	119
16	Espionage.....	119
16.1	Espionage Screen .....	120
16.1.1	Resources Section.....	120
16.1.2	Espionage Mission List .....	120
16.2	Espionage Mission Screen.....	122
16.2.1	Mission Target Section.....	122
16.2.2	Mission Resources Section.....	122
16.2.3	Mission Assignment Section .....	123
16.2.4	Returning to the Espionage Screen.....	123
17	Reporting.....	124
17.1	Reports Menu Screen .....	124
17.2	Battle Summary Report.....	125
17.3	Units Report.....	126
17.3.1	Sort and Filter Section.....	126
17.3.2	Unit List .....	127
17.3.3	Closing the Report.....	129
17.4	Unit Specs Report .....	130
17.4.1	Unit Drop Down List .....	131
17.4.2	Specification Fields .....	131
17.5	Resources Report .....	136
17.5.1	Sort and Filter Section.....	136
17.5.2	Resource List .....	137
17.6	Power Chart .....	139
17.7	Statistics Report.....	140
17.8	Bombing Damage Report .....	141
17.9	Shipping Damage Report .....	142
18	Turn Resolution.....	143
18.1	Player Planning Phase .....	143
18.2	AI Planning Phase.....	143
18.3	Movement/Battle Phase.....	144
18.3.1	Naval Movement Segment .....	144
18.3.2	Air Movement Segment .....	144

18.3.3	Air/Sea Detection Segment.....	145
18.3.4	Air/Sea Battle Segment.....	145
18.3.5	Shore Bombardment Segment .....	145
18.3.6	Strategic Bombardment Segment .....	145
18.3.6	Naval Debarkation Segment .....	145
18.3.7	Paratroop Drop Segment .....	146
18.3.8	Transport Load Segment.....	146
18.3.9	Land Movement Segment .....	146
18.3.10	Land Battles Segment .....	146
18.3.11	Retreat Segment.....	146
18.3.12	More Moves Check Segment.....	146
18.3.1.3	Air Unit Return to Base Segment .....	146
18.4	Event Phase.....	146
18.5	Replacements Phase.....	147
18.6	Resource Production Phase .....	147
18.7	Supply/Fuel Phase.....	147
18.7.1	Supply and Fuel Consumption Segment .....	147
18.7.2	Convoy Creation Segment.....	147
18.7.3	Convoy Movement and Interception Segment .....	147
18.7.4	Depot Resupply Segment .....	148
18.8	Trade .....	149
18.8.1	Trade Shipment Creation Segment .....	149
18.8.2	Trade Convoy Movement and Interception Segment .....	149
18.9	Production Phase.....	149
18.10	Research Phase .....	149
18.11	Espionage Phase.....	149
18.12	Repair Phase .....	150
18.13	Pay Salaries Phase .....	150
18.14	Feed the People Phase .....	150
18.15	Victory Check Phase.....	150
18.15.1	German Victory Conditions.....	150
18.15.2	Italian Victory Conditions.....	151
18.15.3	Japanese Victory Conditions .....	151
18.56.4	Chinese Victory Conditions .....	152

18.15.5	French Victory Conditions .....	152
18.15.6	UK Victory Conditions .....	153
18.15.7	USA Victory Conditions .....	153
18.15.8	USSR Victory Conditions .....	154
18.16	Housekeeping Phase .....	154
19	Battle .....	155
19.1	Country Colors .....	156
19.2	Battle Screen .....	157
19.2.1	Region Section .....	157
19.2.2	Combatant Section .....	158
19.2.3	Units Section .....	160
19.2.4	Messages Section .....	160
19.3	Combat Bonuses .....	160
19.3.1	Flanking Bonus .....	160
19.3.2	Combined Arms Bonus .....	160
19.3.3	Air Advantage Bonus .....	160
19.3.4	Air Superiority Bonus .....	160
20	Retreats .....	161
21	Special Rules .....	162
21.1	French Morale .....	162
21.2	Canals and Crossings .....	162
21.2.1	Suez Canal .....	162
21.2.2	Panama Canal .....	163
21.2.3	Gibraltar .....	163
21.2.4	Turkish Straits .....	164
21.2.5	Danish Straits .....	164
21.3	Russian Winter .....	165
21.4	Finnish Winter War .....	165
21.5	USSR Officer Purge .....	165
21.6	Pearl Harbor .....	165
21.7	Mobilization .....	165
22	Diplomacy .....	166
22.1	Vichy France .....	166
23	Winning the Game .....	166



24 Leaders .....	167
24.1 Leader Types .....	167
24.2 Leader Ratings .....	167
24.2.1 Strategy Rating .....	167
24.2.2 Attack Rating.....	167
24.2.3 Defense Rating.....	168
24.3 Leader Assignment .....	168
24.4 Leader Reputation .....	169
24.5 Leaders Screen .....	170
24.5.1 Identification Section .....	170
24.5.2 Biography Section.....	171
24.5.3 Coverage Section .....	171
24.5.4 Other Leader Section .....	172
24.5.5 Assigning or Dismissing Leaders .....	173
25 Keyboard Shortcuts .....	174
26 Cheat Window .....	175
26.1 Cheat Command Format .....	175
27 Force Size Editor .....	176
27.1 Country Drop Down List.....	177
27.2 Unit/Resource Fields.....	177
27.2.1 Amount To Add Field .....	177
27.2.2 Default Values.....	177
27.3 Include in New Games Check Box.....	177
27.4 Save Button .....	177
27.5 Close Button.....	178
28 Multiplayer Game Modes .....	179
28.1 Overview .....	179
28.1.1 Hotseat Mode.....	179
28.1.2 Play-by-Email (PBEM) Mode .....	179
28.1.3 Starting a new Multiplayer Game .....	179
28.2 Multiplayer Screen.....	180
28.2.1 Faction Radio Buttons .....	181
28.2.2 Game Name .....	181
28.2.3 Scenario.....	181

28.2.4 Use Force Size Edits Checkbox .....	181
28.2.5 Use Vichy Checkbox.....	181
28.2.6 PBEM/Hotseat Radio Buttons .....	182
28.2.7 Start Button.....	182
28.2.8 Cancel Button.....	182
28.3 Saved Game Location.....	182
28.4 Multiplayer Game Sequence .....	183
28.4.1 PBEM Game Sequence .....	183
28.5 Hotseat Game Sequence .....	183
28.6 PBEM Multiplayer Precautions .....	184
28.6.1 Game Versions .....	184
28.6.2 Modifying Files .....	184
28.6.3 Computer/User Restrictions.....	184
29 Design Notes .....	185

# 1 Introduction

Destiny of the World (DOTW) is a **Simultaneous-Turn-based** grand strategic simulation of World War II (WW2). Playing as one of eight major participants in the war, you will take full control of a country, and guide its economy, research, trade, and military. You can follow the historical path of your country, or experiment with what ifs. You can attack any **Neutral Country** in the game. Additionally, you can choose among several optional rules on the **Game Options Screen** to further change the historical setting of the game.

If you prefer more control, you can also take control of the other countries in your alliance and bear full responsibility for the outcome of the war.

To get started playing the game right away, you can view the **Tutorial** from the main **Game Menu**. But to master the game, you may want to read this manual to make sure you fully understand the game mechanics.

A **Simultaneous-Turn-based** game means that both you and the computer will plan your turns simultaneously for the current turn. Once you have entered all your **Orders** for your turn, you will click the **End Turn Button**, and the game will simultaneously move every country's **Units**. This can mean that conflicts can occur during the resolution of the **Orders**. For example, you may **Order** a **Unit** to move to a different **Region**, but an enemy may attack you at the same time. This can result in your **Move Order** to be canceled with a resulting **Battle** from the unexpected attack.

Each turn in DOTW represents one week of calendar time. The game begins September 1, 1939 on the eve of the German attack on Poland and ends on September 2, 1945. At that time, your game performance will be reviewed, and you can watch a replay of the events of the entire war. If you like, you can continue playing after the end date, but no further game events will occur after that date.

During the game, you will have allies based on the historical **Alliances** in WW2. The **Axis Alliance** includes German, Italy and Japan. The **Allies Alliance** includes the UK, USA, USSR, France and China.

## 2 Getting Started

Once you start the game, a loading screen will be displayed while the game loads all the graphics and audio resources needed from the file system. After the loading is complete, the main **Game Menu** will be displayed.



From this screen, you can change game options, or start a new game. Each option on this screen is described below:

**Tutorial Button** – Click this button to watch the game tutorial videos.

**Manual Button** – Click this button to open this manual from inside the game. The manual will be displayed in a separate window on your computer.

**New Game Button** – Click this button to open the **New Game Screen** to start playing a new game.

**Load Game Button** – Click this button to load an existing saved game and resume playing it.

**Save Game Button** – Click this button to save your existing game.

**Options Button** – Click this button to change game options.

**Surrender Button** – Click this button to surrender your current game.

**Resume Button** – Click this button to resume playing your current game.

**About Button** – Click this button to display information about the game, including version number, license, credits and attributions.

**Exit Button** – Click this button to exit the game. If you have an active game, you will be warned that any unsaved changes will be lost.

### 3 Starting a New Game

After you click the **New Game Button** on the main **Game Menu**, you will see the **New Game Screen**.



**NEW GAME**

It is August, 1939. Japan is at war with China. Italy has invaded Ethiopia and Albania. An uneasy peace exists between Germany and the other western powers. Germany has siezed the Rhineland, annexed Austria, and parts of Czechoslovakia. Tensions in Europe are high as Germany has made demands for the Polish return of the city of Danzig, and a plebiscite for the Polish Cooridoor. England and France have guaranteed the independence of Poland. As September 1 approaches, Germany prepares to invade Poland....

Select your country: ☐ Control Alliance

**Axis**

Germany Japan Italy

**Allies**

United Kingdom United States Soviet Union France China

Player Name  Difficulty  Scenario

**Start** **Cancel**

Select one of the eight major WW2 countries by clicking on their flag, or the radio button beneath the country's name.

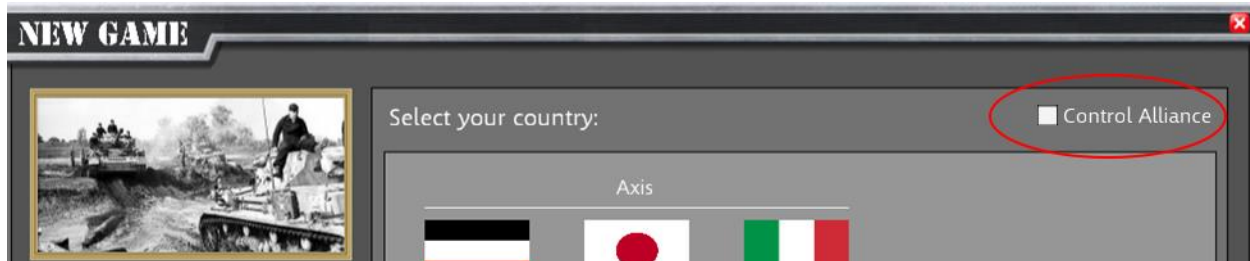
If you'd like, you can change the **Player Name Text Box** to your name. The game defaults to the **Sergeant Difficulty Level**. If you want an easier or more challenging game, you can select a different value from the list.

By default, the game will cover the entire World War II timeline. If you like, you can select another **Scenario** from the **Scenario** drop down list that will cover a different portion of the war.

Once you've made all your selections, click the **Start Button** to begin the game, or the **Cancel Button** to return to the main **Game Menu**.

### 3.1 Axis vs. Allies Mode

If you want control the other **Countries** in your alliance, check the **Control Alliance Checkbox** in the upper right-hand corner of the **New Game Screen**:



For example, if you select “Germany” as your **Country**, and check the **Control Alliance Check Box**, you will be able to issue orders to Germany, plus its allies: Italy and Japan.

When you are in **Axis vs. Allies Mode** in the game, you will see a new **Country Control Button** on the **Main Map Screen**, next to the **Information Panel**:



The **Country Control Button** will show the flag of the **Country** you may currently issue orders for. In the above example, the UK. Each time you click on the button, it will select another **Country** in your alliance. You can switch to each **Country** by continuing to click the button.

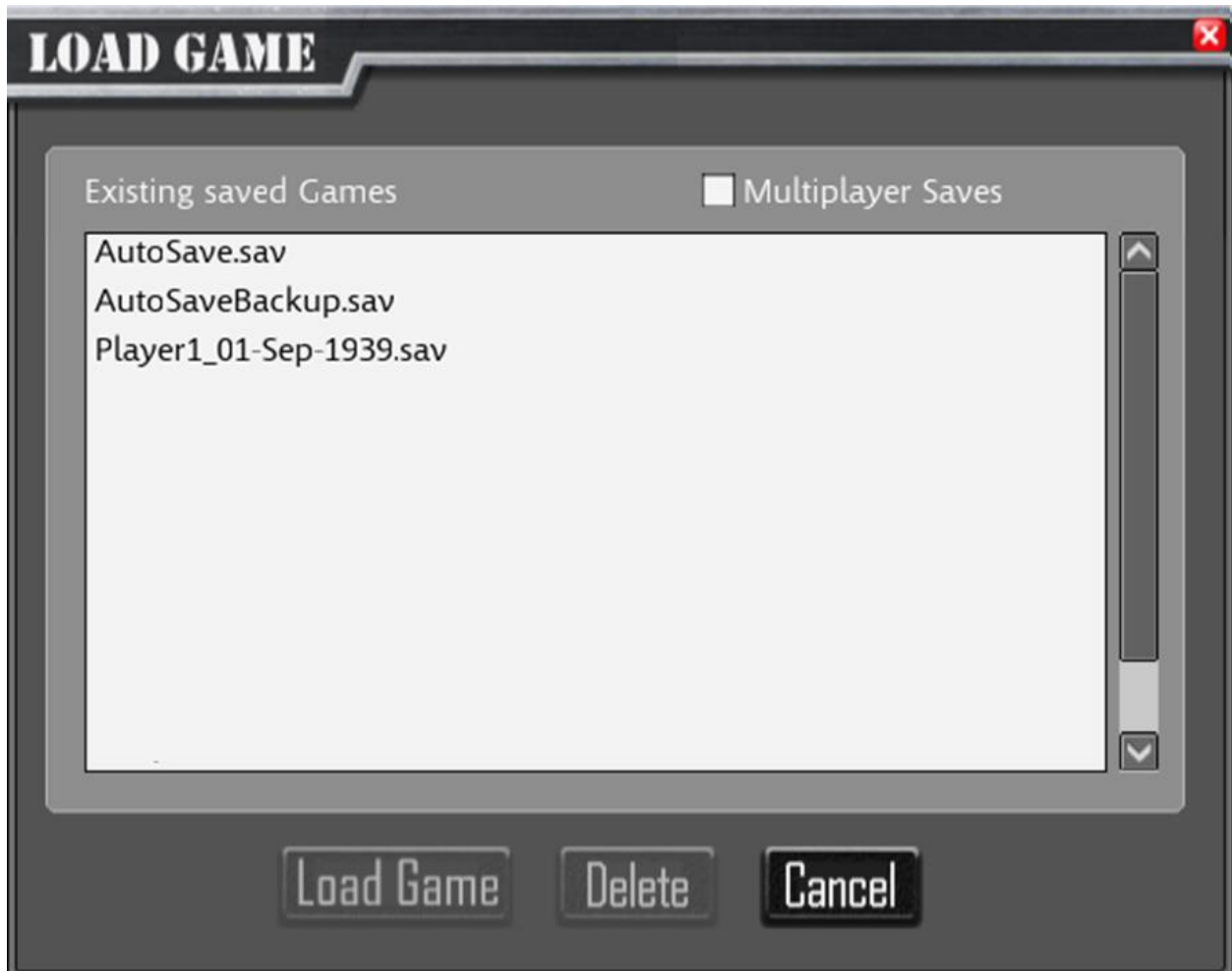
In the above example, you could enter orders for the UK. If you wanted to enter orders for France, you would click the button until you saw the French Flag displayed.

You can cycle through your **Countries** as many times as you want, prior to ending your turn.

But you must enter orders for every **Country** in your alliance **before** clicking the **End Turn Button**. After you click **End Turn**, no more orders can be given for that turn.

## 4 Load Game Screen

If you want to load a previously saved game and resume playing it, click on the **Load Game Button** on the main **Game Menu**. The **Load Game Screen** will be displayed.



The **Load Game Screen** will display a list of the available saved game files. To load a game, click on the saved game file name from the list, and then click the **Load Game Button**. To return to the **Game Menu** without loading a game, click the **Cancel Button**.

**Note:** DOTW automatically saves your game at the end of your turn unless you disable this option on the **Game Options Screen**. The most recently saved turn will be labeled "AutoSave.sav". The autosave for the turn before the last is named "AutoSaveBackup.sav". You can load either of the most recent two turns from the autosave files. The list of saved games will always be sorted from the most recent on top, to the oldest on the bottom.

Files that you manually save will begin with the **Player Name** that you selected from the **New Game Screen**, followed by the in-game date.

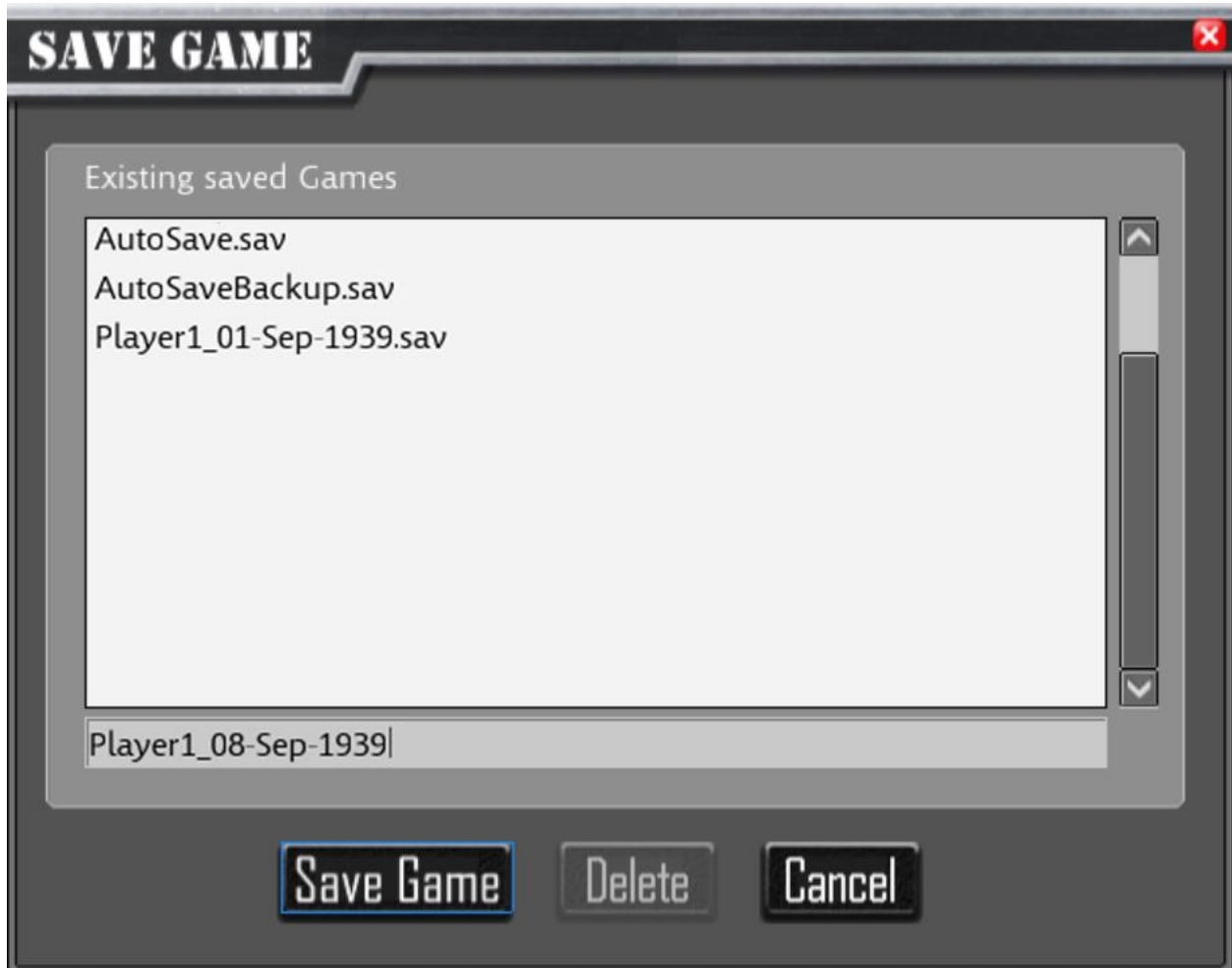
If you want to delete a saved game file, click on the file name with the mouse, and press the **Delete Key** on the keyboard, or click the **Delete Button**.

By default, the screen shows single-player saved game files. To show **Multiplayer** game saved files, make sure you check the **Multiplayer Saves Checkbox**.



## 5 Save Game Screen

If you want to save your current game progress, click on the Save Game Button on the main **Game Menu**. The Save Game Screen will be displayed.



The **Save Game Screen** will display a list of the existing save game files. To save a game, enter the **Save Game File Name** in the text box, or accept the name suggested (Player1\_08-Sep-1939 is the suggested name in the above example), then click the **Save Game Button**. To return to the **Game Menu** without saving the game, click the **Cancel Button**.

Note: DOTW automatically saves your game at the end of your turn, unless you disable this option on the **Game Options Screen**. The most recently saved turn will be labeled "AutoSave.sav". The autosave for the turn before the last is named "AutoSaveBackup.sav". You can load either of the most recent two turns from the autosave files.

If you want to delete a saved game file, click on the file name with the mouse, and press the **Delete Key** on the keyboard or the **Delete Button**.

## 6 Game Options Screens

### 6.1 Options Panels

To change DOTW **Game Options**, click the **Options Button** on the main **Game Menu**. The **Options Screen** will be displayed.



#### 6.1.1 Page1/Page2 Tabs

Click these tabs to switch between the first and second page of options.

### 6.1.2 Page-1 Options

**Music Volume Slider** – To adjust the volume of the game music, adjust the slider with the mouse. To suppress the in-game music, slide the slider all the way to the left.

**Sound Volume Slider** – To adjust the volume of the sound effects in the game, adjust the slider with the mouse. To suppress the sound effects, slide the slider all the way to the left.

**Auto Save Checkbox** – When this box is checked, DOTW will automatically save your game at the end of the turn. To disable this, uncheck this check box. **Warning:** If you turn this off, you will be responsible for saving the game. If you neglect to save your game with this option disabled, all your game progress will be lost when exiting the game.

**Early USA Entry Checkbox** – By default, the USA will enter the war after Pearl Harbor is attacked on December 7, 1941. If you check this box, the USA can declare war on the **Axis** as soon as they want.

**Early Italian Entry Checkbox** – By default, the Italians will not join the war unless attacked, until Germany has conquered some French territory. If you check this box, the Italians can join the **Axis** Powers at any time.

**Early USSR Entry Checkbox** – By default, the Russians won't join the war until Germany attacks it. If Germany doesn't attack by June 22, 1941, then the Russians have a small percentage chance to join the war each turn. If you check this box, the Russians can enter the war on the **Allies** side at any time.

**Turkey Joins Axis Checkbox** – Historically, Turkey remained neutral during WW2. If you check this box, Turkey will join the **Axis** powers once Germany attacks the USSR. This is an interesting "what if" because Turkey could provide a route to the oil fields in Russia and the Middle East. If you don't check this box, Turkey will stay **Neutral** unless attacked.

**Spain Joins Axis Checkbox** – Historically, Spain remained neutral during WW2. Spain had proposed an **Alliance** with Germany, however, Spain wanted Cameroon as part of the spoils, and Germany want to retake its old colony itself. Had Spain joined the war and Gibraltar had fallen, Germany could have gained control of the western end of the Mediterranean Sea and extended British supply lines extensively. If you check this box, Spain will join the **Axis** once Germany conquers some French territory. Otherwise, Spain will remain **Neutral** unless attacked.

**No Operation Barbarossa Checkbox** – Many have wondered what would have happened if Germany hadn't attacked the USSR, although some think the USSR would have eventually attacked Germany if conditions favored them. If you check this check box, the German **AI** (Artificial Intelligence) **Player** will not declare war on the USSR. The USSR will have a small percentage chance each turn after June 22, 1941 to declare war on Germany.

**No Finnish Winter War Checkbox** – The USSR's attack on Finland in the winter of 1939 proved costly, the Red Army's poor performance may have further encouraged Germany to attack the USSR. If this checkbox is checked, The **Finnish Winter War** does not occur. Finland does not cede territory to the USSR, and the **Winter Continuation War Event** will

not occur. Finland will remain **Neutral** unless attacked. If not checked, the **Finnish Winter War Event** will fire, with historical results.

**No French War Weariness Checkbox** – Some historians believe the **Allies** were still weary from World War One and were reluctant to act in the first months of the war as a result. The game models this with reduced French morale at the start of the war, that slowly rebuilds. If this check box is checked, the French start with full morale.

**No Extreme Russian Winter Checkbox** – During the first winter of Operation Barbarossa, the Germans had not provided winter gear for their troops, since they believe Blitzkrieg would provide a quick victory, like their earlier campaigns in the war. In addition to not being properly equipped, the winter was colder than normal, and caused increased German casualties. If you check this check box, the Germans are prepared for a winter campaign, and do not experience increased attrition during the first winter.

**No Pearl Harbor Checkbox** – The Japanese Surprise attack on Pearl Harbor on December 7, 1941 allowed the Japanese to conduct a very successful attack. The game grants the Japanese extra damage in attacks on this turn. Fortunately for the Americans, the U.S. Carriers were not in Pearl Harbor, but the damage to other American surface ships was extensive. If this check box is not checked, the **AI** will not conduct a surprise attack. After December 7, 1941, there is still a small percentage chance that the USA will join the war each turn.

**No USSR Officer Purge Checkbox** – During 1941 Stalin conducted a major purge of officers in the Red Army, reducing its effectiveness for a period of time. In this game this is model with a morale penalty, and loss of experience in Russian Units. If this check box is checked, the purge does not occur, and the USSR does not receive this penalty.

### 6.1.3 Page-2 Options

**Battle Zoom Out Checkbox** – When battles occur, zoom game map out to provide more context.

**Show AI Battles Checkbox** – When checked, all battles are shown. When un-checked, only your battles are shown.

**Slow Movement Animations Checkbox** – When checked, all movement animations on the map are slower.

**Idle Factories Build Cash Checkbox** – When checked, if you have any idle factories when you end your turn, they will build cash, if you have the resources to do so.

**AI Uses Historical Timeline Checkbox** – Normally the game follows the general flow of World War II, but the AI will aggressively try to achieve its goals. When you check this checkbox, the AI will more closely follow the historical timeline of World War II.

### **Don't Show Convoy Battles**

By default, the game will show the location of each **Convoy** battle as it occurs. If you select this option, **Convoy** battles will not be shown on the map, but you can still see the battle results in the **Messages Panel**.

### **6.1.4 Save Button**

After you make changes to one or more options, click the **Save Button** to save the changes and return to the **Game Menu**.

### **6.1.5 Cancel Button**

If you decide you don't want to keep changes, click the **Cancel Button** to discard the changes, and return to the **Game Menu**.

### **6.1.6 Names Button**

DOTW uses historical names for **Carriers**, **Battleships**, and **Cruisers**. All other names are generated. If you want to enter your own or historical names for other **Units**, you can click this button to go to the **Names Screen**. (Section 6.2)

## 6.2 Names Screen

DOTW uses historical names for **Carriers**, **Battleships**, and **Cruisers**. All other names are generated. If you want to enter your own or historical names for other **Units**, you can use this screen to rename them.

This screen can be used to rename any **Unit** or **Army** that exists at the start of the game. Other units can be renamed using the **Future Names Screen**, described in **Section 6.3**.

Unit	Renamed to:	Region
1st Army		Wuhai
9th Army		Yichang
10th Army		Changsha
11th Army		Shiyan
12th Army		Shiyan
13th Army		Shiyan
14th Army		Shiyan
15th Army		Shiyan
16th Army		Shiyan
17th Army		Shaoguan
18th Army		Nanping
2nd Army		Yinchuan
19th Army		Zhengzhou
20th Army		Zhengzhou
21st Army		Quanzhou
22nd Army		Fuzhou
23rd Army		Taizhou
24th Army		Taizhou
3rd Army		Qinzhou
4th Army		Chongqing
5th Army		Xingye
6th Army		Xingye
7th Army		Zhanjiang
8th Army		Yulin

### 6.2.1 Scenario Drop Down List

Select the Scenario whose units you wish to rename, from this list.

### 6.2.2 Country Drop Down List

Select the country whose units you wish to rename, from this list.

## 6.2.3 Type Drop Down List

Select the type of units you wish to rename, from this list.

## 6.2.4 Unit List Grid

Most of the remainder of the screen is the **Unit List Grid**, which lists all the **Units** for your selected **Country** that match the **Type** you have selected.

### 6.2.4.1 Select Button

Clicking the **Select Button** will open the **Field Editor Screen**, which will allow you to rename the **Unit**.

### 6.2.4.2 Unit Column

The **Unit** Column has the default name assigned to the **Units**.

### 6.2.4.3 Renamed-To Column:

This column will show any names you have assigned to **Units**, using this screen.

### 6.2.4.4 Region Column

This column shows the starting location of the **Unit**.

## 6.2.5 Save Button

The **Save Button** will save any pending changes to your disk drive. Any **Units** you have renamed, will use your new names in any new games of DOTW that you start. When changes are still pending, you will see a message in yellow at the bottom right corner of the screen that says, "Unsaved changes". If you close the screen without saving, those changes will not be saved to disk.

### 6.2.6 Future Button

The **Names Screen** lets you rename any **Unit** which exists at the start of the game. It is likely that you will create many more **Units** during gameplay. Those cannot be renamed on the **Names Screen**. However, you can provide names for them using the **Future Names Screen**. Clicking the **Future Button** will open the **Future Names Screen**.

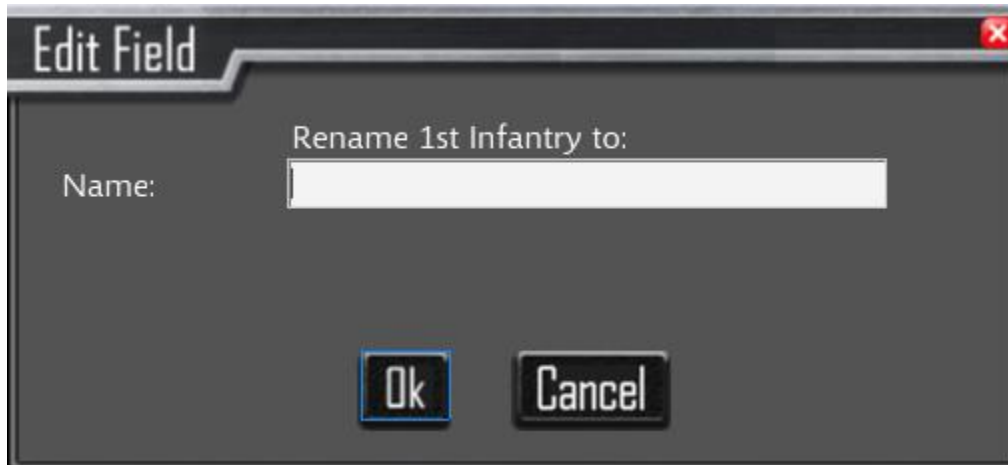
### 6.2.7 Close Button

Clicking the Close Button will close the Names Screen. Any unsaved changes will be lost.



## 6.3 Field Editor Screen

This screen allows you to enter the new game for your units.



### 6.3.1 Name Field

Enter the new name for the **Unit** in this field. (Note: If you want to remove a name you have assigned to a **Unit**, leave the field blank, and click the **Ok Button**)

### 6.3.2 Ok Button

Click the **Ok button**, you are satisfied with the new name you have entered.

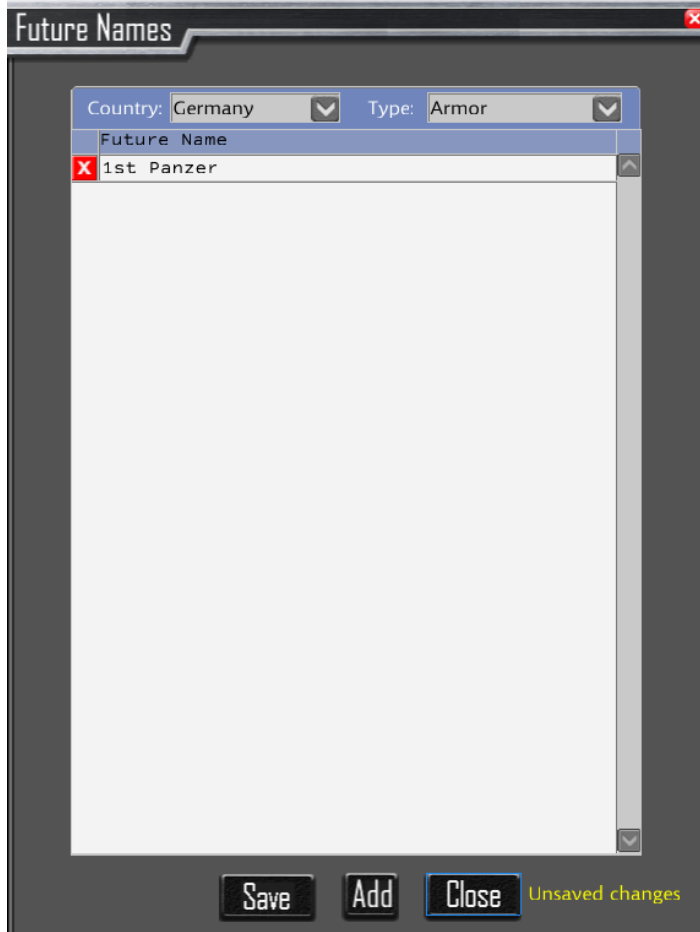
### 6.3.3 Cancel Button

Click the **Cancel Button** to discard the name you entered and close this screen.

## 6.4 Future Names Screen

The Future Names Screen will let you enter names for Armies and Units that are created during gameplay. When you create a new Unit, the game will select the next available name from this list that you have created.

Caution: If you are renaming Armies, Air Fleets and Naval Fleets, take care when using the Grouping Screen in the game, if you want to preserve your names.



### 6.4.1 Country Drop Down List

Select the country to create new names for, from list list.

### 6.4.2 Type Drop Down List

Select the type of units you wish to rename, from this list.

### 6.4.3 Name List Grid

Most of the remainder of the screen is the **Name List Grid**, which lists all the **Future Names** for your selected **Country** that match the **Type** you have selected.

#### 6.4.3.1 Delete Button

Clicking the **Delete Button** will remove the name from your list of names.

#### 6.4.3.2 Name Column

The **Name** Column has the name to be used for a future unit.

### 6.4.4 Save Button

The **Save Button** will save any pending changes to your disk drive. When changes are still pending, you will see a message in yellow at the bottom right corner of the screen that says, "Unsaved changes". If you close the screen without saving, those changes will not be saved to disk.

### 6.4.5 Add Button

Click this button to add another Name to the list.

### 6.4.6 Close Button

Clicking the Close Button will close the Names Screen. Any unsaved changes will be lost.

## 7 Main Map Screen

Much of the game action takes place on the **Main Map Screen**. The screen has five main areas:

1. Main Map Panel
2. Mini Map Panel
3. Action Menu Panel
4. Information Panel
5. Messages Panel

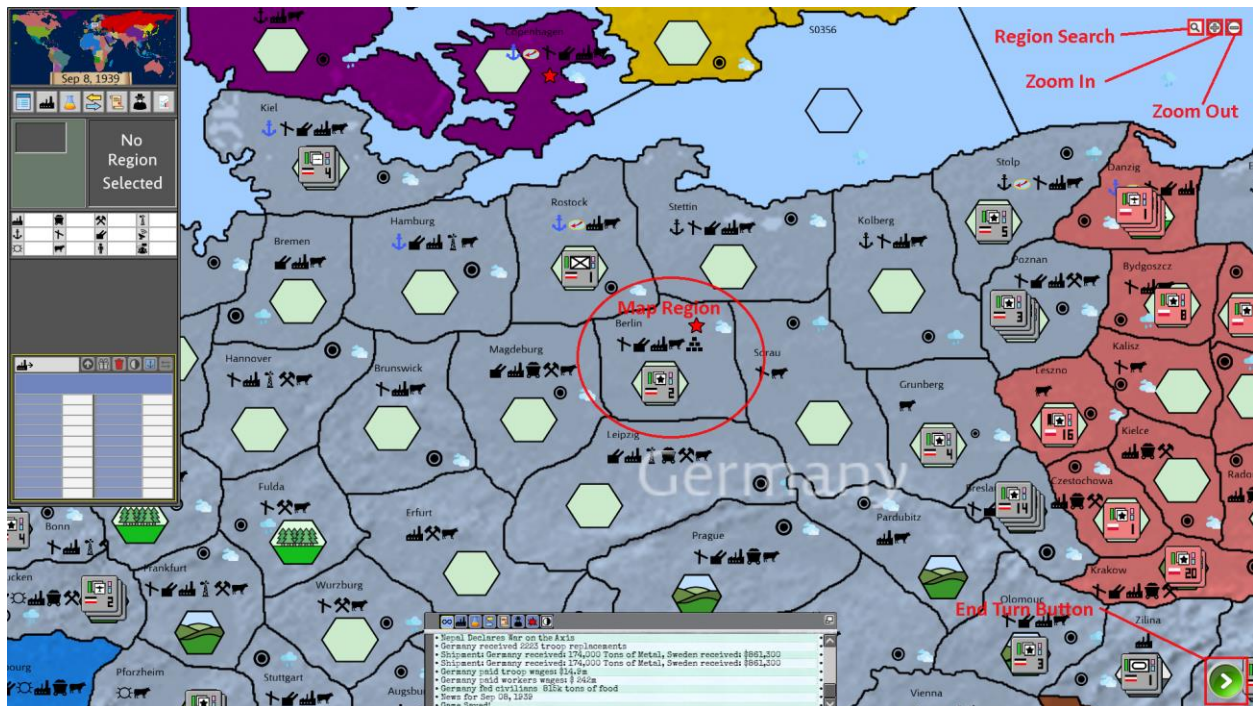
These are highlighted on the figure below. The next sections of the manual will describe the contents of each of these areas.



## 7.1 Main Map Panel

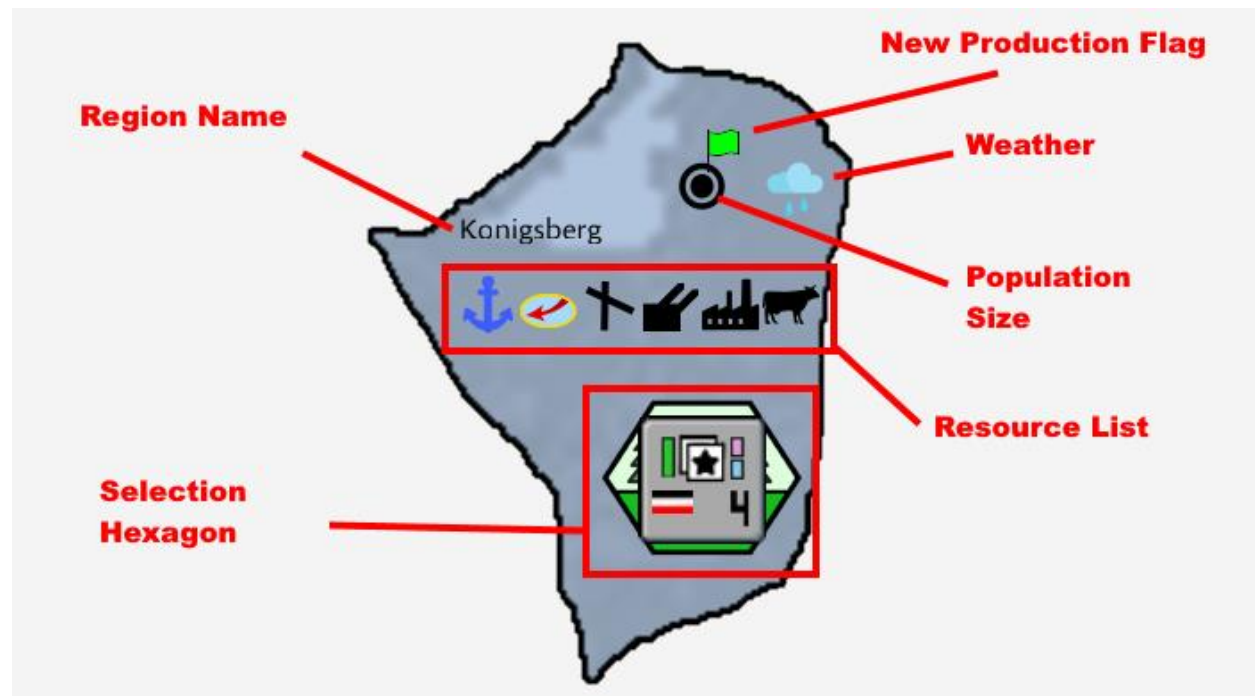
Much of the game's activity takes place on the **Main Map Panel**. The portion of the screen we will be discussing next is shown below. The following information is located on the **Main Map Panel**:

1. Map Regions
2. Search Button
3. Zoom-In Button
4. Zoom-Out Button
5. End Turn Button



## 7.1 Map Regions Panel

Most of the **Main Map** is made of map **Regions**. Each **Region** shows a small geographic area of the world. Your military Units are located in **Regions**. They can only move to **Regions** which are adjacent to them on the map. We'll discuss moving **Units** in a later section. A sample **Region** is shown below. Note that each **Region** is shaded to a color according to the owning country, so you can see at a glance who owns each **Region**.



Only a small portion of the world is visible at a time. To see other areas of the world, you can either click on the **Mini Map Panel** in the upper left corner of the screen or scroll the map. You can either scroll the map using the keyboard arrow keys, or by moving the mouse past the edge of the screen.

Each **Region** consists of the following Information:

1. Region Name
2. New Production Flag (optional)
3. Weather (optional)
4. Population Size
5. Resource List
6. Selection Hexagon

Next, we'll describe these items in further detail.



#### 7.1.1.1 Region Name

This is the name of the **Region**. This uniquely identifies each **Region** in the game. It is generally named after a large city or feature located in the **Region**. This is the primary means used in the game to identify a map location. In the picture shown above, the **Region** Name is “Konigsberg”.

#### 7.1.1.2 New Production Flag (optional)



When you produce items in the game (e.g. Tanks, Aircraft, etc.), they are built in **Factories** located in a **Region**. When **Production** is complete, the **Units** will be placed in the **Region** where they were produced. Since some **Units** can take weeks or even years to complete, the game will show a **New Production Flag** so that you know a new **Unit** has completed **Production**. This flag is not shown for commodities like **Cash**, **Fuel**, or **Supply**. It is displayed until you select a **Region**, or at the end of a turn. This flag won't be shown if there is no newly completed **Production** in the **Region**.

#### 7.1.1.3 Weather (optional)

When there is bad weather that affects game play, one of the following icons will be displayed. Note: If the weather is clear and warm, no icon will be displayed. DOTW uses historical world weather from the WW2 time period to model general weather tendencies. Within the model, randomized weather is generated that is consistent with weather typical to the **Region** and season.



**Snow** – Snow will reduce land movement speed up to 25% through a **Region**, depending on the intensity and duration of the snowfall. Land attack strength can also be reduced by up to 20%, again, depending on the intensity and duration of the snowfall. **Air Unit** attack strength can be reduced up to 50%. **Naval Interception** chances can be reduced up to 50% due to reduced visibility, unless the **Unit** has radar.



**Rain/Mud** – Rain will create mud which will reduce land movement speed up to 50% through a **Region**, depending on the intensity and duration of the rainfall. **Land Unit** attack strength can also be reduced by up to 10%, depending on the intensity and duration of the rainfall. **Air Unit** attack strength can be reduced up to 50%. **Naval Interception** chances can be reduced up to 50% due to reduced visibility, unless the **Unit** has **Radar**.



**Clouds/Overcast** - Clouds can affect **Air Unit** attack strength up to 50%, depending on the duration and intensity of the cloud cover. This represents the difficulty of finding a

target due to the decreased visibility. **Naval Interception** chances can be reduced up to 50% due to reduced visibility, unless the **Unit** has radar.



**Cold** – This icon is displayed when the temperature is below zero degrees Fahrenheit. This will reduce land combat effectiveness by 20%.

#### 7.1.1.4 Population Size

The **Population Size Icon** is an indicator of how populated the **Region** is. If the **Region** is the country's **Capital**, the **Capital** icon is displayed instead. You can view the exact population in a **Region** by selecting the **Region** and viewing the **Population** in the **Information Panel, Region Detail Section**.



**Country Capital** – This is heart of your country and home of your government. **Supply** and **Fuel** originate from here before moving to **Units** and **Depots**. You should protect your **Capital** at all costs. If you lose it, and you have less than 25% of your starting **Population** remaining, you will lose the game. Otherwise, your **Capital** will be relocated to the largest **Population Region** that you control.



**Dense Population** – This icon will be displayed if the **Population** of the **Region** is over 2 million.



**High Population** – This icon will be displayed if the **Population** of the **Region** is between 1 and 2 million.



**Moderate Population** – This icon will be displayed if the **Population** of the **Region** is between 25,000 and 1 million.



**Rural Population** – This icon will be displayed if the **Population** of the **Region** is less than 25,000.

#### 7.1.1.5 Resource List

All resources available in the **Region** are indicated with an icon, as shown below. To find the exact amount of each resource available or being produced in the **Region**, select the **Region** and view the **Information Panel, Region Resource Section**. If the resource is not present, then that icon won't be displayed.



**Factories** – This **Region** has **Factory** capacity.





**Coal Mines** – This **Region** produces **Coal**.



**Metal Mines** – This **Region** produces **Metal**.



**Oil Fields** – This **Region** produces **Oil**.



**Port** – This **Region** has a **Port**. **Ports** are needed to refuel/resupply ships and repair them.



**Naval Base** – This **Region** has a **Naval Base**. **Naval Bases**, like **Ports** can refuel/resupply ships and repair them. Ship systems (e.g., Radar, Damage Control, etc.) can also be upgraded in a **Naval Base**.



**Airbase** – This **Region** has an **Airbase**. **Air Units** must end their turn in a **Region** with an **Airbase**, or they are destroyed.



**Anti-Aircraft Guns** – This **Region** has **Anti-Aircraft Guns** which will help defend against air attacks.



**Radar** – This **Region** has **Radar** which will improve interception effectiveness against enemy air attacks.



**Fortifications** – This **Region** has **Fortifications** which improve the defense rating for **Units** stationed here. Each point of **Fortification** provides 50% bonus to defense.



**Farming** – This **Region** has farms which produce **Food**.



**Unrest** – This **Region** has **Unrest** which is reducing production.



**Depot** – This **Region** has a **Fuel/Supply Depot**. See the Section 9 **Supply Section** for more information.



**Invadable** – This **Region** can be invaded from the sea by using a loaded **Transport**. See Section 11.5.1.5 **Board Transport**.

#### 7.1.1.6 Selection Hexagon

The **Selection Hexagon** is the area of the **Region** you can click to select a **Region** and the **Units** in the **Region**. The first time you left click on a **Region's Selection Hexagon**, the **Region** and first **Army** or **Fleet** is selected. An **Army** is one or more **Land Units**. An **Air Fleet** is one or more **Air Units**. A **Naval Fleet** is one or more **Naval Units**. See the See Section 11. **Units and Army/Fleets** of this manual for a discussion of **Units** and **Army/Fleets**. The **Selection Hexagon** contains an icon which identifies the predominant **Terrain Type** in the **Region**. The **Terrain Type** can affect how long it takes to move through a **Region**, and it can also provide advantages for defenders in the **Region**. The different **Terrain Types** are shown below.



**Clear** – Terrain which poses no impediments to movement, or advantages to defense.



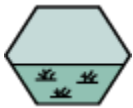
**Hills** – Hilly terrain which takes 25% longer for **Land Units** to travel through. **Hills** give a 100% bonus to defense.



**Forest** – Forested terrain which takes 10% longer for **Land Units** to travel through. **Air Units** strafing **Land Units** are only 50% as effective. **Forest** gives a 100% bonus to defense.



**Mountains** – Mountainous terrain which takes 100% longer for **Land Units** to travel through. **Mountains** give a 200% bonus to defense.



**Swamp** – Swampy terrain which takes 50% longer for **Land Units** to travel through. **Swamps** give a 50% defense bonus to defense.



**Desert** – Arid terrain which has no movement penalties or defense advantages.



**Sea** – Ocean terrain which is only passable by **Naval Units**.



**Impassible** – Terrain which is impassable by any **Units** in the game.

Other information that may be displayed in a **Selection Hexagon** include **Trade Shipments** that are in transit, and **Supply/Fuel Convoys** that are in transit. These will be displayed in the bottom left and right corners of the **Selection Hexagon** using the following icons:



This icon indicates a **Trade Shipment** is en route. Mouse hover over the icon to show a tool tip with more information.

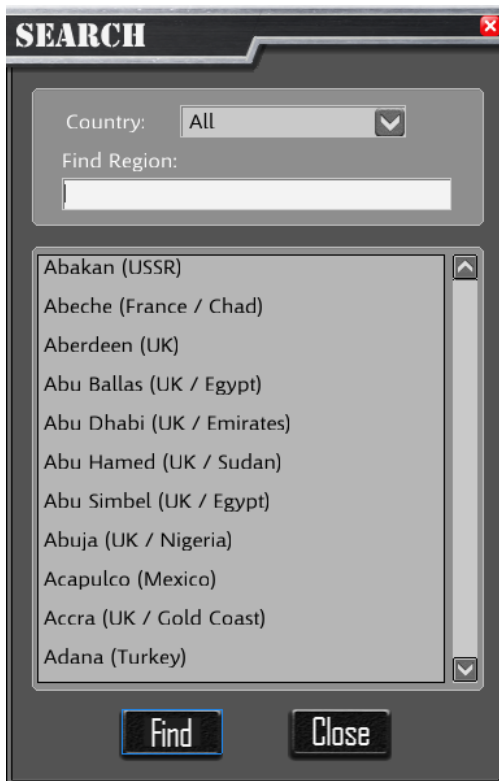


This icon indicates that a **Fuel/Supply Convoy** is en route. Mouse hover over the icon to show a tool tip with more information.

### 7.1.2 Search Button



If you want to find a **Region** on the map you can click on the **Search Button** in the upper right-hand corner of the **Main Map Panel**. This will open the **Search Screen**, shown below.



The Search Screen shows a list of all **Regions** in the game. In parenthesis after the **Region** name is the owning country. If this is a colony of the country, that name will follow the country name. By default, all country **Regions** are listed. You can filter this by selecting a country from the drop-down list.

In the Find **Region** Textbox, enter the **Region** name you want to find. Once you see that **Region** name in the list, click on the name with the mouse to select it, then click the **Find Button**.

The **Search Screen** will close, and the map will center on the requested **Region**.

To close the **Search Screen** without searching, click the **Close Button**.

### 7.1.3 Zoom-in Button



The **Zoom-in Button** is in the upper right-hand corner of the **Main Map**. Click on this button to zoom in the map. You can also scroll the mouse wheel upwards to zoom in the map.

### 7.1.4 Zoom-out Button



The **Zoom-out Button** is in the upper right-hand corner of the main map. Click on this button to zoom out the map. You can also scroll the mouse wheel downwards to zoom out the map.

### 7.1.5 End Turn Button



Once you have entered all your **Orders** for a turn, click the **End Turn Button**, located in the bottom right-hand side of the **Main Map** to end your turn. You can also press the **Enter Key** on your keyboard to end your turn.

## 7.2 Mini Map Panel

The **Mini Map Panel**, shown below, has two main components. At the bottom center is the current **Game Date**. The remainder of the window shows a small map of the world. A white rectangle on the map shows the area that is visible on the **Main Map Screen**. If you click on the map, DOTW will reposition the **Main Map** to that location. So, you can use the **Mini Map Panel** to quickly jump to different locations in the world.



## 7.3 Action Menu

The **Action Menu** is used to manage non-combat aspects of your country. A picture of the **Action Menu** is shown below.



Next, we'll describe each **Action Menu Button**.



Opens the **Game Menu**.



Opens the **Production Screen**.



Opens the **Research Screen**.



Opens the **Trade Screen**.



Opens the **Diplomacy Screen**.



Opens the **Espionage Screen**.

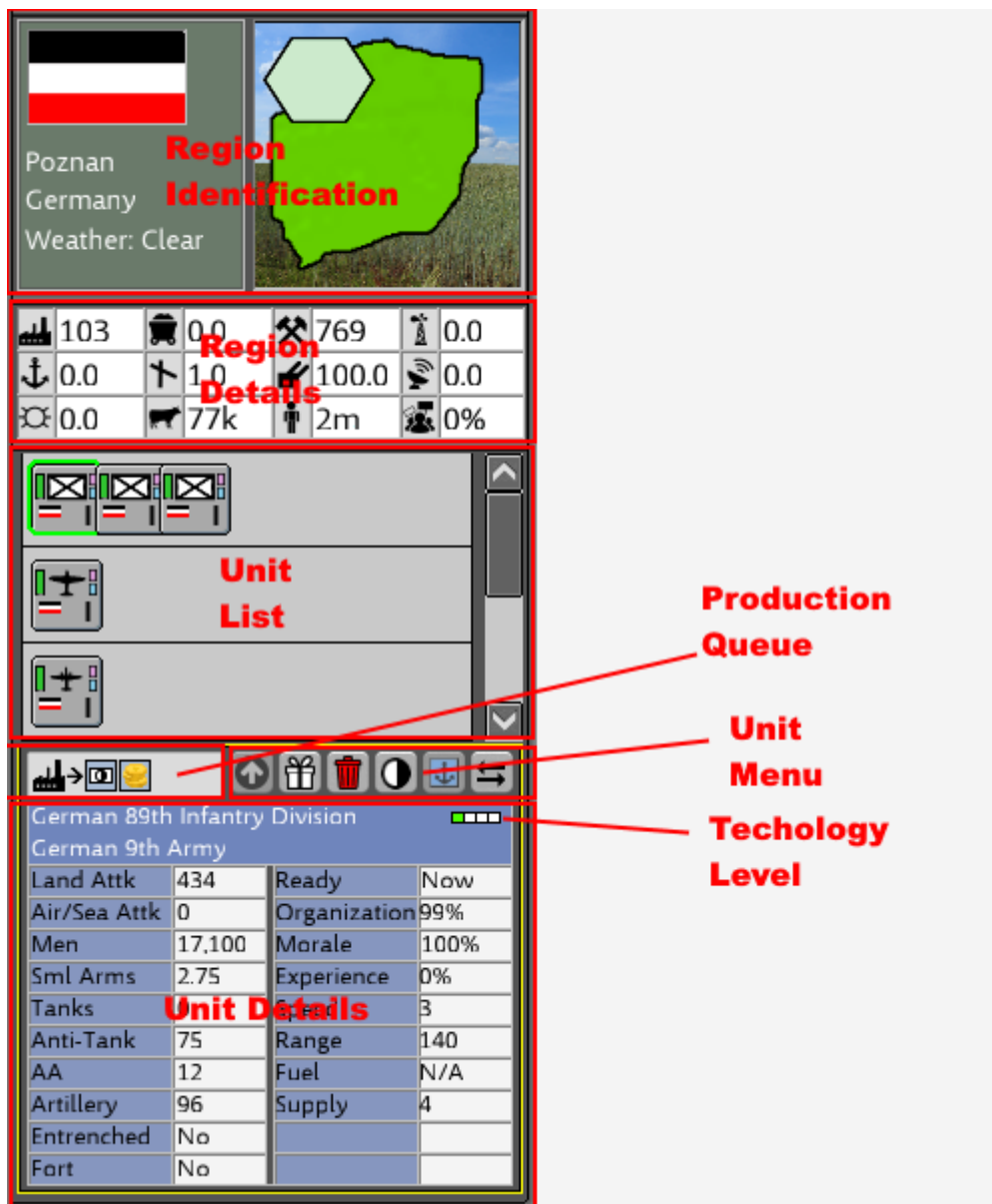


Opens the **Reports Menu**.

## 7.4 Information Panel

The **Information Panel** provides detailed information about a **Region**, and the military **Units** stationed there. The figure below shows the **Information Panel**. The **Information Panel** is divided into 6 sections:

1. Region Identification Section
2. Region Details Section
3. Unit List Section
4. Unit Details Section
5. Production Queue Section
6. Unit Action Menu Section



## 7.4.1 Region Identification Section

The **Region Identification Section** (shown below) of the **Information Panel** shows basic information about the **Region** which is selected on the **Main Map**. You can select a **Region** on the **Main Map** by left clicking on the **Selection Hexagon** inside the **Region**.















On the left panel of the section is the flag of the country which owns the **Region**. Below the flag is the name of the **Region**, in this case, Poznan. Below the **Region** name is the name of the country which owns the **Region**, in this case, Germany. Below the country is the **Weather** in the **Region**.

On the right panel of the section is a hexagon showing the **Terrain Type** present in the **Region** (see 7.1.1.6 Selection Hexagon for more information about the different **Terrain Types**). Underneath the hexagon is an outline of the shape of the **Region** on the map.

## 7.4.2 Region Details Section

The **Region Details Section** (shown below) of the **Information Panel** show the resources that are present in the **Region**.

	103		0.0		769		0.0
	0.0		1.0		100.0		0.0
	0.0		77k		2m		0%

### 7.4.2.1 Number Representation in the Game

Note on Numbers: Because of limited screen real estate, some numbers may be displayed with a unit of measure letter following the number:

$k = 1000$  (thousands)

$m = 1,000,000$  (millions)

$b = 1,000,000,000$  (billions)

So, for example, if the number displayed is 77K, multiply  $77 * 1,000 = 77,000$  units

### 7.4.2.2 Region Resource List



The number of units of **Factory** capacity located in the **Region**.



The tons of **Coal** produced in this **Region** each week. **Coal** is used to manufacture some items in the game.



The tons of **Metal** produced in this **Region** each week. **Metal** is used to manufacture some items in the game.



The tons of **Oil** produced in this **Region** each week. **Oil** is needed to produce **Fuel** is used by ships, planes, and vehicles in military **Units** when they maneuver.



The **Port** level in the **Region**. **Ports** are needed for ships to repair or refuel. Higher **Port** levels will repair damage more quickly. If the **Port** level is  $>1$ , the Port is a **Naval Base**.



The **Airbase** level in the **Region**. **Airbases** are required for **Air Units**. **Air Units** which do not return to an **Airbase** at the end of a turn are destroyed. The **Airbase** level is the maximum number of **Air Units** that can operate at full strength from the **Airbase**. For example, if the **Airbase** level is 4, and 8 **Air Units** are operating from there, they will operate at 50% effectiveness.



The number of **Anti-Aircraft Guns** in the **Region**. These guns will automatically attempt to attack enemy aircraft.



The **Radar** level in the **Region**. The higher the level, the greater the chance to detect aircraft. This will increase the effectiveness of your **Anti-Aircraft Guns**.



The **Fortification** level in the **Region**. Each level of **Fortification** adds 50% to a **Unit's** defense strength.



The tons of **Food** produced in this **Region** each week. **Food** is required to create **Supplies** for troops, and to feed your civilian population.



The number of people in the **Region**. This includes all population. The available **Manpower** is only 68% of the total **Population**. **Population** increases at a 1% annual rate (computed weekly).





The **Unrest** level in this **Region**. **Unrest** is caused when **Food** or salary needs of the civilian **Population** is not met. **Unrest** will reduce the **Production** efficiency of your workforce.

### 7.4.3 Unit List Section

The **Unit List Section** of the **Information Panel** shows the military **Units** that are stationed in the **Region**. Each row shows the military **Units** in each **Army or Fleet**. An **Army or Fleet** is a group of one or more military **Units** that operate as a group. A picture of the **Unit List Section** is shown below.



In this example, the first row has a **Army** with one Armor Division. Since this **Army** has a single **Unit**, it will appear on the map with the same image that appears in the **Unit List Section**:



Also note that this **Unit** has a green border. This indicates that the **Unit** is the **Selected-Unit**. Information will be displayed about this **Unit** in the **Unit Details Section**, which will be described in the next section.

The second row has an **Army** with five Infantry Divisions. In the **Unit List Section**, each **Unit** is shown individually. On the **Main Map**, the **Army** will have a **Army Icon** that shows the number of **Units** in the **Army**. For example, the picture on the left shows the **Army's** representation in the **Unit List Section**. The picture on the right, shows the representation on the **Main Map**:

**Unit List:**



**Main Map:**



The 5 on the **Army** indicates the number of **Units** in the **Army**. For more information about the symbols on the **Units** and **Army/Fleets**, see Section 11 **Units and Army/Fleets**.

### 7.4.4 Unit Details Section

The **Unit Details Section** is shown at the bottom of the **Information Panel**. A sample picture of the **Unit Details Section** is shown below. The information shown in the **Unit Details Section** will vary based on whether the **Selected-Unit** in the **Unit List Section** is an **Air Unit**, **Naval Unit**, or **Land Unit**.



The screenshot shows a window titled "German 15th Armor Division" with a progress bar (four segments, one green, three white) indicating Technology Level 1. Below the title is "German 16th Army". The main content is a table with two columns of attributes and their values.

German 15th Armor Division	
German 16th Army	
Land Attk	644
Air/Sea Attk	0
Men	11,800
Sml Arms	5.41
Tanks	360
Anti-Tank	50
AA	12
Artillery	65
Entrenched	Yes
Fort	No

The first two rows are the same regardless of the type of the **Selected-Unit**. The first row identifies the name of the **Unit**, in this case, the "German 15th Armor Division", followed by a bar (□□□□) with four segments, which is the **Unit's Technology Level**. If all four bar segments are white, the **Unit** is **Technology Level 0**. If it has one green bar it is **Technology Level 1**, two green bars are **Technology Level 2**, etc.

The second row identifies the name of the **Army or Fleet**, in this case the "German 16th Army".

Following this are a list of details about the **Unit**. Some fields are shown for all **Units**. We'll describe those first. Then, we'll list the fields specific to **Land Units**, **Air Units**, and **Naval Units**.

**Note:** If you hover over one of these fields, a tool tip will provide additional details for that field, such as size of guns, thickness of armor, percent of full strength, etc.

#### **Common Unit Detail Fields (All Units):**

**Land Attk** – The **Land Attack Rating** is the composite strength of the **Unit** when attacking a **Land Unit**. This rating will reduce as the **Unit** takes losses to men or equipment. It is computed based on the other factors listed in the **Unit Details Section**.

**Air/Sea Attk** – The **Air/Sea Attack Rating** is the composite strength of the **Unit** when attacking an **Air Unit** or **Naval Unit**. (**Anti-Aircraft Guns** are not included in this rating).

**Men** – The number of troops currently in the **Unit**.

**Ready** – Indicates when the **Unit** will be ready to receive new **Orders**. If the **Readiness** is “Now”, the **Unit** can receive new **Orders**. Otherwise, it will list how many weeks (turns) the **Unit** must wait until it is **Ready**.

**Organization** – If a **Unit** continuously conducts operations, it will lose cohesiveness, and will be less effective in battle. To recover **Organization**, let the **Unit** rest for a turn or two. Low **Organization** will reduce a Unit’s effectiveness in battle.

**Morale** – **Units** winning battles will improve in **Morale**. **Units** which lose battles will lose **Morale**. **Units** with low **Morale** will break from battle more quickly. **Morale** also improves when the **Unit** rests for a turn.

**Experience** – **Units** which fight in battles gain increased **Experience**. Even if a **Unit** loses a battle, it will gain some **Experience**. Winning a battle will provide additional **Experience**. As a **Unit** receives **Replacements** to replace men lost in battle, the **Experience** of the **Unit** will be diluted by the raw troops and will thus decrease. **Experience** improves a Unit’s effectiveness in combat.

**Speed** – The movement speed of the **Unit**.

**Range** – The distance the **Unit** can move in one turn. If a **Unit** moves into a **Region** which is larger than their range, their **Readiness** will be reduced, preventing further action for a length of time. Thus, a **Ready Unit** can always move at least one **Region**, but if the **Region** is very large, as some are for example, in Russia, the **Unit** may not be able to accept new **Orders** for a few turns to reflect the “borrowed” travel time.

**Fuel** – The number of weeks (turns) of **Fuel** the **Unit** has in reserve. Motorized **Units** which have no **Fuel**, cannot move. They can still retreat from battle. **Exception**: Ships at sea can move a single **Region** per turn without **Fuel**.

**Supply** – The number of weeks (turns) of **Supply** the **Unit** has in reserve. **Units** without **Supply** are extremely vulnerable in combat, and will suffer 25% attrition per turn, after being out of **Supply** for two turns.

**Land Unit Detail Specifics:**

**Sml Arms** – The **Small Arms Rating** is a power factor indicating the effectiveness of small arms weapons in the **Unit**.

**Tanks** – The number of **Tanks** in the **Unit**.

**Anti-Tank** – The number of **Anti-Tank Guns** in the **Unit**.

**AA** – The number of **Anti-Aircraft Guns** in the **Unit**.

**Artillery** – The number of **Artillery Guns** in the **Unit**.

**Entrenched** – If a **Land Unit** doesn’t move for a turn, the **Unit** will **Entrench**. The trenches improve defense by 50%.

**Fort** – The **Fortification** level of the **Region**. Each level of **Fortification** increases defense by 50%.

**Air Unit Detail Specifics:**

**Climb Rate** – The aircraft rate of climb in Feet Per Minute. Higher numbers will improve combat effectiveness.

**Bomb Load** – The **Bomb Load** carried by each plane (pounds). Bigger bombs do bigger damage.

**Aircraft** – The number of aircraft in the **Air Unit**.

**Air Guns** – The number of machine guns and light cannon on each aircraft.

**Radar** – Indicates whether the aircraft are equipped with **Radar**.

**Naval Unit Detail Specifics:**

**Climb Rate** – Applicable only to Aircraft **Carriers**. The rate of climb for the aircraft on this ship.

**Bomb Load** – Applicable only to Aircraft **Carriers**. The **Bomb Load** carried by each bomber on the ship (in pounds)

**Aircraft** – Applicable only to Aircraft **Carriers**. The number of aircraft on the ship.

**AA** – The number of **Anti-Aircraft Guns** on the ship.

**Main Guns** – The number of **Main Guns** on the ship. These were the larger guns on surface ships

**Sec Guns** – Larger ships also had smaller guns, or **Secondary Guns**. This field is the number of **Secondary Guns** on the ship, if any.

**Ships** – For larger ships (**Cruisers**, **Battleships** and Aircraft **Carriers**), this will be 1. For **Destroyers** and **Submarines**, each **Unit** in the game represents a squadron of 6 ships. Losses in combat can reduce this number.

**Radar** – Indicates whether the ship contains **Radar**.

**Hit Points** – A measure of the resilience of the ships. As ships take damage, their **Hit Points** are reduced. When **Hit Points** reaches zero, the ship is sunk. Ships repair damage when in **Port**.

### 7.4.5 Production Queue Section


All production is local to individual **Regions**. Each **Region** can be simultaneously be producing multiple items, depending on the **Factory Capacity** in the **Region**. The **Production Queue Section** (shown below) shows recently produced items, and in-production items. Items completed that are available this turn are shown with a light green background. Items with a light blue background with a black border are still in production. You can click on the in-production icons, to view the **Production Details** for the item. For a list of Icons, see **Section 11 Units and Army/Fleets**.





### 7.4.6 Unit Action Menu


The **Unit Action Menu** (shown below) allows you to perform various administrative functions with the selected **Unit** or **Army/Fleet** selected in the **Units List** Section of the **Information Panel**.




 **Upgrade Button** – If a technological upgrade is available for this **Unit**, you can click this button to upgrade it. **Naval Units** must be in a **Naval Base** to upgrade. **Naval Units upgrades are limited** to upgrades to **Radar**, **Ship Firing Control**, **Ship Damage Control**, and **Aircraft Carrier** aircraft. **Armor**, **Mechanized Infantry**, **Infantry**, **Fighter**, **Tactical Bomber**, and **Strategic Bomber Units** can be upgraded, if you have enough replacements. Upgrades take 4 turns to complete. **Tactical Bomber** upgrades cost 3 Air Replacements per aircraft upgraded. **Strategic Bombers** use 5 Air Replacements per aircraft upgraded.

 **Gift Unit Button** – Click this button to give the **Selected-Unit** to one of your allies. When you click this button, the **Gift Unit Screen** will be opened.

 **Disband Unit Button** – If you no longer want to support this **Unit**, click this button to delete the **Selected-Unit**. The troops from the **Unit** will be returned to the **Manpower** pool. **Metal** from the **Unit** will also be recycled and available for use in production.

 **Supply Button** – Click this button to view **Supply** shipment history for the **Selected-Unit**. If there is a **Fuel/Supply Depot** in the **Region**, its information will be displayed as well. See **Section 9 Supply** for more information.

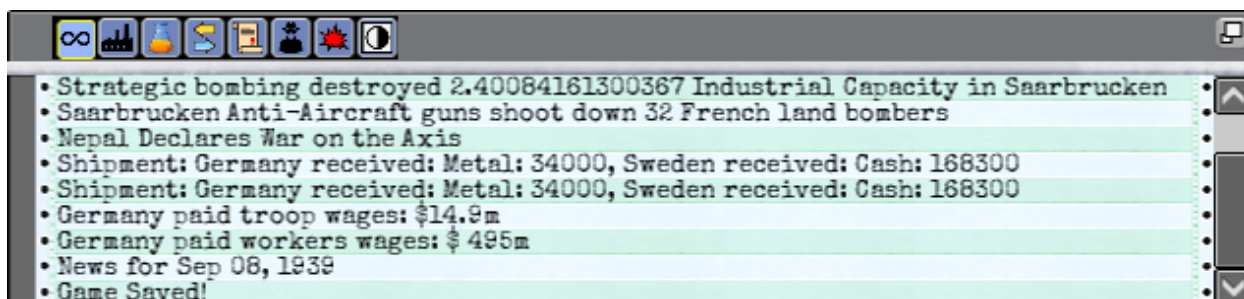
 Each ship is assigned to a **Home Port** where you can have it return to refuel. If you want to change the **Home Port**, click this button.



Click this button to open the **Army/Fleet Grouping Screen**. This screen allows you to transfer **Units** to other **Armies or Fleets** within a **Region**.

## 7.5 Messages Panel

The **Messages Panel** (shown below) is located at the bottom center of the **Main Map Screen**. It shows information about things which are of interest to your country. By default, all messages are displayed, but you can filter the messages by clicking on one of the **Message Filter Buttons** at the top left of the panel. You can also increase/decrease the panel size by clicking on the **Expand Toggle Button** at the upper right of the panel.



**Expand Toggle Button** - Click once to expand the panel size. Click again to reduce the panel to its original size.



**Show All Messages Button** - When clicked, all messages are shown.



**Production Filter Button** - When clicked, only **Production**-related messages are shown.



**Research Filter Button** - When clicked, only **Research**-related messages are shown.



**Trade Filter Button** - When clicked, only **Trade**-related messages are shown



**Diplomacy Filter Button** - When clicked, only **Diplomacy**-related messages are shown.



**Espionage Filter Button** - When clicked, only **Espionage**-related messages are shown.




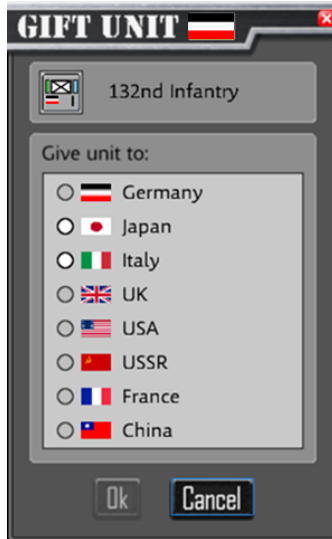
**Military Filter Button** - When clicked, only Military-related messages are shown



**Logistics Filter Button** - When, clicked, only Logistics-related messages are shown.

## 8 Gifting Units

To **Gift** a **Unit** to another country in your alliance, click the **Gift Unit Button**  on the **Information Panel**. The **Gift Unit Screen** (shown below) will be opened.



Verify that the **Selected-Unit** is the one you wish to give, then click the radio button for the recipient country. Click the **Ok Button** to confirm the **Gift**.

Thereafter, the **Unit** will be controlled and owned by the country you selected. **Gifts** are final. No takebacks.

If you decide that you don't want to make the **Gift**, click the **Cancel Button**.

During WW2, the United States used a program called Lend-Lease to provide military support to countries, even though they were officially **Neutral**. The game models this by allowing you to **Gift Units**. Also, see Section 14 **Trade**, you can also gift resources to countries.

Note: If a neutral **Country Gifts** a **Unit** to another **Country**, the **Gift** is not active to the giftee until the gift giver has joined the war.

## 9 Supply

**Supply** was a major factor that every general during WW2 had to manage. The **Supply** system in DOTW is very detailed, but much of it is managed for you. Your primary responsibilities are to produce the amount of **Supply** and **Fuel** needed by your troops, to protect your **Supply** lines, and to ensure that you have enough **Convoy** ships to transport your **Supply** and **Fuel**, if they must cross oceans to get to your troops. In the context of this section, when we use the term **Supply**, we are referring to both **Supply** and **Fuel**, but they are produced and consumed separately in the game.


**Supply** represents the **Food**, medical supplies and munitions needed by the **Unit** to operate successfully in combat. **Units** will consume fewer supplies when they are not in combat.

**Fuel** is the gasoline and diesel fuel required by the motorized **Units**, Aircraft, and Ships in the game. The actual amount of **Fuel** consumed will be determined by the distance your **Unit** moves in a turn. **Units** that don't move or participate in combat will not burn **Fuel**.


You can think of **Supply** as a network, spreading out from your country's **Capital**. All **Units** eventually receive **Supply** from your **Capital** and must be able to trace a path free of enemy control from the **Capital** to the **Unit**.

But **Units** are not supplied immediately. They are sent via **Convoys** from your **Capital** city to the **Unit**. The farther the **Unit** moves away from your **Capital**, the longer it will take to get to your **Unit**.

If your **Unit** is on the same continent as your **Capital** city, the supplies will be sent in **Convoys** directly to the **Unit**. If the **Unit** is on a different continent from your **Capital** city, DOTW will send the **Convoys** to a **Depot** on that continent. That **Depot** will then send **Convoys** to your **Units** on that continent.

If the enemy captures a **Region** containing a **Depot**, some of the **Supply** and **Fuel** in that **Depot** may be captured by the enemy. The rest will be destroyed. **Depots** are marked on the map with a **Depot**  icon.

**Units** can store some **Supply** and **Fuel** reserves. **Land Units** and **Air Units** have up to 4 turns worth of reserves. Ships have 12 weeks of reserves. Ships only receive **Supply** and **Fuel** when they are in a **Port**.

If a **Supply Unit** is still enroute to a **Unit** or **Supply Depot**, a small  icon will be displayed on the map. You can view the details of that **Convoy** by clicking on the **Supply Button** on the **Information Panel**, **Unit Action Menu**.


As your **Supply** lines grow longer, you may want to consider **Researching** improvements to your **Supply** technology. See Section 13. **Research** for more information.

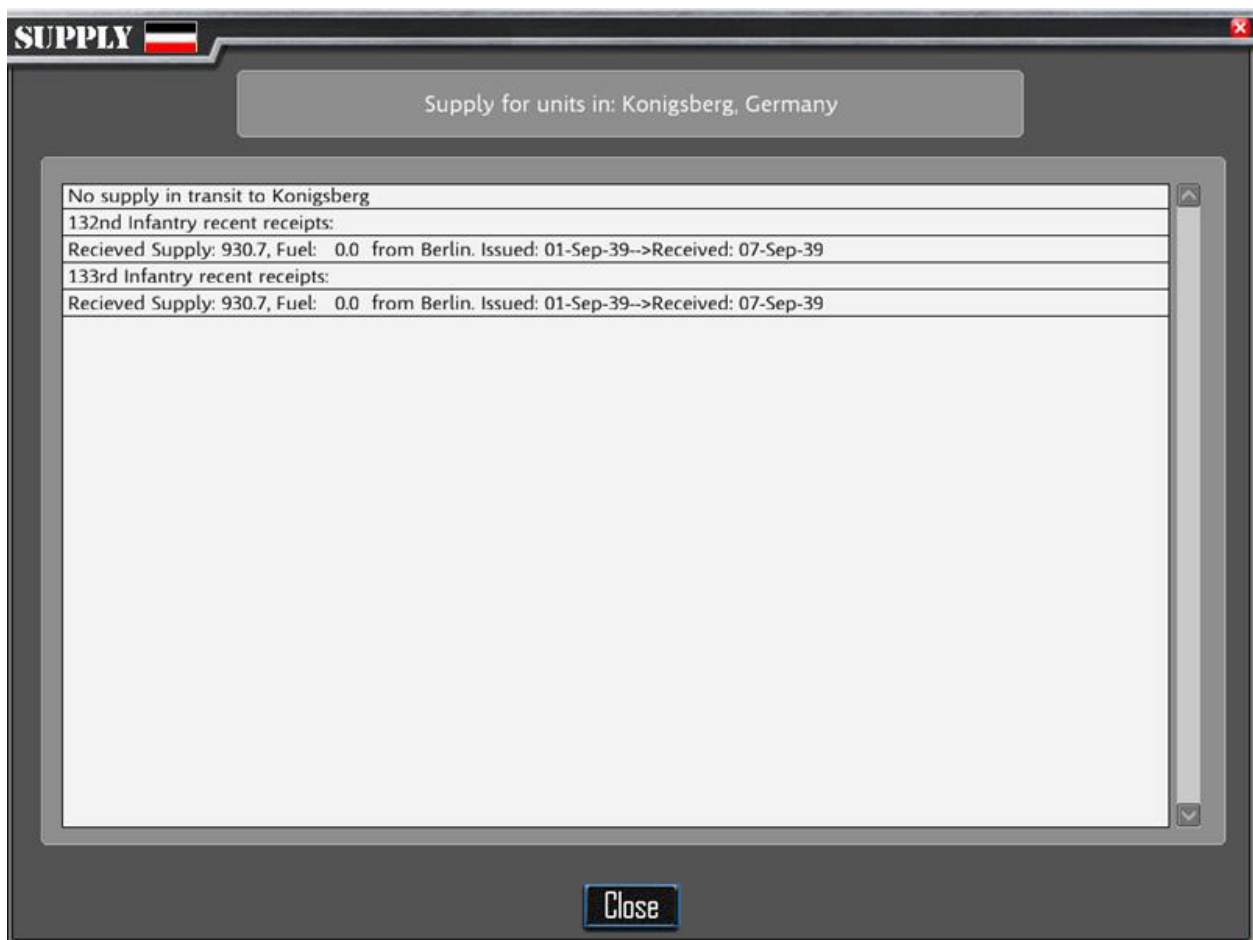
**Units** that aren't fully supplied are less effective in combat. **Units** with no **Supply** will suffer attrition after two weeks (turns). **Land Units** and **Air Units** that require **Fuel**, cannot move without it. Ships without **Fuel** can move one **Region** per turn



**Supply Convoys** traveling my land may be captured if the **Region** they are travelling through is captured. **Convoys** travelling by sea may be intercepted by enemy ships and sunk.

## 9.1 Supply Screen

The **Supply** and **Fuel** reserves for a Unit are shown in the **Information Panel**. If you want more information on **Supply** receipts and shipments for a **Unit**, click on the  **Supply Button** on the **Unit Action Menu** in the **Information Panel**. The **Supply Screen** (shown below) will be displayed.



This screen will show the recent **Supply** and **Fuel** receipts and will identify any **Shipments** enroute to the **Region**.

## 9.2 Supply Mechanics

Understanding how **Supply** gets to your troops is important for mastering the game. At first, it may be confusing as to why a **Unit** is undersupplied. This section will help you understand how **Supply** gets to your troops, and how you can find out why a **Unit** is not being resupplied when needed.

**Supply** in many war games is often very simple. For example, some games just require being able to trace a path back to your capital. DOTW takes a far more detailed approach and, **Supply** is one of the features that distinguishes it from many other war games. DOTW models this in depth, because **Supply** was a big factor in WW2.

Let's go over how **Supply** works and list some things you can check in-game to see what might be going wrong when a **Unit** is out of **Supply**.

Let's start with production. **Units** consume production, so you must make sure you check your consumption vs. production levels of **Supply**. You can view this on the **Production Screen**. The **Supply** must exist in inventory, so that is the first thing to check. You may need to increase your **Supply** production levels, especially if your **Units** are involved in a lot of combat. Combat burns more **Supply**. **Units** sitting idle use much less **Supply**.

Let's assume you have **Supply** available in inventory. You also need to be able to trace a path from your capital or **Supply Depot** to the **Unit** in question. This path can go through territory you own, territory your allies own, neutral territory, and sea **Regions**. You should be able to visually determine this by looking at the map.

Okay, let's assume that you have enough **Supply** in inventory, and you can trace a path. That **Supply** now must be transported to the **Unit**.

All your **Supply** originates in your capital and must be transported from the **Depot** to a **Unit**. Each war **Theater** contains its own **Depot**. **Supply** going to your **Unit** will be sent from the **Depot** in that **Theater** directly to your **Unit**. That **Depot** in turn, will request that amount of **Supply** from the capital.

The game has the following **Theaters**:

- Europe
- Mediterranean
- Africa
- Asia
- Oceania
- America

When you hover over a **Region** on the map or view it in the **Information Panel** on the left side of the screen, you can see which **Theater** a **Region** belongs to.

Let's use a hypothetical situation where Germany has a **Unit** in Taranto, Italy. What are the processes the game will use in resupplying that **Unit**?

In this case, the German Capital is Berlin (unless Berlin was captured, and the capital had to be moved). Berlin is in the European **Theater**. The **Unit** in Taranto is in the Mediterranean **Theater**. Your capital always contains a **Depot**, and the **Depot** in the capital is always the primary **Depot**.

The **Unit** will request **Supply** from its **Depot** in the Mediterranean, that **Depot** will send it, and then request a resupply in that amount from the primary **Depot** in Berlin.

You can find where the **Unit's Depot** is by looking at the **Supply Screen** which can be accessed from the **Supply Screen Button** on the **Information Panel**.

Let's assume the Mediterranean **Depot** is in Venice. Assuming Venice has enough **Supply** in inventory, it will then look for a path to the **Unit**. The **Depot** will try to use a land path if possible, so assuming Italy or Germany owns a contiguous route of land **Regions** between the **Depot** and Taranto, it will dispatch a land **Convoy** to Taranto. A land **Supply Convoy** can move 1,120 miles per turn (this can be increased by researching **Supply Technology**).

So, assuming Venice and Taranto is less than 1,120 miles distant, the **Supply** will arrive the same turn. Otherwise, the **Supply Convoy** will travel 1,120 miles and resume travel the next turn.

However, if the **Depot** in Venice couldn't trace a land path from Venice to Taranto, then it will try to find a path via sea **Regions**. Assuming it finds a path, then it will try to find **Convoy** ships that aren't already in use. Again, you can check your **Convoy** inventory and usage on the **Production Screen**.

Each **Convoy** ship can carry 10,000 tons of **Supply**. You might need to build more **Convoys** to replace **Convoy** losses from enemy interception. (Remember that **Convoys** can take 12 turns to build, so you need to watch this and be proactive.)

Assuming there are enough ships to send the **Supply**, the **Depot** will dispatch a sea **Convoy** to your **Unit** in Taranto.

Every turn, the game will check the **Supply** balance, and will keep sending resupply **Convoys** as needed. It will try to keep the **Unit's** local **Supply** with an inventory to last 4 turns.

We're still not out of the woods yet, because the sea **Convoy** must make it past any enemy ships that it might cross paths with. If enemy warships or subs cross the path of a **Convoy**, they might detect and intercept the **Convoy**. The detection chance is based on a number of factors:

- A patrolling ship has a higher chance of intercepting than a ship just moving through the **Region**
- Enemy ship **Radar** (can be improved by **Research**)
- Weather in **Region** (rain, clouds or snow reduce visibility)
- Number of enemy ships in the **Region**

If the **Convoy** is intercepted, some tonnage may be lost or sunk. This will be shown in the messages window at the bottom of the map. You can also review any battles from the **Battle Report** (short cut key B) from the **Reports Menu**.

The best source for **Supply** information is the **Supply Screen**. When you see a **Unit** with **Supply** problems, select the **Unit** in the **Information Panel**, and click on the **Supply Screen Button** in the **Information Panel**. This will show the **Unit's Depot**, and the amount of **Supply** enroute to your **Unit**, the current location, and the amount of **Supply** and **Fuel** they are carrying. In many cases, **Supply** will be already enroute, and you may just need to let the **Unit** wait a turn for its **Supply** to catch up with it.

If you don't see **Supply** enroute, check the **Battle Report** to see if the **Convoys** might be getting intercepted. When playing as Germany, **Supply** in remote **Theaters** can be a problem, because the Allies will often control the seas. So, the best option is to try to maintain a land path when possible. Alternately, warships can be sent to the area to intercept the enemy ships and make that **Supply** Lane safer.

So, in summary, these are the factors which can affect **Unit Supply**:

- **Supply** stockpiles in Capital
- **Supply** stockpiles in the **Theater Depot**
- Available path from **Depot** to **Unit**
- Enough available **Convoys** (if sea route is required)
- If Sea route, evading or surviving enemy interception
- Time to travel from **Supply** source to destination

## 9.3 Supply and Fuel Usage

### 9.3.1 Supply Usage

The amount of supply that a Unit will consume depends on their activity during the turn. If they are idle and are not involved in combat, they will use 50% of normal supply.

If they are in combat, this increases to 100% of supply. If they move and engage in combat, this amount increases to 125% of supply.

Your units will try to requisition sufficient supplies to allow 100% usage for 4 weeks (turns). Remember that if you have units that are advancing rapidly, you may get ahead of your supply, so keep an eye on your supply levels, and make sure you don't outpace it.

Naval Units only resupply when they are in port. They carry enough supply for 100% usage for 12 turns.

Having insufficient Supply will reduce the Unit's effectiveness in combat, and extreme shortages will cause casualties due to starvation.

### 9.3.2 Fuel Usage


Land or Air Units don't burn fuel if they don't move, unless they are involved in combat. In that case they will burn 25% of their weekly fuel. If they move, they will use up to 100% of their weekly fuel allowance depending on the distance they travel.

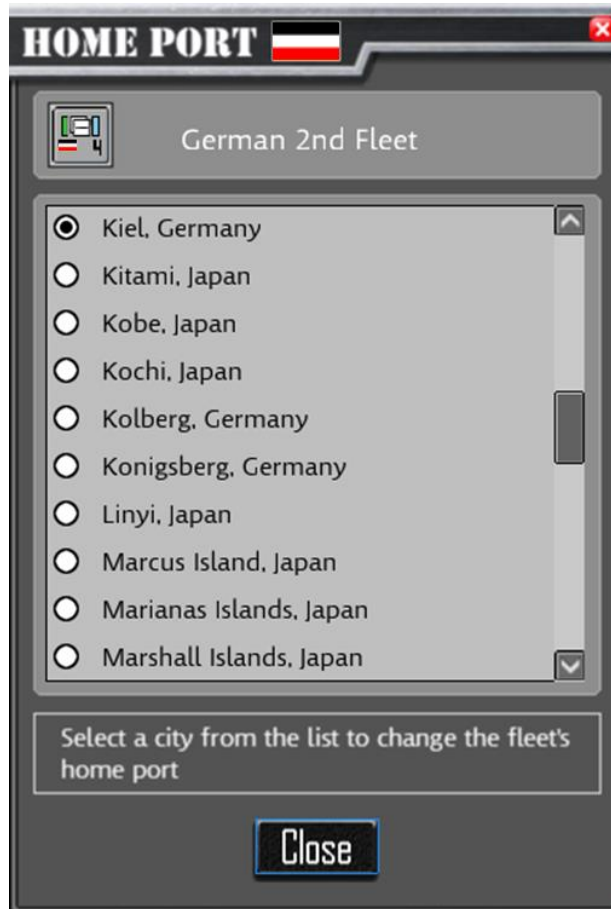
As with Supply, the game will try to keep 4 weeks of 100% fuel supply available for your Units.

Naval Units burn up to 100% fuel depending on the distance they travel. They normally refuel to 12 turns of 100% capacity when in port. They will burn 25% fuel whenever they are in combat. Ships that run out of fuel will incur damage each turn until they return to port, and they are limited to move 1 Region per turn.

## 10 Home Ports

Ships are assigned a **Home Port**. When a ship runs low on **Fuel** or **Supply**, you can **Order** it return to its **Home Port**, rather than moving the ship manually to a **Port**. Also, ships that you assign to a **Patrol Route** will automatically return to their **Home Port** when they run short of **Fuel**.

If your ship operations move far from its **Home Port**, you may want to assign one that is closer. You can do this by clicking the **Change Home Port Button**  in the **Information Panel**. The **Home Port Screen** (shown below) will be displayed.



A list of alternate **Home Ports** will be displayed. Click the radio button next to the **Home Port** you prefer and click the **Close Button**.

The **Home Port** for the **Selected-Fleet** will be updated.

## 11 Units and Army/Fleets

In DOTW, **Units** refers to military **Units**. There are three basic **Classes** of **Units**. **Land Units**, **Air Units**, and **Naval Units**. **Land Units** are each one division in size. This varies depending on the country and division type from anywhere around 5,000 men to 20,000 men. **Air Units** represent air groups of 300 aircraft. This is standardized across countries. **Naval Units** representing Aircraft **Carriers**, **Battleships**, and **Cruisers** all represent a single ship. **Destroyer Units** and **Submarine Units** contain a 6-ship squadron.


The **Army or Fleet** is the lowest level military group you can issue **Orders** to. For convenience, **Units** of the same **Class** may be combined in a single **Army or Fleet**. If you want to issue **Orders** to a single **Unit**, split it from the **Army or Fleet** into its own **Army or Fleet**.

**Armies or Fleets** can only contain one **Class** of **Unit**. **Land Armies** can only contain **Land Units**. **Air Fleets** can only contain **Air Units**, and **Naval Fleets** can only contain **Naval Units**. For example, you can't add a **Strategic Bomber Unit** to an **Army** containing **Infantry Divisions**.

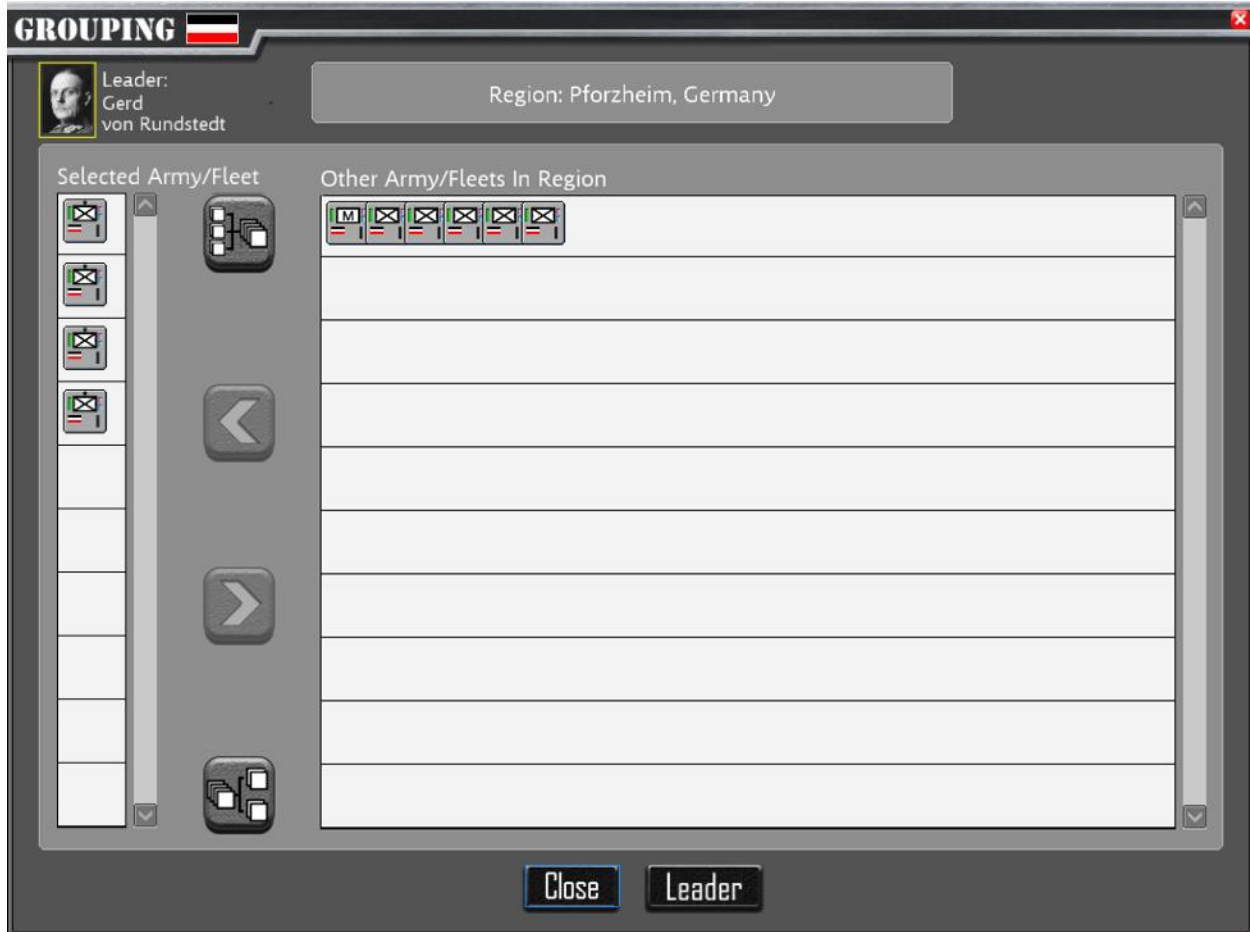
In this section, we'll describe the **Unit** in more detail. Specifically, we'll address:



1. Army/Fleet Grouping
2. Selecting Armies, Fleets and Regions
3. Unit Symbols
4. Issuing Army and Fleet Orders

## 11.1 Army/Fleet Grouping

You can add or remove a **Unit** to/from a **Army**, **Air Fleet**, or **Naval Fleet** whenever you like. To do so, select the **Army** or **Fleet**, and click the **Grouping Button**  in the **Information Panel**.


The **Grouping Screen** will be displayed (shown below).




The **Units** in the currently **Selected-Army/Fleet** is displayed in a list on the left side of the screen. To transfer a **Unit** from the **Selected-Army/Fleet** to a new **Army/Fleet**, click on the **Unit**, and click the  **Button**. The **Unit** will be transferred to a brand-new **Army/Fleet**. The other **Armies and Fleets** are shown on the right-hand list of the **Grouping Screen**. To merge another **Army/Fleet** with the **Selected-Army/Fleet**, click on the other **Army/Fleet** on the right-hand list, and click the  **Button**. Click the **Close Button** to close the **Grouping Screen**.

There are also a couple of short cuts for common **Army/Fleet** changes. To combine **Army/Fleets** that are the same type as the **Selected-Army/Fleet**, click on the **Combine**



**Army/Fleet Button.**  The **Army/Fleets** are considered similar if they contain all the same type (**Air**, **Sea**, **Non-Mechanized Land**, **Mechanized Land**).

You can also split an **Army/Fleet** into two **Army/Fleets** by clicking the **Split Army/Fleet Button.**  The **Army/Fleet** must have more than one **Unit** to be eligible for splitting.

**Note:** There are combat performance penalties for having more than 30 **Units** in a **Region**. There are a maximum of 99 **Units** in a region.

If the selected **Army/Fleet** has been assigned a **Leader**, his photo and name will be displayed in the upper left-hand corner of the screen. To change the **Leader**, you can click the **Leader Button** at the bottom of the screen.

## 11.2 Selecting Army/Fleets and Regions

To select the topmost **Army or Fleet** in a **Region**, simply click on the **Army or Fleet** with the mouse. The **Region** containing the **Army or Fleet** will also be selected and shown in the **Information Panel**. **Note:** If a **Region** does not contain any **Army or Fleets**, you can select the **Region** by clicking on the **Selection Hexagon** in the **Region**.

If the **Region** contains more than one **Army or Fleet**, clicking a second time will select the next **Army or Fleet** in the **Region**. Clicking a third time will select the third **Army or Fleet** in the **Region**, and so forth, until you have cycled through all **Armies and Fleets** in the **Region**.

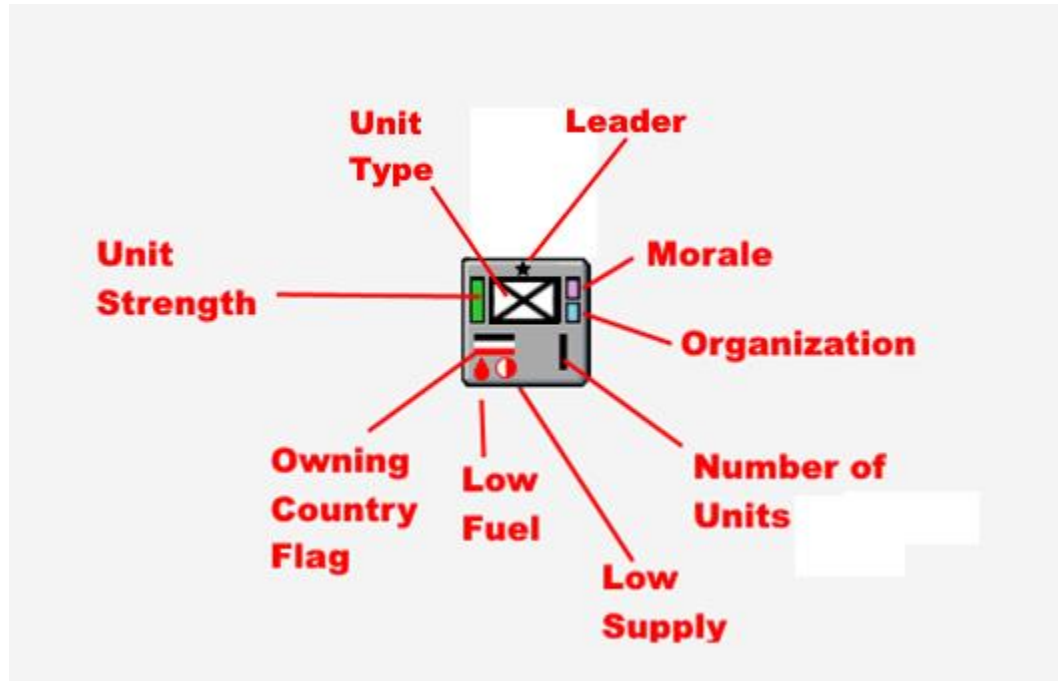
You can only issue movement and combat commands to an **Army or Fleet** when it is the currently **Selected-Army/Fleet**.

## 11.3 Unit Symbols

**Units** are displayed on the maps as **Chits**. **Chits** harken back to old-style wargames with cardboard pieces and paper maps. They are used in the game because they can convey a large amount of information in a small amount of space. **Army/Fleets** with one **Unit** will show the specific **Unit-Type**. **Army/Fleets** with more than one **Unit** will be shown with a symbol identifying the **Army/Fleet** as either non-motorized **Land Units**, Motorized **Land Units**, **Air Units**, or **Naval Units**.

### 11.3.1 Single Unit Army/Fleet







The **Chit** shown for a **Army or Fleet** with only one **Unit** is shown below.




#### 11.3.1.1 Unit-Type





The **Unit-Type** icon identifies the type of military **Unit**. A list of **Unit-Types/Symbols** is shown below.

##### Land Units

-  - Militia
-  - Infantry
-  - Cavalry
-  - Mechanized Infantry
-  - Armor
-  - Paratroops

##### Air Units

-  - Fighter

-  - Tactical Bomber
-  - Strategic Bomber
-  - Rocket
-  - Nuclear Bomb

### **Ship Units**

-  - Submarine
-  - Destroyer
-  - Cruiser
-  - Battleship
-  - Aircraft Carrier
-  - Transport

#### 11.3.1.2 Morale

The magenta bar to the right of the **Unit-Type** icon represents the percentage of **Morale** for the **Army/Fleet**. If the bar is fully colored, the **Army/Fleet** has 100% **Morale**. Otherwise, the **Unit** has lost some **Morale**. You can see the exact numbers in the **Unit Details Section** of the **Information Panel**.

#### 11.3.1.3 Organization

The blue bar to the right of the **Unit-Type** icon represents the percentage of **Organization** for the **Army/Fleet**. If the bar is fully colored, the **Army/Fleet** has 100% **Organization**. Otherwise, the **Unit** has lost some **Organization**. You can see the exact numbers in the **Unit Details Section** of the **Information Panel**.

#### 11.3.1.4 Number of Units in an Army or Fleet

The number of **Units** in the **Army/Fleet**.

#### 11.3.1.5 Low Supply

If the **Army/Fleet** is low on **Supply**, a red Low **Supply** icon  will be displayed.

#### 11.3.1.6 Low Fuel

If the **Army/Fleet** is low on **Fuel**, a red Low **Fuel** icon 🔥 will be displayed.

#### 11.3.1.7 Owning Country Flag

The flag of the owning country is show here.

#### 11.3.1.8 Unit Strength

The percent of attack strength of the **Army/Fleet** is shown as a green bar. If the bar is not fully green, the **Army/Fleet** is at partial strength.

#### 11.3.1.9 Leader Indicator

If a **Leader** is assigned to the **Army** or **Fleet**, a ★ will be displayed above the **Unit Type**.

### 11.3.2 Multiple Unit Army/Fleets

An **Army/Fleet** with more than one **Unit** is displays a different **Unit-Type** icon, since there can be multiple **Unit-Types** in the **Army/Fleet**. This is an example of an **Army** with four **Units**.



Other than a different **Unit-Type** icon, all the other information displayed is the same as for single **Army/Fleets**, except that the information represents the values for the whole **Army/Fleet**, instead of a single **Unit**. And, of course, the number of **Units** will be greater than one, four, in this example, meaning there are four **Units** in the **Army/Fleet**. Here's a list of the different symbols that are shown on the multiple-unit **Army/Fleet**:



- **Air Fleet**



- **Naval Fleet**



- Non-Mechanized **Army**



- Mechanized **Army**

## 11.4 Issuing Army/Fleet Move/Attack Orders

All movement and combat **Orders** issued are at the **Army or Fleet** level. Each **Unit** in the **Army/Fleet** will move together and fight together. If you do not want a **Unit** to participate, split it off into a separate **Army/Fleet** as described in the previous **Grouping Section**.

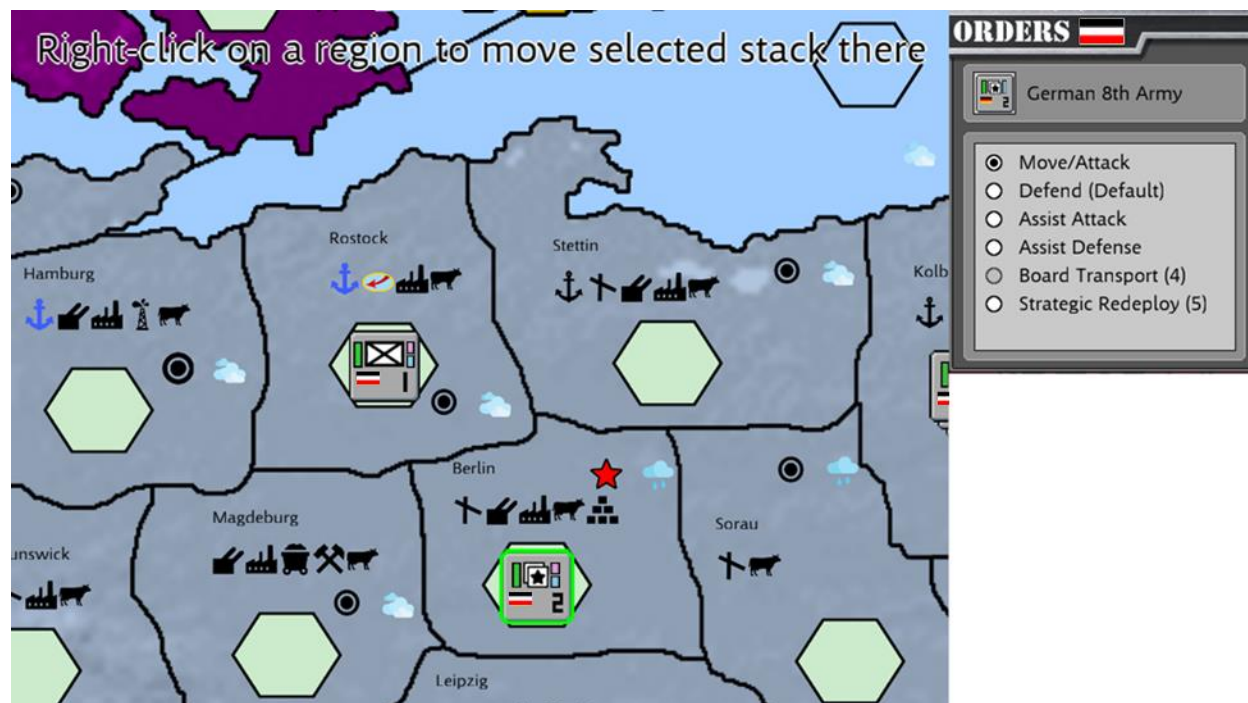
Before you can issue **Orders** to an **Army/Fleet**, you must first select it. To select an **Army/Fleet** simply left click on it with the mouse. If the **Army/Fleet** is **Ready** to receive new **Orders**, it will then be surrounded by a green border:



If the **Army/Fleet** has not yet recovered from a previous move, it will be surrounded by a gray border and will have an icon of a marching soldier on it, so you know that it is not yet ready. The **Unit Details Section** of the **Information Panel** will tell you the number of turns before the **Unit** will be ready to execute a new **Order**. You can still issue new **Orders**, but they will not be executed until the unit's **Ready** state is recovered.

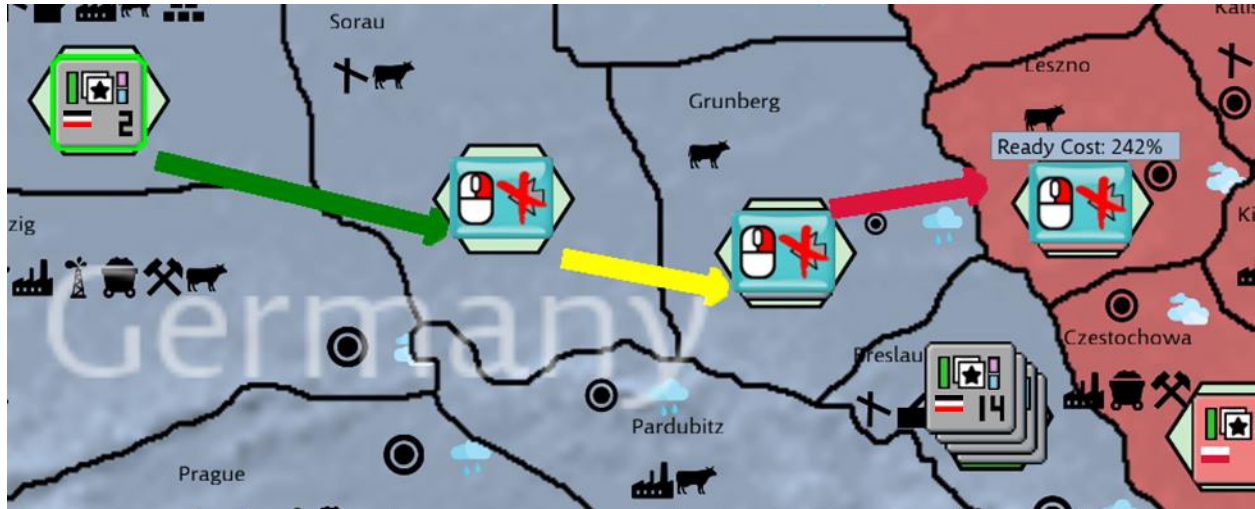


Once you have selected an **Army/Fleet**, the **Orders Screen** will be displayed (see image below). The default Order is **Move/Attack**. To issue this **Order**, simply right click on the destination **Region** for the move. If the destination is enemy controlled, an **Attack** on that **Region** will be executed.

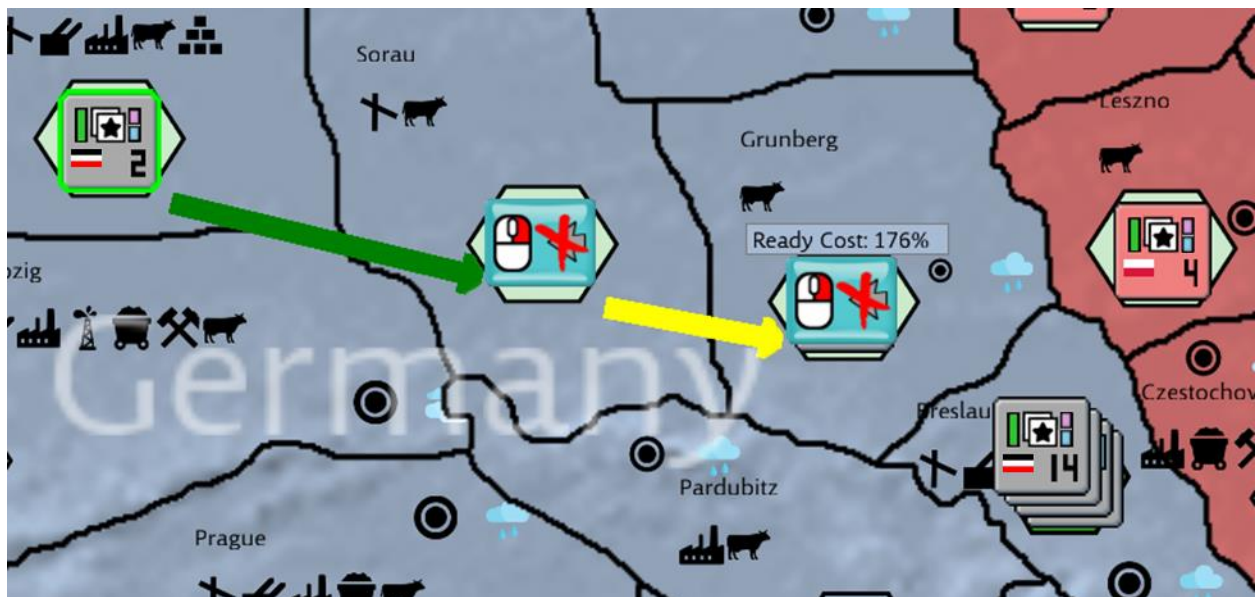


Once you right-click on the destination **Region**, **Move** arrows will be displayed, to show the route the **Army/Fleet** will **Move**. These arrows will be color-coded to indicate when the **Army/Fleet** will arrive. If the arrow is green, the **Army/Fleet** will arrive in the **Region** this turn. If the arrow is yellow, the **Army/Fleet** will arrive in the **Region** next turn. If the arrow is red, the **Army/Fleet** will not arrive in the **Region** for two or more turns.

Continuing our example, we had selected the **Army** in Berlin. We right-click on the Polish **Region** Leszno. If you look at the image below, you will see that the **Army** will arrive in Sorau this turn (green arrow), Grunberg on the following turn, and Leszno in two more turns.

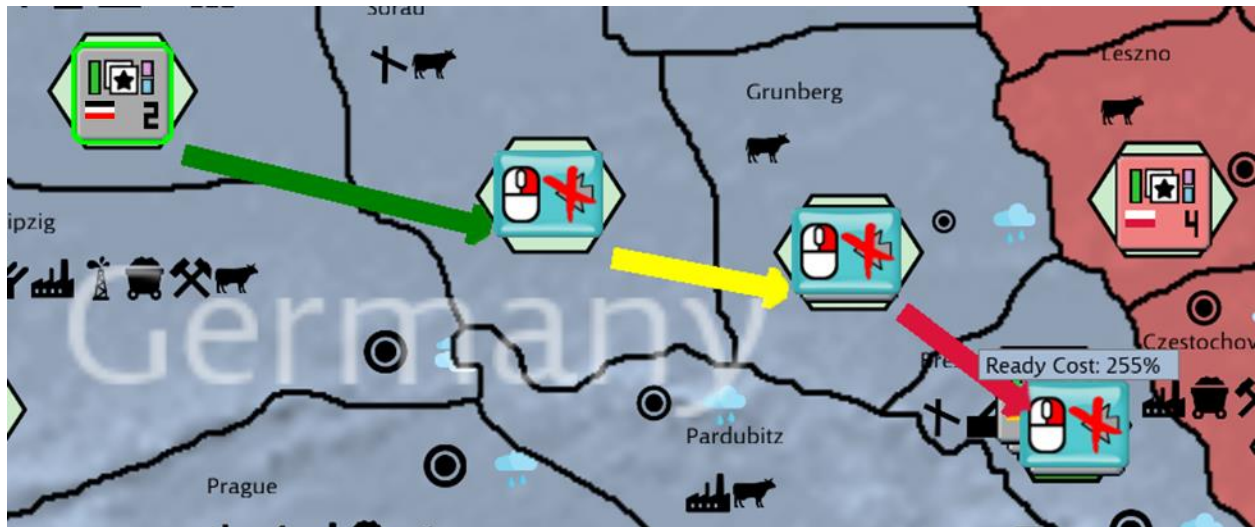


Notice the blue **Buttons** on the destination **Regions**. If we want to cancel the move to that **Region**, we can right-click on the blue **Button**. For example, if decided to hold this Berlin **Army** in reserve, and not move into Leszno in Poland, we could right-click on the Leszno **Region** to halt movement in Grunberg. (See image below)





You can continue to extend the Move by right-clicking on further Regions. For example, if we wanted our **Army** to continue to Breslau, we could right-click on the Breslau Region. (See image below)



If you right-click on a **Region** that cannot be **Moved** to (for example, if you right-clicked on a sea **Region**), you would get an error message displayed on the screen. In this case, because **Infantry** cannot move by sea without first moving to a **Port** and loading into a **Transport**.

You can tell which **Army/Fleets** have outstanding orders by the blue outline that will be displayed around the **Army or Fleet**. (See image below)





As another example, let's **Order** an **Attack** from Breslau into Czestochowa, Poland. To do this, we'll select the **Army** in Breslau by left-clicking on it, and then right-click on Czestochowa. (See image below)



There are other forces we can send from Breslau, which are in other **Armies**. To select the next **Army** in Breslau, just left-click on Breslau again. The next **Army** will be selected. We will order this second **Army**, an **Armored Army**, to also **Attack** Czestochowa by right-clicking on the Czestochowa **Region**. (See image below)



We can continue to issue and change **Orders** to **Army/Fleets** as much as we want. No **Orders** will be carried out until we click the **End Turn Button** (a green play button icon) on the **Main Map Screen** to end the **Planning Phase**, and have the computer implement your **Orders**.

---

**IMPORTANT:** Once you click the **End Turn Button**, you will not be able to make any changes to your **Production, Research, Espionage** or **Army/Fleet Orders** for that turn. So, make sure you double-check that you have done everything you wanted to do during this turn before clicking the **End Turn Button**.

The game uses simultaneous **Orders** resolution, so keep in mind that when the computer attempts to execute all your **Orders** along with the **AI Orders**, some conflicts may arise. For example, you may **Order Region X** to move and attack **Region Y**, but in the meantime the enemy in **Region Z** has **Ordered** an attack on **Region X**. In this instance, your **Units** in **Region X** will defend against the attack, and their attack on **Region Y** will be canceled.

At the end of a turn, only one Faction (**Axis** or **Allies**) can occupy land **Region**. If an attack on an enemy **Region** is unsuccessful, the attackers will retreat to friendly territory.

If a defender loses the battle for its **Region**, it will retreat to a friendly controlled **Region**. If no retreat routes exist, the retreating **Armies** are destroyed.

Naval forces from both factions (**Axis** and **Allies**) can occupy the same **Region** while at sea at the end of a turn.

**Note:** **Air Units** will automatically return to their base at the end of their **Move**. You do not have to plot the return yourself.

### 11.4.1 Readiness

A **Unit** is always allowed to move at least one **Region** if they have **Readiness**. However, if moving to a large **Region** would take more than one turn, they are allowed to make the move, but might incur some **Readiness** debt.

A **Unit** will recover 100% **Readiness** each turn, so, if, when you move, you keep **Readiness** cost to  $\leq 100\%$ , you will be able to move again the following turn.

However, let's say you are moving to a large **Region** that would take more than one turn to enter. You might see a **Readiness** cost of 180%. That means, that you can move there, but your **Readiness** will incur a debt of 80%. This is to simulate the fact that you are still traveling into the **Region**. As a result, you will not be able to enter a new move the next turn, while you "pay" that **Readiness** debt.

This is mostly a concern for "slow" **Units** like **Infantry**. **Armor** can normally move multiple **Regions** in a turn, based on their turn **Range**.

## 11.5 Issuing Other Army/Fleet Orders

### 11.5.1 Army Orders

Most of the **Orders** you issue to your **Armies** will be **Move/Attack Orders**. But each **Class** of **Unit** has additional commands. These function very similarly to **Move/Attack Orders**. However, after selecting an **Army**, you must then select the **Order** from the **Orders** Screen. The **Orders** that are available for the **Selected-Army** are shown in a list on the **Orders** Screen.



Notice that **Move/Attack** is always the **Order** selected when you first select an **Army**, because it is the one that you will be using the most often. If you don't provide any **Orders** to an **Army**, it will be assigned the **Defend Order**.


To select an **Order**, just click on the **Order** from the list. In the next few sections, we'll describe the **Orders** available to each **Unit Class** (**Air**, **Naval**, or **Land**).

#### 11.5.1.1 Move/Attack Orders

This is the typical way you issue **Orders** to **Units**. This is described in **Section 11.4**.

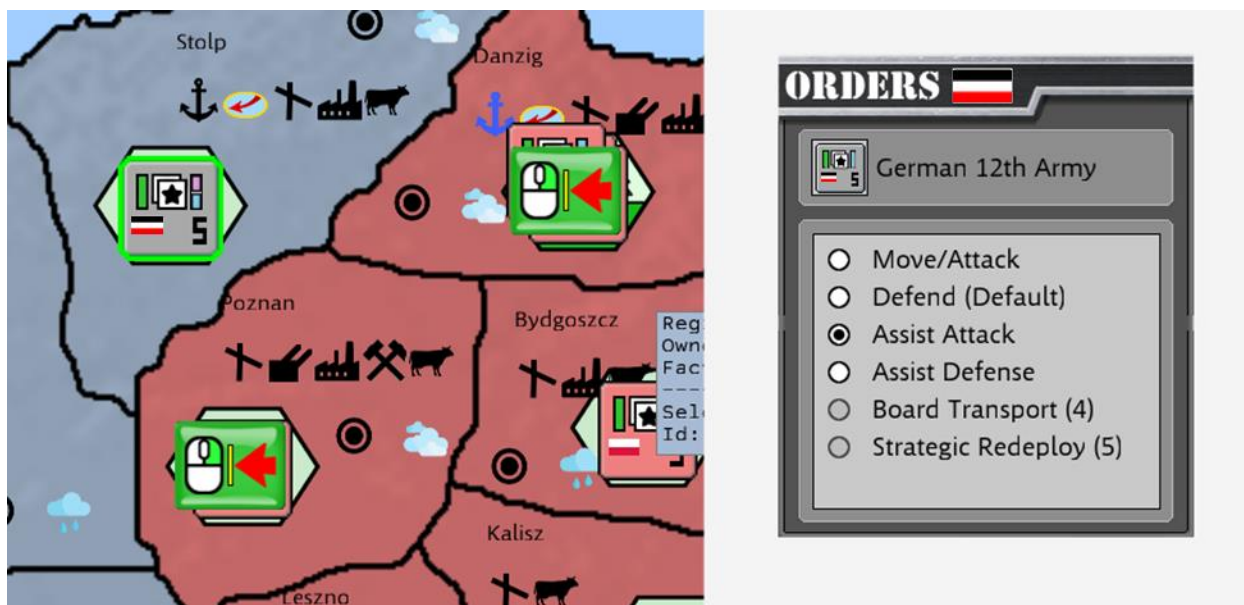
#### 11.5.1.2 Defend


**Order** the **Unit** to **Defend** its **Region**. If you issue no **Orders** by the end of your turn, the **Unit** will be **Ordered** to **Defend** by the computer, but you can manually **Order** it by clicking the **Order** on the **Orders** Screen. This can be useful later in the turn if you want to be sure you have assigned all the **Orders** you intended. You can use the **Units Report** (See **Section 17.2**) to show only **Units** which don't have **Orders**.

Once you issue the **Defend Order**, the **Defend Button**  will be displayed on top of the **Army** while it is selected. If you want to cancel the **Defend Order**, just right-click the **Defend Button**.

### 11.5.1.3 Assist Attack

**Assist Attack** is very similar to **Move/Attack**. Click the **Assist Attack Button** on the **Orders Screen**.



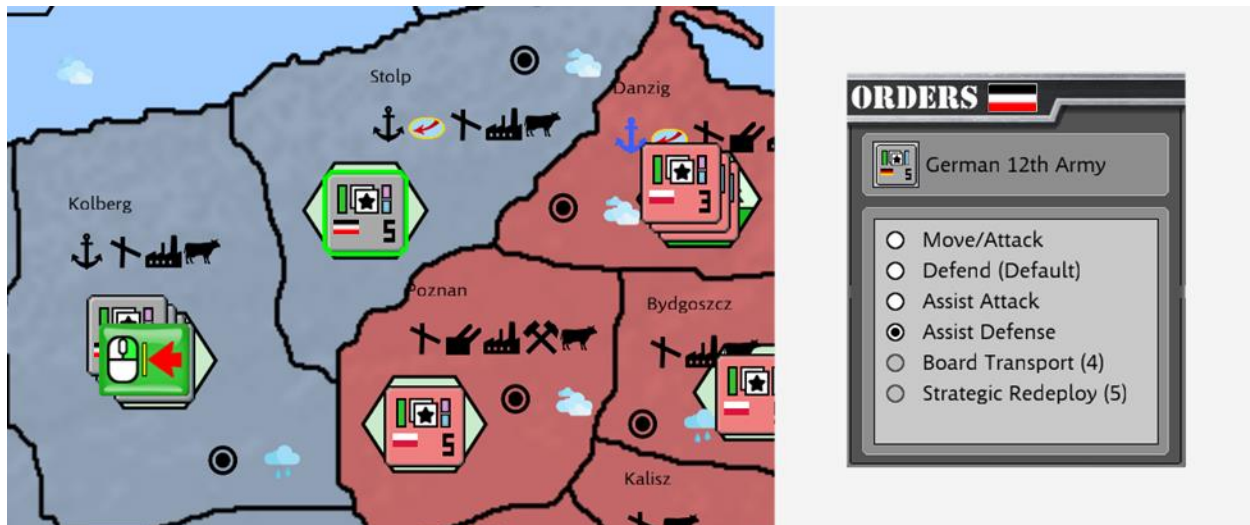
The applicable **Regions** are highlighted with the **Assist Attack Button** . **Move/Attack** differs from **Assist Attack** in one important way. With **Move/Attack**, if the **Move/Attack** is successful, the **Army Moves** to the target **Region**. With **Assist Attack**, the **Army** remains in the original **Region**. It does not advance into the target **Region**. This is useful when you want to lend your strength to an attack by other **Units** but want to remain in place after the attack for defense against other attacks.





After you **Order the Assist Attack**, you can cancel it, by right clicking on the **Assist Attack Button**. 

#### 11.5.1.4 Assist Defense

The **Assist Defense Order** is similar to the **Assist Attack Order**, except in this case, you are lending your defense strength to an adjacent **Region**. To issue an **Assist Defense Order**, left click on the **Assist Defense Order** on the **Orders Screen**. A list of eligible **Regions** will be displayed.



Right-Click on the **Assist Defense Button**  to assign the **Order** to the **Selected-Army**. The **Selected-Army** will remain in place after assisting in the defense of Kolberg.

To cancel the **Order**, right-click on the **Assist Defense Button** 






### 11.5.1.5 Board Transport

This option only applies to **Land Units** that are in a **Port** or **Naval Base**. Also, the number of **Units** in the **Selected-Army** must be less than or equal to the number shown next to the **Board Transport Order**. That number is the number of available transports. Each transport can transport one **Unit**. After you select the **Board Transport Order**, the **Board Transport Button** will be displayed on top of the **Army**.




To cancel the **Order**, right click on the **Board Transport Button**. 

Note: **Transports** are modeled abstractly. Your **Transports** are available at any **Port** with a **Land Unit**. When you build new **Transports**, they are added to your pool. When you use them with the **Board Transport Order**, they are removed from the pool until you **Unload** them. Note, while transporting Units, **Transports** can be intercepted and sunk. Not only may this result in troop losses, but the loss of the **Transport** from the pool as well. Make sure you escort your **Transports** with other ships.

**Boarding Transports** takes the entire turn. You won't be able to move the loaded **Transport** until the following turn. Once they have boarded the **Transports**, they will

appear as a **Transport** icon: 

If you move the loaded **Transport** to a friendly **Port** you can **Unload** it the following turn, using the **Unload Transport Order**.

If you have **Units** loaded in a **Transport** and move the **Transport** to an enemy **Region** with a **Port**, or a **Beach**. These **Regions** will have the **Invadable** Icon  displayed on them in the **Resource List**. When you move a loaded **Transport** to an **Invadable** enemy **Region**, the **Transport** will automatically **Unload** and invade.

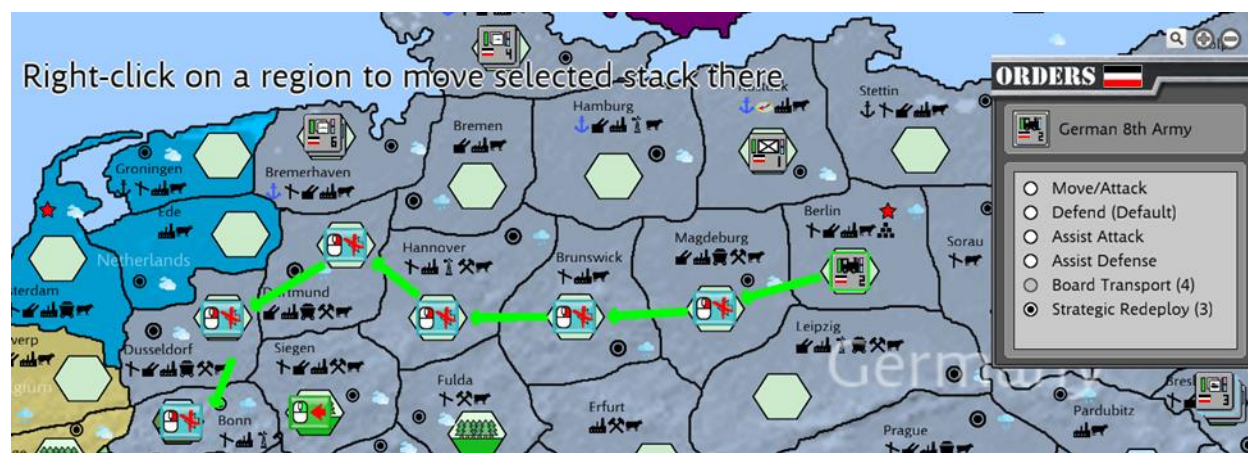
### 11.5.1.6 Strategic Redeploy

Using regular movement is fine for when you are close to your target. But sometimes you need to move longer distances. For example, after conquering Poland, the Germans may want to quickly redeploy troops westward towards France. Strategic Redeployment represents a means of quickly transporting troops by railroad to another location.

Because railroads are a limited resource, you can only move a certain number of **Units** per turn using this method. On the **Orders Screen**, you will see an **Order** called **Strategic Redeployment**. After the **Order** name is a number in parenthesis. That is the maximum number of **Units** you can move per turn using **Strategic Redeployment**.

There is another restriction. The **Army** cannot begin or end their move adjacent to enemy territory, and this **Order** is limited to **Land Units**. You may need to split an **Army** into a smaller size to use **Strategic Redeployment**.

To **Order Strategic Redeployment**, select it from the **Orders Screen**, then enter your move like a normal move. The difference is that you will have a much longer distance that you can move in one turn.



Your **Strategic Deployment Capacity** is based on the size of your country. If you gain or lose **Regions**, your capacity may increase or decrease in size as well.

When a unit has been **Ordered to Move** by **Strategic Redeployment**, its Icon will change to




## 11.5.2 Air Fleet Special Orders

### 11.5.2.1 Move/Ground Attack

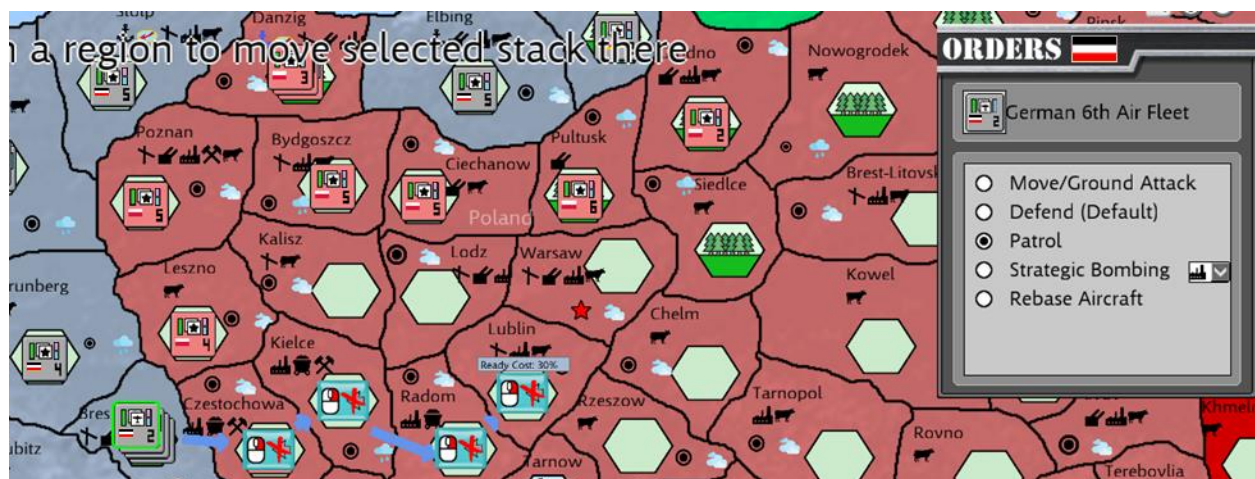
**Air Units** enter **Move/Ground Attack Orders** just like **Land Units**. See Section 11.4 **Issuing Army Move/Attack Orders** for more information.

### 11.5.2.2 Defend

**Order** the **Unit** to **Defend** its **Region**. If you issue no **Orders** by the end of your turn, the **Unit** will be **Ordered** to **Defend** by the computer. Once you issue the **Defend Order**, the **Defend Button**  will be displayed on top of the **Fleet** while it is selected. If you want to cancel the **Defend Order**, just right-click the **Defend Button**.

### 11.5.2.3 Patrol

**Order** the Unit to **Patrol** a **Route**. This is handled just like **Move/Ground Attack**, except, the **Order** will be repeated each turn until canceled. The Move arrows are shown in light blue to differentiate them visually from regular moves





#### 11.5.2.4 Strategic Bombing

**Strategic Bombing** is an attack on the **Infrastructure** of your enemy. Any aircraft that carries a **Bomb Load** can be given the **Strategic Bombing Order**, however, this **Order** is best carried out by actual **Strategic Bombers**, due to their increased range and **Bomb Load**. The **Order** is entered like a regular **Move/Ground Attack Order**, with the exception that you must specify a **Target Type** from the drop-down list on the **Orders Screen**.



Here is a list of the **Target Types** available in the drop-down list:



- **Factories**



- **Oil Fields**



- **Coal Mines**



- **Metal Mines**



- **Population**



- Ports



- Airbase

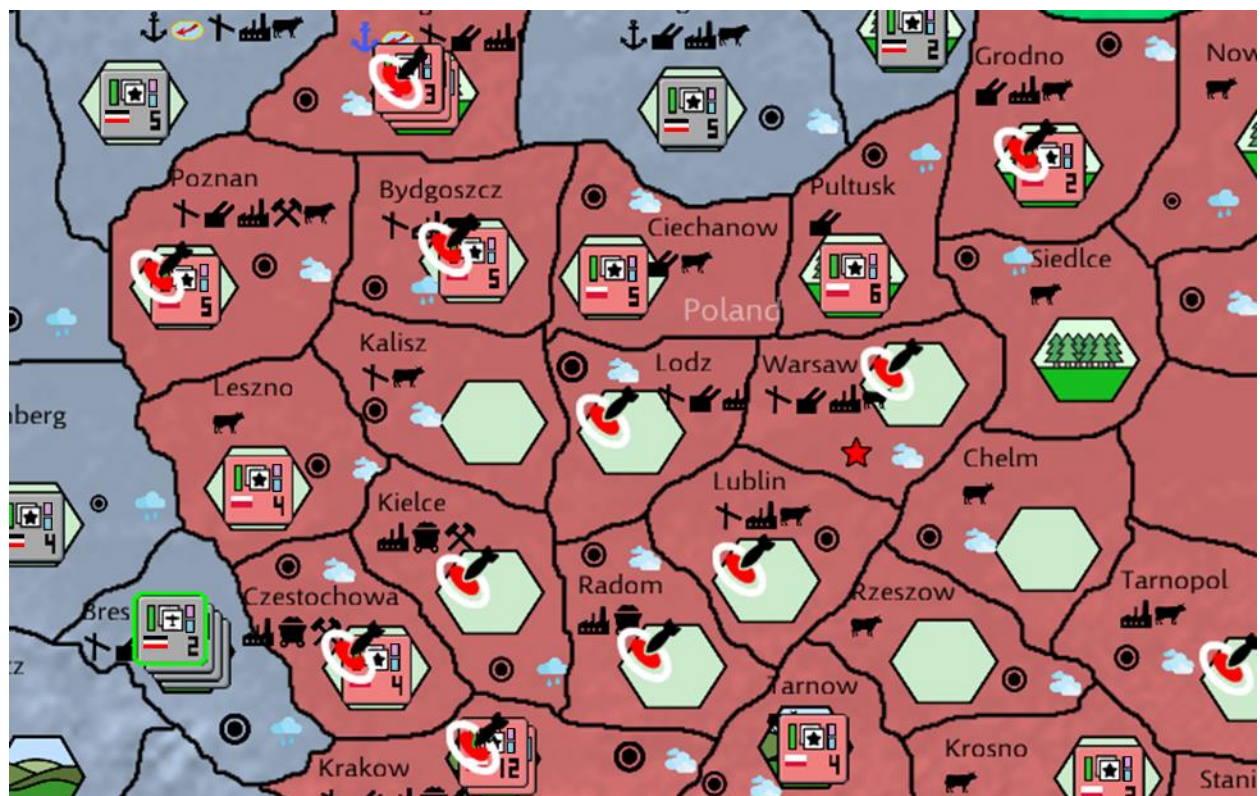


- Fortifications

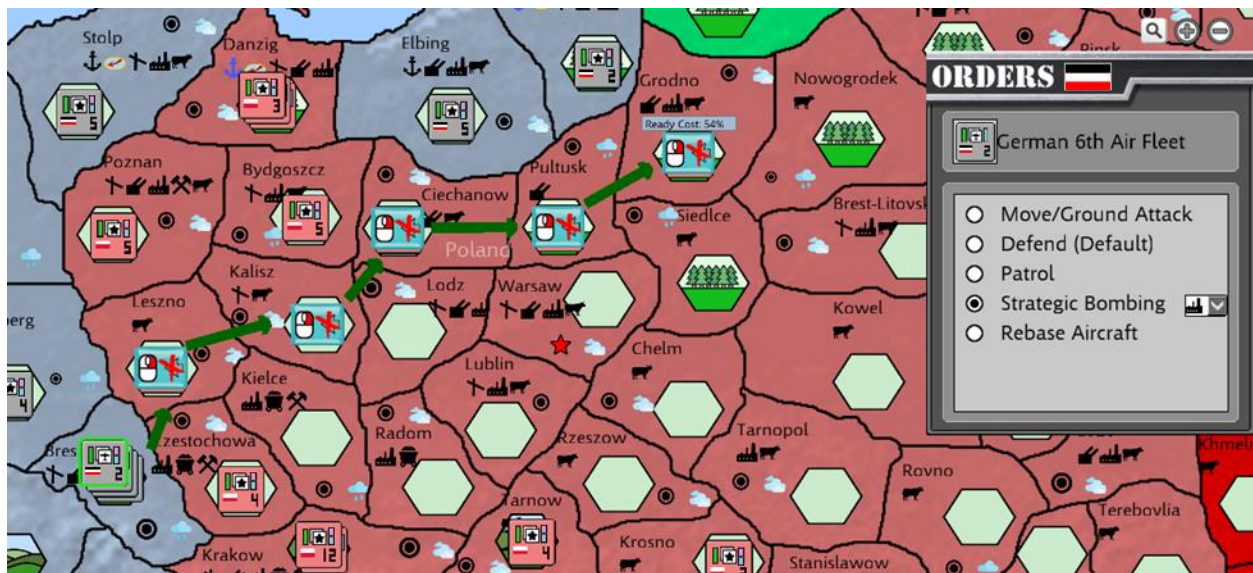


- Radar

When you select the **Strategic Bombing Order**, all of the **Regions** in range of the aircraft which contain the selected bombing target will be marked with a target Icon. (See image below)

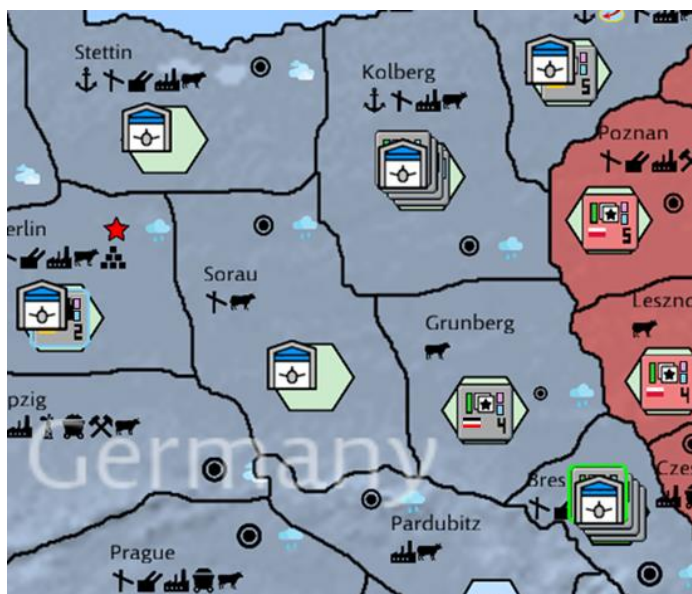


Select your bombing target by right-clicking on the Region.



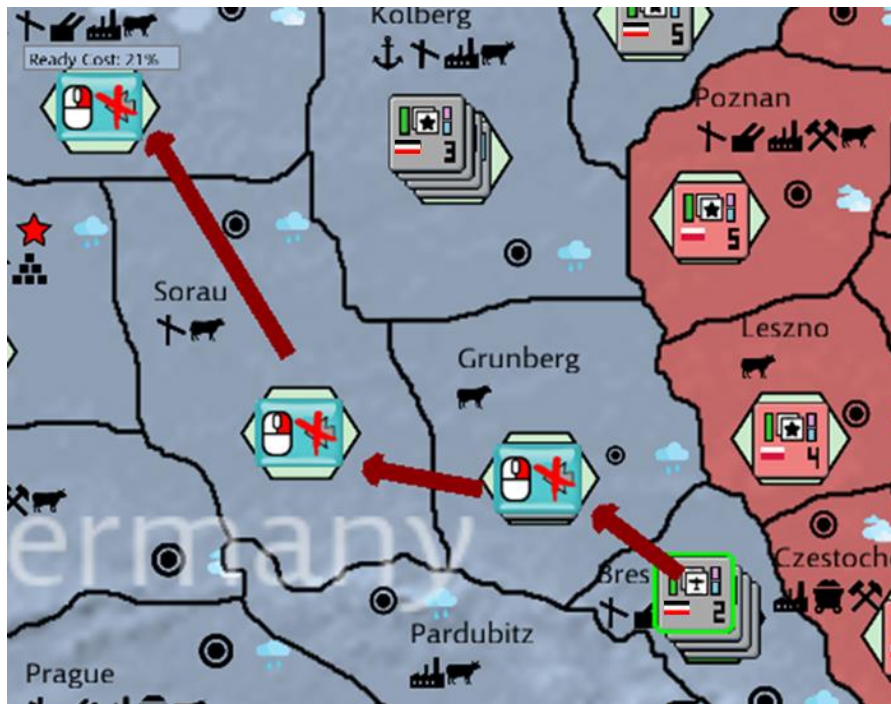
### 11.5.2.5 Rebase Aircraft

This **Order** is very similar to a normal **Move/Ground Attack Order**. However, a normal **Move** is limited to  $\frac{1}{2}$  of the range of the **Fleet** in **Order** to allow for the **Fleet** to return to its **Airbase**. By Selecting the **Rebase Aircraft Order**, DOTW will allow you to use an extended range, however, moving beyond the range of the aircraft will result in a readiness penalty based on how far you exceed the range. You must end the move in a **Region** with an **Airbase**. When you select **Rebase Aircraft Order**, the map will display Hanger Icons showing all regions with an **Airbase** within range of the aircraft.





To rebase the **Air Fleet**, right-click on one of the **Regions** with a Hangar Icon. (See image below). Note that the Rebase Move arrows will be shown as dark red.




### 11.5.3 Naval Fleet Orders

#### 11.5.3.1 Move/Bombard

**Air Units** enter **Move/Ground Attack Orders** just like **Land Units**. See Section 11.4 for more information. One difference to note is that **Land Units** can be resupplied. **Naval Units** start with 12 Turns (weeks) of supplies, and don't refuel or resupply until they are in a friendly **Port** or **Naval Base**. A ship that runs out of **Fuel** will be limited to moving one **Region** per turn. Also, when the last **Region** moved to is an enemy **Region**, the ships will bombard the enemy **Units**.

#### 11.5.3.2 Defend

**Order** the **Unit** to **Defend** its **Region**. If you issue no **Orders** by the end of your turn, the **Unit** will be **Ordered** to **Defend** by the computer. Once you issue the **Defend Order**, the **Defend Button**  will be displayed on top of the **Fleet** while it is selected. If you want to cancel the **Defend Order**, just right-click the **Defend Button**.

### 11.5.3.3 Patrol

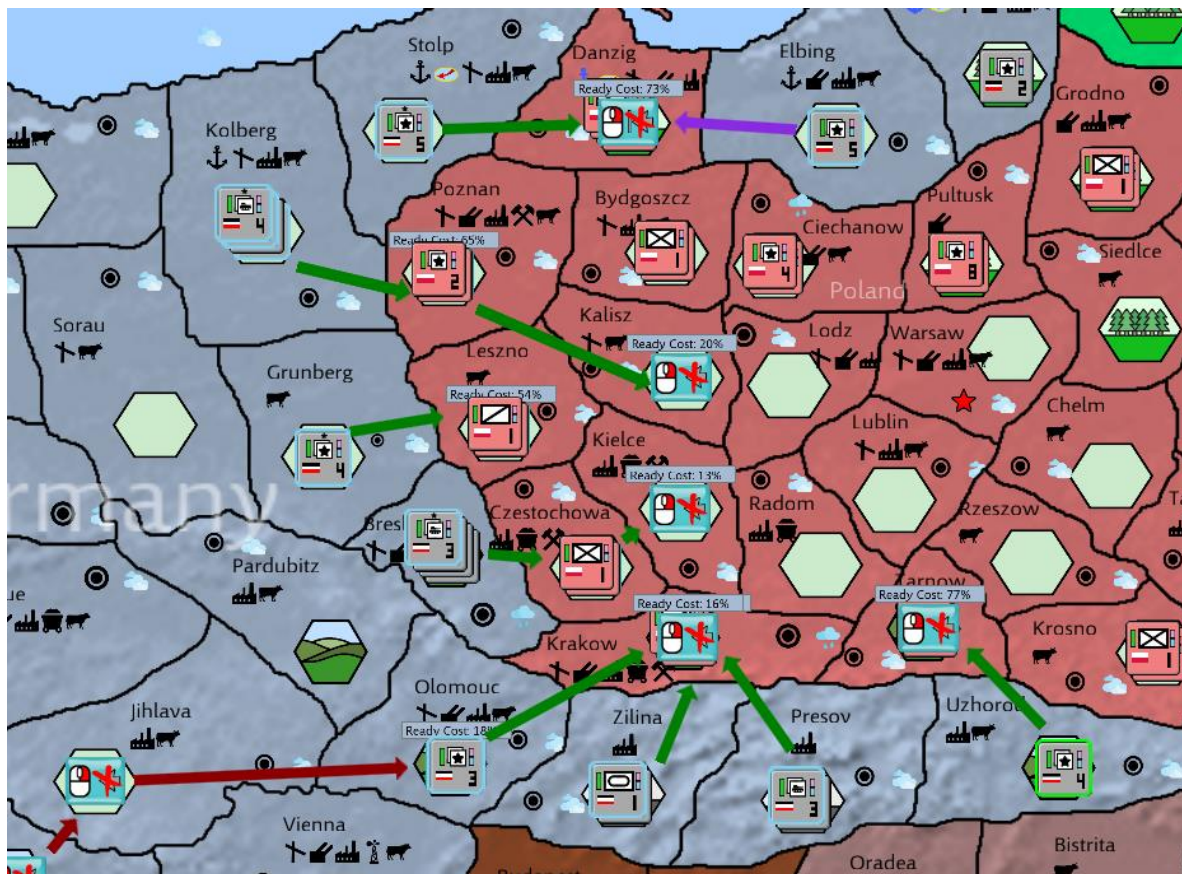
**Patrol** is entered just like a Patrol for **Air Units**. The **Patrol Order** will be repeated until canceled. Also, when the **Patrol** runs low on **Fuel**, it will automatically return to its **Home Port**, refuel, and then resume the **Patrol**. To change your **Home Port**, see Section 10 **Home Ports**. Unlike **Air Patrols**, you can assign a ship **Patrol** route that takes more than one turn to complete.

### 11.5.3.4 Return to Port

This will **Order** the **Fleet** to return to its **Home Port**. To change your **Home Port**, see Section 10 **Home Ports**.

## 11.6 Showing All Planned Moves (Hotkey “M”)

If you want to see all of the moves you have entered for the turn, press and hold the “M” key on the keyboard. The moves will be displayed as in the following screenshot:



## 12 Production

In addition to directing your military forces in battle, you must also manage all the other aspects of your economy. One of the most important other considerations you will have, is what your country will produce. You will need to make sure you produce enough cash to pay your population and troops, you must produce enough food to feed everyone, you must make sure you have enough supplies for your troops, and of course your military will need fuel to keep your tanks, planes and ships going forward.

In addition to this, you will need to produce new military **Units** to meet your needs and train replacements for losses your military **Units** might experience during battle.

Everything you produce will require **Factories**, as well as resources including **Cash, Food, Coal, Metal, Oil** and **Manpower**.

You may not have enough resources to build everything you'd like. You can **Trade** with other countries for resources you lack. See Section 14 **Trade** for more information.

**Production** occurs in the **Region** containing the **Factories** assigned for its **Production**. So, if you build an **Infantry Unit** in Berlin, when it is completed, it will arrive for use in Berlin. Keep that in mind as you plan your **Production**. You may want to produce items close to where you will need them. Also, if a **Region** is captured by the enemy, any **Production** located in that **Region** is lost.

Commodities, including **Cash, Food, Coal, Metal, Oil, Fuel, Supply**, and **Air, Tank** and **Troop Replacements** are automatically add to a national **Depot**, so these may be appropriate items to produce at remote locations, since you won't have to move them in order to use them.

There are two ways you can manage your **Production**. If you want the utmost control of your **Production**, you can manage the **Production** in each **Region** yourself. If you prefer to let the computer handle the details for you, you can just set **Production** levels. For example, instead of manually building one **Armor Division** in Berlin and one in Hamburg, you could use the **Production Manager** and just say that you want two **Armor Divisions** to be produced, and the **Production Manager** will locate **Region(s)** to produce them for you. The choice is up to you.

We'll discuss the **Production Manager** method first, then we'll explain the process to manually assign **Production** to **Regions** yourself.

**Note:** If you are playing on **Difficulty Level Sergeant** and lower, the computer will create an initial **Production** plan for you. You can make changes to this as you play, but at least you will have a reasonable starting point. At higher **Difficulty Levels**, the computer will not create a plan, but any ships that were historically already under construction will be assigned in **Factories**.

## 12.1 Production Screen

To plan your **Production**, click on the **Production Button** on the **Action Menu** (highlighted in red below):



This will open the **Production Screen** (shown below).

**PRODUCTION** [German Flag]

	Resources							Capacity		Replacements				Transport		
	[Icon]	[Icon]	[Icon]	[Icon]	[Icon]	[Icon]	[Icon]	[Icon]	[Icon]	[Icon]	[Icon]	[Icon]	[Icon]	[Icon]	[Icon]	[Icon]
Stock	773m	39.9m	18.8m	90.1m	1.9m	3.2m	209m	57.0m	21.3k	100.0	100.0	100k	0.0	449.0	4.0	5.0
Adds	700m	3.3m	88.0k	7.5m	156k	578k	125k	10.5k	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Usage	520m	645k	166k	293k	210k	0.0	0.0	2.2m	12.8k	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avail	953m	42.6m	18.7m	97.3m	1.8m	3.7m	209m	52.7m	8.5k	200.0	100.0	100k	0.0	449.0	4.0	5.0

Sort: Region    Regions: All    Types: All

UsedRegion	Unused	Capacity	Production Queue
100% Augsburg	0.0	88.0	[Icon]
0% Berlin	1,849.0	1,849.0	
100% Bonn	0.0	837.0	[Icon]
100% Bremen	0.0	264.0	[Icon]
100% Bremerhaven	0.0	330.0	[Icon]
100% Breslau	0.0	264.0	[Icon]
0% Brunswick	1,233.0	1,233.0	
100% Dortmund	0.0	264.0	[Icon]
96% Dusseldorf	46.0	1,101.0	[Icon]
100% Elbing	0.0	154.0	[Icon]
100% Erfurt	0.0	330.0	[Icon]
100% Frankfurt	0.0	837.0	[Icon]
0% Graz	1,487.0	1,487.0	
100% Hamburg	0.0	1,431.0	[Icon]
100% Hannover	6.0	1,321.0	[Icon]
100% Innsbruck	0.0	107.0	[Icon]
100% Jihlava	0.0	65.0	[Icon]

Close    Manager    Summary

**Resource Section**

**Sort & Filter Section**

**Production List**

















There are three main sections to the Production Screen.

1. Resource Section
2. Sort & Filter Section
3. Production List



## 12.1.1 Resource Section

The **Resource Section** (shown below) provides details about your country's resources.

	Resources							Capacity		Replacements				Transport		
																
Stock	773m	39.9m	18.8m	90.1m	1.9m	3.2m	209m	57.0m	21.3k	100.0	100.0	100k	0.0	449.0	4.0	5.0
Adds	700m	3.3m	88.0k	7.5m	156k	578k	125k	10.5k	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Usage	520m	645k	166k	293k	210k	0.0	0.0	2.2m	12.8k	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avail	953m	42.6m	18.7m	97.3m	1.8m	3.7m	209m	52.7m	8.5k	200.0	100.0	100k	0.0	449.0	4.0	5.0

This grid provides an overall picture of the state of your country's economy. Across the top are the main resources that you will be managing for your country. We'll describe those in a bit. There are four rows to the grid that we'll describe in the next section.

The numbers in the grid are abbreviated to conserve space. For more information see **7.4.2.1 Number Representation in the Game**.

### 12.1.1.1 Grid Row Definitions

**Stock** - This represents the stockpiles that you have on hand for each resource.

**Adds** - This number represents the amount of this resource that you produced or received in **Trade** from last turn.

**Usage** - This number represents the amount used in your **Production** this turn plus the amount you **Traded** away to other countries this turn, plus the amount you used in other areas of your economy (e.g. **Research**, **Salaries**, and **Espionage**).

**Avail** - This number represents the amount you have available for use this turn.

### 12.1.1.2 Grid Column Definitions

These are the resources shown in the grid.



- **Cash** (dollars) - **Cash** is used to pay **Salaries**, **Research**, and **Espionage**. It is an abstraction of currency and consumer goods.



- **Food** (tons) - **Food** is used feed your population and troops.



- **Oil** (tons) - **Oil** is refined into **Fuel** to provide gasoline and diesel fuel for vehicles, aircraft, and ships.





- **Coal** (tons) – **Coal** is used to make steel and to produce electricity used to power the **Factories**.



- **Metal** (tons) – This is an abstraction of various metal ores, principally iron, but also other metals used in production.



- **Supply** (tons) – This is **Food** and munitions used by all types of military **Units**. Military **Units** do not consume **Food** directly. It must be manufactured into **Supply**, representing it's more transportable and storable form.



- **Fuel** (tons) – This is gasoline and diesel fuel used to power vehicles, aircraft and ships.



- **Manpower** – This is the portion of your population that can be utilized for **Production** in **Factories**, or as **Troops**.



- **Factories** – This represents **Production** capacity used to manufacture **Units** and resources.



- **Air Replacements** (Aircraft) – This represents replacement aircraft for your **Air Units**. When **Air Units** participate in battle, they lose aircraft. These replacements will automatically be added back to your **Units** to bring them back to full strength. Note, this is an abstraction of a generic replacement aircraft. These are used to replace lost aircraft from **Fighter**, **Tactical Bomber**, and **Strategic Bomber Units**.



- **Tank Replacements** (Tanks) – This represents replacements of tanks in your armored **Units**. This a bit of an abstraction, because you may have several different models of tanks in play, but replacements will be used for all tank types to bring **Units** back up to strength.



- **Troop Replacements** (Men) – This represents new recruits that are trained to replace troop losses in **Land**, **Air** and **Naval Units**.



- **Repair Points** – As your facilities such as **Factories**, **Oil Fields**, or **Metal Mines** are bombed, they will take damage. **Repair Points** will be used automatically to repair them at the end of the turn.



- **Convoy Ships** (Ship) – These are the ships that carry your **Trade** goods overseas. These also are used to carry **Supply** and **Fuel** overseas. Each ship can carry 11,000 tons of **Trade** goods.



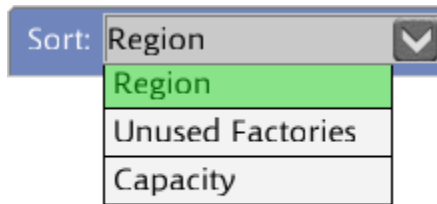
- **Transport Capacity (Units)** – This is the total number of **Land Units** that can be transported by sea.



- **Strategic Redeployment Capacity (Units)** – This is the total number of **Land Units** that can be transported by **Strategic Redeployment** per turn. This represents high speed transport by rail.

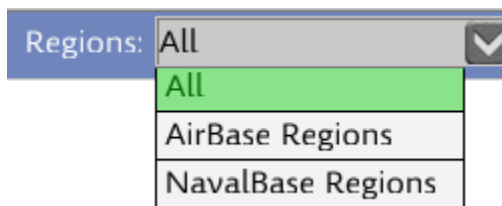
## 12.1.2 Sort & Filter Section

### 12.1.2.1 Sort Drop Down List



The **Sort Drop Down List** will let you change the order of the items in the **Production List**. You can change to sort by **Region** Name (Ascending order), **Unused Factories** (Descending order), or **Capacity** (Descending order)

### 12.1.2.2 Region Filter



The **Regions Drop Down List** lets you filter the **Production List** to show All **Regions**, Only **Air Base Regions**, or only **Naval Base Regions**. This is useful if you are planning to build aircraft or ships. Since those require **Air Base** or **Naval Base** equipped **Regions**, respectively.

### 12.1.2.3 Type Filter



The **Type Filter Drop Down List** lets you filter the **Production List** to show All **Unit-Types** or filter the list to only show **Regions** producing the **Selected Unit-Type**. This can be useful if you want to find all **Regions** where you are producing **Armor Units**, for example.



#### 12.1.3.4 Unused Column

This column shows how much **Factory** capacity is unused in this **Region**.

#### 12.1.3.5 Capacity Column

This column shows the total **Production** Factory capacity in the **Region**.

#### 12.1.3.6 Production Queue Column

This column shows a list of icons of each **Unit-Type** being produced in the **Region**. If you hover over the icons, it will tell you the **Unit-Type** name, and the quantity being produced. If you want further details you can click the **Select Button** (see Section 12.1.3.1 above) to view the **Region** details.

#### 12.1.4 Close Button

To close the **Production Screen**, click the **Close Button** at the bottom.

#### 12.1.5 Manager Button

The **Manager Button** at the bottom of the screen is used to open the **Production Manager**. You can use the **Production Manager** if you don't want to micro-manage all the **Production** details for your country. We'll discuss that in the next section.

#### 12.1.6 Summary Button

The **Summary Button** at the bottom of the screen is used to open the **Production Summary**. The **Production Summary** will show you at a glance how many of each item you are producing, and also show you the percentage of the resources used by each item in production.

## 12.2 Production Manager

The **Production Manager** will manage the **Production** details for you, if you don't want to manually assign **Production** to each **Region**. You can just tell how much of a given **Unit-Type** you want to produce, and the **Production Manager** will assign the **Production** to **Regions** for you. The **Production Manager Screen** is shown below.

PRODUCTION MANAGER

	Resources							Capacity		Replacements (Projected)				Transport		
Stock	61.6m	160m	20.2m	35.1m	46.1m	42.2m	15.0m	146m	9.3k	0.0	306.0	0.0	160.0	340.0	3.0	2.0
Adds	500m	11.2m	690k	1.1m	1.1m	100k	35.0k	23.3k	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Usage	459m	5.6m	41.9k	526k	412k	372k	5.2k	6.0m	6.0k	0.0	0.0	21.7k	0.0	0.0	2.0	0.0
Avail	103m	165m	20.9m	35.7m	46.8m	41.9m	15.0m	140m	3.3k	0.0	306.0	-21.7k	160.0	340.0	1.0	2.0

Category: Land

Build: Armor

Qty: 0

Repeat? ☒

Max Qty: 7

Build Time: 12 weeks

Select a type from the dropdowns, enter a quantity, and let your production manager find available factories, and setup production for you.

Save

Back

Close

Summary

### 12.2.1 Resources Section

This section contains the same resource summary as displayed on the **Production Screen**. (See section 12.1.1)

### 12.2.2 Category Drop Down List

Category:

Land

None

Land

Air

Sea

Infrastructure

Support

The **Category Drop Down List** lets you narrow down the list of what you want to produce. Select **Land** to produce **Land Units** like **Infantry** or **Armor**. Select **Air** to product **Air Units**, like **Fighters** or **Tactical Bombers**. Select **Sea** to produce **Naval Units** like **Destroyers** or **Submarines**. Select **Infrastructure** to build **Transport** and **Convoys**, since they are part of your transportation Infrastructure. Select **Support** to produce consumable items such as **Fuel** or **Supply**.

### 12.2.3 Build Drop Down List

Build:	Armor	▼
	None	
	Armor	
	Cavalry	
	Infantry	
	Mechanized Infantry	
	Militia	
	Paratroops	

Once you have selected the **Category**, the **Build Drop Down List** will show the **Unit-Types** that are in that **Category**. You can select which **Unit-Type** you want to build from the list.

#### 12.2.3.1 Land Unit-Types

**Armor** – The **Armor Units** will contain a combination of Tanks and supporting **Infantry**. These **Units** can advance through up to two enemy **Regions**, which gives them the opportunity to break through enemy lines. These **Units** require **Fuel** for the **Tanks** and supporting vehicles.

**Cavalry** - These **Units** are a carryover from the previous war. They are troops mounted on horses. They don't do particularly well against WW2 weapons. They are included because they existed at the start of the war, but it is not recommended to build them. They do not require **Fuel**.

**Infantry** – The workhorse of your army. These are troops armed with small arms, machine guns, mortars, and artillery. They are good at defending, and for following up your **Armor Units**. They are strong on attack, but slow. They do not require **Fuel**.

**Mechanized Infantry** – These are fully motorized **Infantry**. Some versions contain some **Tanks** as well. They have great motorized support, so they can also advance through up to two enemy **Regions** which give them the opportunity to advance with your **Armor**, and exploit breakthroughs. These **Units** require **Fuel** for the tanks and supporting vehicles.

**Militia** – These are smaller **Infantry Units**, more lightly armed. Best suited for light garrison duties. These units do not consume **Fuel**.

**Paratroops** – These are a specialized form of **Infantry**. They have the unique ability to fly to a target and drop behind enemy lines. As a result, they have less artillery than regular **Infantry**, and they are very expensive due to the extra training and aircraft used to transport them. These **Units** do not consume **Fuel**.

### 12.2.3.2 Air Unit-Types

**Fighter** – These aircraft are best used to attack enemy aircraft and defend friendly bombers, but they can be used to strafe enemy troops, and some do have the ability to carry small bombs and conduct bombing missions. These **Units** consume **Fuel**.

**Tactical Bomber** – These aircraft could be used to either attack enemy ground targets or conduct **Strategic Bombing**. They have a shorter range and carry less **Bomb Load** than **Strategic Bombers**. These **Units** consume **Fuel**.

**Strategic Bomber** – These **Units** were designed to conduct **Strategic Bombing** against **Infrastructure** in enemy **Regions**. They tend to have the longest range of any aircraft and can carry much larger **Bomb Loads**. These can, however, also be used to attack enemy **Land Units**. These **Units** consume **Fuel**.

**Rocket** – Germany built large numbers of **Rockets** to bomb England during the war. You must **Research** the **Rocket Technology** in **Order** to build these **Units**. These are single-use **Units**. Once they conduct their bombing mission, they are destroyed. These **Units** do not consume **Fuel**. They used a non-petroleum based propellant. Anyone can research this **Technology**.

**Nuke** – Nuclear bombs were used during the war by the USA to shorten the war against Japan. They are devastating against enemy population. You must research **Nuke Technology** to build **Nukes**. Also, they require an advanced delivery mechanism. So, you must also research **Strategic Bomber Tech IV** or **Rocket Tech IV** to build **Nukes**. **Nukes** are a single-use weapon and are destroyed once used. **Nukes** do not consume **Fuel**. Anyone can build **Nukes** but the cost to **Research** them is very high.

### 12.2.3.3 Sea Unit-Types

**Submarine** – **Submarines** can travel on the surface or submerge below the water. As a result, they are hard to detect. They have minimal surface guns. They are deadly because of the torpedoes they carry. These can devastate enemy shipping and can sink the largest **Battleship**. Once detected, they have very weak defense and can easily be sunk. In the game a **Submarine Unit** consists of a six-**Submarine Squadron**. Individual **Submarines** can be lost from a **Unit** without destroying the **Unit**. The **Unit** is not destroyed until all six **Submarines** are destroyed. **Submarines** consume **Fuel**.

**Destroyer** – **Destroyers** are small ships designed to escort larger ships, and screen them from enemy **Submarines**. These are also very effective in hunting enemy **Submarines** and are equipped with depth charges which can be deadly to enemy **Submarines**. **Destroyers** are lightly armored and can easily be sunk, but they are inexpensive to build. They also have a higher speed. In the game, each **Destroyer Unit** contains a six-**Destroyer Squadron**. Individual **Destroyers** can be lost from a **Unit** without destroying the **Unit**. The **Unit** is not destroyed until all six **Destroyers** are sunk. **Destroyers** consume **Fuel**.

**Cruiser** - **Cruisers** are larger and more heavily armored than a **Destroyer**, with larger guns. But they were less well armored and armed than **Battleships**. They were often used to escort larger ships, but they were tough enough that they could be used as raiders against enemy shipping. In the war, a combination of light **Cruisers** and heavy **Cruisers** were built. In the game, all new **Cruisers** built will be built with heavy **Cruiser** specifications. However, in the game, Light **Cruisers** that existed at the start of the war are included with their Light **Cruiser** specifications. So, make sure you look at **Cruiser** specifications in the **Unit Details Section** of the **Information Panel**. **Cruiser Units** represent a single **Cruiser** and they are removed when sunk. **Cruisers** that exist at the start of the war will have their historical names. New **Cruisers** that you produce will be assigned names from a list of historical names that were built during the war. **Cruisers** can also conduct **Shore Bombardment** of enemy **Land Units**. **Cruisers** consume **Fuel**.

**Battleship** – **Battleships** are the largest and most heavily armed and armored ships in the game. As the war went on, experience showed that the stars of the navies were the Aircraft **Carriers**, so **Battleships** were assigned mostly as **Carrier Escorts**, but they were also used for **Shore Bombardment**. Their massive guns were like floating artillery. They can be used in the game for **Shore Bombardment** of enemy **Units** in coastal **Regions**. The USA did build a number of new **Battleships** during the war. **Battleship Units** contain a single ship. When it is sunk, it is removed from battle. **Battleships** that exist at the start of the war will have their historical names. New **Battleships** that are built will be assigned a name from historical names that were used during the war. **Battleships** consume **Fuel**.

**Carrier** – Aircraft **Carriers** proved very effective during the war. They could allow a country to project air power all over the world. **Carriers** are the only **Naval Unit** in the game that can carry aircraft. These are effective both against enemy ships as well as ground troops. **Carrier Units** represent a single ship. **Carriers** that exist at the start of the war will have their historical names. New **Carriers** you build will be assigned a name from a list of names used historically. All ships can be **Upgraded** while docked at a **Naval Base**, if you have **Researched** new **Technology** for them. Don't forget that if you **Research** newer, better aircraft, don't forget to **Upgrade** your **Carriers**. They will receive the latest planes during the **Upgrade**. **Carriers** consume **Fuel**.

#### 12.2.3.4 Infrastructure Unit-Types

**Note:** Most **Infrastructure Unit-Types** are built in a specific **Region**. For this reason, they must be produced using the manual **Production** process (see **12.4 Production Detail Screen**). Those **Unit-Types** Include: **Airbase**, **Anti-Aircraft**, **Factory**, **Fortification**, **Naval Base**, and **Radar**.

**Note: Anti-Aircraft** – Select this **Unit-Type** to build an installation with 100 AA Guns in a **Region**.

These are the only Infrastructure Types you can build using the Production Manager:



**Convoy** – Select this **Unit-Type** to build convoy ships. These ships will be added to your **Convoy** pool. Each **Convoy** ship can carry 11,000 tons.

**Transport** – Select this **Unit-Type** to increase the number of **Land Units** you can **Transport** by sea.

### 12.2.3.5 Support Unit-Types

**Cash** – Select this **Unit-Type** to produce **Cash** (dollars). **Cash** in the game is an abstraction which is a combination of currency and consumer goods. It is used to pay for **Salaries**, **Research**, **Trade** and **Espionage**. Each point of quantity you enter will produce \$1,000,000. So, if you enter a quantity of 5, you will produce \$5,000,000.

**Fuel** - Select this **Unit-Type** to refine **Fuel** from **Oil**. Each point of quantity you enter will produce 1000 tons of **Fuel**. So, if you enter a quantity of 2, you will produce 2000 tons of **Fuel**.

**Supply** – Select this **Unit-Type** to produce **Supply** for your military **Units**. **Supply** represents the **Food** and munitions that your **Units** need to operate. Each point of quantity you enter will produce 1000 tons of **Supply**. So, if you enter a quantity of 3, you will produce 3000 tons of **Supply**.

**Synthetic Oil** – If you have **Researched Synthetic Oil**, you will be able to produce **Synthetic Oil**. **Synthetic Oil** is produced from **Coal** to produce **Oil**, which can then be refined into **Fuel**. If your country is short on **Oil** and can't **Trade** for enough **Oil** to meet your needs, you might consider **Researching** and producing **Synthetic Oil**. All countries start with the **Technology** to produce a small amount of **Synthetic Fuel**. If you **Research** this **Technology**, you can produce larger quantities through better processes. Each point of quantity you enter will produce 1000 tons of **Synthetic Fuel**.

**Air Replacements** – As your **Air Units** take damage, some aircraft will be shot down. Rather than producing a **Unit**, you can build replacement aircraft by producing **Air Replacements**. At the end of the turn, the game will reinforce damaged **Air Units** with **Air Replacements**. Note that your **Unit's Experience** level will drop (be diluted) by the raw airmen you receive with the replacement aircraft. Each point of quantity that you enter to produce, will produce 100 replacement aircraft.

**Tank Replacements** – As your **Armor Units** take damage, some tanks will be lost. Rather than producing a new division, you can replace those lost tanks by building **Tank Replacements**. At the end of the turn, the game will reinforce damaged **Armor Units** with **Tank Replacements**. Note that your **Unit's** experience level will drop (be diluted) by the raw tank crews you receive with the **Tank Replacements**. Each point of quantity that you enter to produce, will produce 100 replacement tanks.

**Troop Replacements** – As your **Land Units** take damage, some troop casualties will occur. Rather than producing a new division, you can replace the lost troops by building **Troop Replacements**. At the end of the turn, the game will reinforce damaged **Land Units** with

**Troop Replacements.** Note that your **Unit's** experience level will drop (be diluted) by the raw troops that you receive. Each point of quantity that you enter to produce, will produce 1000 troop replacements.

**Repair Points** - When the enemy bombs your **Regions**, your **Infrastructure** may be damaged. If you build **Repair Points**, at the end of the turn, the game will repair the damage using your **Repair Points**.

### 12.2.4 Qty

You enter the quantity you want to produce of the selected **Unit-Type**.

- For Most **Units**: 1 Quantity = 1 **Unit** produced
- For **Fuel**, **Supply** or **Synthetic Oil**: 1 Quantity = 1,000 tons produced
- For **Cash**: 1 Quantity = \$1,000,000 produced
- For **Air Replacements** or **Tank Replacements**: 1 Quantity = 100 replacements
- For **Troop Replacements**: 1 Quantity = 1000 replacements
- For **Anti-Aircraft**: 1 Quantity = 100 AA Guns

A note will be displayed below the text box to remind you of this fact.

### 12.2.5 Repeat? Checkbox

Check this checkbox if you want the computer to keep producing this same quantity after the first round of production is complete. Un-check this box to only produce this quantity one time.

### 12.2.6 Notes

The game will tell you the maximum quantity you can produce of the selected **Unit-Type** with idle **Factory** capacity. If you want to build more, you will need to reduce production of other items first. You can view a summary of your production on the **Production Summary Screen**, which you can open by clicking the **Summary Button**.

### 12.2.7 Build Time


Some **Unit-Types**, such as **Cash**, **Supply**, or **Fuel**, can be built in one turn. Others will take longer. Ships can take a long time, often several years. If you plan on increasing your navy,

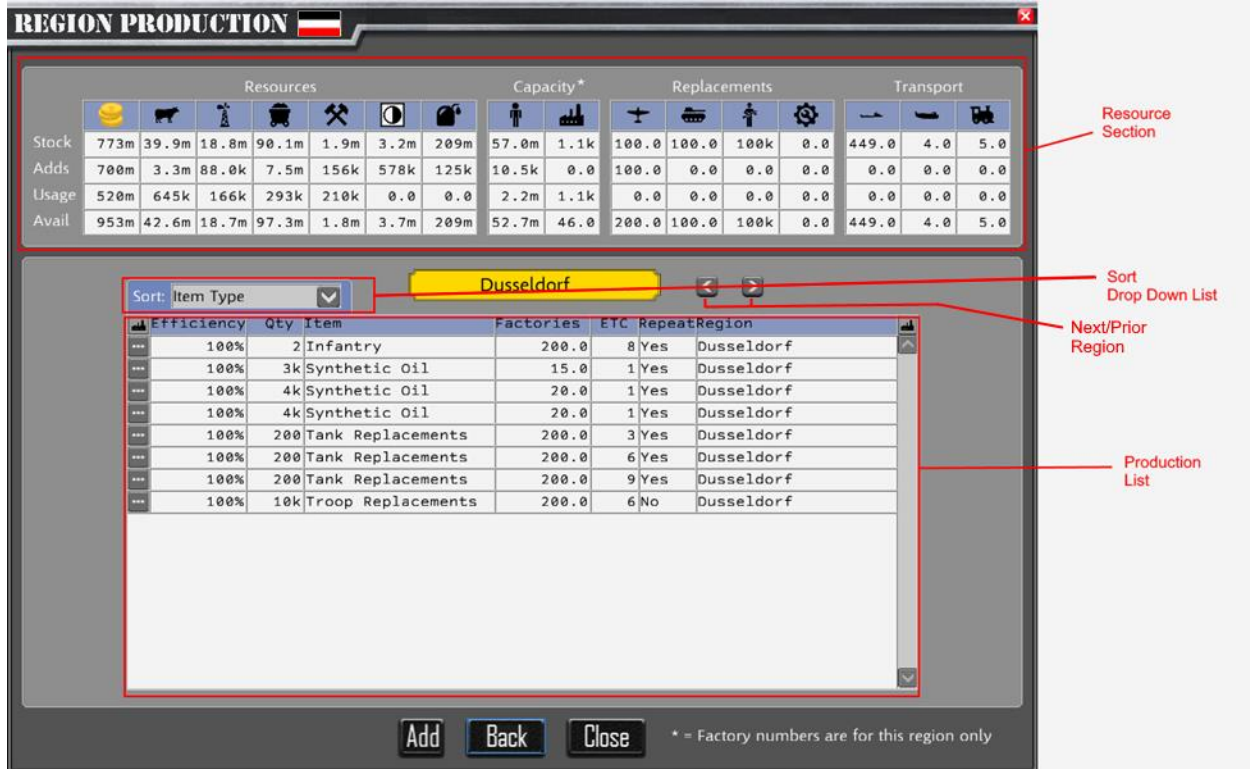
you need to plan ahead. The game will tell you how many turns it will take to produce the **Unit-Type** you have selected.

### 12.2.8 Saving or Canceling your Changes

To save your production **Orders**, click the **Save Button**. Note: It will be disabled until you have filled in the other fields on the form. Click the **Back Button**, to return to the **Production Screen**. Note that the **Back Button** is highlighted in blue. This indicates that the button is the default button on the screen. If you press the **Enter Key** on the keyboard, the **Default Button**, in this case **Back**, will be clicked. The **Close Button** will completely exit from the **Production Screen**.



## 12.3 Production Region Screen

The **Production Region Screen** is accessed from the **Production Screen** (See Section 11.1) by clicking on the **Select Button**  in the **Production List**. The **Production Region Screen** is shown below.



**REGION PRODUCTION**


	Resources							Capacity*		Replacements				Transport		
Stock	773m	39.9m	18.8m	90.1m	1.9m	3.2m	209m	57.0m	1.1k	100.0	100.0	100k	0.0	449.0	4.0	5.0
Adds	700m	3.3m	88.0k	7.5m	156k	578k	125k	10.5k	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Usage	520m	645k	166k	293k	210k	0.0	0.0	2.2m	1.1k	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avail	953m	42.6m	18.7m	97.3m	1.8m	3.7m	209m	52.7m	46.0	200.0	100.0	100k	0.0	449.0	4.0	5.0

Sort: Item Type  Dusseldorf 


Efficiency	Qty	Item	Factories	ETC	Repeat	Region
100%	2	Infantry	200.0	8	Yes	Dusseldorf
100%	3k	Synthetic Oil	15.0	1	Yes	Dusseldorf
100%	4k	Synthetic Oil	20.0	1	Yes	Dusseldorf
100%	4k	Synthetic Oil	20.0	1	Yes	Dusseldorf
100%	200	Tank Replacements	200.0	3	Yes	Dusseldorf
100%	200	Tank Replacements	200.0	6	Yes	Dusseldorf
100%	200	Tank Replacements	200.0	9	Yes	Dusseldorf
100%	10k	Troop Replacements	200.0	6	No	Dusseldorf

Add Back Close \* = Factory numbers are for this region only

### 12.3.1 Resource Section

This section shows the country's resources. It is the same as the information shown on the **Production Screen** (See Section 12.1.1), with one exception. The **Factory**  Column only shows the factories in this **Region** instead of the whole country.

### 12.3.2 Sort Drop Down List

Sort:  Item Type

- Item Type
- Factories




You can use the **Sort Drop Down List** to change the sort order of the **Production List**. By default, it is sorted by **Item Type** Name. You can also sort on **Factory** usage.

### 12.3.3 Next/Prior Region Buttons

These buttons will let you switch to the next or prior region that has factories.

### 12.3.3 Production List

The **Production List** (shown below) shows which items are being produced in the **Region**.

	Efficiency	Qty	Item	Factories	ETC	Repeat	Region	
...	100%	2	Infantry	200.0	8	Yes	Dusseldorf	
...	100%	3k	Synthetic Oil	15.0	1	Yes	Dusseldorf	
...	100%	4k	Synthetic Oil	20.0	1	Yes	Dusseldorf	
...	100%	4k	Synthetic Oil	20.0	1	Yes	Dusseldorf	
...	100%	200	Tank Replacements	200.0	3	Yes	Dusseldorf	
...	100%	200	Tank Replacements	200.0	6	Yes	Dusseldorf	
...	100%	200	Tank Replacements	200.0	9	Yes	Dusseldorf	
...	100%	10k	Troop Replacements	200.0	6	No	Dusseldorf	

#### 12.3.3.1 Select Button



You can click the **Select Button** to view the **Production Details** for this item.

#### 12.3.3.2 Efficiency Column

The **Efficiency Column** should normally be 100%. If it is less than 100%, it means that you don't have enough **Factory Capacity** to efficiently build this item. **Production** is proceeding at the listed percentage of maximum efficiency. Reduced **Efficiency** means that the amount of time to complete the item will be increased. To increase the **Production Efficiency**, you should free up some capacity in the **Region** by reducing **Production** of some other item.

#### 12.3.3.3 Qty Column

This column shows the quantity of the item that is being produced.

#### 12.3.3.4 Item Column

The **Item Column** shows the **Unit-Type** that is being produced.

#### 12.3.3.5 Factories Column

This column shows how much **Factory** capacity is being used to produce this item.

#### 12.3.3.6 ETC Column

This column shows the **Estimate to Complete**. That is, how many turns until the item will be complete and available for use.

#### 12.3.3.7 Repeat Column

The **Repeat Column** indicates whether another item should be produced after the current item is complete. If Yes, another item will start **Production** when this item is complete. If No, the **Factory** capacity that was being used will be freed up for other use.

#### 12.3.3.8 Region Column

The **Region Column** shows where the completed item will be placed on the map. Normally, this will be the same as the **Region** producing the item. However, for **Infrastructure Unit-Types**, you can select a **Region** where the completed Item will be built. For example, if we were producing an **Airbase**, Berlin could be providing the actual **Production**, but the **Airbase** could be built in Rostock. **Infrastructure** Items are the only **Unit-Types** that can be placed in **Regions** outside of the **Region** producing them.

### 12.3.4 Adding New Production

If all the **Factory** capacity is not being used in a **Region** (the **Avail** value for the **Factories Column** of the **Resource List** is greater than zero), you can add an additional item to **Production** in the **Region**. To do so, click the **Add Button** at the bottom of the screen. This will open the **Production Detail Screen** where you can add the new **Production**.

### 12.3.5 Closing the Production Region Screen

To close the **Production Region Screen** and return to the **Production Screen**, click the **Back Button** on the bottom of the screen. To close the **Production Region Screen** and exit from **Production**, click the **Close Button** at the bottom of the screen.

## 12.4 Production Detail Screen

The **Production Detail Screen** is used to **Add, Change, or Delete Production Items**. The screen is shown below.

**PRODUCTION DETAIL**

	Resources							Capacity *		Replacements				Transport		
	Gold	Iron	Steel	Aluminum	Copper	Oil	Gas	Personnel	Factories	Planes	Ships	Trucks	Trains	Subs	Boats	
Stock	773m	39.9m	18.8m	90.1m	1.9m	3.2m	209m	57.0m	1.1k	100.0	100.0	100k	0.0	449.0	4.0	5.0
Adds	700m	3.3m	88.0k	7.5m	156k	578k	125k	10.5k	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Usage	520m	645k	166k	293k	210k	0.0	0.0	2.2m	1.1k	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avail	953m	42.6m	18.7m	97.3m	1.8m	3.7m	209m	52.7m	46.0	200.0	100.0	100k	0.0	449.0	4.0	5.0

**Dusseldorf** ☒ Airbase ☐ Naval Base

Category: None Build: None Qty: 1 Repeat? ☒ In: Dusseldorf

**Item Build Details**

	Gold	Iron	Steel	Aluminum	Copper	Oil	Gas
Costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shortages							

Completion: 01-Sep-39 (this turn)  
Region can produce max: 0

\* = Factory numbers are for this region only

Save Delete Cancel Close Build Max

### 12.4.1 Resource List

The **Resource List** is the same as on the **Production Screen** (See Section 12.1), with one exception. The **Factories** **Column** only includes **Factories** in this **Region**.

### 12.4.2 Region Facilities Section

The **Region Facilities Section** shows if the **Region** has an **Airbase** or **Naval Base**. These are required for building **Air Units** and **Naval Units**, respectively.

### 12.4.3 Item Specification Section

The **Item Specification Section** is where you specify what you want to build, and how much of it you want to build, and for **Infrastructure** Items, where you want to build it.



#### 12.4.3.1 Category Drop Down List

Category:	None	▼
	None	
	Land	
	Air	
	Sea	
	Infrastructure	
	Support	

Use the **Category Drop Down List** to identify the category of **Unit-Type** that you want to produce.

#### 12.4.3.2 Build Drop Down List

Build:	None	▼
	None	
	Armor	
	Cavalry	
	Infantry	
	Mechanized Infantry	
	Militia	
	Paratroops	

Use the **Build Drop Down List** to select the **Unit-Type** you want to build.

##### 12.4.3.2.1 LAND UNIT TYPES

**Armor** – The **Armor Units** will contain a combination of Tanks and supporting **Infantry**. These **Units** can advance through up to two enemy **Regions**, which gives them the opportunity to break through enemy lines. These **Units** require **Fuel** for the **Tanks** and supporting vehicles.

**Cavalry** - These **Units** are a carryover from the previous war. They are troops mounted on horses. They don't do particularly well against WW2 weapons. They are included because they existed at the start of the war, but it is not recommended to build them. They do not require **Fuel**.

**Infantry** – The workhorse of your army. These are troops armed with small arms, machine guns, mortars, and artillery. They are good at defending, and for following up your **Armor Units**. They are strong on attack, but slow. They do not require **Fuel**.

**Mechanized Infantry** – These are fully motorized **Infantry**. Some versions contain some **Tanks** as well. They have great motorized support, so they can also advance through up to two enemy **Regions** which give them the opportunity to advance with your **Armor**, and exploit breakthroughs. These **Units** require **Fuel** for the tanks and supporting vehicles.

**Militia** – These are smaller **Infantry Units**, more lightly armed. Best suited for light garrison duties.

**Paratroops** – These are a specialized form of **Infantry**. They have the unique ability to fly to a target and drop behind enemy lines. As a result, they have less artillery than regular **Infantry**, and they are very expensive due to the extra training and aircraft used to transport them. These **Units** do not consume **Fuel**.

#### 12.4.3.2.2 AIR UNIT-TYPES

**Fighter** – These aircraft are best used to attack enemy aircraft and defend friendly bombers, but they can be used to strafe enemy troops, and some do have the ability to carry small bombs and conduct bombing missions. These **Units** consume **Fuel**.

**Tactical Bomber** – These aircraft could be used to either attack enemy ground targets or conduct **Strategic Bombing**. They have a shorter range and carry less **Bomb Load** than **Strategic Bombers**. These **Units** consume **Fuel**.

**Strategic Bomber** – These **Units** were designed to conduct **Strategic Bombing** against **Infrastructure** in enemy **Regions**. They tend to have the longest range of any aircraft and can carry much larger **Bomb Loads**. These can, however, also be used to attack enemy **Land Units**. These **Units** consume **Fuel**.

**Rocket** – Germany built large numbers of **Rockets** to bomb England during the war. You must **Research** the **Rocket Technology** in **Order** to build these **Units**. These are single-use **Units**. Once they conduct their bombing mission, they are destroyed. These **Units** do not consume **Fuel**. They used a non-petroleum based propellant. Anyone can **Research** this **Technology**.

**Nuke** – Nuclear bombs were used during the war by the USA to shorten the war against Japan. They are devastating against enemy population. You must research **Nuke Technology** to build **Nukes**. Also, they require an advanced delivery mechanism. So, you must also research **Strategic Bomber Tech IV** or **Rocket Tech IV** to build **Nukes**. **Nukes** are a single-use weapon and are destroyed once used. **Nukes** do not consume **Fuel**. Anyone can build **Nukes** but the cost to **Research** them is very high.

#### 12.4.3.2.3 SEA UNIT-TYPES

**Submarine** – **Submarines** can travel on the surface or submerge below the water. As a result, they are hard to detect. They have minimal surface guns. They are deadly because of the torpedoes they carry. These can devastate enemy shipping and can sink the largest **Battleship**. Once detected, they have very weak defense and can easily be sunk. In the game a **Submarine Unit** consists of a six-**Submarine Squadron**. Individual **Submarines** can be lost from a **Unit** without destroying the **Unit**. The **Unit** is not destroyed until all six **Submarines** are destroyed. **Submarines** consume **Fuel**.

**Destroyer** – **Destroyers** are small ships designed to escort larger ships, and screen them from enemy **Submarines**. These are also very effective in hunting enemy **Submarines** and are equipped with depth charges which can be deadly to enemy **Submarines**. **Destroyers** are lightly armored and can easily be sunk, but they are inexpensive to build. They also have a higher speed. In the game, each **Destroyer Unit** contains a six-**Destroyer Squadron**. Individual **Destroyers** can be lost from a **Unit** without destroying the **Unit**. The **Unit** is not destroyed until all six **Destroyers** are sunk. **Destroyers** consume **Fuel**.

**Cruiser** - **Cruisers** are larger and more heavily armored than a **Destroyer**, with larger guns. But they were less well armored and armed than **Battleships**. They were often used to escort larger ships, but they were tough enough that they could be used as raiders against enemy shipping. In the war, a combination of light **Cruisers** and heavy **Cruisers** were built. In the game, all new **Cruisers** built will be built with heavy **Cruiser** specifications. However, in the game, existing Light **Cruisers** that existed at the start of the war are included with their Light **Cruiser** specifications. So, make sure you look at **Cruiser** specifications in the **Unit Details Section** of the **Information Panel**. **Cruiser Units** represent a single **Cruiser** and they are removed when sunk. **Cruisers** that exist at the start of the war will have their historical names. New **Cruisers** that you produce will be assigned names from a list of historical names that were built during the war. **Cruisers** can also conduct **Shore Bombardment** of enemy **Land Units**. **Cruisers** consume **Fuel**.

**Battleship** – **Battleships** are the largest and most heavily armed and armored ships in the game. As the war went on, experience showed that the stars of the navies were the Aircraft **Carriers**, so **Battleships** were assigned mostly as **Carrier Escorts**, but they were also used for **Shore Bombardment**. Their massive guns were like floating artillery. They can be used in the game for **Shore Bombardment** of enemy **Units** in coastal **Regions**. The USA did build a number of new **Battleships** during the war. **Battleship Units** contains a single ship. When it is sunk, it is removed from battle. **Battleships** that exist at the start of the war will have their historical names. New **Battleships** that are built will be assigned a name from historical names that were used during the war. **Battleships** consume **Fuel**.

**Carrier** – Aircraft **Carriers** proved very effective during the war. They could allow a country to project air power all over the world. **Carriers** are the only **Naval Unit** in the game that can carry aircraft. These are effective both against enemy ships as well as ground troops. **Carrier Units** represent a single ship. **Carriers** that exist at the start of the war will have their historical names. New **Carriers** you build will be assigned a name from a list of names used historically. All ships can be **Upgraded** while docked at a **Naval Base**, if you

have researched new technology for them. Don't forget that if you research newer, better aircraft, don't forget to **Upgrade** your **Carriers**. They will receive the latest planes during the **Upgrade**. **Carriers** consume **Fuel**.

#### 12.4.3.2.4 INFRASTRUCTURE UNIT-TYPES

**Convoy** – Select this **Unit-Type** to build convoy ships. These ships will be added to your convoy pool.

**Transport** – Select this **Unit-Type** to increase the number of Land Units you can transport by sea.

**Airbase** – You need an **Airbase** to host or build Air Units. Select this **Unit-Type** to build an **Airbase** in a **Region** that doesn't contain one, or to increase the **Airbase** level in a **Region** that has an Airbase.

**Anti-Aircraft** – Select this **Unit-Type** to build Anti-Aircraft Guns in a **Region**. These will automatically attempt to intercept attacking Aircraft. Each point of quantity that you produce will create 100 guns in a **Region**.

**Factory** – Select this **Unit-Type** to increase your **Factory** capacity in the region.

**Fortification** – Select this **Unit-Type** to increase the **Fortification** Level in the region.

**Naval Base** – Select this **Unit-Type** to increase the **Port Level** in a **Region**. If you increase a **Port Level** above 1, it will become a **Naval Base**.

**Radar** – Select this **Unit-Type** to increase the **Radar Level** in a **Region**. This will increase your ability to detect attacking enemy aircraft.

#### 12.4.3.2.5 SUPPORT UNIT-TYPES

**Cash** – Select this **Unit-Type** to produce **Cash** (dollars). **Cash** in the game is an abstraction which is a combination of currency and consumer goods. It is used to pay for **Salaries**, **Research**, **Trade** and **Espionage**. Each point of quantity you enter will produce \$1,000,000. So, if you enter a quantity of 5, you will produce \$5,000,000.

**Fuel** – Select this **Unit-Type** to refine **Fuel** from **Oil**. Each point of quantity you enter will produce 1000 tons of **Fuel**. So, if you enter a quantity of 2, you will produce 2000 tons of **Fuel**.

**Supply** – Select this **Unit-Type** to produce **Supply** for your military **Units**. **Supply** represents the **Food** and Munitions that your **Units** need to operate. Each point of quantity you enter will produce 1000 tons of **Supply**. So, if you enter a quantity of 3, you will produce 3000 tons of **Supply**.

**Synthetic Oil** – If you have **Researched Synthetic Oil**, you will be able to produce **Synthetic Oil**. **Synthetic Oil** is produced from **Coal** to produce **Oil**, which can then be refined into **Fuel**. If your country is short on **Oil** and can't **Trade** for enough **Oil** to meet your needs, you might consider **Researching** and producing **Synthetic Oil**. All countries start with the technology to produce a small amount of **Synthetic Fuel**. If you **Research** this **Technology**, you can produce larger quantities through better processes. Each point of qty you enter will produce 1000 tons of **Synthetic Fuel**.

**Air Replacements** – As your **Air Units** take damage, some aircraft will be shot down. Rather than producing a **Unit**, you can build replacement aircraft by producing **Air Replacements**. At the end of the turn, the game will reinforce damaged **Air Units** with **Air Replacements**. Note that your **Unit's Experience** level will drop (be diluted) by the raw airmen you receive with the replacement aircraft. Each point of quantity that you enter to produce, will produce 100 replacement aircraft.

**Tank Replacements** – As your **Armor Units** take damage, some tanks will be lost. Rather than producing a new division, you can replace those lost tanks by building **Tank Replacements**. At the end of the turn, the game will reinforce damaged **Armor Units** with **Tank Replacements**. Note that your **Unit's Experience** level will drop (be diluted) by the raw tank crews you receive with the replacement tanks. Each point of quantity that you enter to produce, will produce 100 replacement tanks.

**Troop Replacements** – As your **Land Units** take damage, some troop casualties will occur. Rather than producing a new division, you can replace the lost troops by building **Troop Replacements**. At the end of the turn, the game will reinforce damaged **Land Units** with **Troop Replacements**. Note that your **Unit's Experience** level will drop (be diluted) by the raw troops that you receive. Each point of quantity that you enter to produce, will produce 1000 troop replacements.

**Repair Points** - When the enemy bombs your **Regions**, your **Infrastructure** may be damaged. If you build **Repair Points**, at the end of the turn, the game will repair the damage using your **Repair Points**.

#### 12.4.3.3 Qty Text Box

Enter the Quantity you want to build.

- For Most **Units**: 1 Quantity = 1 **Unit** produced
- For **Fuel, Supply or Synthetic Oil**: 1 Quantity = 1,000 tons produced
- For **Cash**: 1 Quantity = \$1,000,000 produced
- For **Air Replacements** or **Tank Replacements**: 1 Quantity = 100 replacements
- For **Troop Replacements**: 1 Quantity = 1000 replacements
- For **Anti-Aircraft**: 1 Quantity = 100 AA Guns

A note will be displayed below the text box to remind you of this fact.

#### 12.4.3.4 Repeat Check Box

Check this checkbox if you want the computer to keep producing this same quantity after the first round of production is complete. Un-check this box to only produce this quantity one time.

#### 12.4.3.5 In Drop Down List

This drop-down list will only appear if you select an applicable **Infrastructure** Item to produce. This will allow you to have the item to be produced with the current **Region** but added to the “In” **Region** once complete. For example, you could produce an **Airbase** using the **Factory** resources in Berlin, but have it built in Rostock. If you don’t select a different **Region** the item will be produced and built in the currently producing **Region**.

#### 12.4.4 Item Build Details Section

This section will show many resources are needed to build the quantity of the item you want to produce. The first row of the grid will show the cost to build. The second row will show any items you don't have enough quantities of to build the item. If you don't have enough resources on hand, you can't build the item. One exception is a shortage of **Factories**. If you don't have 100% of the **Factories** you need, you can still build the item, but it will take longer to complete. To the right of the grid a picture of the item you are producing will be displayed. Also, the **Completion Date** is shown to the right. This is when the item will be available for use.

Here is a list of the columns in the **Build Details Grid**:



**Cash** – This is the amount of **Cash** needed to produce the quantity of item. Typically, this goes to paying salaries for the soldiers in a military **Unit** you are building. They are training while the **Unit** is being produced.



**Food** – **Food** needed to produce the item. Typically, this is to feed the soldiers in the **Unit** being produced. They are training while the **Unit** is being produced. **Food** is also used to make **Supply**.



**Oil** – Crude **Oil** is used to refine crude oil into **Fuel**.



**Coal** – **Coal** is typically used to produce the steel for the item, and to power the electrical plants powering the **Factories**.



**Metal** – **Metal** is typically made into steel. Many items need steel for their **Production**.



**Manpower** – This is the **Manpower** needed to produce the **Unit**.



**Factory** – This is the **Factory** capacity needed to produce the item.

#### 12.4.5 Saving your changes.

After you have entered your **Build Specifications**, Click the **Save Button** to add your item to the **Factories** to be produced. The **Save Button** will be displayed until you correct any errors shown on the screen.

### 12.4.6 Closing the Screen

To return to the previous screen, without saving your changes, click the **Cancel Button**. To cancel your changes and exit Production, click the **Close Button**.

### 12.4.7 Deleting a Production Item

If you are viewing an existing **Production** Item, you can delete it from **Production** by clicking the **Delete Button**. Any unused resources and your **Manpower** will be returned to your country. **Factory** capacity will be freed for other use.

### 12.4.8 Updating a Production Item.

If you are viewing an existing **Production** Item, the only thing you can change, is the **Repeat Check Box**. If you change this **Check Box**, click the **Save Button** to commit your changes.


### 12.4.9 Build Max Button

If you would like to use all the idle capacity to produce the currently selected item, you can press the **Build Max Button**. This will create the maximum possible production for that item in the region. The game will ask you to confirm before it creates the new production.



## 12.5 Production Summary

The Production Summary Screen (shown below) will show you how many of each item are currently being produced by your country, the number of factories being used for that production, and the percentage of resources used by each item in production.

PRODUCTION SUMMARY 										
Sort: Type										
Type	Producing	On-Hand	Factories	Factory %	Cash	Food	Oil	Coal	Metal	
Airfield	0	27	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	▲
Air Replacements	300	100	300	1.49%	0.04%	0.00%	0.00%	0.65%	0.28%	
Anti-Aircraft	0	2k	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Armor	3	9	900	4.48%	4.79%	0.11%	0.00%	8.44%	13.41%	
Battleship	2	3	200	1.00%	0.01%	0.00%	0.00%	0.66%	0.63%	
Carrier	1	0	100	0.50%	0.02%	0.01%	0.00%	0.66%	0.95%	
Cash	400m	1b	3,200	15.93%	0.00%	0.00%	0.00%	7.03%	3.20%	
Convoy	5	449	150	0.75%	0.03%	0.00%	0.00%	12.33%	23.36%	
Cruiser	2	10	200	1.00%	0.05%	0.01%	0.00%	1.25%	1.76%	
Destroyer	0	5	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Factory	0	21k	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Fighter	3	4	600	2.99%	0.29%	0.00%	0.00%	1.44%	0.84%	
Fortification	0	14	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Fuel	125k	512k	313	1.56%	0.00%	0.00%	0.00%	0.52%	0.00%	
Infantry	32	86	3,200	15.93%	74.01%	1.68%	0.00%	11.69%	12.22%	
Mechanized Infantry	2	2	450	2.24%	4.46%	0.10%	0.00%	2.47%	3.32%	
Militia	0	1	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Naval Base	0	14	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Paratroops	1	0	400	1.99%	6.57%	0.07%	0.00%	1.46%	1.52%	
Radar	0	0	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Repair Points	100	0	5,000	24.89%	0.00%	0.00%	0.00%	8.45%	0.10%	
Submarine	10	10	1,000	4.98%	0.23%	0.01%	0.00%	4.14%	4.76%	
Supply	578k	3m	2,312	11.51%	0.00%	97.79%	0.00%	15.85%	23.15%	
Synthetic Oil	13k	0	65	0.32%	0.00%	0.00%	0.00%	14.66%	0.00%	
Tactical Bomber	2	5	500	2.49%	0.77%	0.01%	0.00%	1.56%	1.40%	
Tank Replacements	900	100	900	4.48%	0.61%	0.01%	0.00%	6.17%	9.01%	▼


Close

### 12.5.1 Sort Drop Down Box

The Sort Drop Down Box will allow you to change the order of list to the selected value:


- Item Type
- Producing
- On-Hand
- Factories
- Cash
- Food
- Oil
- Coal
- Metal

### 12.6 Completed Production

After your **Factories** complete the **Production** of an item, it will be placed in the **Region** for use. A message will be added to the **Messages Panel** at the bottom of the **Main Map**, unless the produced item is a commodity such as **Fuel**, **Supply** or **Cash**. Also, a **Production Complete Flag**  will be displayed above the **Population Icon** in the **Region** on the **Main Map**.

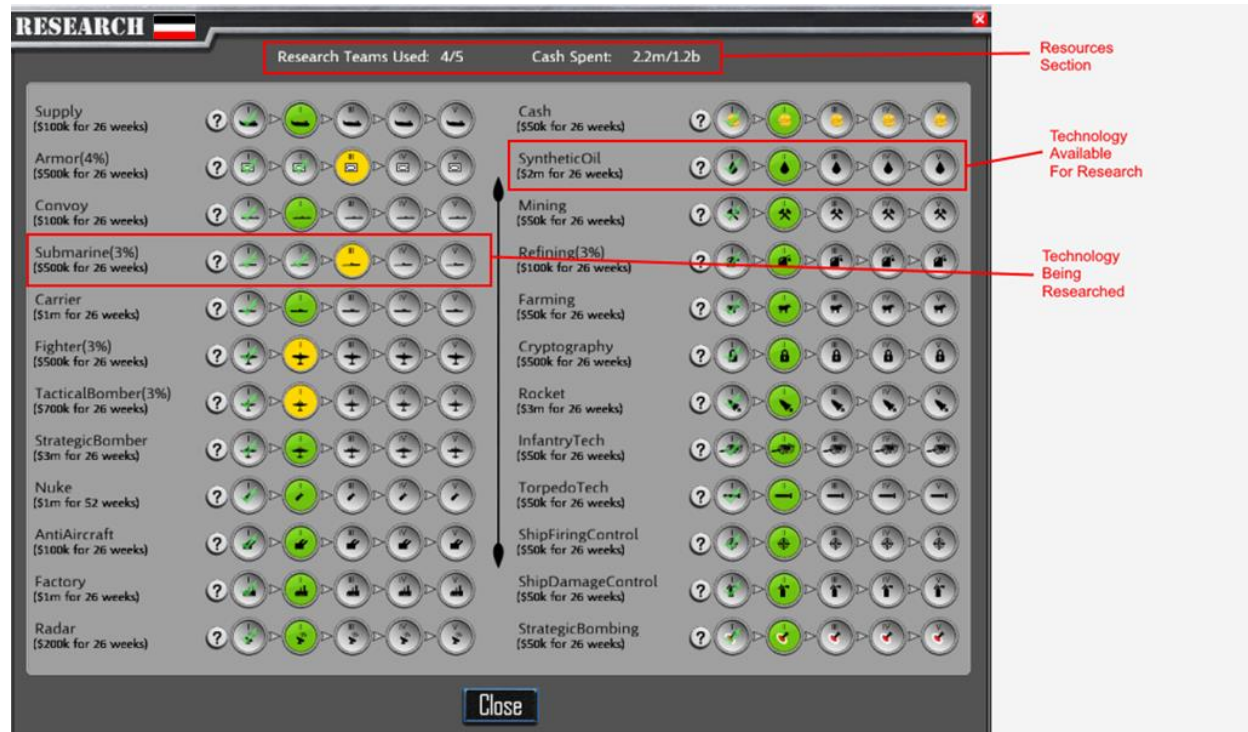
## 13 Research

**Technology** played an important role during WW2. Tanks became larger, with heavier armor, and bigger guns. Aircraft became faster with increased ranges. New weapons were like **Rockets** and Nuclear Bombs were created. It is important that your country invest in research, or you may find your forces facing superior and more deadly technology. Based on your country, you will have a fixed number of **Research Teams** that you can use to research new **Technologies**. Each team can research one new technological change per week. Different technologies have a different research cost. Some, like **Nukes**, are very expensive to **Research**. Others are much cheaper. To open the **Research Screen**, click on

the **Research Button**  on the **Action Menu**. Each **Technology** has 5 **Research Levels**. Every country starts with at least **Research Level 1** on every **Technology**. **Research Levels** range from 1 to 5. New **Technologies** will be used in any new **Units** that you produce. Existing ships can be upgrade in a **Naval Base** to use applicable new **Technologies**. For example, you could upgrade a ship to include **Radar**, or **Upgrade a Carrier** to use new aircraft types that you have **Researched**.

## 13.1 Research Screen

The **Research Screen** is shown below. This is where you assign your **Research Teams** to **Research** different **Technologies**.



### 13.1.1 Resources Section

#### 13.1.1.1 Research Teams Used

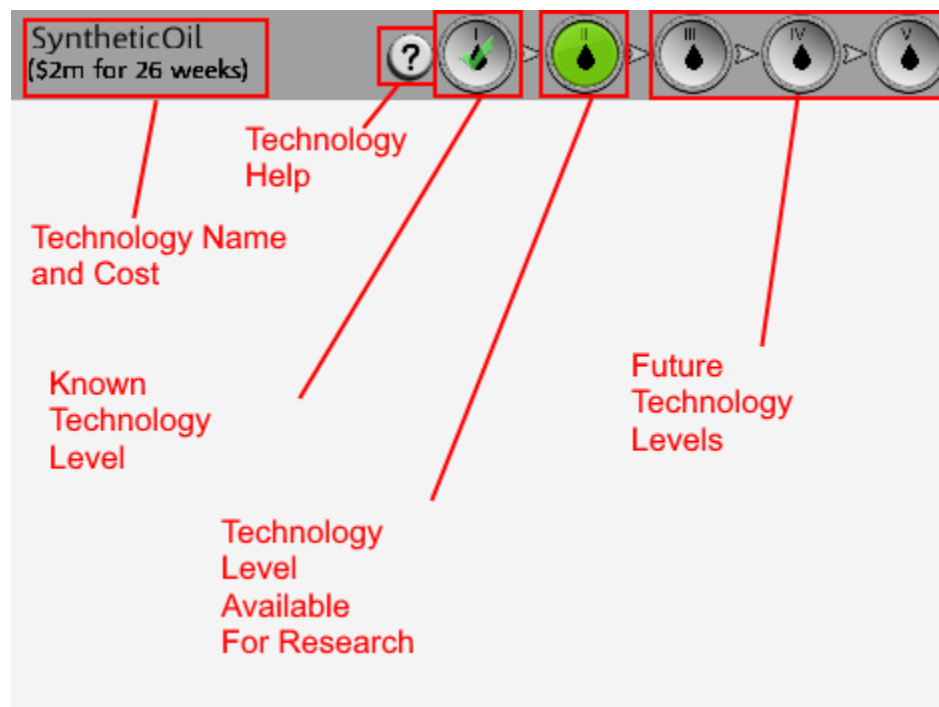
This section shows how many of the **Research Teams** available to your country are in use. In this example, 4 out of 5 teams are busy researching new **Technologies**.

#### 13.1.1.2 Cash Spent

This section the cost of your current **Research**, and the total available **Cash** you have available. In this example, you are spending \$2.2 million and your country has a total of \$953 million available.

## 13.2 Technology Available for Research

Each **Technology** that is available to **Researched** is shown as follows:



### 13.2.1 Technology Name and Cost

This shows the **Technology Name**, the **Cost Per Week to Research**, and the number of **Weeks of Research** required to learn each **Technology Level**. In this example, The **Technology Name** is **Synthetic Oil**. It will cost \$2 million per week for 26 weeks to learn each **Technology Level**.

### 13.2.2 Technology Help Button

 If you want to learn more about the **Technology**, and the advantages of learning each **Technology Level**, you can press the **Help Button**. This will open the **Research Help Screen**. (See Section 13.5)

### 13.2.3 Known Technology Button



The **Known Technology Button** is shown with a green checkmark on a grayed button. In icon representing the **Technology** is shown. In this example, a drop of **Oil**, since this is the **Synthetic Oil Technology**. There is also a Roman Numeral

showing the **Technology Level**. The Roman Number will be I, II, III, IV or V to represent each of the 5 **Technology Levels**. In this example, this button indicates that **Technology Level 1** or **Synthetic Oil Technology** is known by your country.

### 13.2.4 Technology Available for Research Button



The **Technology Available for Research Button** is shown with a green background, indicating that this **Technology** can be researched. The button shows an icon representing the **Technology**, in this example, **Synthetic Oil**. There is a Roman number on the button showing the **Technology Level to be Researched**. In this example, it shows “II”, meaning that if you click this button, you will start researching **Technology Level 2**.

### 13.2.5 Future Technology Level Button



You can only **Research** the next higher **Technology Level** to the latest one you know. Those higher than that are not yet available to **Research** and are shown as a grayed-out button.

## 13.3 Technology Being Researched

If a **Technology Level** is currently being **Researched**, it will be shown with a lit yellow button as shown below.



In the example shown, **Submarine Technology Level 3** is being **Researched**. To cancel this **Research** simply click the lit button. The **Technology Research** will cease. Any **Research** you have conducted up to this point will be retained. If you resume **Research** later, it will proceed from where you left off.


### 13.4 Closing the Research Screen

To close the **Research Screen**, click the **Close Button** at the bottom of the screen.

## 13.5 Research Details Screen

The **Research Details Screen** (shown below) shows the advances you will receive for researching a new **Technology Level**.

**RESEARCH DETAILS**

Unit Attribute: 

Technology Type: **Armor**

Current Technology Level: **Improved Medium Tanks**

Researchable Technology Level: **Heavy Tanks**

Future Technology Level: **Improved Heavy Tanks**

Research improvements to your tanks. This includes main guns, auxiliary guns, powerplant, range, and armor thickness. Also develops new tactics for your armored formations. See the chart below for the impact of each level of research.

Level of Research

Attribute	Light Tanks	Medium Tanks	Improved Medium Tanks	Heavy Tanks	Improved Heavy Tanks
Troops	11,800	11,800	11,800	11,800	11,800
Small Arms	5.41	5.68	5.95	6.23	6.5
Tanks	360	360	360	360	360
Armor	1.83"	1.75"	2.75"	2.5"	4.4"
Tank Gun Size	3.8"	3"	3"	3.5"	3.5"
Other Vehicles	1,900	1,900	1,900	1,900	1,900
Range	440 miles	440 miles	440 miles	447 miles	770 miles
Speed	26 mph	24 mph	29 mph	23 mph	22 mph
Artillery	65	65	65	65	65
Artillery Size	5"	6"	5"	5"	6"
AT Guns	50	50	70	70	70
AT Gun Size	1.5"	3"	3"	3.5"	3.5"
AA Guns	12	12	12	12	12

**Back**

### 13.5.1 Attribute Column

This column identifies attributes that may be improved by **Researching** this **Technology**.

## 13.5.2 Technology Level Column

The remaining five columns on the screen show the attribute changes for each of the **Technology Levels**. The name of the **Technology Improvement** is shown at the top of the column. The attribute improvements are shown in the column body.

### 13.5.2.1 Current Technology Level Column

The currently known **Technology Level** is shown with black text for the attribute values.

### 13.5.2.2 Researchable Technology Level Column

The **Researchable Technology Column** shows the attribute improvements if you **Research** this **Technology Level**. The text is shown in green for the attribute values.

### 13.5.2.3 Future Technology Levels Column(s)

These columns show improvement that can be achieved at later **Technology Levels**. Remember, **Technology Levels** must be researched sequentially, so in this example, Germany knows Armor **Technology Level 2**, can **Research Technology Level 3**, but **Research Technology Levels 4 and 5** aren't available yet. **Future Technology Level Attribute Values** are shown in blue text.

## 13.5.3 Returning to the Research Screen

To return to the **Research Screen**, click the **Back Button** at the bottom of the screen.




## 14 Trade

You may not have all the resources you need to produce everything you'd like. Of course, by conquering new **Regions**, you may acquire additional resources. But a short-term solution is to **Trade** with other countries for things that you need.

You can only **Trade** with countries in your **Alliance** or that are **Neutral**. Countries in the **Axis Alliance** include **Germany**, **Japan**, and eventually **Italy**. Countries in the **Allies Alliance** include the **UK**, **France**, **China** and eventually the **USA** and **USSR**. All other countries in the game are **Neutral** and can be traded with. Among **Neutral** Countries, some may be friendly or hostile toward your country. If they are friendly, you can get a better trade deal than if they are hostile. To see a country's attitude towards you, see Section 15. **Diplomacy**.

When you **Trade** with a country, you must provide the transportation for the goods via convoys. Land **Convoys** are provided at no cost. However, if your **Trade** must cross an ocean, you will have to provide **Convoy** Ships. Also, note that **Trade** is not instantaneous. If you initiate a **Trade** deal with another country, it must travel from there to your country. This can take multiple turns.

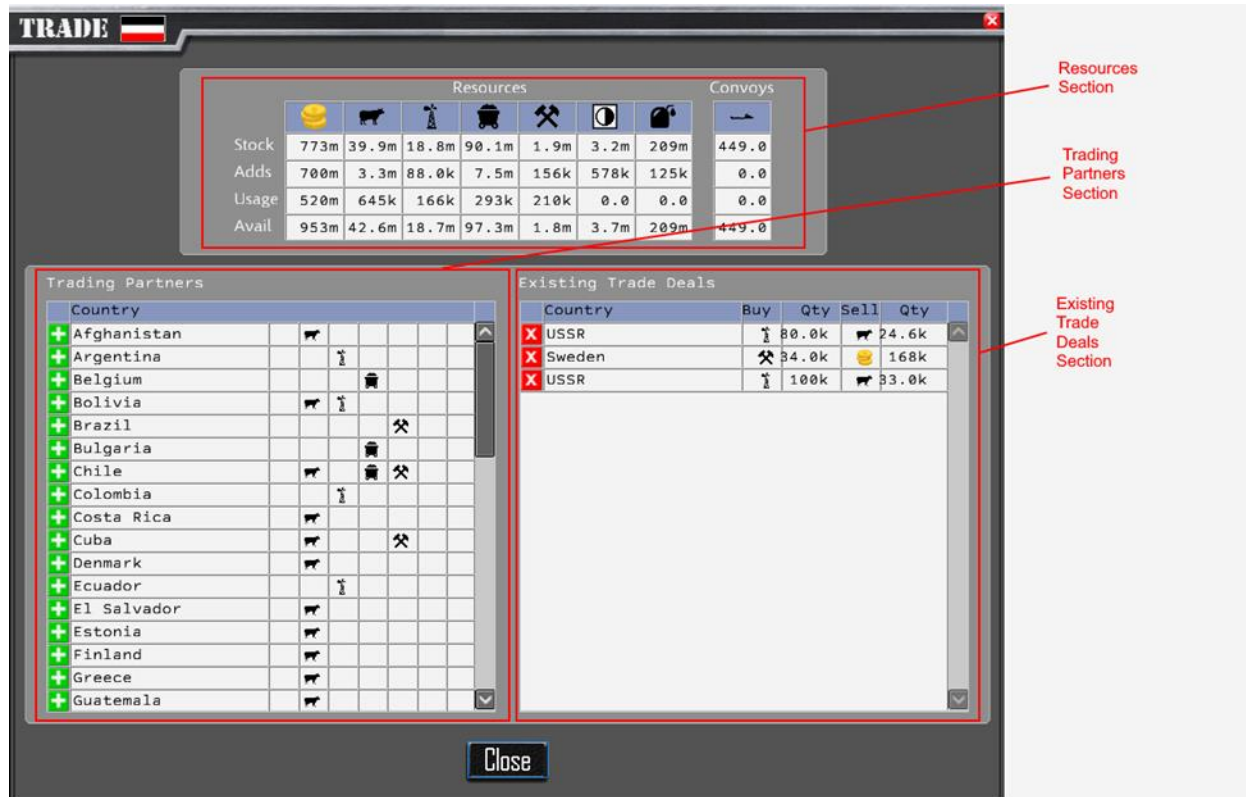
Once you establish a **Trade** deal with another country, it will continue until either party cancels it. A **Shipment** will be sent each turn the **Trade** is in effect. If a trade requires **Shipment** over via ocean, and you don't have enough **Convoy** ships, the **Trade** will be suspended until such time as you do.

If any of your **Trades** are still at the end of a turn, they will be displayed in the **Region** they are in, with a **Shipment** Icon .

**Convoys** can be intercepted by enemy ships and **Submarines**. If they are sunk, their cargo is lost at sea.

## 14.1 Trade Screen

The **Trade Screen** (shown below), is invoked by clicking on the **Trade Button**  on the **Action Menu**. The screen shows your existing **Trades**, lists potential **Trading Partners**, and allows you to **Add** or **Delete** a **Trade**.



The screenshot shows the Trade Screen interface. It has a title bar with 'TRADE' and a Polish flag icon. The main content is divided into three sections:

- Resources Section:** A table showing stock, adds, usage, and availability for various resources and convoys.
- Trading Partners Section:** A list of countries with checkboxes and icons for trade.
- Existing Trade Deals Section:** A table showing active trade deals between countries.

Red boxes highlight these sections, and red arrows point to them from labels on the right. A 'Close' button is at the bottom.

	Resources							Convoys
Stock	773m	39.9m	18.8m	90.1m	1.9m	3.2m	209m	449.0
Adds	700m	3.3m	88.0k	7.5m	156k	578k	125k	0.0
Usage	520m	645k	166k	293k	210k	0.0	0.0	0.0
Avail	953m	42.6m	18.7m	97.3m	1.8m	3.7m	209m	449.0

Country						
+ Afghanistan						
+ Argentina						
+ Belgium						
+ Bolivia						
+ Brazil						
+ Bulgaria						
+ Chile						
+ Colombia						
+ Costa Rica						
+ Cuba						
+ Denmark						
+ Ecuador						
+ El Salvador						
+ Estonia						
+ Finland						
+ Greece						
+ Guatemala						

Country	Buy	Qty	Sell	Qty
X USSR		80.0k		24.6k
X Sweden		34.0k		168k
X USSR		100k		33.0k

### 14.1.1 Resources Section

The **Resource Section** (shown below) provides details about your country's resources.

	Resources							Capacity		Replacements				Transport		
Stock	773m	39.9m	18.8m	90.1m	1.9m	3.2m	209m	57.0m	21.3k	100.0	100.0	100k	0.0	449.0	4.0	5.0
Adds	700m	3.3m	88.0k	7.5m	156k	578k	125k	10.5k	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Usage	520m	645k	166k	293k	210k	0.0	0.0	2.2m	12.8k	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avail	953m	42.6m	18.7m	97.3m	1.8m	3.7m	209m	52.7m	8.5k	200.0	100.0	100k	0.0	449.0	4.0	5.0

This grid provides an overall picture of the state of your country's economy. Across the top are the main resources that you can trade. We'll describe those in a bit. There are four rows to the grid that we'll describe in the next section.

The numbers in the grid are abbreviated to conserve space. For more information see **6.4.2.1 Number Representation in the Game.**

#### 14.1.1.1 Grid Row Definitions

**Stock** - This represents the stockpiles that you have on hand for each resource.

**Adds** - This number represents the amount of this resource that you produced or received in **Trade** from last turn.

**Usage** - This number represents the amount used in your **Factory Production** this turn plus the amount you traded away to other countries this turn, plus the amount you used in other areas of your economy (e.g. **Research**, **Salaries**, and **Espionage**).

**Avail** - This number represents the amount you have available for use this turn.

#### 14.1.1.2 Grid Column Definitions

These are the resources shown in the grid.



- **Cash** (dollars) - **Cash** is used to pay **Salaries**, **Research**, and **Espionage**. It is an abstraction of currency and consumer goods.



- **Food** (tons) - **Food** is used feed your population and troops.



- **Oil** (tons) - **Oil** is refined into **Fuel** to provide gasoline and diesel fuel for vehicles, aircraft, and ships.



- **Coal** (tons) - **Coal** is used to make steel and to produce electricity used to power the **Factories**.



- **Metal** (Tons) - This is an abstraction of various metal ores, principally iron, but also other metals used in **Production**.




- **Supply** (Tons) - This is **Food** and munitions used by all types of military **Units**. Military **Units** do not consume **Food** directly. It must be manufactured into **Supply**, representing it's more transportable and storable form.



- **Fuel** (Tons) - This is gasoline and diesel fuel used to power vehicles, aircraft and ships.




- **Manpower** - This is the portion of your population that can be utilized for **Production** in **Factories**, or as **Troops**.

 - **Convoy Ships (Ship)** – These are the ships that carry your **Trade** goods overseas. These also are used to carry **Supply** and **Fuel** overseas. Each ship can carry 11,000 tons of **Trade** goods.

### 14.1.2 Trading Partners Section


Trading Partners					
Country					
+ Afghanistan					
+ Argentina					
+ Belgium					
+ Bolivia					
+ Brazil					
+ Bulgaria					
+ Chile					
+ Colombia					
+ Costa Rica					
+ Cuba					
+ Denmark					
+ Ecuador					
+ El Salvador					
+ Estonia					
+ Finland					
+ Greece					
+ Guatemala					

The **Trading Partners Section** shows a list of all the countries that will **Trade** with your country. Next to them are the resources that they have available for **Trade**.

At the beginning of each row is an **Add Button** . To initiate a **Trade** with that country, click its **Add Button**.

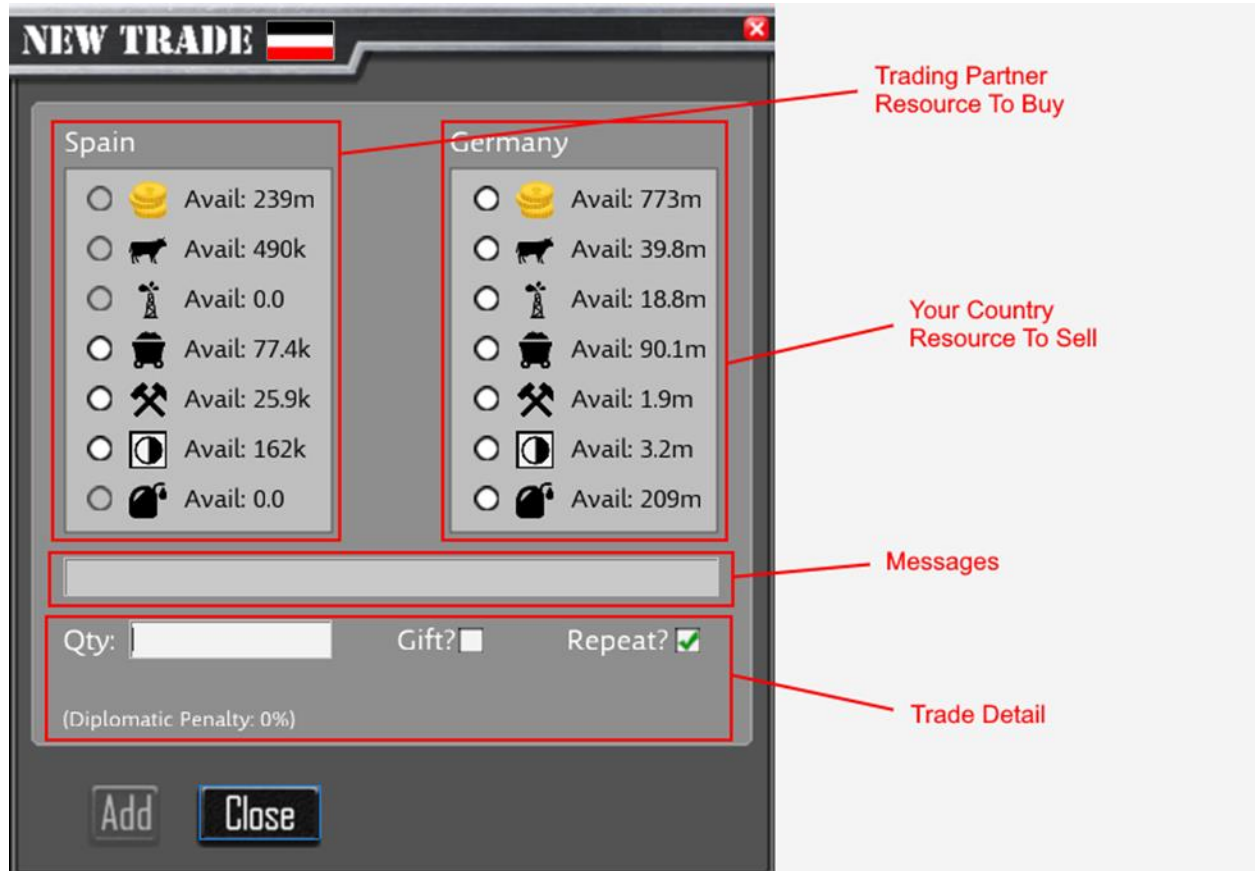
### 14.1.3 Existing Trade Deals Section

Existing Trade Deals				
Country	Buy	Qty	Sell	Qty
 USSR		80.0k		24.6k
 Sweden		34.0k		168k
 USSR		100k		33.0k

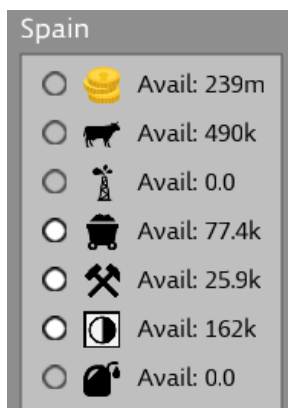
This section shows your existing **Trades**. The **Country Column** shows your trading partner. The **Buy Column** shows the resource you are buying from them, following by the quantity you are purchasing. The **Sell Column** shows the resource you are selling, followed by the quantity you are selling. To Delete a Trade Deal, click the **Delete Button**  next to the country name.

## 14.2 New Trade Screen

After you click the **Add Button** in the **Trading Partner List** (See Section 14.1.2), the **New Trade Screen** is displayed (shown below). You will use this screen to initiate new **Trade Deals**.



### 14.2.1 Trading Partner Resource to Buy

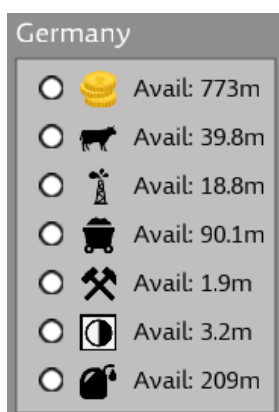


This section of the information shows resources your **Trading Partner** has available to sell. In this example, your **Trading Partner** is Spain. After each resource, it shows the amount of that resource your **Trading Partner** will sell.

For the explanation of the list of icons, see section 14.1.1.2.

To select a resource for purchase, click on the radio button next to the resource. If the **Trading Partner** doesn't have the resource, or isn't willing to **Trade** it, the radio button will be disabled.

### 14.2.2 Your Country Resource to Sell



This section shows the resources your country has available to **Trade** to the **Trading Partner**.

To select a resource to sell, click the Radio Button next to the Resource Icon.

### 14.2.3 Messages

If there are any problems making the **Trade**, they will appear in this section. For example, if you don't have enough available **Convoys** to make the **Trade**, that message will appear here.

### 14.2.4 Trade Specification

In this section, you will specify how much of the resource you want to **Trade** for. When you enter the quantity, the **Trading Partner** will list the **Terms** of the **Trade**. For example, if you wanted to buy 100 (tons) of **Metal**, paying with **Cash**, the **Trading Partner** would respond with "Terms: Give 495 Cash for 100 Metal". See screen shot below. This means that you will

be paying \$495 for 100 Tons of Metal. Note that below the **Terms** you will see the effect of your **Diplomatic Relations** on the **Terms**. In this case, it is 0%. These means you are paying normal market prices. If you had better relations with Spain, you would pay some percentage less. If you had hostile relations with Spain, you would be paying some percentage amount more.



The **Repeat Check Box** indicates whether you want this to be an ongoing **Trade**. If checked, a **Shipment** of this amount will occur each turn. If not checked, this **Trade** is for a single turn, and only one **Shipment** will be made as part of the **Deal**.

If you agree to the **Terms**, click the **Add Button** to make the **Trade**. Otherwise, click the **Close Button** to turn down the **Trade**.

## 15 Diplomacy

**Diplomacy** has two impacts in the game. The first, and most important, is your war status with a country. All countries in the Game will either be in the **Allies**, **Axis**, or **Neutral**. If you want to attack a **Neutral Country**, you must first **Declare War** on it.

**Exception:** The Japanese Player will automatically change to war status with the USA on Dec 7, 1941 which will occur on the 12/5/1941 **Game Turn**. Japan will receive a surprise attack bonus on this turn. This can be changed in the **Game Options** (see **Section 6**).

The second impact will be their opinion of you in the game. In most cases they will be **Neutral**, but this can change to **Friendly** or **Hostile** based on historical **Game Events**. This can increase or decrease your **Trade** costs with that country.

The **Diplomacy Screen** is invoked by clicking on the **Diplomacy Button**  on the **Action Menu**.



## 15.1 Diplomacy Screen

The **Diplomacy Screen** (shown below) allows you to see other country's opinions of you and **Declare War** on **Neutral** countries.



The screen shows a list of world countries, and your attitude towards each other. To **Declare War** on a country, click on the radio button, and Click the **Declare War Button**.

Your diplomatic state will change to war, and the map will zoom to your new enemy's country.

To close the **Diplomacy Screen** without changing your diplomatic status, click the **Close Button**.

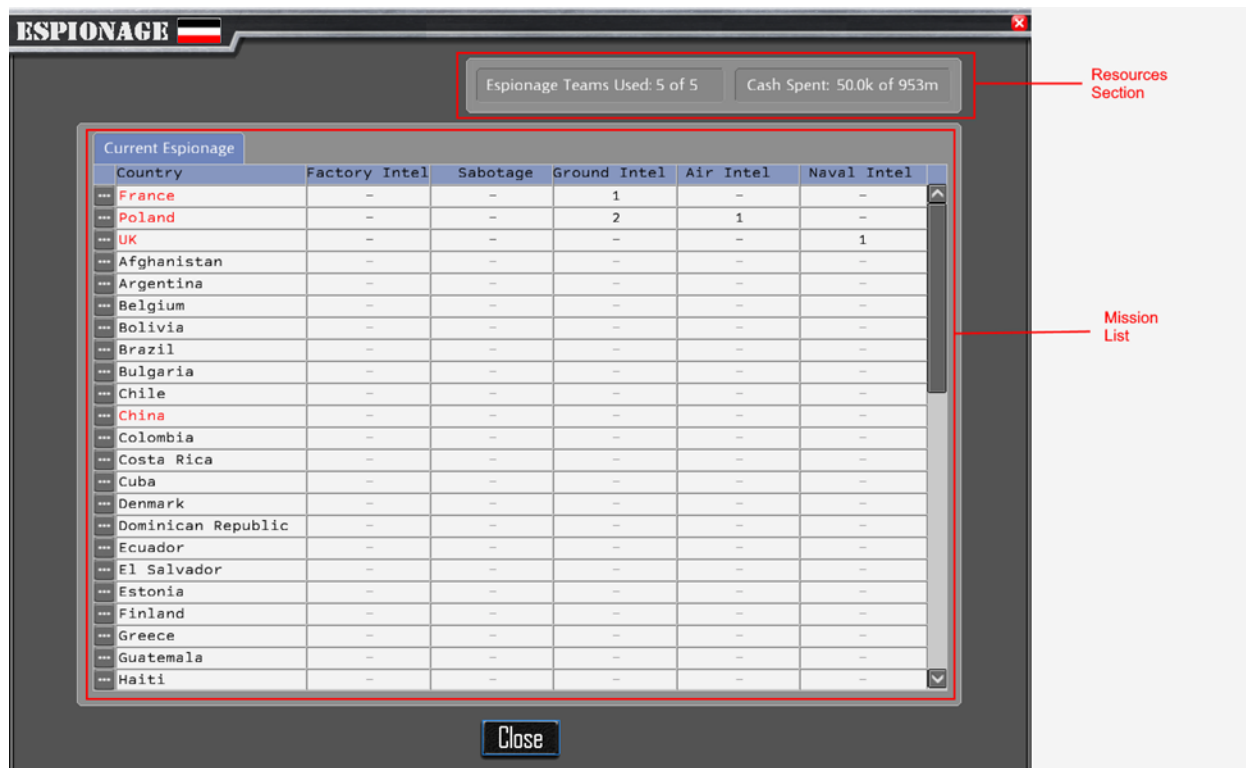
## 16 Espionage

In DOTW, you will not have perfect knowledge of your enemy's forces. This is called **Fog of War** in the game. You may not be able to see enemy **Units** which are not adjacent to your own forces. Also, even when you know some enemy forces are present, you may not know their accurate sizes. Fortunately, your country can employ spies to provide better **Intelligence** about your enemy. In addition, you can have your spies **Sabotage** enemy **Production**. This section will explain how you can employ spies and assign **Espionage** missions to them.

You can also increase the accuracy of your Espionage by researching **Cryptography** (See Section 12).

## 16.1 Espionage Screen

To open the **Espionage Screen**, click on the **Espionage Button**  on the **Action Menu**. The **Espionage Screen** is shown below.



**Resources Section**

Espionage Teams Used: 5 of 5    Cash Spent: 50.0k of 953m

**Mission List**

Country	Factory Intel	Sabotage	Ground Intel	Air Intel	Naval Intel
France	-	-	1	-	-
Poland	-	-	2	1	-
UK	-	-	-	-	1
Afghanistan	-	-	-	-	-
Argentina	-	-	-	-	-
Belgium	-	-	-	-	-
Bolivia	-	-	-	-	-
Brazil	-	-	-	-	-
Bulgaria	-	-	-	-	-
Chile	-	-	-	-	-
China	-	-	-	-	-
Colombia	-	-	-	-	-
Costa Rica	-	-	-	-	-
Cuba	-	-	-	-	-
Denmark	-	-	-	-	-
Dominican Republic	-	-	-	-	-
Ecuador	-	-	-	-	-
El Salvador	-	-	-	-	-
Estonia	-	-	-	-	-
Finland	-	-	-	-	-
Greece	-	-	-	-	-
Guatemala	-	-	-	-	-
Haiti	-	-	-	-	-

Close

### 16.1.1 Resources Section

This section shows the number of **Espionage Teams** that are in use, and how many you have in total. In this example, you have 5 teams, and you are using all of them. To the right, it shows the cost of supporting these teams, in this case \$50,000, and the cash your country has on hand, in this example \$953 Million.


### 16.1.2 Espionage Mission List

This section shows a list of countries and the number of **Espionage Missions** you have active in each country. Countries in which you have active missions are shown at the top of the list. Major countries are shown in red text. **Important:** Missions which return intelligence take one turn before you will see the results.


To the right of the **Country Name Column**, are 5 columns, 1 for each **Espionage Mission Type**:

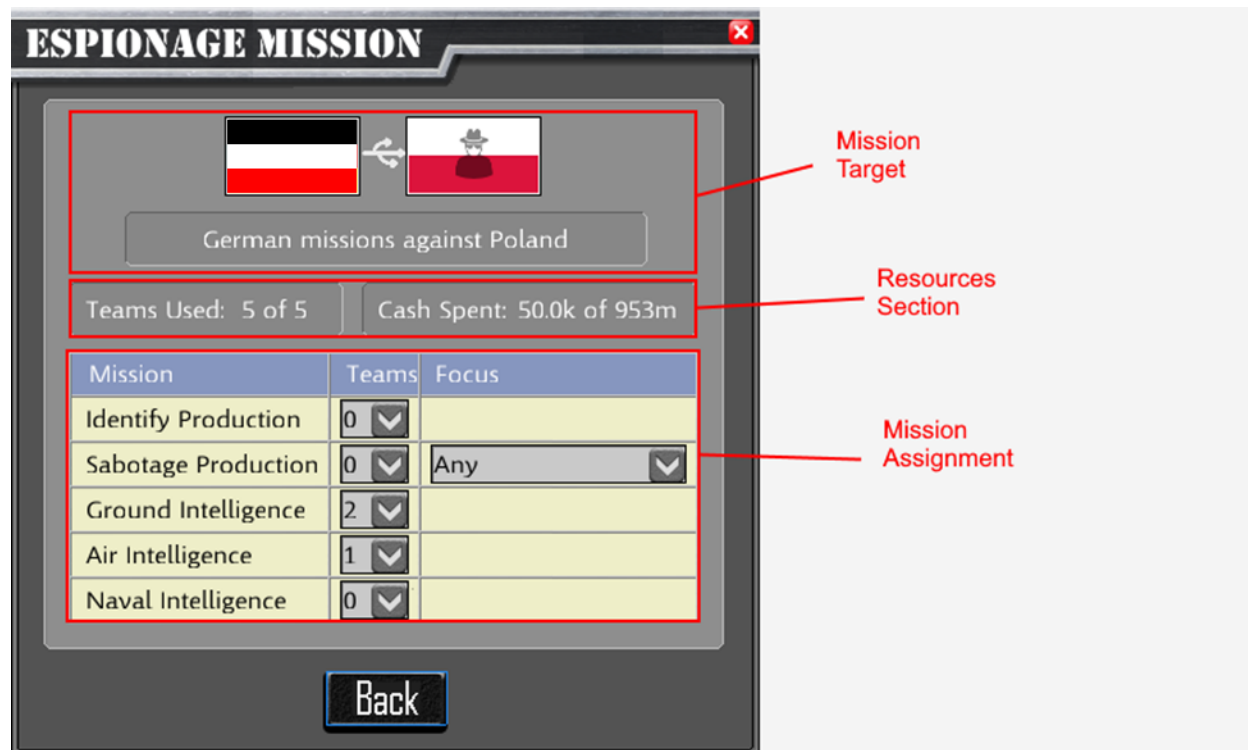
- **Identify Production** – Each team you dedicate to this mission improve the accuracy of the information you receive about your enemy's **Regions**. For example, from the map, you may know that there are **Coal Mines** in a **Region**, but you may not know how much is being produced there. The reports you receive may be higher or lower than the actual **Production** levels. But increasing the number of teams or your **Cryptography Research Level** will increase the accuracy of the data on the **Information Panel**. This **Espionage Mission Type** will also identify **Production** items being produced in **Factories**. When you mouse hover over a target country's **Regions**, it will show you what is being produced there in a tool tip. This information can also be viewed on the **Resources Report**.
- **Sabotage** – Each team you dedicate to this **Espionage Mission Type** will sabotage **Production** in one of the target country's **Regions**. You can specify a specific **Production** type when you assign the team, or you can choose "Any" to allow the team to sabotage any **Production** type they find.
- **Ground Intelligence** – This **Espionage Mission Type** allows you to spot **Land Units** which aren't adjacent to your own forces. The chance of spotting and the accuracy of the spotting reports will increase with the number of **Espionage Teams** assigned to the mission.
- **Air Intelligence** – this mission type allows you to spot **Air Units** which aren't adjacent to your own forces. The chance of spotting a **Unit** and the accuracy of the spotting reports will increase with the number of **Espionage Teams** assigned to the mission.
- **Naval Intelligence** – this mission types allows you to spot **Naval Units** which aren't adjacent to your own forces. The chance of spotting a **Unit** and the accuracy of the spotting reports will increase with the number of **Espionage Teams** assigned to the mission.

#### 16.1.2.1 Assigning/Removing Espionage Teams

To the left of each **Country Name** is a **Select Button** . You can click the **Select Button** to assign **Espionage Teams** to missions against the country, or to cancel **Espionage Teams** assigned to a country. Clicking this button will open the **Espionage Mission Screen**.

## 16.2 Espionage Mission Screen

When you click on the **Select Button**  on the **Espionage Screen**, the **Espionage Mission Screen** (shown below) is displayed. You can **Add** or **Remove** teams from **Espionage Missions** on this screen.



### 16.2.1 Mission Target Section

This section of the screen will show the country you are targeting with missions shown on this screen. In this example, your country, Germany, is targeting Poland.

### 16.2.2 Mission Resources Section

This section shows the number of **Espionage Teams** that are in use, and how many you have in total. In this example, you have 5 teams and you are using all of them. To the right, it shows the cost of supporting these teams, in this case \$50,000, and the cash your country has on hand, in this example \$953 Million.

### 16.2.3 Mission Assignment Section

This section is used to assign a number of teams to a mission or remove a number of teams from a mission. All 5 **Espionage Mission** Types are listed. Next to each **Espionage Mission** Type is a drop-down list where you can specify the number of teams you want to assign to that mission. If you want to remove teams from an **Espionage Mission** Type, choose a smaller number or zero from the drop-down list.

#### 16.2.3.1 Focus Drop Down List




The **Sabotage** Mission also allows you to select a specific target. If you don't care what is sabotaged, leave the default selection, "Any". Otherwise, pick the specific **Sabotage Target** from the drop-down list.

### 16.2.4 Returning to the Espionage Screen

Once you have finishing assigning or removing teams, you can return to the **Espionage Screen** by clicking the **Back Button** on the bottom of the screen.

## 17 Reporting

There are additional reports that provide more information about your country and its forces. You can access these by clicking on the **Reports Button**  on the **Action Menu**. When you click on this button, the **Reports Menu Screen** will be opened, allowing you to choose from the available reports.


### 17.1 Reports Menu Screen


The **Reports Menu Screen** (shown below) lists the reports that are available to you.












- **Battles Button** – Click this to open the **Battle Summary Report**.
- **Units Button** – Click this button to open the **Units Report**.
- **Unit Specs Button** – Click this button to open the **Unit Specs Report**.
- **Resources Button** – Click this button to open the **Resources Report**.
- **Power Button** – Click this button to open the **Power Chart**.
- **Statistics Button** – Click this button to open the **Statistics Report**.
- **Bombing Button** – Click this button to open the **Bombing Report**.
- **Shipping Button** – Click this button to open the **Shipping Report**.
- **Close Button** – Click this button to close the **Reports Menu Screen**.


## 17.2 Battle Summary Report

The **Battle Summary Report** shows a list of all of the battles which occurred on a given week. You can select any prior week from the date drop down lists at the top. If you want, you can click the **Select Button**  to close the report and zoom the map on the region where the battle occurred. Click the **Close Button** at the bottom of the screen to close the report.

**BATTLE SUMMARY** 

Year: 1939  Month: 09  Day: 01 


	Theater	Region	Type	Attacker	Defender	Outcome	
	Europe	Poznan	Land	Germany	Poland	Attacker captured region	
	Europe	Danzig	Land	Germany	Poland	Attacker captured region	
	Europe	Krakow	Land	Germany	Poland	Attacker captured region	
	Europe	Tarnow	Land	Germany	Poland	Attacker captured region	
	Asia	Shiyan	Land	Japan	China	Attacker captured region	

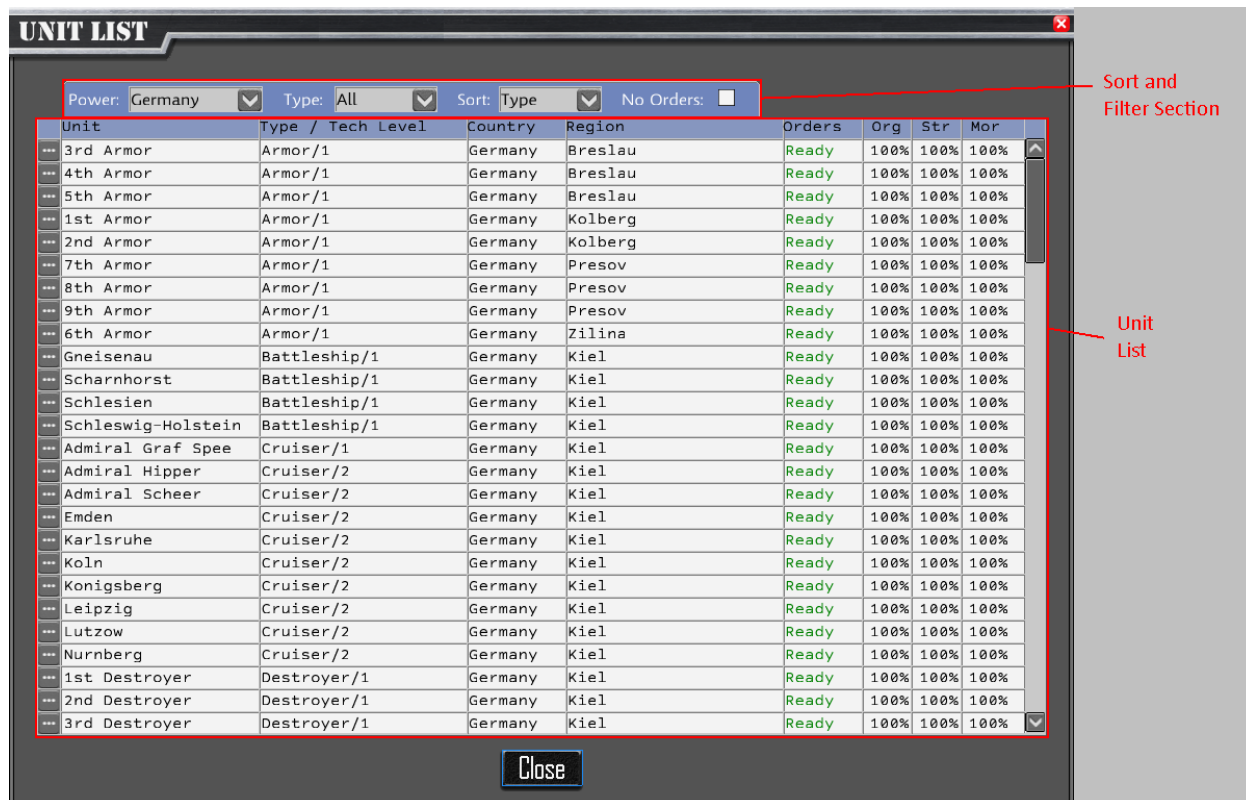


Close



## 17.3 Units Report

The **Unit Report** shows **Units** in your country or in the countries in your **Alliance**. You can Filter the list by country and **Unit-Type**. You can also filter this report to show only **Units** which have no **Orders** for this turn. Additionally, if you want to view the **Unit** on the map, the **Select Button**  will close the report and zoom the map on the **Selected-Unit**.



The screenshot shows the **UNIT LIST** window. At the top, there is a filter section with the following controls:

- Power:** Germany (dropdown)
- Type:** All (dropdown)
- Sort:** Type (dropdown)
- No Orders:** ☐

Below the filters is a table of units. The table has the following columns: Unit, Type / Tech Level, Country, Region, Orders, Org, Str, and Mor. The units listed are:

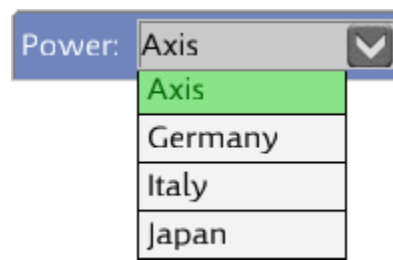
Unit	Type / Tech Level	Country	Region	Orders	Org	Str	Mor
3rd Armor	Armor/1	Germany	Breslau	Ready	100%	100%	100%
4th Armor	Armor/1	Germany	Breslau	Ready	100%	100%	100%
5th Armor	Armor/1	Germany	Breslau	Ready	100%	100%	100%
1st Armor	Armor/1	Germany	Kolberg	Ready	100%	100%	100%
2nd Armor	Armor/1	Germany	Kolberg	Ready	100%	100%	100%
7th Armor	Armor/1	Germany	Presov	Ready	100%	100%	100%
8th Armor	Armor/1	Germany	Presov	Ready	100%	100%	100%
9th Armor	Armor/1	Germany	Presov	Ready	100%	100%	100%
6th Armor	Armor/1	Germany	Zilina	Ready	100%	100%	100%
Gneisenau	Battleship/1	Germany	Kiel	Ready	100%	100%	100%
Scharnhorst	Battleship/1	Germany	Kiel	Ready	100%	100%	100%
Schlesien	Battleship/1	Germany	Kiel	Ready	100%	100%	100%
Schleswig-Holstein	Battleship/1	Germany	Kiel	Ready	100%	100%	100%
Admiral Graf Spee	Cruiser/1	Germany	Kiel	Ready	100%	100%	100%
Admiral Hipper	Cruiser/2	Germany	Kiel	Ready	100%	100%	100%
Admiral Scheer	Cruiser/2	Germany	Kiel	Ready	100%	100%	100%
Emden	Cruiser/2	Germany	Kiel	Ready	100%	100%	100%
Karlsruhe	Cruiser/2	Germany	Kiel	Ready	100%	100%	100%
Koln	Cruiser/2	Germany	Kiel	Ready	100%	100%	100%
Konigsberg	Cruiser/2	Germany	Kiel	Ready	100%	100%	100%
Leipzig	Cruiser/2	Germany	Kiel	Ready	100%	100%	100%
Lutzow	Cruiser/2	Germany	Kiel	Ready	100%	100%	100%
Nurnberg	Cruiser/2	Germany	Kiel	Ready	100%	100%	100%
1st Destroyer	Destroyer/1	Germany	Kiel	Ready	100%	100%	100%
2nd Destroyer	Destroyer/1	Germany	Kiel	Ready	100%	100%	100%
3rd Destroyer	Destroyer/1	Germany	Kiel	Ready	100%	100%	100%

At the bottom of the window is a **Close** button. Red annotations point to the filter section and the unit list.

### 17.3.1 Sort and Filter Section

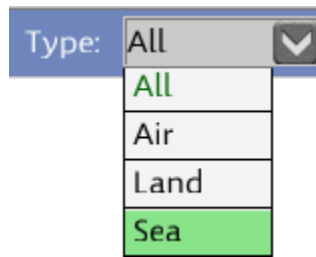
This section allows you to filter which **Units** appear in the list, and to sort the list as described in the next sections.

#### 17.3.1.1 Power Drop Down List



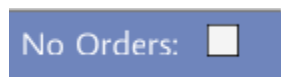
By default, all **Units** in your **Alliance** will be shown. If you only want to see your country's **Units**, or an ally country, select it from this list.

### 17.3.1.2 Type Drop Down List



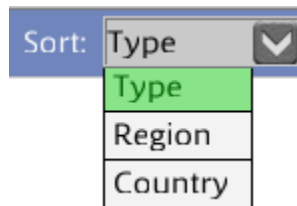
By default, all **Unit-Types** are displayed. This drop down allow you to limit the list to only **Air Units**, **Land Units**, or **Sea Units**.

### 17.3.1.3 No Order Check Box



If you want to make sure you haven't forgotten to give **Orders** to any **Units**, you may find this check box useful. When you check this box, only **Units** which haven't received **Orders** for this turn are shown in the list.

### 17.3.1.4 Sort Drop Down List



This drop-down list will determine the order in which the **Units** are listed on the report. You can sort by **Unit-Type**, **Region**, or **Country**.

## 17.3.2 Unit List

The **Unit** List shows all the **Units** you selected in your filters. By default, all **Unit** in your **Alliance** are shown.

### 17.3.2.1 Select Button

The **Select Button**  will close the report and zoom the map to the **Selected-Unit**.

### 17.3.2.2 Unit Column

The **Unit** column shows the name of the **Unit**.

#### 17.3.2.3 Type / Tech Level Column

This column shows the **Unit-Type** and **Research Technology Level** of the **Unit**

#### 17.3.2.4 Country Column

This column shows the **Country** which owns the **Unit**.

#### 17.3.2.5 Region Column

This column shows the **Region** which contains the **Unit**.

#### 17.3.2.6 Orders Column

This column shows whether the **Units** has received **Orders** or not. One of the following will be displayed:

- **Ready** – The **Unit** is ready to receive **Orders** but has none yet.
- **Issued** – The **Unit** has been assigned **Orders**.
- **Catch Up** – The **Unit** is still recovering from previous **Orders**.

If the No **Orders Check Box** is checked, only **Units** that are **Ready** will be displayed.

#### 17.3.2.7 Org Column

This column shows the **Organization** Level of the **Unit**.

#### 17.3.2.8 Str Column

This column shows the **Strength** Level of the **Unit**.

#### 17.3.2.9 Mor Column

This column shows the **Morale** Level of the **Unit**.

### 17.3.3 Closing the Report

To close the report, click the **Close Button** at the bottom of the screen.

## 17.4 Unit Specs Report

The **Unit Specs Report** shows the detailed specifications for the selected **Unit Type**. These specifications determine how the **Unit** will perform in combat. This report will show you the most state-of-the-art version of the selected **Unit** which is available to each **Country**.

UNIT SPECS

Unit: 

Armor

Statistics	Germany	Italy	Japan	China	France	UK	USA	USSR	
Research Level	1	1	0	0	0	0	0	0	▲
Land Attack	685	377	508	297	196	380	524	168	
Air/Sea Attack	0	0	0	0	0	0	0	0	
Troops	11,800	7,739	10,500	12,000	10,000	10,000	11,000	7,800	
Small Arms	5.680	4.800	4.740	2.460	1.900	3.760	4.710	2.000	
Artillery Guns	65	96	12	100	40	38	38	76	
Art. Gun Size	6.00"	2.50"	4.80"	3.00"	3.00"	3.50"	3.50"	4.60"	
Anti-Tank Guns	50	16	18	0	27	27	27	180	
AT Gun Size	3.00"	2.00"	1.85"	0.00"	1.00"	1.50"	1.50"	1.70"	
AA Guns	12	10	30	0	12	10	12	32	
Tanks	360	165	270	200	240	230	227	176	
Tank Gun Size	3.00"	1.80"	1.60"	0.75"	1.50"	0.75"	1.50"	1.50"	
Tank Armor	1.75"	1.18"	0.44"	0.55"	1.00"	0.55"	1.00"	0.50"	
Tank Crew Size	5	3	4	4	3	4	4	3	
Other Vehicles	1,900	1,900	1,900	1,900	1,900	1,900	1,900	1,900	
Speed (mph)	24	20	26	30	17	30	36	27	
Range (miles)	840	840	889	910	700	910	1,400	980	

### 17.4.1 Unit Drop Down List

The report will display the specifications for the Unit Type selected from this drop-down list.

Unit: Armor	▼
Armor	
Battleship	
Carrier	
Cavalry	
Convoy	
Cruiser	
Destroyer	
Fighter	
Infantry	
MechInfantry	
Militia	
Nuke	
Paratroops	
Rocket	
StrategicBomber	
Submarine	
Supply	
TacticalBomber	
Transport	

### 17.4.2 Specification Fields

Each of the **Unit**'s specifications will be listed on a row in the report. They are described below.

#### 17.4.2.1 Research Level

The specifications shown on the report will be for the newest type of **Unit** that has been research by each **Country**. This field will show the best researched level for this **Unit Type**.

#### 17.4.2.2 Land Attack

This approximates the strength of the **Unit** when fighting in a land battle. It is a rough summarization of the other factors that make up the **Unit**. Note that in battle, the detailed individual specification fields are used. This field will help you estimate different **Unit**'s strengths when planning battles.

#### 17.4.2.3 Air/Sea Attack

This approximates the strength of the **Unit** when fighting in a battle containing **Air** or **Naval Units**.

#### 17.4.2.4 Troops

The number of troops available to fight in battle.

#### 17.4.2.5 Small Arms Rating

This is a rating of the effectiveness of the small arms used in battle by your troops. The higher the number, the better.

#### 17.4.2.6 Artillery Guns

This is the number of artillery guns in the division.

#### 17.4.2.7 Art. Gun Size

This is the diameter of the shells fired by the artillery (in inches). Bigger is better.

#### 17.4.2.8 Anti-Tank Guns

This is the number of Anti-Tank (AT) Guns in the division. These will target enemy tanks.

#### 17.4.2.9 AT Gun Size

This is the diameter of the shells fired by the artillery (in inches). Bigger is better. Tanks throughout the war had thicker and thicker armor, and larger caliber shells were needed to penetrate the thicker armor. Make sure you keep your **Units** up to date by researching **Infantry Tech**. **Infantry Tech** will improve the artillery, anti-tank guns, etc., and allow your **Units** to remain effective against enemy **Armor**, and increased threats from air power.

#### 17.4.2.10 AA Guns

This is the number of Anti-Aircraft guns in the **Division**. These are land units only defense against attacking aircraft. In the game, all AA guns are standardized at .8 inch barrels.

#### 17.4.2.11 Tanks

This is the number of tanks present in the **Division**.

#### 17.4.2.12 Tank Gun Size

This is the diameter of the shells fired by the tank (in inches). Bigger is better.

#### 17.4.2.13 Tank Armor

This is the thickness of the armor (in inches) on the tank. Bigger is better. Armor can prevent penetration of artillery and AT shells and prevent or reduce damage to the tanks.

#### 17.4.2.14 Tank Crew Size

The number of men required to operate a tank in the **Division**.

#### 17.4.2.15 Other Vehicles

The number of trucks and other vehicles present in the **Division**, this will affect your fuel consumption for the **Unit**.

#### 17.4.2.16 Speed (mph)

This is the speed of the **Unit** in miles per hour. For **Land** or **Naval Units**, this primarily affects range. For aircraft, this can also provide a tactical advantage in battle.

#### 17.4.2.17 Range (miles)

This is the maximum distance the **Unit** will move in a turn. A **Unit** can always move at least one region, however, if that move would exceed their range, they may spend one or more turns unable to move again, to “catch up” for the extra distance moved.

**Air Units** must return to an **Airbase** each turn, so when you order regular air missions, they will only be able to move  $\frac{1}{2}$  of their range, since they will use their remaining fuel to automatically return to their **Airbase**.

The exception is the **Rebase** order, which allows moving their full range, but will require the last region moved to, to contain an **Airbase**. **Units** which cannot return to an **Airbase** at the end of their turn run out of fuel and are destroyed.

#### 17.4.2.18 Max Range (miles)

For **Naval Units**, this is the maximum distance a **Unit** can travel before returning to port to refuel. If this range is exceeded, the **Unit** will be reduced to moving one **Region** per turn and will suffer damage until it returns to port and refuels.

#### 17.4.2.19 Air Crew Size

For **Air Units**, this is the number of airmen required to pilot each aircraft in the **Air Group**.

#### 17.4.2.20 Aircraft

For **Air Units**, this is the number of aircraft in the **Air Group**.

#### 17.4.2.21 Aircraft Guns

This is the number of guns each aircraft is armed with.

#### 17.4.2.22 Aircraft Gun Size

This is the diameter of the shells fired by the guns on the aircraft (in inches). Bigger is better.

#### 17.4.2.23 Bomb Load (lbs)

This is the total weight of the bomb load (in pounds) that can be carried by each aircraft in the **Air Group**. **Note: If a bomber's flight plan is less than 400 miles to a target, they carry twice the bomb load.**

#### 17.4.2.24 Climb (ft/min)

This is a measure of how fast the plane can increase altitude (in feet/minute). Higher climb rates provide a combat advantage.

#### 17.4.2.25 Crew

For **Naval Units**, this is the number of men in the crew complement of the ship.

#### 17.4.2.26 Ships

**Aircraft Carriers**, **Battleships**, and **Cruisers** are represented in the game as individual ships. This field will always be "1" for those ships.

**Destroyers** and **Submarines** in the game represent squadrons of six ships, so that number will be reported here.

**Transports** contain 18 ships.

**Convoys** are somewhat abstracted and will always show "1" here.

#### 17.4.2.27 Main Guns

This is the number of guns in the main batteries on a ship. These are the ship's heavy hitters.

#### 17.4.2.28 Main Gun Size

This is the diameter of the **Main Gun's** shells (in inches). Bigger is better.



#### 17.4.2.29 Secondary Guns

This is the number of guns in the secondary batteries on a ship. These are smaller than the ship's **Main Guns**, but still can pack some damage.

#### 17.4.2.30 Sec. Gun Size

This is the diameter of the **Secondary Gun's** shells (in inches). Bigger is better

#### 17.4.2.31 Firing Control

This rating models the effectiveness of the ship's fire control systems. This will affect the ship's ability to accurately target the enemy. It can be improved by researching **Ship Firing Control** on the **Research Menu**.

#### 17.4.2.32 Torpedo Tubes

This is the number of torpedo tubes installed on a ship. This affects the maximum number of torpedoes that can be fired at a target.

#### 17.4.2.33 Torpedo Rating

Torpedoes started the war with poor accuracy and reliability. Some failed to detonate. Others missed the target. The early U.S. torpedoes were notoriously inaccurate. In fact, one U.S. ship was sunk by a torpedo that it fired, which malfunctioned and hit the firing ship.

Researching **Torpedo Tech** on the **Research Menu** can increase the accuracy and reliability of your torpedoes. (Note: Not to worry, you can't hit your ships with your own torpedoes in game)

#### 17.4.2.34 Depth Chargers

This is number of depth charge launch racks on the ship. More racks will allow you to launch more depth chargers and potentially do more damage to the enemy.

#### 17.4.2.35 Deck Armor

This is the thickness of the armor protecting the deck of the ship (in inches). Bigger is better.

#### 17.4.2.36 Hull Armor

This is the thickness of the armor protecting the hull of the ship (in inches). Bigger is better.

**Note: When ship guns fire at enemy ships, the location of the hit can be any of the following:**

- **Deck Armor**-typically thinner armor, which is easier to penetrate, and can cause increased damage
- **Hull Armor**-the most protected armored area of the ship. Usually hard to penetrate and will cause less damage.
- **Depth Charge Launchers**-If hit can reduce the number of depth charges that can be launched. (Repaired in port).
- **Radar**-Can destroy the radar, making it harder to detect enemy ships. (Repaired in port).
- **Propulsion System**-Hits here can reduce the ships maximum speed (Repaired in port). If the ship's speed is reduced to zero, the ship will be scuttled (Sunk to prevent capture).

- **Aviation Fuel**-Only aircraft carriers are vulnerable to this type of hit. It is rare, but can cause tremendous damage, due to the volatility of the aviation fuel.

#### 17.4.2.37 Damage Control

This rating determines how effective the ship's damage control systems are. It can be improved by researching **Ship Damage Control** on the **Research Menu**.

#### 17.4.2.38 Displace (tons)

This is the ship's displacement (in tons). In game, this will determine how much damage the ship can take before being sunk.

#### 17.4.2.39 Cargo Cap (tons)

For **Convoys**, this will indicate the carrying capacity (in tons).

#### 17.4.2.40 Radar

If **Radar** is installed on the ship, it will be more effective at finding enemy ships at sea.

#### 17.4.2.41 Fighters

For **Aircraft Carriers** only, the number of fighter aircraft carried on the ship.

#### 17.4.2.42 Dive Bombers

For **Aircraft Carriers** only, the number of dive bomber aircraft carried on the ship.

#### 17.4.2.43 Torpedo Bombers

For **Aircraft Carriers** only, the number of torpedo bomber aircraft carried on the ship.

#### 17.4.2.44 Fighter Speed

For **Aircraft Carriers** only, the speed of the fighters on the ship.

#### 17.4.2.45 Bomber Speed

For **Aircraft Carriers** only, the speed of the dive bombers and torpedo bombers on the ship.

#### 17.4.2.46 Climb Rate

For **Aircraft Carriers** only, the climb rate (feet per minute) of the aircraft on the ship.

## 17.5 Resources Report

The **Resources Report** lets you view different resources in **Regions** around the world. Be aware, that if you aren't conducting an **Identify Production Espionage Mission** against a country, the report will show a value of “-1”, indicating that you don't know how much resource is in that **Region**. The **Resources Report** is shown below.

**Sort and Filter Section**

**Resource List**

Country	Region	Faction	Available	Built
Germany	Frankfurt	Axis	837	837
Germany	Graz	Axis	1,487	1,487
Germany	Hamburg	Axis	1,431	1,431
Germany	Hannover	Axis	1,321	1,321
Germany	Innsbruck	Axis	107	107
Germany	Jihlava	Axis	65	65
Germany	Kiel	Axis	418	418
Germany	Kolberg	Axis	154	154
Germany	Konigsberg	Axis	506	506
Germany	Leipzig	Axis	1,145	1,145
Germany	Magdeburg	Axis	660	660
Germany	Munich	Axis	704	704
Germany	Olomouc	Axis	54	54
Germany	Pardubitz	Axis	43	43
Germany	Prague	Axis	1,008	1,008
Germany	Presov	Axis	43	43
Germany	Rostock	Axis	418	418
Germany	Saarbrucken	Axis	538	550
Germany	Salzburg	Axis	305	305
Germany	Siegen	Axis	308	308
Germany	Stettin	Axis	330	330
Germany	Stolp	Axis	154	154
Germany	Stuttgart	Axis	264	264
Germany	Uzhorod	Axis	65	65
Germany	Vienna	Axis	2,180	2,180
Germany	Zilina	Axis	43	43

Close

### 17.5.1 Sort and Filter Section

This section will allow you to filter which **Regions** are shown and change the order in which the report is sorted.

### 17.5.1.1 Power Drop Down List

Power: 

Germany
All
Allies
Axis
Neutral
China
France
Germany
Italy
Japan
UK
USA
USSR

This drop-down list will allow you to filter the report to show the **Regions** owned by the **Allies**, **Axis**, **Neutrals**, or a specific country.

### 17.5.1.2 Type Drop Down List

Type: 

Factories
All Regions
AirBases
Coal
Factories
Food
Metal
Oil
Ports

This drop-down list will filter the report to only containing the **Resource Type** selected.

### 17.5.1.3 Sort Drop Down List

Sort: 

Region
Amount
Region
Country

This will change the sort order of the report. Amount will sort the list in descending order based on the available **Amount** of the Resource. **Region** will sort by **Region** Name, and **Country** will sort by Country Name.

## 17.5.2 Resource List

The report will show a list of **Regions** with the following columns:

### 17.5.2.1 Select Button

Click the **Select Button**  to close the report and zoom the map to the selected **Region**.

#### 17.5.2.2 Country Column

The **Country Column** shows which country controls the **Region**.

#### 17.5.2.3 Region Column

This column shows the name of the **Region**.

#### 17.5.2.4 Faction Column

This column show which **Alliance** owns the **Region** (**Allies**, **Axis**, or **Neutral**)

#### 17.5.2.5 Available Column

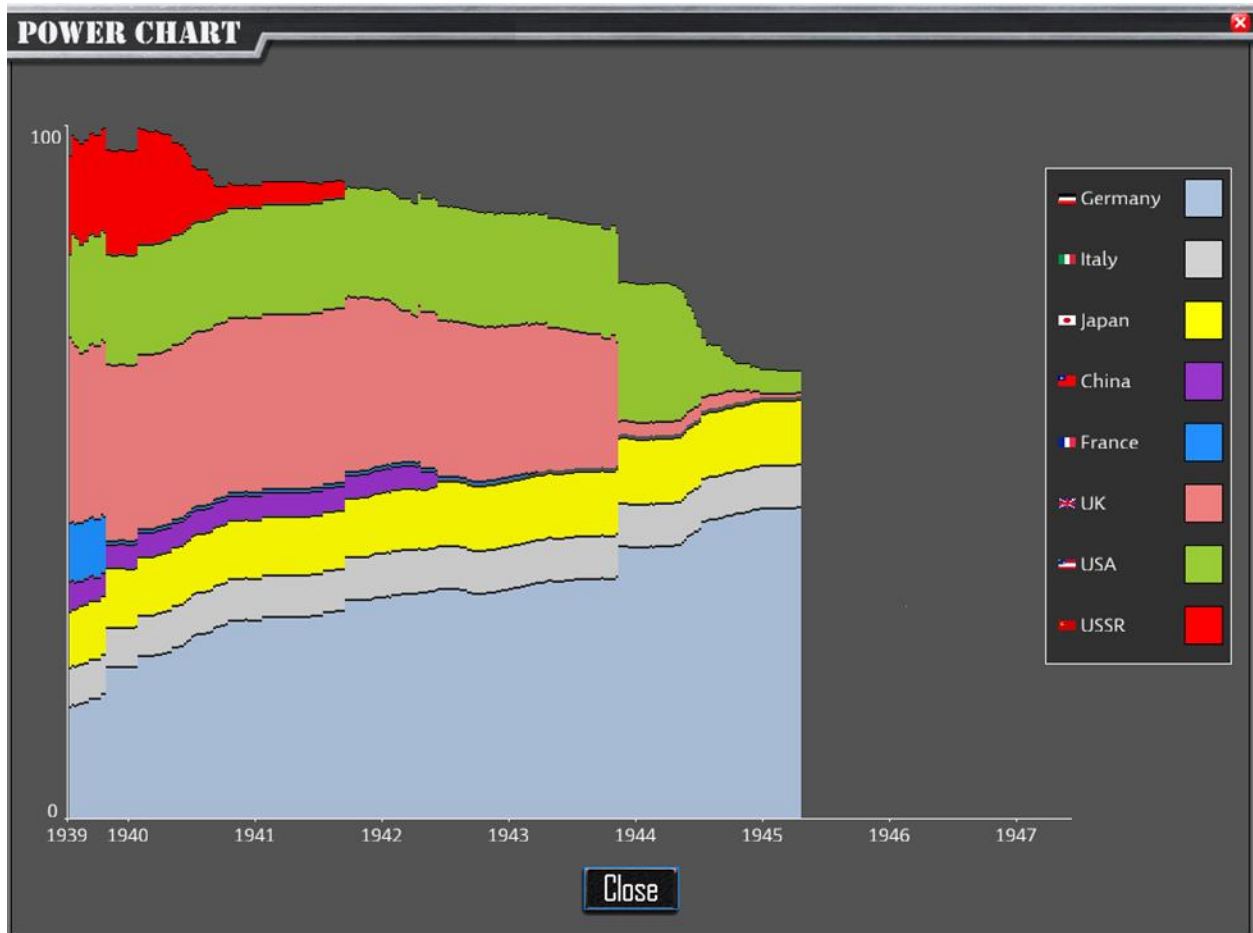
This column shows the amount available to produce per turn in this **Region**. If this **Region** isn't owned by your **Alliance**, it may show a value of "-1" if you don't have an **Espionage Team** assigned to the **Identify Production** Mission for country that owns the **Region**.

#### 17.5.2.6 Built Column

The **Built Column** shows the amount that was originally available in this **Region**. It may have been reduced by bombing, so this number may be lower than the available column. If this **Region** isn't owned by your **Alliance**, it may show a value of "-1" if you don't have an **Espionage Team** assigned to the **Identify Production** Mission for country that owns the **Region**.

## 17.6 Power Chart

The **Power Chart** shows the relative power of each country in a chart using a stacked-bar chart, charted over the course of the war. The **Power Chart** is shown below. Click the **Close Button** at the bottom of the chart to close the chart.



## 17.7 Statistics Report

The **Statistics Report** will show **Units** and **Unit Losses** that have occurred up to the current **Game Date**. Click the **Close Button** at the bottom of the report to close the report.

STATISTICS									
Statistics	Germany	Italy	Japan	China	France	UK	USA	USSR	
Starting Regions	43	98	77	67	213	514	124	293	
Current Regions	43	98	77	67	213	514	124	293	
Troops	1m	1m	964k	1m	1m	1m	437k	1m	
Troops Lost	0	0	0	0	0	0	0	0	
Tanks	3k	1k	0	0	1k	398	0	1k	
Tanks Lost	0	0	0	0	0	0	0	0	
Fighters	1k	1k	436	300	1k	970	1k	3k	
Fighters Lost	0	0	0	0	0	0	0	0	
Bombers	1k	600	812	0	919	1k	1k	900	
Bombers Lost	0	0	0	0	0	0	0	0	
Submarines	60	108	60	0	78	66	48	216	
Submarines Lost	0	0	0	0	0	0	0	0	
Destroyers	30	60	78	0	60	198	150	60	
Destroyers Lost	0	0	0	0	0	0	0	0	
Cruisers	10	21	35	0	19	63	37	7	
Cruisers Lost	0	0	0	0	0	0	0	0	
Battleships	3	4	10	0	5	15	16	3	
Battleships Lost	0	0	0	0	0	0	0	0	
Carriers	0	0	6	0	1	7	5	0	
Carriers Lost	0	0	0	0	0	0	0	0	
Transports	4	3	5	0	2	5	0	0	
Transports Lost	0	0	0	0	0	0	0	0	
Convoys	449	342	600	15	593	2k	891	132	
Convoys Lost	0	0	0	0	0	0	0	0	
AT Guns	7k	1k	804	378	3k	4k	1k	12k	
AT Guns Lost	0	0	0	0	0	0	0	0	

Close

## 17.8 Bombing Damage Report

The **Bombing Damage Report** will show losses due to bombing up to this **Game Date** in the game. Click the **Close Button** to close the report.

BOMBING DAMAGE								
Statistics	Germany	Italy	Japan	China	France	UK	USA	USSR
Factory	21,314	0	9,731	5,113	9,124	30,877	0	0
Factory Losses	0	0	0	0	0	0	0	0
Oil	74,997	0	10,191	6,923	0	175,343	0	0
Oil Losses	0	0	0	0	0	0	0	0
Coal	7,505,766	0	1,794,945	300,184	1,018,226	6,787,972	0	0
Coal Losses	0	0	0	0	0	0	0	0
Metal	155,762	0	47,329	9,987	360,282	405,239	0	0
Metal Losses	0	0	0	0	0	0	0	0
Population	80,599,980	0	396m	223m	115m	526m	0	0
Population Losses	0	0	0	0	0	0	0	0
Port	14	0	62	6	67	203	0	0
Port Losses	0	0	0	0	0	0	0	0
AirBase	27	0	22	6	49	88	0	0
AirBase Losses	0	0	0	0	0	0	0	0
Fort	8	0	0	0	20	14	0	0
Fort Losses	0	0	0	0	0	0	0	0
Radar	0	0	0	0	0	8	0	0
Radar Losses	0	0	0	0	0	0	0	0

Close



## 17.9 Shipping Damage Report

This report shows losses from attacks on shipping. To Close the report, click the **Close Button** at the bottom of the report

SHIPPING DAMAGE								
Statistics	Germany	Italy	Japan	China	France	UK	USA	USSR
Cash	0	0	0	0	0	0	2,975,262	0
Cash Losses	0	0	0	0	0	0	0	0
Food	0	121,000	0	0	0	0	0	60,593
Food Losses	0	0	0	0	0	0	0	0
Oil	179,660	225,000	184,000	0	167,000	74,000	196	0
Oil Losses	0	0	0	0	0	0	0	0
Coal	0	90,000	0	0	0	0	1,588,050	101,784
Coal Losses	0	0	0	0	0	0	0	0
Metal	34,000	102,000	135,000	38,000	0	320,000	0	0
Metal Losses	0	0	0	0	0	0	0	0
Supply	0	0	0	0	0	0	0	0
Supply Losses	0	0	0	0	0	0	0	0
Fuel	0	0	0	0	0	0	0	0
Fuel Losses	0	0	0	0	0	0	0	0

Close


## 18 Turn Resolution

DOTW is a simultaneous-turn-based game. This means that you and the computer will plan your **Orders**, and then your **Orders** and the computer's **Orders** will be executed simultaneously each turn. Each game turn represents one week of calendar time. Each turn, you will plan everything you want to do for the week, and then will press the **End Turn**

**Button**  on the **Main Map** or press the **Enter Key** on the keyboard.

Once you choose to end the turn, the game will then begin to plan its **Orders** and play out the turn. The following sections describe how DOTW processes the turn.

### 18.1 Player Planning Phase

This is where you will spend a lot of your time in the game. This is where you issue **Orders** to your **Armies and Fleets**, plan your **Production**, conduct your **Espionage**, initiate **Trades**, conduct **Research**, etc. Once you end your turn, you will see your **Orders** carried out. You can take as much time as you like to plan your **Orders**, but once you end your turn by clicking the **End Turn Button**  on the **Main Map** or pressing the **Enter Key** on the keyboard you can't make further changes for that turn. At this point the **AI Player** will plan its turn.

### 18.2 AI Planning Phase

During this phase, the **AI** will do the same things you did during your turn. It will issue **Orders** to its **Armies and Fleets**, plan **Production**, conduct **Espionage**, initiate **Trades**, and conduct **Research**. The **AI** does not “cheat” by looking at your **Orders**. It makes all decisions based on the information available at the start of the turn. After the **AI** completes its planning, DOTW starts playing out the turn.

## 18.3 Movement/Battle Phase

Because you and the **AI** plan your **Orders** independently, conflicts can arise when you both try to occupy the same **Region**. This can result in **Battles** or canceled **Orders**. Each **Army** and **Fleet** can move one or more **Regions** per turn. The **AI** considers each move to another **Region** in a separate movement **Segment**. This can be best explained with an example. Let's say you issued these commands:

**1<sup>st</sup> Armor Division** moved from **Region A** to B, then C

Battleship **Bismark** moved from **Region D** to E, then F, then G

**1<sup>st</sup> Air Group** moved from **Region H**, to I, then J

DOTW will first move the **Bismark** from **Region D** to E. Then it will move the **1<sup>st</sup> Air Group** from **Region H** to I. Then, it will move the **1<sup>st</sup> Armor Division** from **Region A** to B. That is, it will execute the first **Ordered** move for every **Army/Fleet** in the game. It will resolve conflicts and conduct any **Battles**. This is the first movement **Segment**.

Then, for each **Army/Fleet** that had a second **Ordered** move, it would execute them. In this case, it would move **Bismark** from E to F, then move **1<sup>st</sup> Air Group** from I to J, then move **1<sup>st</sup> Armor Division** from B to C. It will resolve conflicts and conduct any battles. This is the second movement **Segment**

Now, only **Bismark** still has a remaining move, so the game will move it from F to G. This is the third movement **Segment**.

This in this example, the Movement/Battle occurred during three **Segments** to handle each of the **Army/Fleet** move **Orders**. If this is confusing, don't worry, the computer takes care of all of this for you. This information is just provided for those who want to know how it works in more detail.

Within a movement **Segment**, **Naval Units** are moved first, then **Air Units**, and finally **Land Units**.

### 18.3.1 Naval Movement Segment

As described above, DOTW will execute the next **Region Move Order** for each **Naval Unit** in the game, if they have one. Then DOTW will proceed to the **Air Movement Segment**.

### 18.3.2 Air Movement Segment

DOTW will repeat the process done with **Naval Units** for **Air Units**. It will execute the next **Region** move **Order** for each air **Unit** in the game, if they have one.

### 18.3.3 Air/Sea Detection Segment

After the **Naval Units** and **Air Units** have been moved for this **Segment**, if any **Units** occupy the same **Region**, it will determine if the **Units** detected each other. Remember the **Regions** are very large, so they may go undetected to each other. Things like **Weather**, and **Radar** can decrease or increase the chances of detection, respectively.

The following will affect the chance that a battle will occur:

- Force Size - Bigger forces increase the chance of an encounter
- Weather - Bad weather in a sea region will reduce the chance of an encounter
- Patrol vs Move - Units moving with the Move command have a lower chance of detecting other forces than if they are using Patrol
- Air Units - If there are air units in the region, the chance of detection is increased
- Radar - Radar greatly increases the chance of detection and an encounter
- Submarine only forces - These try to avoid detection by surface ships and are harder to detect unless they are attacking.

### 18.3.4 Air/Sea Battle Segment

If detection occurred, an **Air/Sea Battle** will occur. The **Battle Screen** will be displayed. See section 19.2.

### 18.3.5 Shore Bombardment Segment

If the **Naval Fleet** ends its turn in an enemy coastal **Region** and they **Ordered Move/Bombard**, the ships will bombard any enemy **Land Units** in the **Region**. Casualties will be displayed in the **Messages Section of the Battle Screen**.

### 18.3.6 Strategic Bombardment Segment

If any **Air Units Ordered Strategic Bombardment**, and this is the final **Region** in their **Ordered** moves, then the aircraft will bomb the **Region**. Enemy **Anti-Aircraft Guns** in the **Region** will fire in defense. Casualties and damage are displayed in the **Messages Section of the Battle Screen**.

### 18.3.6 Naval Debarkation Segment

If any transports had an **Unload Order**, they will be unloaded from their **Transports**. If you have a loaded **Transport** that ends its turn in an enemy coastal **Region** that can be invaded, they will unload from their **Transports** and invade the **Region**. Actual combat from the invasion won't take place until the **Land Battle Segment**, so that **Paratroops** or other **Land Units** that move to the **Region** can also participate.

### 18.3.7 Paratroop Drop Segment

Any **Paratroop Units** reaching their final destination will drop into the **Region**. **Battle** won't occur until the **Land Battle Segment**.

### 18.3.8 Transport Load Segment

Any **Land Units Ordered** to **Board Transports** are loaded into **Transports** at this time.

### 18.3.9 Land Movement Segment

DOTW will execute the next **Region Move Order** for each **Land Unit** in the game, if they have one.

### 18.3.10 Land Battles Segment

For every **Land Region** containing friendly and enemy **Units**, a **Land Battle** will occur. The **Battle Screen** will be displayed. See Section 19.2.

### 18.3.11 Retreat Segment

If any **Armies** lose a battle, they will retreat from the **Region** where they were defeated. If they cannot retreat, they are destroyed.

### 18.3.12 More Moves Check Segment

If there are more **Region Moves** left to resolve, DOTW will repeat Section 18.3 **Movement/Battle Phase** including all the above **Segments**.

### 18.3.1.3 Air Unit Return to Base Segment

After all the movement has been resolved in Section 18.3 **Movement/Battle Phase**, all **Air Units** will return to a friendly **Airbase**. Any that cannot find an **Airbase** to return to within range, are destroyed.

## 18.4 Event Phase

There are many **Events** that will fire based on actions that occur during the game. To avoid spoiling them for you, we won't list them here. But, as an example, If Warsaw falls to the

Germans, the **Molotov-Ribbentrop Pact Event** will fire, with German and the USSR dividing Poland, as per secret agreement. When events occur, a **Message Box** will be displayed.

## 18.5 Replacements Phase

During this turn phase, any **Units** which have suffered casualties will receive replacement troops, tanks, or aircraft, if any replacements are available in the country inventory.

Damaged **Cruisers**, **Battleships** and **Aircraft Carriers** that spend their turn idle in a **Naval Base** will repair a small amount of damage each turn, as long as they have a full crew complement. Crew is automatically replaced when sufficient **Troop Replacements** are available when the ship is idle in a **Naval Base**.

## 18.6 Resource Production Phase

During this phase, DOTW will generate resources from **Farms**, **Mines**, and **Oil Fields**.

## 18.7 Supply/Fuel Phase

### 18.7.1 Supply and Fuel Consumption Segment

Each **Land/Air Unit** has a small, attached **Supply** and **Fuel Depot** than can carry 4 weeks of **Supply** and **Fuel**. Ships can store 12 weeks of **Supply** and **Fuel** on board. During this phase, **Units** will consume the **Fuel** and **Supply** based on their actions this turn. **Fuel** consumption is based on distance moved. **Supply** consumption can be higher if the **Unit** defended or attacked. Regardless, the **Unit** will also burn some **Supply** for **Food**, and training.

### 18.7.2 Convoy Creation Segment

After **Units** have burned **Supply** and **Fuel**, DOTW will calculate how much **Fuel** and **Supply** needs to be sent to each **Unit**, to fill their local **Depots**. **Convoys** always originate from the country's **Capital**. If the **Unit** is on the same continent as the **Capital**, the **Convoys** will be sent directly to the **Unit**. If the **Unit** is on a different continent from the **Capital**, the **Convoy** will be sent to the **Depot** on that continent, and the continent **Depot** will send a **Convoy** to the **Unit** from its local store.

### 18.7.3 Convoy Movement and Interception Segment

**Supply/Fuel Convoys** will then begin or continue to move toward their destination. DOTW will determine if the movement path intercepts earlier **Moves** this turn by enemy **Naval**

**Units.** If so, DOTW will perform a **Sea Detection** check, and **Interception** of the **Convoy** may occur. If **Interception** occurs, any ship, **Supply** and **Fuel** losses will be displayed in the **Messages Section** of the **Battle Screen**.

#### 18.7.4 Depot Resupply Segment

After **Convoys** reach their destination, they will replenish the **Unit Depot**, or continent **Depot**.

## 18.8 Trade


### 18.8.1 Trade Shipment Creation Segment

For each active **Trade** agreement that you have, DOTW will create a **Convoy** to send the **Shipment** from the selling country to the buying country.

### 18.8.2 Trade Convoy Movement and Interception Segment

**Trade Shipments** will begin or continue their movement toward their destination. DOTW will determine if the movement path intersects earlier moves this turn by enemy **Naval Units**. If so, DOTW will perform a **Sea Detection** check, and **Interception** of the **Convoy** may occur. If **Interception** occurs, any ship or **Trade** losses will be displayed in the **Messages Panel**. **Trade** goods that reach their destination are added to the country's inventories.

## 18.9 Production Phase

During this phase your **Factories** will work on the items you requested. If any items are completed, they will be placed in their target **Regions**. If the **Production** is a military **Unit**, a message will be added to the **Messages Panel**, and a **New Production Flag**  will be added to the **Region** on the map. **Supply**, **Cash** and **Fuel** are added to the country's inventories.

## 18.10 Research Phase

During this phase your scientists will be working on the **Research** tasks you have assigned them. If they achieve a breakthrough, an alert **Message Box** will be displayed.

## 18.11 Espionage Phase

During this phase, your spies will carry out their missions. Results of any **Sabotage** will be reported in the **Messages Panel**.



## 18.12 Repair Phase

Your **Region** infrastructure can incur damage from enemy **Strategic Bombing** or **Sabotage**. If you have **Repair Points** in your country inventory, they will be used to repair this damage.

## 18.13 Pay Salaries Phase

During this phase, DOTW will pay **Salaries** to your workers and soldiers. Insufficient **Cash** will result in **Unrest** in the **Regions**, and reduced **Morale** in your military **Units**.

## 18.14 Feed the People Phase

During this phase, DOTW will feed your civilian population. **Food** shortages will result in **Unrest** and/or starvation.

## 18.15 Victory Check Phase

During this phase, the game will determine if you have won/lost the game. You will win a **Strategic Victory** at the end of any turn, if all the enemy faction countries have been defeated and lose if you are defeated by the enemy. Otherwise, when the **Game Date** is Sep 2, 1945, the war is over. You can continue to play after this date, but you will not accrue any further official score.

Victory status will then depend on which country you are playing, using the following criteria:

### 18.15.1 German Victory Conditions

#### 18.15.1.1 Major German Victory

If Germany survives, and the Axis Faction has a higher score than the Allies, Germany scores a **Major Victory**.

#### 18.15.1.2 Minor German Victory

If Germany survives to the end of the war, Germany scores a **Minor Victory**.

#### 18.15.1.3 German Defeat

If Germany is defeated by Sep 2, 1945, then Germany suffers a German **Defeat**.

### 18.15.2 Italian Victory Conditions

#### 18.15.2.1 Major Italian Victory

If Italy survives and the Axis has a higher score than the Allies, then Italy scores a **Major Victory**.

#### 18.15.2.2 Minor Italian Victory

If Italy survives until the end of the war, it scores a **Minor Victory**.

#### 18.15.2.3 Italian Defeat

If Italy is defeated by Sep 2, 1945, then Italy suffers an Italian **Defeat**.

### 18.15.3 Japanese Victory Conditions

#### 18.15.3.1 Major Japanese Victory

If Japan survives, and the Axis Faction has a higher score than the Allies, Japan scores a **Major Victory**.

#### 18.15.3.2 Minor Japanese Victory

If Japan survives until the end of the war, it scores a **Minor Victory**.

### 18.15.3.3 Japanese Defeat

If Japan is defeated by Sep 2, 1945, then Japan suffers a Japanese **Defeat**.

## 18.56.4 Chinese Victory Conditions

### 18.15.4.1 Major Chinese Victory

If China survives, and the Allies have a higher score than the Axis, then China scores a **Major Victory**.

### 18.15.4.2 Minor Chinese Victory

If China survives, then China scores a **Minor Victory**.

### 18.15.4.3 Chinese Defeat

If China is defeated by Sep 2, 1945, then China suffers a Chinese **Defeat**.

## 18.15.5 French Victory Conditions

### 18.15.5.1 Major French Victory

If Free France survives, and the Allies have a higher score than the Axis, then France scores a **Major Victory**. (Note: Free France is created after Vichy is created. If Vichy is not created, then this condition should be read as France instead of Free France)

### 18.15.5.2 Minor French Victory

If Free France survives, then France scores a **Minor Victory**.

### 18.15.5.3 French Defeat

If Free France is defeated by Sep 2, 1945, then France suffers a French **Defeat**.

## 18.15.6 UK Victory Conditions

### 18.15.6.1 Major UK Victory

If UK survives, and two Axis Powers have been defeated, then UK scores a **Major Victory**.

### 18.15.6.2 Minor UK Victory

If UK survives, and one Axis Power was defeated, then UK scores a **Minor Victory**.

### 18.15.6.3 UK Defeat

If UK survives and no Axis Powers have been defeated, or UK is conquered, then UK suffers a British **Defeat**.

## 18.15.7 USA Victory Conditions

### 18.15.7.1 Major USA Victory

If USA survives, and two Axis Powers have been defeated, then USA scores a **Major Victory**.

### 18.15.7.2 Minor USA Victory

If USA survives, and one Axis Power was defeated, then USA scores a **Minor Victory**.

### 18.15.7.3 USA Defeat

If USA survives and no Axis Powers have been defeated, or USA is conquered, then USA suffers an American **Defeat**.

## 18.15.8 USSR Victory Conditions

### 18.15.8.1 Major USSR Victory

If USSR survives, and two Axis Powers have been defeated, then USSR scores a **Major Victory**.

### 18.15.8.2 Minor USSR Victory

If USSR survives, and one Axis Power was defeated, then USSR scores a **Minor Victory**.

### 18.15.8.3 USSR Defeat

If USSR survives and no Axis Powers have been defeated, or USSR is conquered, then USSR suffers a Soviet **Defeat**.

## 18.16 Housekeeping Phase



DOTW will do some end of turn housekeeping, the **Game Date** will advance by 7 days, and the game will loop back to **18.1 Player Turn Planning Phase** to begin the next turn.

## 19 Battle

**Battle** occurs when enemy air/land **Units** meet in a **Region**, or when naval **Units** detect each other. When this happens, the **Battle Screen** will be displayed.

When a **Battle** occurs, it is resolved by each **Unit** picking a target enemy **Unit** and firing each of their weapons at it. The defender will return fire. The defender may be aided by **Terrain Type**, **Entrenchment**, or **Fortifications**. **Weather** can also affect a **Unit's** effectiveness in combat.

**Note:** **Units** automatically **Entrench** if they don't move or issues other orders for one turn, and they aren't attacked.

As each **Unit** attacks a target, damage indicators  or  will appear on the target **Unit**, indicating that it is being fired upon.

**Battles** will proceed for up to 5 rounds. As the tides of battle change, **Unit Morale** can increase or decrease. At the end of each round, a victory check will take place using the following rules:
















- If Combatant A Morale < Combatant B **Morale**
  - If Combatant A **Morale** < 50% or >1 round has been fought
    - Combatant A Loses and will **Retreat**
- If Combatant A Strength less than 5% of Combatant B Strength
  - Combatant A Loses and will Retreat
- If Combatant A and B **Morale** both < 50%
  - Lowest Strength Combatant Retreats

**Units** that cannot retreat to a friendly **Region** are destroyed. Whichever **Alliance** remains in a **Region** at the end of a **Battle** controls it. The **Region** will be shaded to a country's Color.

When a country captures a **Region**, it will take control of the population, resources and factories that are present in the **Region**.

## 19.1 Country Colors

**Regions** on the **Main Map** are tinted with the color of the country which owns it. These are shown below.

 Germany	
 Italy	
 Japan	
 China	
 France	
 UK	
 USA	
 USSR	

## 19.2 Battle Screen

The **Battle Screen** has three main sections. The **Region Section** contains information about a **Region**. The **Combatant Section** summarizes the enemy forces that have engaged. The **Units Section** shows the **Units** which have engaged in **Battle**. And the **Messages Section** shows the battle casualties.

The screenshot shows the COMBAT! interface with the following sections:

- Region Section:** A table with the following data:

Country	Poland
Region	Poznan
Terrain	Clear
Weather	Cloudy
Defenders	Unentrenched

Next to the table is a map of Poland with the Poznan region highlighted in green.
- Combatant Section:** A table comparing Attacker and Defender statistics:

Attacker	Strength	8,962	Defender	Strength	720
	Troops Lost	11,325		Troops Lost	61,677
	Tanks Lost	0		Tanks Lost	0
	Planes Lost	2		Planes Lost	0
	Ships Lost	0		Ships Lost	0


Below the table are two star icons: a green star with +7.00 and a green star with +0.00.
- Units Section:** A map showing the positions of various units, represented by small icons with flags, on a terrain map.
- Messages Section:** A scrollable list of battle messages, including:
  - German 97th Infantry small arms fire inflicts 902 Polish casualties
  - German Infantry "98th Infantry" targets Polish Infantry "28th Infantry"
  - German 98th Infantry artillery inflicts 13 Polish casualties
  - German 98th Infantry small arms fire inflicts 1563 Polish casualties
  - German Infantry "98th Infantry" targets Polish Infantry "28th Infantry"
  - German 98th Infantry artillery inflicts 9 Polish casualties
  - German 98th Infantry small arms fire inflicts 871 Polish casualties
  - German Infantry "99th Infantry" targets Polish Infantry "29th Infantry"
  - German 99th Infantry artillery inflicts 14 Polish casualties
  - German 99th Infantry small arms fire inflicts 1646 Polish casualties
  - German Infantry "99th Infantry" targets Polish Infantry "29th Infantry"
  - German 99th Infantry artillery inflicts 12 Polish casualties
  - German 99th Infantry small arms fire inflicts 1456 Polish casualties

A "Close" button is located at the bottom center of the interface.

### 19.2.1 Region Section

The **Region Section**, at the top left of the **Battle Screen**, shows information about the **Region** where the **Battle** is being fought.

Country	Poland
Region	Poznan
Terrain	Clear
Weather	Cloudy
Defenders	Unentrenched





### 19.2.1.1 Country

This section of the **Region** Section shows the country which owns the **Region** where the **Battle** is occurring.

### 19.2.1.2 Region

This is the name of the **Region** where the **Battle** is being fought.

### 19.2.1.3 Terrain

This shows the **Terrain Type** in the **Region**.



### 19.2.1.4 Weather

This show the current **Weather** in the **Region**.

### 19.2.1.5 Defenders

This shows whether the defender is **Entrenched** or in a **Fortification**.

## 19.2.2 Combatant Section

Attacker	Strength	8,962	Defender	Strength	720
	Troops Lost	11,325		Troops Lost	61,677
	Tanks Lost	0		Tanks Lost	0
	Planes Lost	2		Planes Lost	0
 +7.00	Ships Lost	0	 +0.00	Ships Lost	0

This section shows a summary of the two combatants. The **Axis** countries are on the left (Germany). The **Allies** countries are on the right (Poland).

### 19.2.2.1 Faction Identification

The combatant section is divided into two halves. The left half describes the **Axis** Forces, and the right half describes the **Allies** Forces. The faction's role is listed above the faction flags, either "Attacker" or "Defender". That describes what role that faction is playing in this battle. Below the **Country** flags is the Leader Bonus ★. The number is an amalgamation of the Theater Leader Strategy Rating and the Army/Fleet Leader Attack or Defense Ratings, adjusted for the total size of the armies.

### 19.2.2.2 Strength

This number shows the strength of the combatant. This is a computed number based on the number of troops, tanks, aircraft, ships, and types of weaponry available. It is the combat strength of the combatant.

### 19.2.2.3 Troops Lost

This number shows the troops the combatant has lost, so far, in this **Battle**.

### 19.2.2.4 Tanks Lost

This number shows the number of tanks which were destroyed, so far, in the **Battle**.

### 19.2.2.5 Planes Lost

This number shows the number of aircraft that have been shot down, so far, in the **Battle**.

### 19.2.2.6 Ships Lost

This number shows the number of ships that have been sunk, so far, in the **Battle**.

### 19.2.3 Units Section

This shows the **Units** which are fighting in **Battle**. As each **Unit** attacks a target, damage indicators  or  will appear on the target **Unit**, indicating that it is being fired upon.

### 19.2.4 Messages Section

As **Units** fire on each other, you will see reports from the **Battle**, describing casualties and **Units** lost.

## 19.3 Combat Bonuses

When a battle takes place, several factors can influence the battle outcome. These can greatly increase the effectiveness of your attacks.

### 19.3.1 Flanking Bonus

When you attack from more than one region you receive a bonus for flanking the enemy. A bonus of 25% is given for each region beyond the first that attacks an enemy region.

### 19.3.2 Combined Arms Bonus

World War II showed that the whole was greater than the sum of its parts. If the attacking force contains both Infantry and Armor, the attack gets a 50% bonus.

### 19.3.3 Air Advantage Bonus

If both sides have air units in the battle, but one has superior forces, they will get a bonus of 25%.

### 19.3.4 Air Superiority Bonus

If one side completely dominates the skies in a battle, the Air Advantage Bonus is increased from 25% to 50%.

## 20 Retreats

After a land battle, one of the two combatants must retreat. Opposing forces cannot occupy a land **Region** at the end of a turn. At the end of a sea battle, **Naval Units** can remain in the same Sea **Region**.

## 21 Special Rules

### 21.1 French Morale

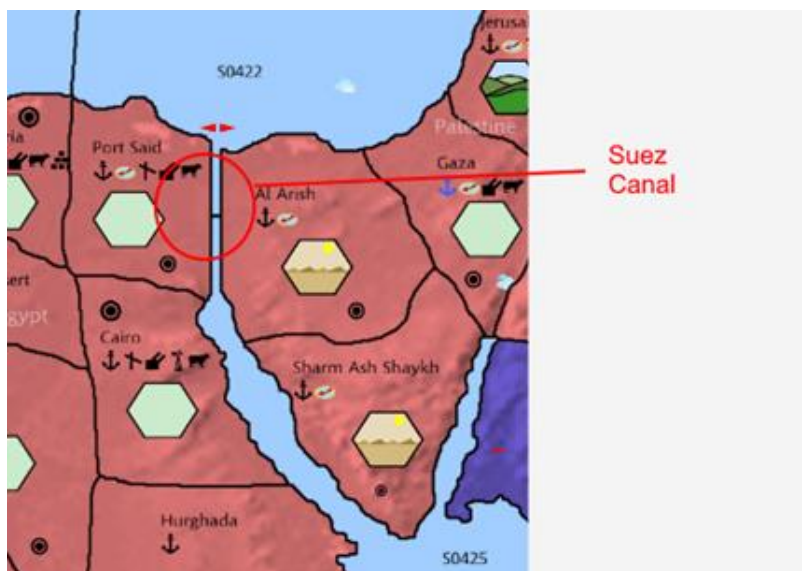
At the start of the war, France begins with a morale penalty. This is to model **War Weariness** carryover from World War I. If you are playing with France, observe your **Unit Morale** carefully before attacking. Your **Morale** will recover to normal over time, but at the beginning of the war, offensive operations may be risky. Note: This rule can be disabled in the **Game Options Screen** (See Section 6. **Game Options**).

### 21.2 Canals and Crossings

Certain **Regions** have canals or crossing that permit transit over water without using **Transports**, or conditionally block sea movement. These are listed below. They are marked with a ◀▶ crossing symbol.

#### 21.2.1 Suez Canal

**Land Units** can cross between **Regions**: Port Said and Al Arish. In addition, if your **Alliance** doesn't own both Port Said and Al Arish, then your ships and **Supply** cannot pass between **Regions**: S0422 and S0425.



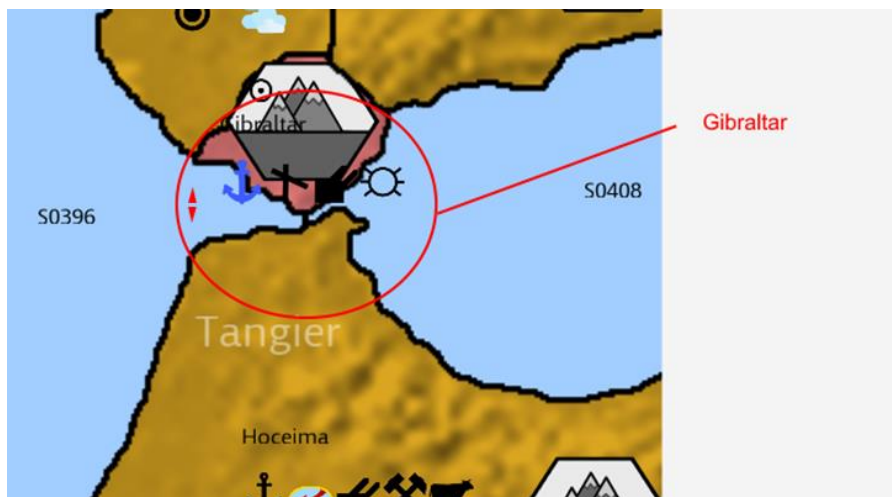
### 21.2.2 Panama Canal

**Land Units** can cross between **Regions**: Panama City and David. In addition, if your **Alliance** does not control both Panama City and David, then your ships cannot move between S0451 and S0212. The Allies can move between S0451 and S0212 while the USA remains **Neutral**, and of course, after they join the **Allies**.



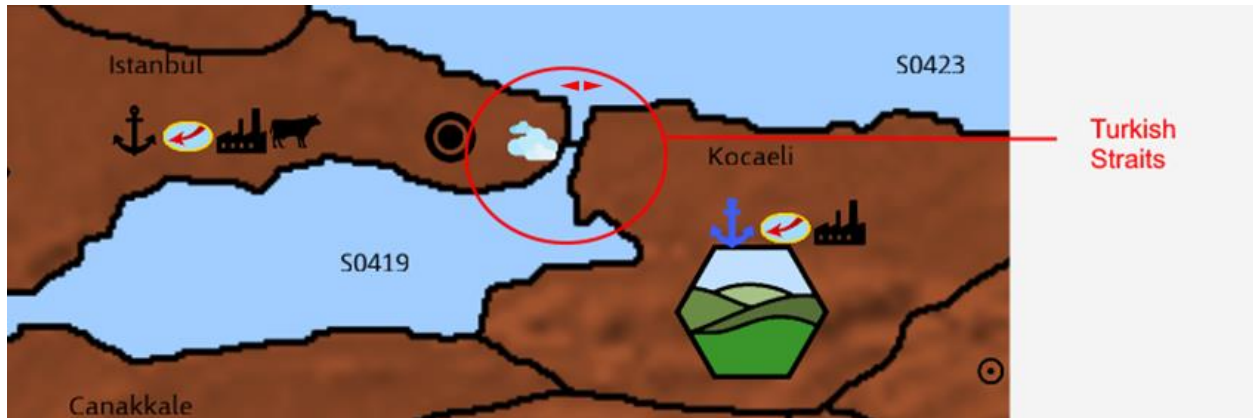
### 21.2.3 Gibraltar

**Land Units** can cross between **Regions**: Gibraltar and Hoceima. In addition, if your **Alliance** does not control both Gibraltar and Hoceima, and Hoceima is not **Neutral**, then your ships cannot pass between S0396 and S0408.



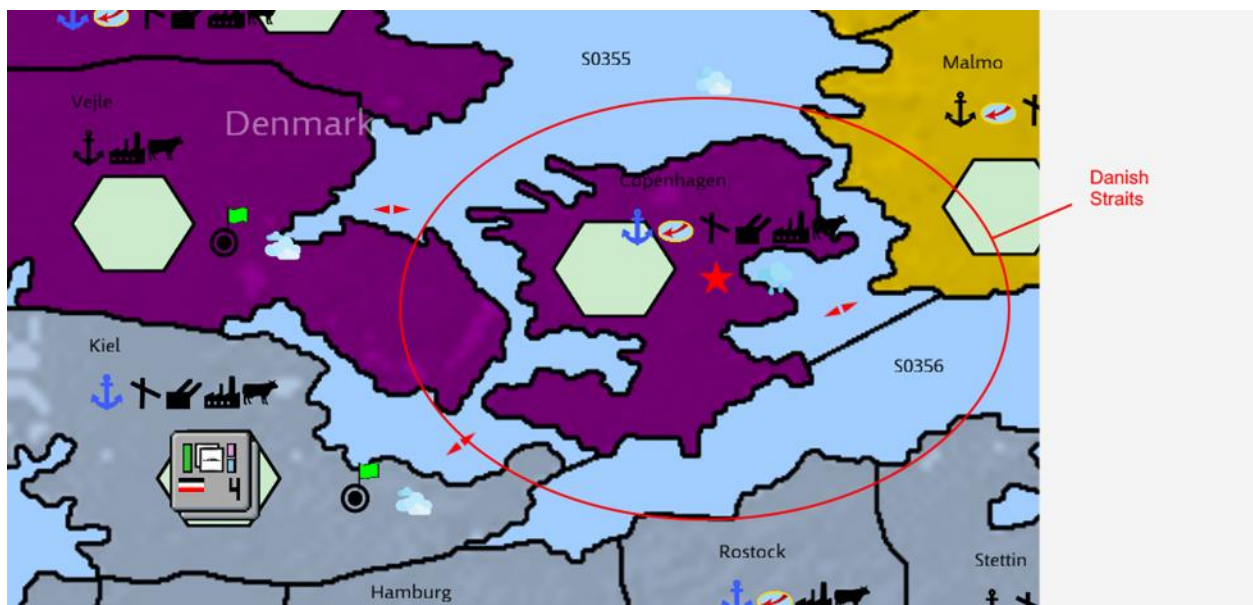
### 21.2.4 Turkish Straits

**Land Units** can pass between Istanbul and Kocaeli. If Turkey is **Neutral**, then ships can pass between S0423 and S0419. If Turkey is not **Neutral**, then your **Alliance** must control both Istanbul and Kocaeli, or your ships cannot move between S0419 and S0423.



### 21.2.5 Danish Straits

**Land Units** can pass between Vejla and Copenhagen, Kiel and Copenhagen, and Malmo and Copenhagen. To move between S0355 and S0356 your alliance must control both Malmo and Copenhagen, or Kiel and Copenhagen. Your ships can also move between S0355 and S0356 if both Copenhagen and Malmo are **Neutral**.



## 21.3 Russian Winter

The Germans assumed that their Blitzkrieg tactics would bring quick victory in Russia, just like it had previously. They did not provide their troops with winter gear for this reason. During the first winter after German invades the USSR, they will suffer attrition. This can be disabled (See Section 6. **Game Options**)

## 21.4 Finnish Winter War

During WW2, the USSR invaded Finland on November 30, 1939. If you are playing as USSR, this **Event** will fire while you are **Neutral**. A historical result will occur, with Finland ceding territory to the USSR and significant USSR casualties. This can be disabled. (See Section 6. **Game Options**).

## 21.5 USSR Officer Purge

In October of 1941 Stalin conducted a large officer purge in the Red Army. In the game this results in a loss of all experience for all USSR **Units**, and a 15% reduction in **Morale**. This rule can be disabled (See Section 6. **Game Options**).

## 21.6 Pearl Harbor

On December 7, 1941, Japan conducted a surprise attack on the USA at Pearl Harbor. During this turn, the Japanese will receive a large combat bonus. This rule can be disabled (See Section 6 **Game Options**).


## 21.7 Mobilization

The USA and USSR start the game with a civilian economy, unprepared for war. They start the game with a reduced percentage of their full production capacity. This capacity will gradually increase to 100% by their full mobilization date. For the USA, this is 12/5/1941. For the USSR, this is 2/16/1940.



## 22 Diplomacy

At the start of the war, England, France, China and Poland are at War with Germany and Japan. Certain events will occur during the game, which may cause a **Neutral** Country to join the war. For example, after Pearl Harbor, the USA will enter the war with the Allies.

If a country is **Neutral**, your country must **Declare War** on the country in order to attack it. You can do this by opening the **Diplomacy Screen** using the **Diplomacy Button**  on the **Action Menu**.

When you attack a country, its military will be gifted to a country in the opposing alliance to yours. The **Neutral** Country's **Regions** will stay independent until its capital is captured.

Note: When you capture a Major Country's **Capital**, you won't capture the country. The **Capital** will relocate to another **Region** in that country. To capture a major country, you must conquer 80% of its starting **Population**.

### 22.1 Vichy France

France is a special case. If Paris is captured by Germany, Vichy France may be created. The **AI Player** will always create Vichy France. If you are playing as Germany, you will be asked if you want to create **Vichy France**. If you accept, continental France will be partitioned with Germany occupying Northern France, and a friendly Vichy State being created with Southern France and some of its colonies. Some French colonies will remain as Free France (in the game, Free France is just known as France. France just lives on, post Vichy, as a much smaller power). Later game **Events** will result in additional Vichy colonies defecting to Free France.

If you don't accept Vichy France, then France will be defeated when 80% of its **Population** has been captured, including its colonies.

## 23 Winning the Game

You win the game by conquering your enemy's **Regions**. When 80% of an enemy country's **Population** is under your occupation, that country will surrender, and will be out of the game. If you conquer all the enemy **Alliance** countries, you will have won the game. If this hasn't happened by the historical end of WW2 on September 2, 1945, whichever **Alliance** has the greater score will be declared the victor.

Note: If you want, after the Game Over Screens are displayed, you will have the opportunity to continue fighting the war, should you choose to, however, no further score will be kept.

## 24 Leaders

Every **Army** or **Fleet** in the game had a commander. However, some had **Leaders** which had greater impact than the rank-and-file commanders. Each **Country** can assign these exceptional **Leaders** where they can have the maximum impact.

### 24.1 Leader Types

There are two types of **Leaders** in the game. **Generals**, which command **Armies**, and **Admirals**, which command **Navies**. **Leaders** *can't* be assigned to **Air Units**.

### 24.2 Leader Ratings

Each **Leader** can provide bonuses in three different areas based on his three **Ratings**:

- 1) **Strategy Rating**
- 2) **Attack Rating**
- 3) **Defense Rating**

#### 24.2.1 Strategy Rating

The **Strategy Rating** is applied to all **Units** in the **Theater** (e.g., Europe, Asia, etc.). The **Strategy Rating** will increase the chance each **Unit** has to inflict damage when firing at the enemy. You might have multiple **Leaders** present in a **Theater**. In that situation, the **Leader** with the best **Strategy Rating** is assumed to be in command of the **Theater**. For all other considerations, the **Leader** impact only applies to the **Army** or **Fleet** they are assigned to.

#### 24.2.2 Attack Rating

The **Attack Rating** is used in combat when an **Army** or **Fleet** is involved in an **Attacking Role** in battle. Unlike the **Strategy Rating**, which applies to the entire **Theater**, the **Attack Rating Bonus** only applies to the **Army** or **Fleet** to which a **Leader** is assigned. The **Attack Rating** increases the *amount* of damage a **Unit** inflicts on the enemy if they successfully hit the enemy. (Remember, the **Strategy Rating** increases the *chance* that a **Unit** will hit a target).

### 24.2.3 Defense Rating

The **Defense Rating** is used in combat when an **Army** or **Fleet** is involved in a **Defending Role** in battle. Unlike the **Strategy Rating**, which applies to the entire **Theater**, the **Defense Rating Bonus** only applies to the **Army** or **Fleet** to which a **Leader** is assigned. The **Attack Rating** increases the *amount* of damage a **Unit** inflicts on the enemy if they successfully hit the enemy.

## 24.3 Leader Assignment

For **Leaders** to have an impact, they must be assigned to an **Army** or **Fleet**. Each **Country** can assign a limited number **Admirals** and **Generals** to their **Armies** and **Fleets**.

Note: some **Countries** may have more **Admirals** or **Generals** than they have available slots. These extra **Generals** and **Admirals** are “Idle” and have no impact unless assigned. This reflects the fact that during the war, some **Countries** often replaced a **General** or **Admiral** that wasn’t performing well. You can decide which of the available **Leaders** you want to have actively assigned.

At the start of the game, all available slots will be filled with **Leaders**. You may want to review these initial assignments to see if those **Leaders** can better serve your plans in a different **Army**, **Fleet**, or **Theater**.

You can change **Leader** assignments as often as you like. However, if you change a **Leader’s** assignment, he will not provide a **Bonus** during that turn.

To change **Leader** assignment, select the **Army** or **Fleet**, and click the **Grouping Button** on the **Information Panel** (short cut key “A”). This will show any existing **Leader** that’s assigned to your **Army** or **Fleet**. To change the **Leader**, click the **Leader Button** on the **Grouping Screen**.

This will open the **Leaders Screen** (shown in the next section), where you can review or change your **Leader** assignment.

When you change **Leaders** for an **Army** or **Fleet**, the **Army** or **Fleet** won’t receive a **Leader** bonus for the turn in which the **Leader is changed**, to allow for transit time. However, this won’t affect the **Theater-wide Strategic Rating** for that **Leader**. So, if that **Leader** is the **Theater** commander, his **Strategic Rating** will still apply that turn. **Strategic Rating** is not affected by transit time.

## 24.4 Leader Reputation

As a **Leader** participates in battle, his reputation will increase or decrease. This reflects that during the war, if a **Leader** lost battles, he would lose favor, and often be replaced. Likewise, **Leaders** which won battles were often granted more responsibility.

In game terms, their **Attack** or **Defense Ratings** may increase or decrease based on their performance in game. However, their **Ratings** will never decline lower than 1 or increase higher than 5.

Likewise, the **Theater Leader's Strategy Rating** will increase or decrease for each battle won or lost in the **Theater**. However, the **Strategy Rating** changes much slower than the **Attack** or **Defense Ratings**.

## 24.5 Leaders Screen

The **Leaders Screen** (shown below) is opened from the **Grouping Screen** by clicking the **Leader Button**.

**Identification Section**

**Leader Biography**

**Theater Coverage**

**Other Leaders**

The screenshot shows the 'LEADERS' window with a German flag icon. The 'Identification Section' on the left shows '11th Army' and 'Leader: (in transit) Gerd von Rundstedt' with stats: Strategy: 4, Attack: 4, Defense: 4. The 'Leader Biography' section features a portrait of Gerd von Rundstedt and text: 'Rundstedt served as a widely respected commander on both the eastern and western fronts throughout the war.' The 'Theater Coverage' section on the right lists regions: Africa, America, Asia, Europe (checked with a green triangle), Mediterranean, and Oceania. The 'Other Leaders' section contains a table with 15 rows of leader data.

Leader List:		Assigned: 7	Max Size: 7				
Theater	Leader	Assigned To	Region	Str	Att	Def	
+	Josef 'Sepp' Dietrich	Idle		3.0	4.0	2.0	
+	Paul Ludwig Ewald von Kleist	Idle		3.0	3.0	3.0	
+	Walther von Brauchitsch	Idle		3.0	3.0	2.0	
+	Gunther von Kluge	Idle		3.0	3.0	2.0	
+	Georg von Kuchler	Idle		2.0	2.0	2.0	
+	Friedrich Paulus	Idle		1.0	1.0	2.0	
+	Europe	Erich von Manstein	14th Army	Breslau	5.0	5.0	5.0
+	Europe	Erwin Rommel	10th Army	Kolberg	5.0	5.0	5.0
+	Europe	Walter Model	17th Army	Zilina	5.0	3.0	5.0
+	Europe	Heinz Guderian	15th Army	Breslau	4.0	5.0	3.0
+	Europe	Fedor von Bock	3rd Army	Saarbrücken	4.0	4.0	3.0
+	Europe	Wilhelm Ritter von Leeb	12th Army	Stolp	4.0	2.0	5.0

Close


### 24.5.1 Identification Section

This section of the screen will identify the currently selected **Army** or **Fleet**, in this case the *11<sup>th</sup> Army*.

The current **Leader** is *Gerd von Rundstedt*. Because we see the message “(in transit)”, we know he was assigned this turn, and won’t be effective until next turn. If a **Leader** is already in place, you won’t see this message.

Finally, this section shows Rundstedt's effectiveness in **Strategy**, **Attack** and **Defense Ratings**. Note, most **Army/Fleets** won't have a named **Leader**. You should assign **Leaders** where they can provide the most benefit.


### 24.5.2 Biography Section



If a **Leader** is assigned to this **Army/Fleet**, a short biography of him will be listed in this section. Also, if you want to dismiss the **Leader**, there is also a red **Dismiss Button**  in this section. Click the **Dismiss Button** to remove the **Leader** from command of this **Army/Fleet**.


### 24.5.3 Coverage Section


The **Coverage** section shows your worldwide **Leader** status. While **Leaders** assigned to an **Army/Fleet** will affect battles that their **Army/Fleet** is involved in, **Leaders** also have a **Strategy Rating**, which can apply to the entire **Theater**. The **Leader** with the best **Strategy Rating** in each **Theater** will provide a combat bonus to *EVERY* **Army/Fleet** in that **Theater**.

It is important that you have at least one **Leader** present in every **Theater** which contains an **Army/Fleet**. If you don't have a **Leader** in that **Theater**, every **Unit** in that **Theater** will be missing the **Strategy Bonus**.

The **Coverage** section will let you see at-a-glance, if all of your **Theaters** are properly staffed. If you see a **Dash Symbol**  then you have no **Units** of that type in that **Theater**, so assigning a **Leader** in that **Theater** is not necessary, and no action is required.

If you see a **Green Square Symbol** , then you have **Armies** present in that **Theater**, and you have a **Leader** assigned, so again, no action is needed. If you see a **Green Triangle**  next to a **Theater** name, then your **Theater** contains naval **Fleets**, and you have an **Admiral Leader** assigned. No action is necessary.

However, if you see a **Red Square Symbol**  next to a **Theater** name, it means you have **Armies** present in that **Theater**, but you don't have a **Leader** assigned. You should assign a **Leader** to an **Army** in this **Theater**, so you get the **Strategy Bonus** in that **Theater**.

If you see a **Red Triangle Symbol**  next to a **Theater** name, it means that you have ships present in the **Theater**, but you don't have any **Leaders**. You should assign an **Admiral Leader** to the **Theater**, so your **Fleets** don't miss out on the **Strategy Bonus**.

You can mouse hover over a **Theater** in the **Coverage** list to see which **Admiral** or **General** is assigned as the **Theater** commander.

## 24.5.4 Other Leader Section

The **Other Leader** Section will show where your other **Leaders** are assigned, and if you have any that are Idle. The following information is displayed in this section. This list will be filtered by the type of **Army/Fleet** you have selected. If you have an **Army** selected, the list will show your other **Generals**. If you have a naval **Fleet** selected, the list will show your other **Admirals**.

### 24.5.4.1 Assigned

At the top of the list, this number is the number of **Leaders** of this type are currently assigned for your **Country**. In the sample screen shot, this is 7.

### 24.5.4.2 Max Size

This number shows the maximum numbers of **Leaders** from your **Leader** pool, that you can assign them to **Army/Fleet's**. In the sample screen shot, this is also 7. Meaning that we have assigned our maximum number of **Generals**. If we want to assign a **General** to a new **Army**, it will be dismissed from the current assignment.

### 24.4.3 Theater

This is the **Theater** where this **Leader** is currently assigned. If the **Leader** is idle, then this column will be blank.

### 24.4.4 Leader

This column shows the name of your **Leaders**.

### 24.4.5 Assigned To

This column shows the **Army/Fleet** this **Leader** is assigned to. If unassigned, this column will show "Idle".

#### 24.4.6 Region

This column shows the **Region** name where this **Leader** is assigned. If unassigned, this column will be blank.

#### 24.4.7 Strategy Rating (Str)

This column shows the **Leader's Strategy Rating**. This is the **Rating** that applies if the **Leader** is the **Theater** commander.


#### 24.4.8 Attack Rating (Att)


This column shows the **Leader's Attack Rating**. This is the amount of bonus applied when the assigned **Army/Fleet** is attacking another **Region**.

#### 24.4.9 Defense Rating (Def)

This column shows the **Leaders Defense Rating**. This is the amount of bonus applied when the assigned **Army/Fleet** is defending a **Region**.

### 24.5.5 Assigning or Dismissing Leaders

Changing **Leaders** is easy. To dismiss a **Leader**, just click on the **Dismiss Button** . He will be immediately moved to the idle pool and be available for reassignment.

To add or change a **Leader** click on green **Assign Button**  at the left of the list. This will immediately assign the **Leader** to this **Army/Fleet**. Note that if the **Leader** was already assigned to a different **Army/Fleet**, he is automatically dismissed from the other **Army/Fleet** when he is assigned to a new one.

If you assign an **Army/Fleet** already has a **Leader** when you click the **Assign Button**, the new **Leader** is assigned, and the previous **Leader** is returned to the idle pool. It takes one turn for a **Leader** to become effective in his new assignment.



## 25 Keyboard Shortcuts

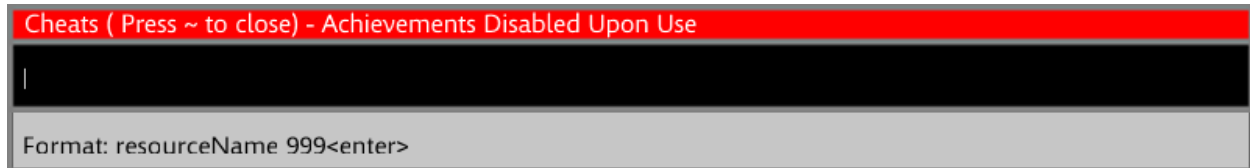
There are several keyboard short cuts that can be used instead of clicking with the mouse. These are listed here.

Key	Function
Esc	Exit from a screen
Enter	On the <b>Main Map</b> , End the Turn. On other Screens, will click the <b>Default Button</b> ,
Delete	On the <b>Game Load/Save Screen</b> , this will Delete the selected Save Game
+	Zoom in the <b>Main Map</b> (can also use mouse wheel)
-	Zoom out the <b>Main Map</b> (can also use mouse wheel)
Left Arrow	Scroll the <b>Main Map</b> Left (Can also move the mouse pointer off the screen)
Right Arrow	Scroll the <b>Main Map</b> Right (Can also move the mouse pointer off the screen)
Up Arrow	Scroll the <b>Main Map</b> Down (Can also move the mouse pointer off the screen)
Down Arrow	Scroll the <b>Main Map</b> Up (Can also move the mouse pointer off the screen)
F2	Open the <b>Report Menu</b>
F3	Search for a <b>Region</b>
F5	Quick Save the game
F9	Quick Load the game
A	Open the <b>Army/Fleet Grouping Screen</b>
B	Open the <b>Battle Summary Screen</b>
C	Open the <b>Resources Report</b>
D	Open the <b>Diplomacy Screen</b>
E	Open the <b>Espionage Screen</b>
G	Open the <b>Game Menu</b>
H	Open the <b>Home Port Screen</b>
I	Open the <b>Shipping Report</b>
M	Show All Moves on Map
O	Open the <b>Bombing Report</b>
P	Open the <b>Production Screen</b>
R	Open the <b>Research Screen</b>
S	Open the <b>Supply Screen</b>
T	Open the <b>Trade Screen</b>
U	Open the <b>Units Report</b>
W	Open the <b>Power Chart</b>
X	Open the <b>Statistics Report</b>
Z	Open the <b>Unit Specs Report</b>

## 26 Cheat Window

Games are meant for fun. Some people like cheat codes, some don't. The cost of using a cheat is that **Steam Achievements** will be disabled for that game. Other than that, it's up to you whether you want to use them or not.

You can open the window by pressing the tilde (~) character on the keyboard.



### 26.1 Cheat Command Format

Cheats will allow you to gain more of the basic **Resources** in the game. You just enter the cheat command in the **Cheat Window**, in this format:

resourceName 999<enter>

The following **Resources** can be gained using the **Cheat Window**:

- Cash
- Food
- Oil
- Coal
- Metal
- Supply
- Fuel

Where “999” is a number for the amount of the **Resource** you want to gain.

To close the window, just press the tilde (~) key again.

## 27 Force Size Editor

The **Force Size Editor Screen** allows you to make changes to the starting forces and resources for major countries. The changes you make in this screen will only affect new games. Additionally, the “**Include in New Games**” **Check Box** must be checked for the changes to be included in new games you start.

This provides additional opportunities to do “what if’s”, or just have some fun making a country extra powerful.

**Note:** Achievements are disabled for games started using changes from this screen.

Country Selection      Unit/Resource      Amount To Add      Default Values

The screenshot shows the 'FORCE SIZE EDITOR' window. A red box around the 'Country: USA' dropdown is labeled 'Country Selection'. Another red box around the 'Submarine' unit name is labeled 'Unit/Resource'. A third red box around the '0' value in the 'Submarine' row is labeled 'Amount To Add'. A fourth red box around the '(8)' default value in the 'Submarine' row is labeled 'Default Values'. The screen is divided into several sections: Land Units, Naval Units, Air Units, Replacements, Transport and Goods, and Resources. Each section contains a list of units or resources with input fields for their counts. At the bottom, there is a checkbox for 'Include in New Games' and 'Save' and 'Close' buttons.

Category	Unit/Resource	Amount To Add	Default Values
Land Units	Militia:	0	
	Infantry:	0	(21)
	Cavalry:	0	(1)
	Mechanized:	0	
	Armor:	0	
	Paratroops:	0	
	Naval Units	Submarine:	0
Destroyer:		0	(25)
Cruiser:		0	(37)
Battleship:		0	(16)
Carrier:		0	(5)
Air Units		Fighter:	0
	Tactical:	0	(3)
	Strategic:	0	(3)
	Nuclear:	0	
Replacements	Air:	0	(100)
	Tank:	0	(100)
	Troop:	0	(20.0k)
	Repair:	0	
Transport and Goods	Transport:	0	(1)
	Convoy:	0	(1.6k)
	Cash:	0	(1.7b)
	Fuel:	0	(873k)
Resources	Coal:	0	(24.0m)
	Oil:	0	(1.1m)
	Metal:	0	(48.1m)
	Food:	0	(49.0m)

☒ Include in New Games      **Save**      **Close**

## 27.1 Country Drop Down List

Select the **Country** whose forces you wish to modify, from the **Country Drop Down List**.

## 27.2 Unit/Resource Fields

Every **Unit** or **Resource** you can increase is shown on the screen, grouped by type.

### 27.2.1 Amount To Add Field

Each **Unit** type and **Resource** type have a text box where you can enter a number. This is the number of **Units**, or number of **Resources** to add for the selected **Country**. For example, if you enter “10” in the **Submarine Text Box**, that **Country** will start with an extra 10 **Submarine Units** in any new game that you start.

### 27.2.2 Default Values

In parentheses next to each text box, is the number of that **Unit** or **Resource** the country will start with in a new game. In the example screen shot shown above, the **USA** starts the game with 8 **Submarine Units**. If you entered “10” in the **Submarine Text Box**, the **USA** would be given 18 **Submarines** in any new games you start (10 + 8).

## 27.3 Include in New Games Check Box

This **Check Box** must be checked for your changes to be included in new games. You can un-check this **Check Box** to start new games with the default forces. This **Check Box** allows you to easily toggle between your custom game settings and the default game settings.

## 27.4 Save Button

None of your changes are saved until you click the **Save Button**. When you click **Save**, changes you made to **ALL** countries are saved. If you close the screen without clicking the **Save Button**, your changes will be lost.

## 27.5 Close Button

This will close the **Force Size Edit Screen**. Make sure you save your changes before closing the screen.

## 28 Multiplayer Game Modes

### 28.1 Overview

If you prefer to compete against a human opponent, **DOTW** supports two **Multiplayer Game Modes: Hotseat and Play-by-Email (PBEM)**.

#### 28.1.1 Hotseat Mode

With **Hotseat Mode**, two people play against each other on the same computer. The first player makes his moves and clicks the **End Turn Button**. The other player then sits at the computer and loads the game and makes his moves.

#### 28.1.2 Play-by-Email (PBEM) Mode

With **PBEM Mode**, Player 1 enters his moves and clicks the **End Turn Button**. He then sends his saved game to the other player by email. Player 2 saves the email attachment to the **DOTW Multiplayer** folder, and then loads that saved file into the game, makes his moves, ends his turn, and sends the new saved game back to Player 1.

**DOTW** stores these saved games in a separate folder from your normal saved games. The game will tell you which file to send, and you will be responsible for emailing the file to your opponent.

#### 28.1.3 Starting a new Multiplayer Game

You can start a **Multiplayer** game by clicking on the **Multiplayer Button** on the main **Game Menu**.

**Multiplayer** games are **Axis vs. Allies Mode** only. So, there will be two players. The first player will pick a faction: **Axis** or **Allies** and decide whether they want to include **Force Size Edits** in the game or not. The active **Game Options** from the first player's computer will be used for the **Multiplayer** game.

Both players should discuss the **Game Options** they want to use in the game, and whether to utilize **Force Size Edits**. The first player should make sure his **Game Options Screen** settings reflect their agreed upon settings. He should also make sure the **Force Sizes** match the agreed upon settings, if the players choose to use them.

When the second player loads his first turn, the game will display any active **Game Options** and **Force Size Edits** that the first player has included, so he can verify that they match what both players agreed upon before proceeding with play.

Using **Force Size Edits**, and/or **Game Options** is a good way to provide a handicap for a player, when the players have different skill levels in the game.

Each game will be given a **GameName** by the first player. The saved game files will include the **GameName** as the first part of the file name, so that you can keep track of which game is which, and you will be able to have multiple **Multiplayer** games in progress at the same time.

You will **NOT** be able to manually save the game. The game will automatically save when you end your turn.

## 28.2 Multiplayer Screen

When you click the **Multiplayer Button** on the main **Game Menu**, the **Multiplayer Screen** (shown below) will be displayed:



### 28.2.1 Faction Radio Buttons

**Multiplayer** games are always played in **Axis vs. Allies Mode**. This means that one player will control all the **Axis Powers (Germany, Italy, and Japan)**, and the other player will control the **Allies (UK, France, USA, USSR and China)**. Player 1 should pick which faction they want to play: **Axis** or **Allies**.

### 28.2.2 Game Name

You must provide a name for each game you play. All the saved games for the game will include the **Game Name** as the first part of the saved game file name. Each game must have a unique name. Enter the name you chose in the **Game Name Text Box**.

### 28.2.3 Scenario

By default, the game will cover the entire World War II timeline. If you like, you can select another **Scenario** from the **Scenario** drop down list that will cover a different portion of the war.

### 28.2.4 Use Force Size Edits Checkbox

If you want to give an advantage to a player as a handicap, you can use the **Force Size Edits Screen** (See **Section 27**) to give extra **Units** and **Resources** to **Countries**. Check the **Use Force Size Edits Checkbox** if you want these extra **Units** and **Resources** to be used in your game. If you don't check this checkbox, both players will play with the standard number of **Units** and **Resources**.

If you choose to use these edits, when Player 2 starts his first turn, the **Messages Panel** will display all **Game Options** and **Force Size Edits** which will be active during the game.

### 28.2.5 Use Vichy Checkbox

If checked, Vichy France will be created when conditions are met. If not checked, Vichy won't be created.



### 28.2.6 PBEM/Hotseat Radio Buttons

Chose the type of **Multiplayer** Game you want to play: **PBEM** or **Hotseat**. Note: For anti-cheating purposes, the game will verify the computer name and username of each user playing the game. So, the game will prevent Player 1 from loading a Saved Game intended for Player 2, and vice versa.

### 28.2.7 Start Button

Once you have made your game selections, click the **Start Button** to begin your game.

### 28.2.8 Cancel Button

Click the **Cancel Button** to exit the screen without creating a new game.

## 28.3 Saved Game Location

After you click the **End Turn Button**, the game will display a message box reminding you that you need to send the saved game file to your opponent.

For reference, your saved games for **Multiplayer** will be stored in the folder:

***C:\Users\yourUserName\AppData\Roaming\Fiddlyware\DOTW\Multiplayer***

**Note:** *yourUserName* will be your **Windows Login ID**.

**Note:** the **AppData** folder that is in the path is hidden in Windows by default. To make hidden folders visible, in your File Explorer window, click the "View" menu option at the top. Then, if you look on the toolbar ribbon at the top of File Explorer, you should see a check box labeled "Hidden Items". Make sure that check box is checked, and then the **AppData** folder should be visible.

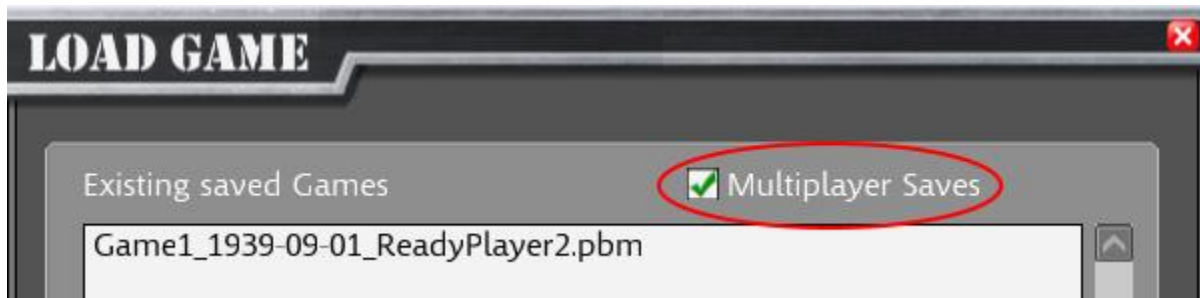
## 28.4 Multiplayer Game Sequence

### 28.4.1 PBEM Game Sequence

Here is the sequence for **PBEM** Games:

Player 1 enters his moves and clicks the **End Turn Button**. The game will be saved prior to turn processing, and the game will display a message box telling the player the name of the file he needs to email to player 2.

Player 2 receives the email, saves the file to his game folder, and then loads the saved game file. To load the game, click the **Load Game Button** on the main **Game Menu Screen**. On the **Game Load Screen**, make sure the **Multiplayer Saves Check Box** is Checked:



Player 2 enters his moves and clicks the **End Turn Button**. The game will be saved prior to turn processing, and game will display a message box telling the player the name of the file to send to player 1.

Player 1 receives the email and loads the saved game. The game will process the turn. Player 1 will enter his moves for the second turn and click the **End Turn Button**. Player 1 will then send the new Saved Game File to Player 2.

Player 2 will load the saved game file from player 1 for the second turn. The game will replay the turn results, and then player 2 will enter their orders and click the end turn button.

<repeat until end of game>

## 28.5 Hotseat Game Sequence

**Hotseat** Games use the same sequence as **PBEM** Games, except, you don't need to worry about emailing files. When it is your turn, just load the saved game, and play your turn.

## 28.6 PBEM Multiplayer Precautions

Because **PBEM** games run on two separate copies of the game, keep the following in mind.

### 28.6.1 Game Versions

Both players should make sure they keep their game version updated on **Steam**.

### 28.6.2 Modifying Files

Do not modify your local game files. **DOTW** will validate that both player's games are using the same versions of files and Saved Games will not load if either player's computer files have been manually modified.

### 28.6.3 Computer/User Restrictions

Once both players have entered their first turn, you cannot play the saved game on different computers, or with different Windows Users. This is done to prevent cheating.

## 29 Design Notes

I've always liked grand strategic wargames. And my favorite historical period is World War II. I really liked the fact that in games like Hearts of Iron (HOI), that I could incorporate play in the entire world. One thing that I really disliked about HOI was the "real time" aspect of the game. I always found myself waiting for something to happen. If I sped the game up, then I'd end up with dozens of alerts, and I would frantically try to pause the game. While it seemed like a cool idea to me at first (to see game time pass in real time) it soon turned into an annoyance. So, I decided to write my own game, and include just the features I liked. DOTW is the result of that idea.

The biggest decision was to let the player plan his move in detail, then end the turn and let the game carry out his orders. I felt this was a good model to a General issuing orders to his subordinates, and then watching them carry it out. DOTW uses a complex system to resolve move conflicts as the players orders and AI Orders are both carried out simultaneously.

As I've studied WW2, there were a number of themes that I felt were really important, that I wanted to include in the game. One of those was supply. Supply paid an important role in many aspects of the war. As the Germans advanced into Russia, their supply lines grew long, and often slowed advances while the supplies caught up. The Allies had a similar problem after D-Day. German resistance was crumbling before them, but they couldn't get supplies to the front quickly enough.

The vulnerability of supply and trade routes was also critical. Especially early in the war, submarine warfare against shipping was devastating to the Allies. Supplying troops in Libya was a challenge for Italy and German due to the dominance of the British Navy.

For this reason, I wanted to include a detailed supply system in the game, but I didn't want the player to have to micro-manage it. So, the game handles the movement of supply, fuel and trade in great detail behind the scenes. The player is just responsible for creating enough supplies and protecting his supply lines.

This also means that as your troops advance, you need be aware of your current supply and fuel status, and not advance too far ahead of them.

Since supply is modeled with depots and supply convoys, these represent physical things at real locations on the map. Loss of those regions in combat can mean loss of important convoys and depots.

WW2 was also a war of production. The ability of the Allies to outproduce the Axis, often allowed them to overcome superior technology. I wanted to model the fact that the production was actually performed in specific geographic locations. There wasn't just this magic pool of factories that spit out new units that you could place down at your convenience on the map. Instead, the production would occur in a region. If you built a tank in a remote location, it would have to move to where you needed it from that remote factory. If you lost a region in combat, you would not only lose the region, but also the output of the mines and farms and oil fields. And you would lose the factory production.

And you would lose those factories. If the factories in a region were producing critical aircraft, and that region is captured, then that production is lost.

WW2 also introduced many modern technologies. These technologies could provide great impact, but required long periods of research in some cases, and great financial investment. The B-29 bomber cost \$3 billion. That was a huge investment in the 1940's. The Manhattan project cost \$2 billion dollars. I wanted the player to have access to these technologies, but I wanted them to have to make trades offs. You can have everything and must decide what has the most benefit to you, given the way that you are conducting the war.

Since the game incorporates Fog of War (limited intelligence), I wanted to provide a means of giving the player more information if he was willing to invest resources in it.

Cryptography was critical in the war, and this research, combined with Espionage missions were the way the player can get it. But even with the best espionage, the information is not 100% accurate. The player must utilize imperfect intelligence, just like his counterparts in the war.

I tried to research the best data that I could find to determine the historical resources and unit strengths. Many games at the grand strategic level will give you a unit with a strength of 4, for example. With no detail behind it. Instead, I chose to research the composition of the historical divisions, from the number of troops and artillery, to the tank armor thickness and gun calibers. The game uses this to generate the strength of the units. As the units loses tanks in battle, for example, this will be reflected in the battle strength which is recomputed whenever needed for combat. Ships in WW2 had different armor on the decks and hulls. The battle engine will use this to model hits against different locations of the ship and uses armor penetration data to estimate the impact of different guns sizes against different armor.

I hope you enjoy playing DOTW. I certainly enjoyed making it.

David Visti