
CLASH
OF
STEEL
TM
WORLD WAR II EUROPE 1939-45
SSI

TABLE OF CONTENTS

INTRODUCTION 1
Your Game Box Should Contain 1

STARTUP 1
Backup Disks 1
README File 1
Installing the Game 1
Documentation Check 1

PLAYER AIDS 2

GAME CONCEPTS 2
Game Scale 2
Game Map 2
Combat Forces 2

LAND UNITS 3

AIR UNITS 3

NAVAL UNITS 3
Game Abbreviations 4

TALKING TO THE COMPUTER 4
Using the Keyboard 4
Using the Mouse 4
Menu Overview 4

QUICK START 5
Overview 5
Summary of Menus 5
Brief Summary of Game Play 6
Summary of Game Menus 6
Summary of Tables/Rules 7
Combat Units 7
Accessing Units 7
Moving Units 7
Ground Combat 7
Air Strikes/Shore Bombardment 8
Terrain Effects on Movement/Combat 8
Placing Units on the Map 8
Amphibious Operations 9
Strategic Bombing 9
Supply 9
Production 9
Research 10
Other Rules 10

THE SETUP MENU 10
Loading/Saving the Game 11
Rules Options 11
Computer Options 12
Edit Game Options 13

TURN SEQUENCE.....14
Overview.....14
Impulse Restrictions.....15
ORDERS PHASE.....15
Player's Checklist.....15
The Main Menu.....15
Unit Menu.....16
Navy Menu.....17
Map Menu.....18
Information Menu.....19
Status Menu.....19
Research Menu.....19
Developments.....20
Politics Menu.....21
Strategic Bomber Menu.....22
UNITS.....22
Units on the Map.....23
MOVEMENT.....24
Land Movement.....24
Normal Movement.....24
Overrun Movement.....24
Reserve Movement.....25
Operational Movement.....25
Terrain Effects.....25
Russian Partisan Effects on Axis Movement.....25
Strategic Bombing Effects on Oil Resources.....25
Air Movement.....26
Rebase Air Movement.....26
Reserve Air Movement.....26
Naval Movement.....26
Restrictions on Movement..27
Naval Formations.....27
Convoys.....27
Sea Transport.....28
Loading Units.....28
Unloading Units.....28
COMBAT.....29
Land Combat.....29
Combat Icons.....30
Retreat.....31
Special Combat Skills.....31
German Kampfgruppe..31
German Mobile Defense.....31
Russian Infiltration.....31
Russian Exploitation.....31
AT-Guns/Heavy Tanks.....31
AT-Barrier.....31
Panzer Battle.....32
MRLS.....32
Panzerfaust.....32
Air Combat.....32
Ground Strike.....32
Strategic Bombing.....33
R&D Effects.....33

Naval Combat 33
Searching for Enemy Ships..33
ASW-Sonar Research.....33
Naval Combat Execution 33
Shore Bombardment.....34
Harbor Requirement 34
Ship Damage Repair 34
Amphibious Invasion.....34
Artificial Harbors 35
POLITICS.....35
Nations at War.....35
Entering the War.....37
SUPPLIES/PRODUCTION 38
Hex Control Determined.....38
Supply Partitions.....38
Isolation 39
Supply.....39
Morale Adjustment.....39
Sea Supply 39
Production.....40
Industrial Base Multiplier ...41
Unit Upgrade Level 41
Unit Refit.....41
WEATHER 41
Russian Winter 42
SPECIAL RULES 42
Blitzkrieg.....42
Fortifications 42
Malta 43
German Disorganization.....43
Norwa.....43
Rommel 43
Homeguard.....43
Paratroops.....44
UNIT REORGANIZATION.....44
REINFORCEMENTS.....44
VICTORY CONDITIONS 44
Conquering a Country 44
SCENARIOS 45
STRATEGY AND TACTICS 47
Allied Player Strategy 47
Axis Player Strategy.....48
General Tactics/Strategy 49
TUTORIAL 50
HISTORICAL TIMELINE 55
GAME ABBREVIATIONS 59
ORDER OF BATTLE.....60

INTRODUCTION

CLASH OF STEEL is a strategic war-game simulation of the conflict in Europe during World War II from September 1939 to August 1945. The map runs from Ireland in the west to Russia in the east and from Norway/Sweden in the north to North Africa in the south. As the Supreme Commander of either the Axis or Allied countries, you are in control of all the military decisions affecting your numerous land, air, and sea forces in the European theatre. You can also engage in politics attempting to acquire additional allies in your struggle for the control of Europe. You decide which units to produce and what areas of special weapons you want your research and development scientists to concentrate on. Although each turn represents two months, every turn is broken down into a variable number of impulses in which you manage your forces across the battlefield. Many alternatives are present, thereby allowing you to try different approaches in this World War II combat simulation.

Your Game Box Should Contain

Your game box should contain: Disk(s) that contain the game, this Rule Book, and a Data Card.

STARTUP

Backup Disks

Your game disk has no physical copy protection, so please make a backup copy and put the original away for safekeeping. Use the information that came with your computer's operating system to make the backup copy.

README File

Your game disk may come with a README file that contains rules updates and/or errata. Please take a look at this file before playing the game.

Installing the Game

Use the instructions on your Data Card to install and play the game.

Documentation Check

To verify that you have a legitimate copy of the game you will be asked to answer a question using information from this rule book. **Note**: Do *not* count section headings as part of paragraphs.

PLAYER AIDS

Due to the scope of the game, the player aids listed below were designed to help you get started playing the game.

- **Quick Start:** A Quick Start section allows you to read a minimum of rules giving you a general idea of how to play the game. Numerous references to more expanded explanations of the rules are included. See the section "Quick Start on page 5.
- **How to Play:** See the "Tutorial" section on page 50.
- **Scenario Objectives:** Each scenario has some suggestions as to what to do to play the first few turns. See "Scenarios" on page 45 for more details.
- **Timeline:** See the section on "Historical Timeline" on page 55 to review the dates for the various battles that took place in the European theatre.
- **Checklist:** In the section "Player's Checklist" on page 15 you can review some of the important tasks you need to perform in any given turn.
- **Strategy and Tactics Hints:** A section on "Strategy and Tactics" on page 47 has been included to give you some helpful hints on playing the game.

GAME CONCEPTS

Game Scale

Each hex is approximately 50 miles across. Each turn is 2 months long, and composed of a random number of impulses. Most land units are at the Corps or Army level in size.

Game Map

The game map covers from Ireland to the Soviet Union, extending 2500 miles from east to west. It also covers from Norway/Sweden/Finland to North Africa, extending 2300 miles from north to south. The various terrain features used on the map are:

City
Clear
Desert
Fort
Mountain
Port
Resource
River
Sea
Swamp
Wood

Combat Forces

The land and air units that appear on the map are color-coded for each country. German units have a gray background with black lettering, German panzer units have a black background with white lettering,

Italian forces have a gray background with brown lettering, Allied forces have a blue background with red lettering, U.S. units have a brown background with white lettering, and Russian units have a red background with black lettering. Neutral countries have various color schemes.

The land units have two numbers printed on their counters. The left number is the effective ground combat strength, rounded to the closest whole number. The right number is the amount of remaining Action Points (AP) which can be used to move and attack. The air units also have two numbers. The left number is the effective air combat strength, rounded to the next full number. The right number is the number of air strikes remaining. Although not shown on the counter, all air units have an effective strength of one ground combat point if attacked. Naval units are not represented by counters on the map. They can be accessed in the Navy Menu and the Naval Formation Menu.

LAND UNITS

- Army-sized land units usually have a large combat strength due to their size.
- Army Group (Supply) units have a action point allowance of 2 or 3. Other units can trace supply to these units. They have a high combat strength as well.
- Corps units are smaller formations with a lower combat strength.
- Engineer units can build fortifications in any hex to help strengthen defenses against enemy attacks and amphibious operations.
- Panzer (Tank) units have a good combat strength normally and a high Action Point allowance.
- Paratroop units can help negate defensive advantages when friendly units are engaged in a ground assault.

AIR UNITS

- Air units can perform air strikes against enemy units to soften up the defender before a ground attack occurs.

NAVAL UNITS

- Artificial Harbors (Mulberry) are used in conjunction with amphibious assaults to give the units a supply source throughout the turn the landing takes place. Unlike other naval units, these units appear on the map like land units.
- Carrier units have a high combat value in naval operations.
- Escort units provide the firepower to protect transport missions, engage enemy naval units, or to perform shore bombardment.

- Sub units are used to sink enemy convoys.
- Transport units can move the land combat units that are to be landed in friendly ports or enemy coastal hexes in an amphibious assault.

Game Abbreviations

A list of the game abbreviations is on page 59.

TALKING TO THE COMPUTER

Using the Keyboard

Note for IBM users: Make sure your [Num Lock] is ON and your [Caps Lock] is OFF before playing.

Use the following keys on the numeric keypad to move the cursor:

```
7  8  9
4     6
1  2  3
```

The menu options can be accessed with hotkey commands which are listed with the menus in the manual. To exit a window press the Esc key. Use the arrow keys to move up and down some of the menus (such as the OB menu) or use the page up and page down keys on the keypad.

Using the Mouse

Use the mouse to move the pointer over the menu items and buttons. Click the left mouse button to select the option. To exit from a window place the pointer outside the window or on the small button in the top-left corner of the window and click the left button. To scroll around the map, move the mouse pointer to one of the edges of the map. To select a hex, click the left button while the mouse pointer is over the desired hex. To select a unit first select the desired hex and then click the left button again.

All keyboard commands also work if you are using a mouse.

Menu Overview

The program accepts input from either the keyboard or mouse at anytime. The menus are ordered in a tree-like structure. To select a certain item, you can click on a box, or type the highlighted key. To exit from a menu, you can select EXIT or press the Esc key. If you are in the Main Menu, you can also select and move units. Use the mouse or keypad to move the cursor. The right mouse button or the "5" key centers the map around the cursor. You can scroll the map by moving the mouse cursor to the edge of the map. If the cursor is located on a friendly unit, you can click on it again, or type "+" to enter the Unit Menu. In the Unit Menu you can move the unit by clicking on a nearby hex within the unit's range, or typing the appropriate key on the keypad. The right mouse button, or the Esc key will bring you back to the Main Menu.

QUICK START

This section allows you to read a minimum of rules to get started playing the game. The first section contains an overview of the game. The second section shows a listing of the main menus offered in the game. The third section has a brief summary of the game's rules.

Overview

The game is played in bimonthly turns. Each turn is further divided into an Economy Phase followed by a varying number of impulses. In the Economy Phase, the computer calculates the eligible Production Points (PP) for both sides. Accordingly, a check on the Initiative Table will determine who is the active player in the first impulse. In each impulse, only one side can move. He is referred to as the active player; the other side is the passive player. Each impulse starts with a Supply Phase for the active player, followed by an integrated combat and movement impulse. After the active player has finished his impulse, a check is made on the Turn Continuation Table. If the turn continues, the passive player becomes active in the following impulse. The first two impulses of each turn are special, as a number of actions are only allowed at that time. These include production, navy moves, amphibious invasions, reserve movement, and insertion of new units.

Summary of Menus

SETUP MENU
GAME (G)
SCENARIO (C)
LOAD (L)
SAVE (S)
AXIS (A)
ALLIED (I)
RULES (R)
COMP (O)
EDIT (D)
END (E)

MAIN MENU
MENU (U)
END (E)
ASSAULT (A)
STRIKE (S)
NAVY (V)
NEW (N)
UNLOAD (L)
PRODUCT (P)
MAP (M)
INFO (I)
CNTL (C)
CLEAR (R)

EDIT GAME OPTIONS MENU
SOUND (S)
PANZER (P)
IMPULS (E)
AUTO (T)
SCROLL (C)
ATTACK (A)
D6SOUND (O)
D6ANIM (N)
HEXGRID (H)
SLIDE (L)
UNITEXIT (U)

INFORMATION MENU
STATUS (S)
SEA ZONE (E)
HISTORY (H)
OB (O)
RESEARCH (R)
POLITICS (P)
BOMBER (B)
WEATHER (W)

COMPUTER OPTIONS MENU
HIDDEN (H)
FAVOR (F)
BALANCE (B)
IMPROVE (I)

RULES OPTIONS MENU
SELECT (S)
CHAOS (C)
HOLD (H)
PARTISAN (P)
JAPAN (J)
LIBERATE (L)

UNIT MENU
OPERAT. (P)
RESERVE (R)
AMPHIB (H)
REBASE (B)
PREPARE (A)
FORTIFY (F)
MOVE (M)
OOPS (O)
EVACO (E)

STRATEGIC BOMBER MENU
EXIT (X)
BUY (B)
FACTORIES (F)
HARBORS (H)
OIL (O)
ENGLAND (E)
RUSSIA (R)

POLITICS MENU
CONFLICT (C)
BALKAN (B)
WAR (W)
PRESS (P)

MAP MENU
GET (G)
COUNTRY (C)
CNTL (T)
SEA (S)

RESEARCH MENU
UP (U)
DOWN (D)
MORE (M)
LESS (L)
VIEW (V)

NAVY MENU
SELECT (S)
NEW (N)
MOVE TO (M)
FORM. (F)

STATUS MENU
AXIS (A)
ITALY (I)
ALLIED (C)
US (U)
RUSSIA (R)
LOSSES (O)

Brief Summary of Game Play

A short summary of the more important game menus, tables, and rules is detailed below.

SUMMARY OF GAME MENUS

The Setup Menu is the first menu you will see as the game starts. In this menu you can begin to play the game, select a scenario, load/save a file, and set many of the game's parameters in the Edit Game Options Menu, Computer Options Menu, and the Rules Options Menu.

Selecting GAME in the Setup Menu begins the game. You will now be brought to the Main Menu. MENU brings you back to the Setup Menu. END allows you to finish your impulse. The game map will be displayed and in the Main Menu. You can move units on the map and also attack using the ASSAULT and STRIKE options. The NAVY option allows you to move and place your naval units. You can place new units or units in reserve on the map using the NEW option. UNLOAD gives you the option to unload units from ships. You can check out your unit production schedule with the PRODUCT option. MAP displays the Map Menu which allows you to view the entire map with various settings. The INFO option allows you to access the Information Menu. The CNTL option shows you which side controls the hexes on the map. CLEAR removes all units from the map.

When you access a unit, the Unit Menu is displayed. You can move land and air units by selecting a nearby hex to move to. You can also move land units with the OPERAT. and RESERVE options. Air units can move with the OPERAT., RESERVE, and REBASE options. A paratroop unit can use Prepare to be able to airdrop up to three hexes away in the next impulse. Engineer units can use FORTIFY to fortify the hex they are in at the beginning of the next turn. If they are in fortify mode, an additional option to MOVE will be displayed.

The Information Menu is accessed from the Main Menu. STATUS will allow you to see how many Production Points you will be receiving due to the number of cities, resource centers, and convoys you have. You can choose to upgrade your units. You can also view the overall amount of strength and losses for each player. Here you can check the status of your forces using OB. You can see the sea zones with the SEA ZONE option. The RESEARCH option allows you to build new weapons to help win the war. POLITICS allows you to influence a country's neutrality and declare war. You can buy strategic bombers for 20 PPs and set your bombing targets using the BOMBER option. The current weather can be displayed with the WEATHER option.

SUMMARY OF TABLES/RULES

A brief summary of the important tables and rules appears below.

Combat Units

Refer to the section "Combat Forces" on page 2 for a brief description of the unit types in the game. Also refer to the section on "Paratroops" and "Engineers" on page 42 for the specific rules for these two unit types.

Accessing Units

You can move the map cursor by using the mouse or the keypad keys. To scroll the map place the mouse pointer or move the cursor to the edge of the map. Clicking the right button or pressing the "5" key centers the map. Placing the cursor over a friendly unit and clicking the left button or pressing "+" displays the Unit Menu. Every unit on the map exerts a Zone of Control (ZOC). This influence extends into each of the six adjacent hexes surrounding the unit. A unit must pay one additional Action Point to move from one enemy ZOC into another enemy ZOC.

Moving Units

Units have a variety of methods to move by. You can move units one hex at a time by placing the cursor in an adjacent hex or move multiple hexes by placing it a few hexes away. Units can move by the functions RESERVE, OPERAT., or REBASE.

The RESERVE option removes the unit from the map and places it in Reserve. It costs one transport point to place a unit in reserve. After a unit is placed into reserve, you can take the unit out of reserve by moving the map cursor adjacent to a city. Access the NEW option on the Main Menu. The hex cannot be in an enemy ZOC and the hex must be friendly-controlled. All reserve units must be deployed out of reserve before you can end your turn, but only on the first or second impulse. The unit must have a supply level greater than zero to be put in reserve.

The option OPERAT. allows you to move the unit up to 10 hexes away. Axis, Allied, U.S., and Russia (only after Russian Winter strikes) can move one unit per impulse.

The REBASE option allows an air unit to relocate up to four hexes away in a friendly-controlled hex. You cannot rebase on snow or mud turns. You can rebase on any impulse.

Ground Combat

In the Main Menu the ASSAULT option allows you to select the adjacent friendly units you wish to use to attack the enemy unit in the hex which contains the map cursor. You can therefore combine multiple units to attack the selected enemy unit. A unit can only make one assault in a given impulse. Units can also conduct an overrun attack by themselves. To do so, simply attempt to move the friendly unit into the enemy hex. An overrun attack will then be made.

Air Strikes/Shore Bombardment

In the Main Menu you can use the STRIKE option to perform an air strike on the enemy unit in the hex which contains the map cursor. The air unit must be within 7 hexes of the target. Enemy air units may also intercept if within 7 hexes of the target. If the target hex is a coastal hex, then Shore Bombardment can take place. Shore Bombardment acts similarly to an air strike. CV and BB will each add one point to a bombardment which is resolved on the ground strike table. Only units in the same sea zone as the naval unit can be bombarded. There will be no interception and bombarding ships will suffer no reverse results except that they can not bombard a second time in the same impulse.

Terrain Effects on Movement/Combat

The Action Point costs to enter the different terrain types and the effect that terrain has on the defender's strength and air strikes are shown in the table below. The defense bonus is the number of strength points added to a unit's strength. The unit's total strength is then modified by its morale. The Air Strike column shows the reduction in attacker's effective air strength.

TERRAIN NAME	AP COST	DEFENSE BONUS	AIR STRIKE
City	1	2	1
Clear	1	-	-
Desert		1	--
Fort *	1	3	2
Mountain	2	1	1
Port	1	2	1
Resource	1	-	-
River -	#	-	
Sea	-	-	-
Swamp	2	1	-
Wood		1	-1

units attacking across a river are halved in strength.

* Note: a computer player's unit has its defense strength increased 70% while defending in a fort.

Placing Units on the Map

Units which have just come out of production are shown in the third box from the left at the bottom of the screen when the Main Menu is displayed. Units placed into Reserve or newly produced units can be placed on the map using the NEW option in the Main Menu. Place the cursor on the friendly-controlled hex on or adjacent to a city and select NEW. A list of units will appear. Select Insert to place the unit on the map. If you are conducting amphibious operations, you must first have naval transport unit(s) in the Sea zone box (not a port box) in the same sea zone as the unit to be loaded onto the ship. Select the unit and choose the AMPHIB option in the Unit Menu. Move the cursor to the landing hex and select UNLOAD from the Main Menu. Select the unit to unload.

Amphibious Operations

If you wish to conduct sea transport or amphibious landings, refer to "Naval Movement" on page 26 and "Naval Combat" on page 33.

Strategic Bombing

Strategic Bombing Points (SBP) can be purchased at the cost of 20 spared PP from the Strategic Bombing Menu which can be accessed from the Info Menu. You can direct the whole bombing fleet at three different targets: Factories, Harbors, and Oil. If England and Russia are both in the war, the Axis player can choose which nation to bomb. Once each turn the bombers will resolve their orders.

Supply

Supply lines are traced through friendly-controlled hexes. Also, surrounding enemy units with friendly-controlled hexes disables their retreat, as it cuts their supply line. Each hex is either friendly or enemy-controlled, or contested. Control can change on two occasions during the game:

- Every time a unit enters a hex it becomes friendly-controlled.
- During the Supply Phase control of all hexes is recalculated: All friendly units and all city hexes which were previously friendly-controlled act as control bases for each side. Now each hex becomes friendly to the side which has the nearest control base in terms of Action points. In the case of a draw, the hex becomes contested.

After the calculation of hex control, the supply value of all units of the active player (only) will be calculated. For this purpose all friendly-controlled cities and all friendly army groups count as supply sources for the active player. You get the new supply value of a unit by tracing a path through friendly-controlled hexes from a supply source to the unit and subtracting the Action Point cost of this path from the supply value of the source. The varying supply values of sources are:

SUPPLY SOURCE	SUPPLY VALUE
Not isolated city in home country	10
Not isolated army group	10
City in sea supply in home country	10
Artificial harbor	10
City in sea supply	7
Isolated city in home country	5
Isolated army group	5
Not isolated city in enemy country	5
Isolated city in enemy country	0

Production

Each turn, except for the Sep/Oct 1939 turn, the Italian, Axis, Russian, and Allied players receive Production Points (PPs) based on the number of friendly cities, friendly resource centers, and convoys. Each city and convoy is worth 1 point while resource centers are worth 2 points. If the country

has been conquered, all resource centers belong to the other player. Players use PPs to buy various land, air, and naval units which are either dissolved or purchasable in the Production Phase. When buying units in the Purchase Menu you will get a list of eligible units together with the cost of the unit in PP and the number of turns it will take to produce the unit. You can only purchase a unit if you have sufficient PP remaining. Unused PP count as spared PP. Purchased units will become available as Reserve units after the shown delay.

Research

You have 10 Research Points to allocate among various weapon research areas. Review the effects described in the section on "Research Menu" on page 19.

Other Rules

Refer to the section on "Special Rules" on page 42, especially if you are playing the 1939 or 1940 scenarios. The Mediterranean area has a special Malta supply rule and England has a homeguard rule if the Axis plans to invade their country. Under the section "Rules Options" on page 11 there are additional rules that can apply.

THE SETUP MENU

When you start a game, the Setup Menu allows you to load saved games or set up new ones. There are many optional rules and game balancing alternatives to give added flexibility. You can return to this menu while playing by selecting the MENU option in the Main Menu. Each scenario has a list of short term objectives that you can review to give you an idea what you need to be concerned with in either attacking or defending in the first few turns (see "Scenarios" on page 45).

Setup Menu

GAME
SCENARIO
LOAD
SAVE
AXIS
ALLIED
RULES
COMP
EDIT
END

GAME **(G)** option starts a new game or allows you to continue playing the game once you have started.

SCENARIO **(C)** option allows you to choose one of the six scenarios to play: Poland 1939, Fall of France 1940, Operation Barborossa 1941, Drive to Stalingrad 1942, Kursk 1943, or D-Day 1944. See the section "Scenarios" on page 45.

LOAD (L) option allows you to load in a previously saved game. See the "Loading/Saving the Game" on this page.

SAVE (S) option allows you to save the game. See the "Loading/Saving the Game" on this page.

AXIS (A) this option allows you to have the Axis player controlled by either a human or a computer player.

ALLIED (I) option allows you to have the Axis player controlled by either a human or a computer player.

RULES (R) option allows you to select various rules to use in the game: assault selection, chaos at OKW, hold (stand and die), partisans, Japan (war in Siberia), and liberation politics. See the section "Rules Options" on page 11.

COMP (O) allows you to adjust several factors for the computer player: computer hidden, computer favored, adjust balance, and improved Allied units. See the section "Computer Options" on page 12.

EDIT (D) option allows you to select various sound/graphic options: sound, impulse end request, automatic messages, scrolling active, attack request, dice with sound, animated dice, hex grid, sliding moves, and unit exit with 0 AP. See the section "Edit Game Options" on page 13.

END (E) option allows you to exit to DOS. Answer YES (Y) if you wish to quit. Answer NO (N) if you wish to continue playing.

Loading/Saving the Game

All saved games are stored in a separate directory called "Save". The amount of free space on your hard drive will determine how many saves you can store. The LOAD (L) option in the Setup Menu allows you to retrieve a previously saved game. When you have selected the desired filename (the file selection box is displayed around the file-name), click the left button with the mouse arrow over the LOAD box or press the "L" key to load the file. The other options allow you to move the highlight to other pages or up/down the list of filenames.

The SAVE (S) option in the Setup Menu allows you to save the game using the selected saved game file-name which is surrounded by the file selection box. The option SAVE AS (A) allows you to name your own saved game filename. A max-imum of eight characters can be typed in. Press Enter when you are finished entering your filename. Press Enter again to return to the Setup Menu. The DELETE (L) option erases a previously saved game from the hard drive.

Rules Options

Additional game rules are available as explained below:

SELECT (S) option allows you to choose "YES" or "NO" for each attacking unit when assaulting an enemy unit

if the option is set to ON. If the option is OFF, then all attacking units automatically participate.

The computer can never be affected adversely if these rules are used:

CHAOS **(C)** option is the Chaos at OKW rule which states that from 1941-1945, every Axis Army-Group has a 50% chance of receiving only one AP each impulse.

HOLD **(H)** or the "Stand & Die" rule states that starting with the turn of Russian Winter, every Axis unit which intends to move west has a 33% chance of being intercepted by one of Hitler's stand & die orders. In this case, the unit will not move and lose a random number of AP. If there are remaining AP's, the unit can try to move again.

PARTISAN **(P)** rule states that there is a test against the number of unoccupied, Axis controlled cities in Russia during each Axis Supply Phase. If a random number is less than the number of cities, then partisans will greatly lower Axis supply in Russia. The chance for partisans to appear will also increase as the war progresses.

JAPAN **(J)** or the "War in Siberia" rule assumes that Japan has invaded Kamtschatka. The 3 Russian shock units will not be available. Note: A Japanese invasion would have concentrated on the capture of vital Siberian cities. There are no Japanese units in the game.

LIBERATE **(L)** or "Axis Liberation Politics" rule states that with the capture of certain cities, the Axis will recruit units there. These are corps-sized and will arrive automatically after 2 turns. The cities are: Paris, Riga, Minsk, Smolensk, Odessa, Kiev, Rostov, and Baku.

Computer Options

The Computer Options menu offers additional rules and game balancing selections which are explained below:

HIDDEN **(H)** allows computer controlled units to only become visible if you move adjacent to them.

FAVOR **(F)** allows the computer player to have more of an advantage. This rule has two effects:

- Computer pays only 75% of the normal PP cost for units
- A human player pays 50% of the normal PP cost for dissolved units (instead of 33%)

There are two more effects if the Allies are human-controlled:

- The Axis ignores rivers in the first turn that Russia is at war.
- For every impulse that Moscow is Axis-controlled, there is a chance that Russian units will lose efficiency.

BALANCE **(B)** sets the level of difficulty in the game. The default is Normal. The computer's units

have their strength modified by the percentage shown below. The five levels are:

- PACIFIST (P) places the computer at a -50% disadvantage.
- PRIVATE (R) places the computer at a -25% disadvantage.
- SERGEANT (S) is the normal balance selection.
- MAJOR (M) places the computer at a +25% advantage.
- GENERAL (G) places the computer at a +50% advantage.

IMPROVE (I) allows for each neutral or Allied nation to have their units strengthened. The European theatre allows for a variety of different strategies. There is a danger that once you have found your favorite winning strategy, like invading England early in the game, you can lose your interest in an invasion in Russia as you have already proved "how to win this game." This rule can be a bit of motivation. There is a check for each neutral or Allied nation. Depending on this check the units of this nation will be strongly improved, improved, or not improved at all. The effect is permanent.

Edit Game Options

The Edit Game Options menu gives you more options to choose from as explained below:

SOUND (S) option will turn on or off the sound effects in the game.

PANZER (P) turns on or off the sound of panzers (tanks) moving on the map.

IMPULSE (I) toggles on or off the Impulse End request message. If it is set to ON, you will be prompted to answer YES or NO when you have chosen the END impulse option in the Main Menu.

AUTO (T) displays messages two different ways. If this option is set to ON, messages will be cleared from the screen after a few seconds or if a key/button is pressed. If set to OFF, you must press a key/button to continue.

ATTACK (A) allows you to automatically attack an enemy unit, or display an additional menu allowing you to cancel the attack.

D6SOUND (O) gives sound effects on the dice rolls.

D6ANIM (N) displays animated dice.

HEXGRID (H) allows you to use the hex grid or not. If you do wish to see the hex grid, click the USE (U) option. The other options in the hex grid are FATLINE (F), BLACK (B), and GREEN (G).

SLIDE (L) activates or deactivates a smooth sliding motion when units move.

UNITEXIT (U) automatically exits the Unit Menu to the Main Menu whenever a unit reaches zero AP.

TURN SEQUENCE

Economy Phase
- Test for Entry into War
- Convoy Phase
- New PP Determined
- Strategic Bombing
- Reorganization Phase
- Build Forts
- Recruiting Phase
- Develop New Weapons
- Initiative Determined
- Supply Phase
- Production Phase
- Declaration of War

1st Impulse
- Determine Weather
- Buy Units
- Orders Phase-Move/Attack
- Test for Surrender
- Impulse Continue Test

2nd Impulse
- Buy Units
- Orders Phase-Move/Attack
- Test for Surrender
- Impulse Continue Test

3rd Impulse
- Determine Weather
- Orders Phase-Move/Attack
- Test for Surrender
- Impulse Continue Test

4th Impulse
- Orders Phase-Move/Attack
- Test for Surrender
- Impulse Continue Test

5th-10th Impulse

End Turn

Overview

The game is played in bimonthly turns. Each turn is further divided into an Economy Phase followed by a varying number of impulses. In the Economy Phase, the computer calculates the eligible Production Points (PP) for both sides. The computer will also determine who is to be the active player in the first impulse based on the year and the month. The Axis player has a higher chance of having the initiative early in the war and in better weather months. In addition, if Russia is conquered the Axis has an increased chance. In each impulse, only one side can move. He is referred to as the active player; the other side is referred to as the passive player. Each impulse starts with a Supply Phase for the active player, followed by an integrated combat and movement impulse. After the active player has finished his impulse, a check is made to see if the turn continues. In better weather the percentage chance that the turn will continue is much higher. Each turn usually has between four and six impulses. If the turn continues, the passive player becomes active in the following impulse. On every odd-numbered impulse the Weather Table is used to determine the weather.

IMPULSE RESTRICTIONS

The first two impulses of each turn are special, as a number of actions are only allowed at that time. These include the following:

- Production
- Reserve movement
- Amphibious transport and invasion
- Navy battles
- German disintegration
- Placing new units on the map

ORDERS PHASE

You can move the map cursor by using the mouse or the keypad keys. To scroll the map place the pointer at the edge of the map. Using the keyboard you can scroll the map by placing the cursor on the map edge. Clicking the right button or pressing the "5" will center the map. Placing the cursor over a friendly unit and clicking the left button or pressing "+" will display the Unit Menu. Every unit on the map exerts a Zone of Control (ZOC). This influence extends into each of the six adjacent hexes surrounding the unit. A unit must pay one additional Action Point to move from one enemy ZOC into another enemy ZOC. This movement is also called infiltration.

Player's Checklist

- Politics — try to persuade neutral countries to join your side
- Research — review/allocate research points
- Declare war
- Buy strategic bombers
- Check Production menu for Reinforcements — place on map
- Move land units using normal, reserve, or operational movement modes
- Make air strikes/shore bombardment
- Make ground attacks/assaults
- Make forts with engineers
- Make paradrops
- Move navies
- Make amphibious assaults

The Main Menu

This menu is the heart of the game, in which you move and attack your forces and check on the status of many items such as research, weather, Order of Battle, etc.

Main Menu

MENU **(U)** option returns you to the Setup Menu described on page 10.

END **(E)** option allows you to end your orders for the impulse.

ASSAULT **(A)** option allows you to select the adjacent friendly units to attack the enemy unit in the hex which contains the map cursor. You can combine multiple units to

attack the selected enemy unit. A unit can only make one assault in a given impulse.

STRIKE **(S)** option allows you to perform an air strike on the enemy unit in the hex which contains the map cursor.

NAVY **(V)** option allows you to access the Navy Menu described on page 17.

NEW **(N)** option allows you to place reinforcements or units in reserve onto the map in an empty friendly-controlled hex which is on or adjacent to a friendly city. The hex cannot be in an enemy ZOC or contested hex.

UNLOAD **(L)** allows a friendly unit that has previously been loaded onto a naval transport ship with the AMPHIB option to land in a coastal hex. If the hex is friendly-controlled, the unit lands automatically. If it is enemy-controlled or occupied, then the amphibious invasion combat routine is used to determine if the unit successfully lands or not.

PRODUCT **(P)** option graphically displays which units are currently in production for both players. Axis units are on the left; Allied units are on the right side of the display.

MAP **(M)** option allows you to access the Map Menu described on page 18.

INFO **(I)** option allows you to access the Information Menu described on page 19.

CNTL **(C)** option shows you the hexes currently under the player's control. First one player's controlled hexes are displayed; next the other player's hexes are shown.

CLEAR **(R)** removes the units from the map so you can see the underlying terrain features more clearly. Clicking the left or right button returns the units to the map.

Unit Menu

When a combat unit is accessed, the unit's data will be displayed in the lower-left hand text window showing the unit's name, strength, Action Points (AP), morale, efficiency, and supply.

To move a ground combat unit place the mouse pointer over an empty adjacent hex and click the left mouse button. Using the keyboard, press one of the keypad keys. You cannot stack with friendly units. You can also select a non-adjacent hex to move to. The computer will automatically move the unit toward the destination hex selected. In addition you also have the movement options listed below:

OPERAT **(P)** allows you to move the unit up to 10 hexes away. Each player, including Russia before Russian Winter strikes, can move one unit per impulse with this Operational Movement.

RESERVE **(R)** removes the unit from the map and places it in Reserve. It costs one transport point to place a unit in reserve. Reserve movement is allowed only during the first or second impulses. After a unit is placed into reserve, you can take

the unit out of reserve by moving the map cursor to an empty hex on or adjacent to a friendly city. Access the NEW option on the Main Menu. The hex cannot be in an enemy ZOC and the hex must be friendly-controlled. All reserve units must be deployed out of reserve before you can end your turn. The unit must have a supply level greater than zero to be put in reserve.

AMPHIB **(H)** option allows a land unit (with a morale of at least 25) in a port during the first or second impulse to perform an amphibious operation. See the sections on "Naval Movement" on page 26 and "Naval Combat" on page 33 for further details.

PREPARE **(A)** option allows paratroop units to be put into preparation mode. In any subsequent first or second impulse, they are allowed to take part in assaults up to 4 hexes away. In this event, paratroop units have a 25% chance of disabling the defender's terrain bonus, a 20% chance of disrupting the defender, and they automatically disable the effect of rivers.

FORTIFY **(F)** option allows engineers to build forts. This will place them into fortification mode. They will build a fort at the start of the next turn. Forts act like the Maginot Line. They can further hinder sea invasions with an unoccupied fort having a 50% chance of defeating a sea invasion. Forts are removed if control of the hex changes.

MOVE **(M)** option is active if an engineer is fortifying. Selecting this option takes the engineer out of fortification mode.

REBASE **(B)** option allows an air unit to relocate up to four hexes away in a friendly-controlled hex. You can rebase on any impulse.

OOPS **(O)** option allows you to move back to your starting location. If you are using hidden units, this option is not available.

Navy Menu

The Navy Menu allows you to deploy new ships that have been produced, move your fleets to engage enemy fleets, provide escort, launch amphibious invasions, transport troops to friendly ports, and engage in shore bombardment against enemy troops on coastal hexes. A map is displayed with two types of boxes that contain the various ships. The large, light blue box is the At Sea box which represents the seven sea zones: Baltic Sea, North Sea, North Atlantic, South Atlantic, West Mediterranean, East Mediterranean, and the Black Sea. The smaller dark blue box is the Port box. The menu options shown on the right side of the map are as follows:

SELECT **(S)** allows you to select the naval units you wish to move from one box to another. When you access

the Selection Menu, you can highlight the ship you wish to move and then choose SELECT (S). An asterisk will be placed to the right of the ship name showing that the ship has been selected to move. If an "M" appears across from the ship's name, it means that the ship has already moved. A "D" means the ship is damaged. Exit the Selection Menu and you will notice in the top-right corner the ship(s) in the MOVING STACK box. Next choose the destination box to move the ships to by clicking on the appropriate box. Click the MOVE TO box to move the ships.

NEW (N) allows you to place newly produced units in the selected box. Click on the box you wish to place the ship and then select NEW. Next select the ship from the list of available ships.

MOVE TO (M) allows you to move the units displayed in the MOVING STACK box to the destination At Sea or Port box which has been selected.

FORM. (O) option accesses the Naval Formation Menu. Naval units At Sea can be issued orders by putting them into formation boxes. For every sea zone, there are 8 boxes:

- 2 fleet boxes: units placed in these boxes are ordered to show up and seek combat to gain the superiority in this zone.
- 1 transporter box: units in this box show their presence for some reasons (i.e. establishing sea supply), but try to avoid combat.
- 4 raider boxes: each box can only have one unit. Units in this box are ordered to raid enemy convoys and avoid combat.
- 1 land-based box: air units which are located in a coastal hex will be displayed in the appropriate land-based box and can take part in combat occasionally.

SELECT (S) brings up the Select Moving Unit Menu for the highlighted unit. First click on the appropriate box you wish to move units out of and then click on the SELECT button.

MOVE TO (M) moves the units displayed in the MOVING STACK box in the upper-right corner. You must have first selected the units you wish to move using the SELECT option. Choose the destination sea zone or port you wish to move to. Select MOVE TO to move the ships.

Map Menu

The Map Menu displays a strategic view of the entire map on one screen. The map options are explained as follows:

GET (G) centers the map on the area enclosed within the rectangle on the strategic map.

COUNTR (C) displays the location of the different countries on the map.

CNTL (T) displays the territory controlled by each player.

SEA (S) displays the sea zones on the map.

Information Menu

The Information Menu gives you a number of options to view your status in many areas such as production, order of battle, politics, research, skills available, and strategic bombing. The menu options are:

STATUS **(S)** accesses the Status Menu described on page 19. You can view the number of cities and resource centers controlled for production purposes, convoy PPs, remaining PPs, and the losses and strength of each sides forces.

SEA ZONE **(E)** allows you to temporarily view the sea zone borders on the map.

OB **(O)** allows you to view both sides units. YES **(Y)** displays your units, while NO **(N)** displays the enemy's units. The INFO **(I)** option displays various unit data.

RESEARCH **(R)** accesses the Research Menu described on page 19. You can set your research priorities with 10 research points in various categories such as jet planes or rockets.

POLITICS **(P)** accesses the Politics Menu described on page 21. This menu allows you to declare war on another country or try to use political points to get new allies.

BOMBER **(B)** accesses the Strategic Bomber Menu described on page 22 to buy Strategic Bombers and set your bombing targets.

WEATHER **(A)** displays the current weather condition: Clear, Mud, or Snow. The effects of weather are outlined in the "Weather" section on page 41.

Status Menu

The Status Menu gives you information about the Production, Industrial Base, and Unit Upgrade level for AXIS **(A)**, ITALY **(I)**, ALLIED **(C)**, US **(U)**, and RUSSIA **(R)**. Accessing one of the countries will list the number of controlled cities for production, the number of resource centers for production, the number convoy Production Points being received, the remaining number of Production Points left, the current level of the Industrial Base multiplier, the current level of Unit Upgrade, and the maximum level that can be attained for Unit Upgrade (which is the total of the side's AT and Heavy Panzer R&D levels). The LOSSES **(O)** option displays the amount of losses suffered by each side and the remaining unit combat strength left on the map. Each unit's strength is calculated by multiplying the strength by its supply and efficiency values and then dividing the result by 100.

Research Menu

There are eight fields of technical research which can be advanced in order to strengthen certain qualities of the armed forces. The fields are

MRLS (Multiple Rocket Launchers Systems), Panzerfaust (Bazooka), AA-Radar, ASW-Sonar, Rockets, Jet Plane, AT-Guns, and Heavy Tanks. Each side has a fixed number of ten Research Points (RP) which can be assigned to the various fields. On some fields, improvement of the armed forces will only occur at a certain level. Some of the menu options are explained below:

MORE **(M)** allows you to add one research point to the highlighted category.

LESS **(L)** allows you to subtract one research point from the highlighted category.

VIEW **(V)** allows you to view the current research progress standings of both players in each category. The Axis player's current level is displayed first. Next is the Allied player's current level. Last is the maximum level which can be achieved in the category. The enemy player's research levels are approximated with a question mark after the number.

Each side can assign its ten points to any of the field(s) desired. The chance for an R&D increase in a turn depends on the number of points allocated to the field. Only the first, third, sixth, and tenth point allocated in each field will affect the percentage chance as displayed by a red bulb (a gray bulb means the research point has no effect). For example, one point allocated gives the same chance as two points; three, four, or five points all give the same chance as well. In every Economy Phase, there is a test for advance on each field:

TECHNICAL RESEARCH INCREASE TABLE

# RP ASSIGNED	% CHANCE
1-2	7%
3-5	14%
6-9	20%
10	27%

DEVELOPMENTS

- **MRLS**: Once the level has reached its maximum (level 3), there will be Multiple Rocket Launchers (MRLS) available for that side. For each attack or assault thereafter, there is a 15% chance that the defender will be disrupted by the preceding bombardment. In this case, the defender will be halved.
- **Panzerfaust:** With each new level, the efficiency of all non-panzer ground units will be increased by 5 points.
- **AA-Radar:** If developed to the maximum (level 2), enemy strategic bomber attacks will be reduced by 20%.
- **ASW-Sonar:** Until ASW is developed to its maximum, the chance for spotting enemy subs in raider boxes is divided by three. An Allied fleet box will engage Axis subs in a raider box with a probability of 5%, no matter who is the searching player. If Allied ASW is at maximum, the probability of spotting will be 15%.

- **Rockets:** If developed to the maximum (level 7), the strength of strategic bomber attacks will be tripled.
- **Jet-fighter:** With every new level, starting with level 3, the efficiency of all air units will be increased by 10 points.
- **AT-Guns:** Every new level increases the efficiency of non-panzer ground units by 3 points. See the combat section "AT-Guns/Heavy Tanks" on page 31 for more details.
- **Heavy Tanks**: Every new level increases the efficiency of panzers by 3 points. See the combat section "AT-Guns/Heavy Tanks" on page 31 for more details.

Politics Menu

The Politics Menu allows you to use diplomatic pressure to persuade the various countries to join your side. You can also declare war on a country as well. A strategic map view shows the countries involved and their status. Each country has a box with either a number (0-99) or letters (AL or AX). The number, representing the country's Alliance Level, can be either red or blue; red signifies the country is pro Allied whereas blue signifies pro Axis. Whenever the number reaches 100, the country will automatically join the appropriate side. An "AX" means the country has joined the Axis side and "AL" the Allied side. The top right corner displays political information. Click on a country's box and on the top line you will see the country's name followed by its Break Value and Political Value. The Break Value for a neutral country ranges from 0 to 100 and represents its ability to withstand diplomatic pressure. The higher the number, the less effect political pressure will have. A country's Political Value reflects the prestige (in Political Points) that a side gains if it conquers the country. At the moment of conquest the points are awarded. A country can only be conquered once. Next the Political Points for both the Axis and Allied players are displayed. The current political level of the Balkan Pact is also shown. The four countries comprising the Balkan Pact are Greece, Rumania, Turkey, and Yugoslavia. Hungary and Bulgaria can also join the Pact if an attempt to use diplomatic pressure on them fails. Whenever one of the Pact members is being pressured diplomatically, the Balkan Pact Value (BPV) is added to the country's Break Value. The BPV starts out at 30 and increases slightly each time someone attempts to pressure a Pact member. It decreases by a much larger random amount whenever a member joins a side. There are four buttons displayed on the right side which are:

CONFLICT **(C)** will display three minor conflicts between Russia and Rumania, Bulgaria and Yugoslavia, and Rumania and Bulgaria. You can choose to be neutral or support one of the countries. If you choose to support one country, that country's Alliance Level will be

shifted slightly in your favor and the other country will be shifted towards your enemy. Select CHANGE (C) to toggle between neutrality and supporting one of the sides.

BALKAN (B) displays which countries are in the Balkan Pact.

WAR (W) allows you to declare war on the country selected. You cannot enter into a neutral country; you must first declare war on it.

PRESS (P) allows you to diplomatically pressure the country selected to join your side.

Strategic Bomber Menu

The Strategic Bomber Menu allows you to increase your strategic bombing fleet through purchase of Strategic Bomber Points (SBP) at a cost of 20 PP per SBP and/or to switch your bombing raids to a different target. The number of SBPs are represented graphically for each side. The options are listed below:

EXIT (X) will exit the menu.

BUY (B) will allow you to buy one SBP at a cost of 20 PPs. The Allied player has another menu allowing you to buy an SBP for either US (U), CW (C), or RUSSIA (R).

FACTORIES (F) each SBP will achieve 0-15 hits on enemy factories. Each hit will increase the purchase cost for a randomly selected enemy unit permanently by one.

HARBORS (H) same as factories, except that all hits will be divided among naval units increasing the purchase cost by one.

OIL (O) each SBP will have a 50% chance of permanently decreasing the Action Point allowance of an enemy unit by one.

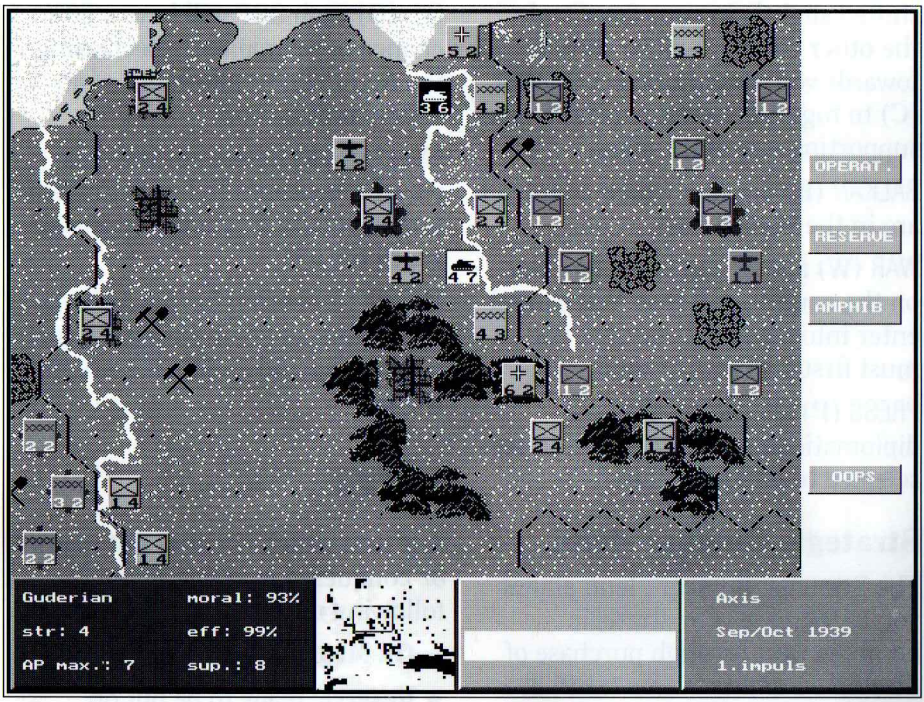
ENGLAND (E) option for the Axis player allows him to bomb English targets if both England and Russia are in the war.

RUSSIA (R) option for the Axis player allows him to bomb Russian targets if both England and Russia are in the war.

UNITS

Any unit which is either not neutral *or* conquered is in one of the following modes:

- **On Map**: the unit is on the map
- **Reserve**: ready to be put on the map
- **Sea Trans**: loaded on a Transporter
- **In Production**: will be placed into **Reserve** status in a number of turns
- **Dissolved**: the unit was dissolved in combat and taken from the map. The unit can be repurchased at 40% of the original cost in the next turn
- **Purchasable**: the unit can be purchased and be placed **In Production**
- **Eliminated**: was dissolved while being isolated, can be repurchased after one year for the full price
- **Gone**: the unit's home country is conquered. All units are not available even if friendly forces liberate the country



Units on the Map

Land combat units have two numbers printed on their counters. The left number is the effective ground combat strength, rounded to the closest whole number. The right number is the amount of remaining Action Points (AP) which can be used to move and attack. A unit's efficiency is a representation of the unit's training and leadership. The supply value (0-9) represents the current supply status of the unit. A unit's morale is a result of a units' efficiency and supply values. The air units also have two numbers. The left number is the effective air combat strength, rounded to the next full number. The right number is the number of air strikes remaining. Although not shown on the counter, all air units have an effective strength of one ground combat point if attacked. Naval units are not represented by counters on the map. They can be accessed in the Navy Menu and the Naval Formation Menu.

The display above is from the 1939 Scenario. The German unit Guderian has been accessed with the Unit Menu options displayed on the right side of the screen: OPERAT., RESERVE, AMPHIB, and OOPS. Below the map are four boxes. The leftmost box contains unit information showing the unit name (Guderian), its

combat strength (str: 4), its maximum Action Points (AP Max: 7), its morale level (morale: 93%), its efficiency level (eff: 99%), and its supply level (sup.: 8). The box to the right shows a view on a strategic scale of the entire map. You can place the mouse pointer over any part of the strategic map; clicking the left button will center the tactical map over the point you selected. Next is a box that contains unit symbols of any units which have come out of production and are in Reserve status. You can place them on the map by using the New option on the Main Menu. The rightmost box contains general information about whose phase it is (Axis), the current date (Sep/Oct 1939), what impulse number it is (1.impulse).

MOVEMENT

Movement is divided up into three areas: Land Movement, Air Movement, and Naval Movement. Each of these areas are explained below.

Land Movement

In the integrated Movement and Combat Phase, all units of the active player can continue moving and fighting until their Action Points (AP) are exhausted. A unit can be moved more than once, not having to spend its entire Action Points at one time. At any given time only a single unit can be located in a given hex. A unit receives its maximum Action Points unless any of the situations apply below:

- Subtract one AP if the unit's supply value is less than five.
- Halve the AP (rounding up) if the unit's supply value is zero.
- A maximum of two AP if the weather is Mud.
- A maximum of one AP if the unit is an Army Group and the weather is Mud.
- Air units get one AP if the weather is Mud or Snow.
- Rommel does not get 3 AP in Russia until the Russian Winter arrives.

In general, four types of movement are possible:

NORMAL MOVEMENT

When moving into an empty adjacent hex, units pay the AP cost shown on the Terrain Table. If a unit is conducting infiltration movement, which is moving from a hex which is adjacent to an enemy unit directly into another hex which is adjacent to an enemy unit, the unit must pay one additional AP.

OVERRUN MOVEMENT

If you try to move into an adjacent hex which is occupied by an enemy unit, this is called an Overrun. Overrun costs no AP for movement, but a single AP for the Combat. A unit can always Overrun as long

as it has a remaining AP. The overrunning unit does not advance into the hex if the enemy unit is destroyed or has retreated.

RESERVE MOVEMENT

In the first two impulses you can move a limited number of units strategically over an unlimited number of hexes. To do so move the cursor over the unit you wish to move, click the left button twice to access the unit, and select RESERVE. **Note:** The unit must be placed back on the map in the same impulse using the NEW option. However, you must place the unit in a friendly-controlled hex in or adjacent to a city which is in the same partition as the original hex of the unit. See the section "Supply Partitions" on page 38 for more details. To use Reserve Movement a unit must have at least a supply value of >3, a morale of 25, one remaining AP, and have not conducted an assault.

OPERATIONAL MOVEMENT

For each nation (except for Italy), one unit can be moved up to 10 hexes in its partition, regardless of the current impulse. Units need not be inserted next to cities. Army groups act as supply centers and are not allowed operational movement. Units cannot use operational movement if they have already moved or attacked. No Operational Movement is allowed for Russian units before Russian Winter strikes, which is the first snow turn after war is declared.

TERRAIN EFFECTS

The number of Action Points (AP) it takes to enter a given hex is summarized below:

TERRAIN EFFECTS COST TABLE

TERRAIN NAME	AP COST TO ENTER
City	1
Clear	1
Desert	1
Fort	1
Mountain	2
Port	1
Resource	1
River	-
Sea	-
Swamp	2
Wood	1

RUSSIAN PARTISAN EFFECTS ON AXIS MOVEMENT

There is a test against the number of unoccupied, Axis controlled cities in Russia during each Axis Supply Phase. If a random number is less than the number of cities, then partisans will greatly lower Axis supply in Russia. The chance for partisans to appear will also increase as the war progresses.

STRATEGIC BOMBING EFFECTS ON OIL RESOURCES

Each Strategic Bombing Point (SBP) assigned to attack oil targets will have a 50% chance of permanently decreasing the Action Point allowance of one enemy unit by one point.

Air Movement

Every air unit has an integrated strength point of ground combat units. Ground combat strength is modified by the same morale value as the air strength. If this ground strength point is eliminated, the air unit is removed. The numbers on the air unit counter show the actual effective air strength and the remaining number of possible ground strikes for the impulse. Air units can only be moved by using Reserve or Rebase Movement. The air range is 7 hexes to conduct a ground strike or interception.

REBASE AIR MOVEMENT

Air units rebase up to 4 hexes away per impulse. If an air unit attacks, then it cannot rebase. Air units can rebase across sea hexes.

RESERVE AIR MOVEMENT

In the first two impulses you can move a limited number of units strategically over an unlimited number of hexes. To do so move the cursor over the unit you wish to move, click the left button twice to access the unit, and select RESERVE. **Note:** The unit must be placed back on the map in the same impulse using the NEW option. However, you must place the unit in a friendly-controlled hex in or adjacent to a city which is in the same partition as the original hex of the unit. Air units are not held by this restriction. See the section "Supply Partitions" on page 38 for more details. To use Reserve Movement a unit must have at least a supply value of >3, a morale of 25, one remaining AP, and have not conducted an air strike.

Naval Movement

Naval operations are only possible during the first two impulses of a given turn. There are four types of naval units:

- Carriers: the best fighting units
- Escorts: surface units from destroyers to battleships
- Subs: used to hunt down enemy convoys
- Amphib: used to transport ground units

Note: Artificial harbors are treated as land units. They can be placed on a coastal or sea hex.

Each unit is rated for strength and raid value. Amphib units are also rated for capacity. When a ship suffers a loss it will become damaged. A ship which is damaged and suffers a further loss is sunk. Sunk ships are permanently eliminated.

In the Navy Menu the map is displayed with two types of boxes that contain the various ships. The large light blue boxes are the At Sea box which represents the seven sea zones: Baltic Sea, North Sea, North Atlantic, South Atlantic, West Mediterranean, East Mediterranean, and the Black Sea. The smaller light blue boxes are the Port box. Each

naval unit can be located either in one of these sea zones or in a friendly port. During the impulse a naval unit can travel an unlimited number of sea zones in any combinations with entering and/or leaving port. However, this must be done in one single action, i.e. you can not move, use shore bombardment and move again with the same unit. You can only enter friendly-controlled ports. If a ship is in port and the port is captured by the enemy, you will receive a message that the ship has left the port.

RESTRICTIONS ON MOVEMENT

There are three narrow points on the map where sea movement can be blocked by the control of land hexes. A naval unit (including subs) can move from one sea zone to another only if a certain port is friendly-controlled. These cases are:

ZONE #1	ZONE #2	INTERDICTED BY
Baltic Sea	North Sea	Hamburg
Atlantic	Mediterranean	Gibraltar
Mediterranean	Black Sea	Istanbul

NAVAL FORMATIONS

Naval units At Sea can be issued orders by putting them into formation boxes. For every sea zone, there are 8 boxes:

- 2 fleet boxes: units placed in these boxes are ordered to show up and seek combat to gain the superiority in this zone.
- 1 transporter box: units in this box show their presence for some reasons (i.e. establishing sea supply), but try to avoid combat.
- 4 raider boxes: each box can only have one unit. Units in this box are ordered to raid enemy convoys and avoid combat.
- 1 land-based box: air units which are located in a coastal hex will be displayed in the appropriate land-based box and can take part in combat occasionally.

Note: units in the same box will act together as a fleet for all purposes of search, combat, and raid. Splitting a fleet gives a higher chance of finding the enemy, but it is more uncertain if the fleets can combine again in the case of a combat.

CONVOYS

The Convoy Table below lists the number of convoys which are running through a number of sea zones and port hexes. During the Convoy Phase a convoy report will be displayed showing the number of convoy points allocated to the various countries. If there is a "NA" displayed, it means that the convoy route is not active. A "NL" means that the country could not trace a valid line of sea zones due to the presence of enemy ships. To receive convoy points a side must at least control all indicated ports. The opponent player can reduce the number of cleared convoy points. Every enemy naval unit which is

located in an indicated sea zone will destroy a random number of convoy points between 0 and its raid value. If subs are raiding then every friendly CV and BB will have a 1/6 chance of sinking (that means eliminating) one sub. Only subs and convoy points can be lost during the convoy phase. If a raider is located in a zone with two convoys it will attack and be attacked twice.

CONVOY TABLE

NAME	MAX PP	POOL	REQUIRED SEA ZONES AND REQUIRED CITIES
Canada	4	Allied	North Atlantic, Scapa Flow
Asia	5	Allied	Alexandria, East Medit., West Medit., South Atlantic, North Atlantic, Scapa Flow
Ural	8	Russia	Saratov
Sweden	2	Axis	Baltic Sea, Hamburg
Italy	1	Italy	East Medit.
America	15	Allied	North Atlantic, Liverpool

America convoy points start with American entry into the war.

SEA TRANSPORT

Loading Units

Placing a land unit (not an air unit) on a transport is similar to placing a unit in reserve. You will receive an additional menu item AMPHIB in the Unit Menu if:

- the unit is located in a port
- it is the first or second impulse
- there is a transport with sufficient remaining capacity in the same sea zone. **Note: The transport must not be located in a port!**

You may also load units without a port by using the EVAC button.

You can continue loading units before unloading them. Transport capacity is used at the rate of one point per unit. Human players pay double for units with a maximum strength of at least 5. After selecting AMPHIB you will be given a menu listing the seven sea zones. Select the one you wish to move to. The seven sea zone selections are BALTIC **(B)**, NORTH SEA **(N)**, N.ATLANTIC **(A)**. S.ATLANTIC **(S)**, W.MEDIT. **(W)**, E.MEDIT. **(E)**, and BLACK SEA **(L)**. Note that once you have started unloading in a seazone, you cannot load additional units in the same zone.

Unloading Units

Unloading a specific unit is done in the same impulse as loading. Units which were not unloaded at the end of the impulse will be eliminated. Place the map cursor on the invasion coastal hex desired. You will get a list of eligible units to unload by selecting the UNLOAD option. Unloading can be done at any sea zone which can be reached unblocked from the unit's origin. Do not move the transport unit! The transport will remain at its current sea zone. Unlike movement of sea units, ground units moving via sea have a chance of being intercepted by enemy naval and air units.

COMBAT

There are three types of combat: land, air, and naval. Each of these are explained below.

Land Combat

There are two types of land combat: overrun and assault. It costs one AP to engage in combat. During combat both sides' units can lose strength points and morale. Morale can be restored close to its original value by the next impulse.

- Overrun: if you try to move into an adjacent hex which is occupied by an enemy unit, this is called an Overrun. Overrun costs no AP for movement, but a single AP for the Combat. A unit can always Overrun as long as it has a remaining AP.
- Assault: if you locate the cursor on an enemy unit and select ASSAULT then you will conduct an Assault. In an Assault all friendly units which are adjacent to the selected enemy unit will combine into a single Attack Strength. Assault is mandatory (unless the Assault Selection option has been deactivated in the Rules Options Menu), which means every unit which can take part has to assault. After Assaulting, the color of the number on the counter will change to light gray until the next impulse. To be eligible for an Assault a unit has to have one remaining AP and must not have assaulted before in the impulse.

Single attacking units in an Overrun will attack with 70% of their effective Strength. Units assaulting with at least one other unit attack with 85%. Units attacking across a river are further halved. Defending units use their full effective strength. The defender's strength can be increased for defending in some terrain types. The defender's morale is based on the unit's efficiency and supply values. The defender's strength will be calculated as follows:

(STRENGTH + TERRAIN DEFENSE BONUS)
X MORALE/100

Finally divide the attack strength by the defense strength. This will determine the combat odds which affects the amount morale and occasionally strength points lost. The defender can also have to retreat. The defender can also become dissolved. Dissolved units can be repurchased for 40% of the normal purchase cost and can be immediately reinserted in the next turn. Dissolved units, which (at the moment of combat), are not in a partition with either two cities of which one is located in one of its side's home country or with a city in sea supply, will become eliminated instead. Eliminated units can be repurchased after one year.

The bonus for terrain effects for a defender are shown below. The defense bonus is added to a unit's strength to give a modified strength value which then is further modified by its morale.

TERRAIN DEFENSE BONUS TABLE

TERRAIN NAME	DEFENSE BONUS
City	2
Clear	-
Desert	-
Fort *	3
Mountain	1
Port	2
Resource	-
River	#
Sea	-
Swamp	1
Wood	-

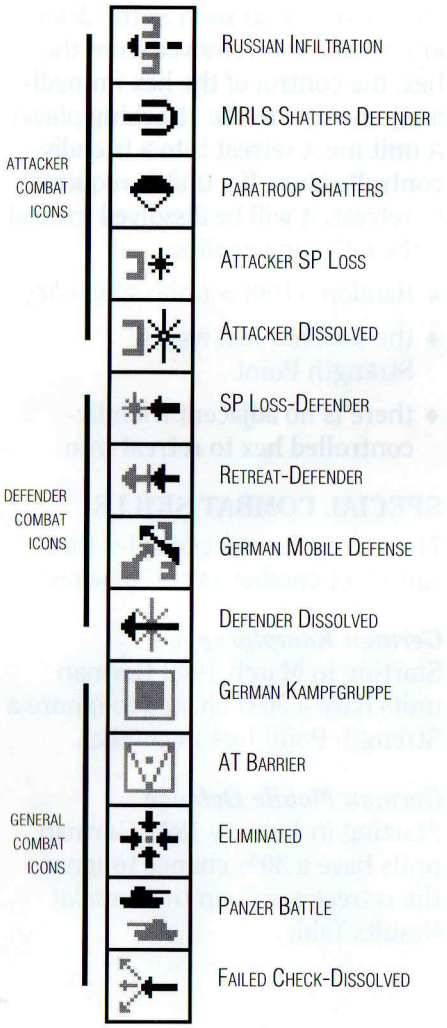
units attacking across a river is halved.

* Note: a computer player's unit has its defense strength increased 70% while defending in a fort.

Example: A German 3-5 attacks a Russian 0-2 in a city hex. The German unit has 3 strength points with a morale of 90%. The attacker strength for a single attack is next multiplied by 70%. The attack strength is therefore .7 x 3 x .9 = 1.89. The Russian unit has 1 strength point and a morale of 40%. For being located in a city hex, the Russian unit gets a bonus of 2 strength points. The defense strength is therefore (1+2) x .4 = 1.2. So we come out with a 1.89 : 1.2 which rounds to 1.0 odds.

COMBAT ICONS

On the bottom line of the combat results display there can appear various special combat icons which are shown below:



RETREAT

Units can be required to retreat due to combat. If the odds are above 2-1, then the defender has a chance that he will retreat with the percentage chance greater at higher odds. If the defender is in a city or fort, then the chance is less. As soon as the defender retreats or is removed from the hex, the control of the hex immediately changes to the attacking player. A unit must retreat into a friendly-controlled hex. If a unit is required to retreat, it will be dissolved instead if the following applies:

- Random (100) > unit's efficiency
- the unit has lost its last Strength Point
- there is no adjacent friendly-controlled hex to retreat into

SPECIAL COMBAT SKILLS

There are a few special rules that can affect combat as noted below:

German Kampfgruppe

Starting in March 1943 German units have a 50% chance to ignore a Strength Point loss in combat.

German Mobile Defense

Starting in January 1942 German units have a 30% chance to ignore the retreat result on the Combat Results Table.

Russian Infiltration

Starting in July 1942 any Russian attack has a 15% chance to decrease the defender's modified strength points by 20%.

Russian Exploitation

Up until January 1944 all Russian units pay a random amount of AP to Overrun while attacking by themselves. There is no penalty for Assaults.

AT-GUNS/HEAVY TANKS

Every new R&D level of A-T Guns increases the efficiency of non-panzer ground units by 3 points. Every new level of Heavy Tanks increases the efficiency of panzers by 3 points. In the two sections below, "AT-Barrier" and "Panzer Battle", if the attacking force contains at least one panzer unit, it is considered Panzer; if it does not contain a panzer unit, but an HQ unit, then it is considered an HQ force; otherwise it is considered as Other.

AT-Barrier

Whenever a panzer force attacks or assaults, and the R&D level of "Heavy Tanks" is less than the enemy R&D level of "AT-guns", then there is a chance that the panzer force will run into an AT-barrier. In this case the attacker will be halved. The chance is as follows:

	DEFENDER		
ATTACKER	PANZER	HQ	OTHER
Panzer	5%	50%	30%

Panzer Battle

Whenever a force attacks or assaults, a Panzer Battle can occur according to the composition of both forces. See the table below for the percentage chance of a Panzer Battle. The player with the higher R&D level of "Heavy Tanks" gains a bonus in modified strength of 20% times the difference in the R&D levels.

ATTACKER	DEFENDER PANZER	DEFENDER HQ	DEFENDER OTHER
Panzer	80%	20%	5%
HQ	20%	10%	5%
Other	5%	5%	5%

MRLS

Once the level has reached its maximum, there will be MRLS available for that side. For each attack or assault thereafter, there is a 15% chance that the defender will be disrupted by the preceding bombardment. In this case, the defender will be halved.

PANZERFAUST

With each new level, the efficiency of all non-panzer ground units will be increased by 5 points.

Air Combat

There are two types of Air Combat: Ground Strike and Strategic Bombing, which are explained as follows:

GROUND STRIKE

The numbers on the air unit counter show the actual effective air strength and the remaining number of possible ground strikes for the impulse. To initiate a ground strike, move the cursor over an enemy unit and select STRIKE. The computer will select the strongest friendly air unit within air range, (7 hexes), to conduct the strike. Before the strike will actually take place, the computer handles interception. Every enemy air unit within air range, also 7 hexes, with an effective strength of at least 1 will force the attacker in a round of air-to-air combat. If the attacker survives all interceptions, the strike will be conducted with the remaining strength. The defender's terrain can affect the results of the combat. If the defender is in city, port, wood, or mountain terrain, the attacker's strength is reduced by one. If defending in a fort, it is reduced by two strength points. The air strength will be halved in mud or snow weather turns. Air units which are not strong enough for an interception will have their numbers painted in light gray. Every air unit has one ground combat strength point if attacked. Ground combat strength is modified by the same morale value as the air strength. If this ground strength point is eliminated, then the air unit is removed from play. With every new R&D level of Jet Fighter Research, starting with level 3, the efficiency of all air units will be increased by 10 points.

STRATEGIC BOMBING

Strategic Bombing Points (SBP) can be purchased at the cost of 20 spared PP from the Strategic Bombing Menu which can be accessed from the Info Menu. You can direct the whole bombing fleet at three different targets. If England and Russia are both in the war, the Axis player can choose which nation to bomb. Once each turn during the Economy Phase the bombers will launch their offensives. If factories are chosen as a target, each Strategic Bombing Point (SBP) will achieve 0-15 hits on enemy factories. Each hit will increase the purchase cost for a randomly selected enemy unit permanently by one. Bombing harbors works the same as factories, except that all hits will be divided among naval units. This increases the purchase cost by one. If oil centers are targeted, each SBP will have a 50% chance of permanently decreasing the Action Point allowance of an enemy unit by one.

R&D Effects

Due to Research and Development of rockets, if developed to the maximum (level 7), the strength of strategic bomber attacks will be tripled. If AA-Radar is developed to the maximum (level 2), enemy strategic bomber attacks will be reduced by 20%.

Naval Combat

SEARCHING FOR ENEMY SHIPS

After the first and second impulse, there will be tests for every sea zone if combat occurs. Every occupied formation box of the active player will search for every occupied formation box of the enemy player. Refer to the Navy Search Table below to see if combat occurs. The numbers in the table refer to the percentage chance of spotting the enemy fleet.

NAVY SEARCH TABLE

	DEFENDER			
ATTACKER	FLEET	TRANSPORTER	RAIDER	LAND-BASED
Fleet	60%	20%	15%*	10%
Transporter	20%	15%	10%	5%
Raider	15%*	10%	5%	5%
Land based	10%	5%	5%	0%

* see ASW-research

ASW-Sonar Research

Until ASW is developed to its maximum, the chance for spotting enemy subs in raider boxes is divided by three. An Allied fleet box will engage Axis subs in a raider box with a probability of 5%, no matter who is the searching player. If Allied ASW is at maximum, the probability of spotting will be 15%.

NAVAL COMBAT EXECUTION

If combat is initiated, the time of day will determined. It can be either morning, noon, or afternoon. Then the computer determines the kind of battle, either sea-to-sea or air-to-sea.

If any carrier or land-based aircraft is participating, then there is an 80% (60% in mud and snow) chance that the battle will be air-to-sea, else the battle will be sea-to-sea. In a sea-to-sea battle only escorts and subs can attack, while in air-to-sea battles only carriers, subs, and land-based aircraft can attack. Any air unit which is on a coastal hex can participate in land-based attacks.

The combat is resolved in rounds between all participating units. In the first round, only the searching and the searched for boxes will take part in the combat. A round consists of all capable units firing simultaneously at the enemy formation. A hit is scored, if the Random (6) is less than or equal to the strength of the firing unit. A hit causes an undamaged unit to become damaged and a damaged unit to become sunk.

If it is afternoon, or one side is fully destroyed, the battle will automatically end after the round. Otherwise, both players will be given an option screen where an order can be issued to every formation box. The ships in each box can be either ordered to FLEE (avoid combat) or BATTLE (engage enemy ships). The chance for fleeing depends greatly on the speed of the slowest unit. You can not split boxes, but you can flee single boxes, if there are two or more engaged in combat. Aircraft can choose to JOIN (engage enemy ships), NO ORDER (do not engage enemy ships), or REFUEL (if they have already attacked).

Shore Bombardment

If an enemy unit is in a coastal hex and is targeted with the STRIKE option in the Main Menu, then Shore Bombardment can take place. Shore Bombardment acts similar to an air strike. CV and BB will each add one point to a bombardment. Only units in the same sea zone can be bombarded. There will be no interception and bombarding ships will suffer no reverse results except that they can not bombard a second time in the same impulse. They may bombard in a future impulse.

HARBOR REQUIREMENT

There is a 25% chance per turn that a naval unit which is located in a sea zone without a friendly harbor will become damaged. A message will indicate this. Naval units will not be sunk this way.

SHIP DAMAGE REPAIR

There is a 33% chance per turn that a damaged naval unit which is located in a harbor will be repaired. A message will indicate this.

AMPHIBIOUS INVASION

See the section "Sea Transport" on page 28 to load unit(s) to amphibiously invade. An invasion can only take place in the first or second impulse. A combat unit must have a minimum morale of at least 25 in order to be placed onto a ship using the AMPHIB option. Bad weather may also affect the chance of a successful

invasion. There must be available naval transports in the same sea zone as the unit. An amphibious invasion can be intercepted by an enemy fleet. The percentage chance is affected by the number of friendly naval strength points in the unloading sea zone and adjacent sea zones plus the amount of enemy naval strength points in the unloading sea zone. Unloading on a friendly-controlled hex will always be successful. Unloading on an enemy-controlled hex is termed an amphibious invasion. Invading an empty hex has an 80% chance for success (40% chance if it contains a fort) in which case the amphibious landing units will be placed into reserve. If the hex is occupied by an enemy unit, the chance for success is further halved. A successful invasion against an enemy unit will force the defender to retreat; the unit will not lose morale nor test for being dissolved. If no retreat path is available, the unit will be either eliminated or dissolved. Units which have invaded successfully have one AP for the rest of the impulse. There is also a chance that your unit may become damaged during the invasion attempt. This will result in the unit temporarily losing all AP strength points. Each amphibious ship has an amphibious carrying capacity which is renewed each turn. (See the "Order of Battle" for naval ships on page 70).

ARTIFICIAL HARBORS

The Allied "Mulberry" and the Axis "groáe Freiheit" are artificial harbors. They can be landed like sea transported units in any coastal hex. While in sea supply, they act as a supply source with a value of 10. Artificial Harbors are removed at the end of a turn, and must be repurchased with full price, and full delay. While artificial harbors have no AP, they can still take part in an assault. They can never invade on cities and always have a minimum 70% chance for success. Note: Do not display until you are ready to use it.

POLITICS

Nations at War

The Politics Menu allows you to use diplomatic pressure to persuade the various countries to join your side. You can also declare war on a country as well. Both sides have a number of Political Points which it can use for diplomatic pressure. During the Economy Phase the number of Political Points will be randomly adjusted up or down depending upon the number of points. A strategic map view shows the countries involved and their status. Each country has a box with either a number (0-99) or letters (AL or AX). The number, representing the country's Alliance Level, can be either red or blue; red signifies the country is pro-Allied whereas blue is pro-Axis. During the Economy

Phase the Alliance Level can be adjusted slightly towards one side or the other on a random basis. Whenever the number reaches 100, the country will automatically join the appropriate side. An "AX" means the country has joined the Axis side; an "AL" means the country has joined the Allied side. The top-right corner displays political information. Click on a country's box and on the top line you will see the country's name followed by its Break Value and Political Value. The Break Value for a neutral country ranges from 0 to 100 and represents its ability to withstand diplomatic pressure. The higher the number, the less effect political pressure will have. A country's Political Value reflects the prestige (in Political Points) that a side gains if it conquers the country. At the moment of conquest the points are awarded. A country can only be conquered once. Next the Political Points for both the Axis and Allied players are displayed. The current political level of the Balkan Pact is also shown. The four countries comprising the Balkan Pact are Greece, Rumania, Turkey, and Yugoslavia. Hungary and Bulgaria can also join the Pact if an attempt to use diplomatic pressure on them fails. Whenever one of the Pact members is being pressured diplomatically, the Balkan Pact Value (BPV) is added to the country's Break Value. The BPV starts out at 30 and increases slightly each time someone attempts to pressure a Pact member. It decreases by a much larger random amount whenever a member joins a side. There are four buttons displayed on the right side which are:

CONFLICT **(C)** will display three minor conflicts between Russia and Rumania, Bulgaria and Yugoslavia, and Rumania and Bulgaria. You can choose to be neutral or support one of the countries. If you choose to support one country, that country's Alliance Level will be shifted slightly in your favor and the other country will be shifted toward your enemy.

BALKAN **(B)** displays which countries are in the Balkan Pact.

WAR **(W)** allows you to declare war on the country selected.

PRESS **(P)** allows you to diplomatically pressure the country selected at a cost of a random number of Political Points. The more political points you have and the lower Break Value of the country pressured, the greater the chance you have of getting a positive response which will shift the country's Alliance Level towards you by a random number of points. If the diplomatic pressure fails and if the country's Alliance Level is leaning towards the enemy side, there is a chance based on the country's Alliance Level that it can shift even more toward the enemy by a random amount.

For game purposes, Europe is divided into several areas: Axis, Allied, and Neutral. For the most part the areas correspond with historical borders. For the reason of playability and also for the computer player, some countries have been put together. Each country can be either at war, neutral, or conquered. In September 1939 only Germany, Poland, Commonwealth, and France are at war. The territory of neutral countries can not be moved into. The navy of neutral countries is still allowed to move, but will not take part in any combat. When a neutral country's Alliance Level is at 50 or above, it will lend its cities and resources to either the Allied or Axis production pool. The Allied's production capabilities are severely restricted:

- Russia's prewar production is quartered
- America has no prewar production at all

Entering the War

There are basically three ways a nation can enter the war: through game triggering events (Italy enters the war as soon as at least two hexes of the Maginot Line or 6 Russian cities are Axis controlled), through declaration of war, and through diplomatic pressure with the Alliance Level reaching 100. Some special rules are as follows:

- The US Alliance Level starts with a value of 0. It increases every turn by a random of 10. It increases 5-25 points every time the Axis declares war on a nation. It decreases by 5-25 points every time the Allies declare war on a nation. Certain political events or an early invasion of Russia may also influence the U.S.
- If the Axis player declares war on Russia, then Rumania and Hungary have their Alliance Level shifted 60 points toward the Axis.
- If the Axis player declares war on Russia in 1939 or 1940, the U.S. entry level will rise by 40-70 points.
- Every turn that Italy is at war, Russia is not at war, and Greece is not at war, there is a 10% chance that Greece will join the Allied side. If this happens then there is a further 70% chance that Yugoslavia's Alliance Level will shift 70 points towards the Allied side.
- Spain's Alliance Level can increase due to the Axis capture of Paris.
- Every turn from 1940 on, a check on the table below is made. If it is successful, then Russia will prepare for war (receiving full Production Points) and an entry date will be set. There is a 50% chance that the Axis secret service will get to know about the plans and a message will appear. If the Allied player is human-controlled, then you will automatically get a

message. The percentage below is the Russian Alliance Level which is calculated each turn. Russia's Alliance Level can be adjusted temporarily by the minor conflicts option. If Germany declares war on the Baltics, there is an 80% chance per turn that Russia will enter the war. German Garrison Value (GGV) is the number of Axis units stationed in former Poland. If the GGV equals or exceeds the German Garrison Requirement (GGR) for that year, then the chance for Russian preparation will be lowered. Also the chance for Russian entry is tripled if Turkey is on the Axis side.

RUSSIAN PREPARATION FOR WAR TABLE

YEAR	GGR	GGV < GGR	GGV >= GGR
1940	4	2%	5%
1941	7	3%	7%
1942	11	7%	10%
1943	20	8%	15%
1944	20	8%	15%
1945	20	8%	15%

SUPPLIES/PRODUCTION

Units must be able to trace supply lines back to Army group units or friendly cities. New units are produced through Production Points (PP) which are received according to the number of cities, resource centers, and convoy points the player controls. The detailed rules for both supply and production are described below.

Hex Control Determined

The main purpose of control is to allow the tracing of supply through friendly-controlled hexes. As a side effect, surrounding enemy units with friendly-controlled hexes disables their retreat, as it cuts their supply line. Each hex is either friendly, enemy-controlled, or contested. Control changes by two occasions during the game:

- every time a unit enters a hex it becomes friendly-controlled.
- during the Supply Phase control of all hexes is recalculated. All friendly units and all city hexes which were previously friendly-controlled act as control bases for each side. Now each hex becomes friendly to that side which has the nearest control base in terms of Action Points. In case of a draw the hex becomes contested.
- if the defender retreats or is dissolved.

Supply Partitions

The friendly-controlled territory is divided into Supply Partitions (SP). Two hexes are referred to as being in the same partition, if there is a continuous line of friendly-controlled hexes between them. The line is also blocked if traced across a border, or if one of the countries is not at war. Sea hexes also block partitions.

Examples: First, Germany has taken Poland and France, and is now engaged in Russia. There is now a big partition from Brest to Russia. Second, Italy is at war. Then Italy is split into the two partitions: one in Italy and one in Africa. Third, Minsk is surrounded by German panzers. Minsk is therefore the only Russian city in its partition.

Partitions affect:

- supply levels of cities
- elimination after combat
- inserting of new units
- strategic movement

ISOLATION

A city is referred to as isolated if it is not in a partition with at least one other city, and one of the cities is in one of the player's home countries. Major Cities (London, Berlin, Paris, Warsaw, Moscow, Alexandria, and Gibraltar) count double, while Tripoli and Tobruk do not count. Major Cities appear in dark gray.

Supply

After the recalculation of control, the supply value of all units of the active player (only) will be calculated. For this purpose all friendly-controlled cities and all friendly army groups count as supply sources for the active player. You get the new supply value of a unit by tracing a path through friendly-controlled hexes from a supply source to the unit and subtracting the Action Point cost of this path from the supply value of the source. The varying supply values of sources are:

SUPPLY SOURCE	SUPPLY VALUE
Not isolated city in home country	10
Not isolated army group	10
City in sea supply in home country	10
Artificial harbor	10
City in sea supply	7
Isolated city in home country	5
Isolated army group	3
Not isolated city in enemy country	5
Isolated city in enemy country	0

Morale Adjustment

As the final step in the Supply Phase all units of the active player get a new morale value by the formulas:

MORALE: = MORALE x 70%

MORALE: = MORALE + (EFFICIENCY - OLD MORALE) x SUPPLY VALUE/10

Sea Supply

A city in sea supply has an asterisk after its name. Move the cursor to the city and the city name will appear in the lower-left hand corner of the text window. If an asterisk does not appear, then the city is not in sea supply. A city which is isolated in terms of overland supply can still act as a limited supply source via sea supply. To be eligible two conditions have to be fulfilled:

- the city is located in a coastal hex.
- there must be a line of sea zones to a friendly supplied port which is not blocked as per the rules in "Restrictions on Movement" on page 27. In each of these zones

(not a harbor) there must be a friendly naval unit (not a sub).

Please keep in mind that although a city can obtain sea supply, it still has to trace a line to another friendly-supplied port. A unit surrounded by enemy units can still be in supply due to sea supply. However, sea supply is not sufficient for the inserting of new units.

Effects of sea supply on units sharing the same partition:

- dissolved units are not eliminated
- army groups give 10 supply points
- the city itself gives 7 or 10 supply points

Production

Each turn, except for the first turn of a scenario, the Italian, Axis, Russian, Allied, and U.S. countries receive Production Points (PPs) based on the number of friendly cities, friendly resource centers, and convoys. The Status Menu will display the number of PPs for each country. Each major city and convoy is worth 1 point while resource centers are worth 2 points. The amount of PPs received in a turn is also adjusted by the Industrial Base Multiplier as shown below. If a country has been conquered then all resource centers and all eligible cities automatically belong to the conquering player. Only certain cities, once controlled, count for PP purposes. All cities in a country's homeland count for PP purposes. The cities in Poland, Benelux, and France, which become German territory once they are conquered, will be added to the Axis pool. Rumania joins the Axis player so its cities will be added into the Axis pool. Once controlled all resource centers are added. Russia has its PPs divided by four until it is at war or preparing for war.

Players use PPs to buy various land, air, and naval units which are either dissolved or purchasable in the Production Phase. PPs are further divided into pools per side which are namely: Axis/Italian and Allied/US/Russian. Axis points can be spent for all Axis units except Italian, which can only be purchased by Italian points. The same holds for the Allied, U.S., and Russian points. All PPs which are earned by the Axis player will be added to the Axis pool, except for spared Italian PP, cities, and resources which are located in the Italian home country and resources which are declared as Italian in the Convoy Table. The same holds for the Allied/US/Russian player.

In the Purchase Menu you will get a list of eligible units together with the cost of the unit in PP and the number of turns it will take to produce the unit. You can only purchase a unit if you have sufficient PP remaining. Unused PP count as spared PP. Purchased units will become available as Reserve units after the shown delay. The color of the lettering indicates the status of the unit: light red means the unit is on the map, dark red means the unit is in Reserve, and blue means the

unit is purchasable. Select BUY to purchase the unit. Select INFO to see various data on the unit.

Each side receives PP according to the following formula:

PP = SPARED PP - PP SPENT ON AUTOMATIC REFIT + (NUMBER OF CONTROLLED CITIES + CLEARED CONVOY POINTS + CONTROLLED RESOURCES X 2) X INDUSTRIAL BASE MULTIPLIER

INDUSTRIAL BASE MULTIPLIER

Countries at war over a period of time can increase their production of war materials. The table below represents the multiplier used in determining a nation's new PPs during a given year.

INDUSTRIAL BASE MULTIPLIER

NATION	1939	1940	1941	1942	1943	1944	1945
Germany	1.0	1.0	1.0	1.2	1.6	2.0	2.0
Italy	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Russia	1.0	1.0	1.2	1.6	1.8	1.8	2.0
UK & Allies	0.5	1.0	1.0	1.2	1.6	1.6	2.0
US	0.0	1.0	1.0	1.5	3.0	4.0	4.0

UNIT UPGRADE LEVEL

All of the units in a country's production pool are affected by the Unit Upgrade Level. You can increase your country's level while in the Status Menu by clicking on the UPGRADE button. Each upgrade costs between 10-30 PPs depending on the country. Units receive a 10% increase in strength points per upgrade. It also costs an additional 20% in PPs per upgrade level to buy a unit. The maximum level of upgrade is the total of the R&D levels in AT and Heavy Panzer.

COUNTRY	UPGRADE PP COST
Italy	10
Germany	30
Russia	30
Allies	15
U.S.	20

UNIT REFIT

After calculating PP, just before purchasing units, an automatic refit of lost Strength Points (SP) will take place. Every unit which is on the map will have its SP restored to its maximum SP. This costs 1 PP for each SP of ground units and 2 PP for each SP of Air Units. Units are refitted up to the limit of available PPs. Refit cost will be multiplied by current upgrade level. Prior to Production, this expense is automatically deducted.

WEATHER

At the beginning of each odd-numbered impulse the weather will be determined by a roll on the Weather Table. Weather influences:

- The number of impulses in a turn
- The number of AP of some units (See "Land Movement" on page 24.)
- The row of the CRT (1 column shift left if snow)
- The strength of Ground Strikes (air strength divided by 3 in mud or snow)

The WEATHER option on the Information Menu allows you to view the current weather condition: Clear, Mud, or Snow. The background map color will change depending upon the current weather condition. During clear turns the map will be green, on mud turns the map is yellowish/brown, and on snow turns the color is gray. The weather is determined by the computer according to the table below:

WEATHER TABLE

DIE ROLL	JAN/ FEB	MAR/ APR	MAY/ JUN	JUL/ AUG	SEP/ OCT	NOV/ DEC
1	Clear	Clear	Clear	Clear	Clear	Snow
2	Mud	Clear	Clear	Clear	Clear	Snow
3	Snow	Mud	Clear	Clear	Clear	Snow
4	Snow	Mud	Clear	Clear	Mud	Snow
5	Snow	Mud	Clear	Clear	Mud	Snow
6	Snow	Mud	Clear	Clear	Mud	Snow

Russian Winter

In the first turn in any year in which Russia is at war and the weather is snow, the Russian player will be reinforced as follows:

- the efficiency of all Russian units will be increased by 20.
- Russian units with a maximum strength of 2 will receive a new maximum strength of 3.
- the Russian shock units will be instantly available as reserve units.
- in the first impulse Axis units in Russia will lose Strength Points and Morale on a random basis. The effect on Axis units is harder the further east they are positioned.
- all Axis supply values are halved.

SPECIAL RULES

Blitzkrieg

The Germans originally planned for a repetition of the Schlieffen plan, which would have seen the bulk of the German army moving through Benelux into France. Only after a number of unforeseen events the plan was changed to include a mighty panzer strike through the Ardennes Forest. Historically these divisions cut through to the channel and isolated the bulk of the Allied army in Benelux which still tried to counter the Schlieffen plan. It is questionable if an Axis victory in France would have been possible otherwise, but you cannot expect a player to repeat the Allied mistake. The following rule takes place:

If the Axis player declares war on Benelux in 1940 and the weather is clear, then the Allied units suffer under Blitzkrieg. In this case every Allied unit in France or Benelux will instantly get a new morale between 10%-35%. Allies may also lose supply levels. This rule holds even if parts of France are already Axis controlled. So don't be shy to attack in the winter of 1939/40.

Fortifications

The defenders in a fort receive a defense bonus of 3 strength points when attacked. Defenders will always have a minimum effective strength of at least one strength point. The computer defender receives an additional 70% bonus to

its strength while defending in a fort. The forts will be removed if the hex is enemy-controlled at the end of the impulse. The Maginot Line on the French and German border is built at the start of the 1939 scenario. Other forts can be built by engineer units. Access the engineer unit and put them into fortification mode. They will build a fort at the start of the next turn. They can also hinder sea invasions with an unoccupied fort having a 50% chance of defeating a sea invasion. Forts are removed if control changes. While in fortification mode, they have an asterisk that replaces their AP number on the unit counter. While in fortification mode, an additional menu option MOVE will appear on the Unit Menu. Selecting this option will take the unit out of fortification mode.

Malta

While Allied controlled there is a 33% chance per impulse that Axis sea supply is terminated in both Mediterranean zones. Tobruk will be isolated and any Axis units dissolved will become eliminated. Should the Axis take Gibraltar, the fort in Malta will be removed. This should make an invasion possible. The Malta unit can never move.

German Disorganization

If any of the cities Cologne, Hannover, or Berlin are Allied-controlled, then there is a one-third chance per city that all German units can lose efficiency. Each unit has a one-third chance that it will lose up to a maximum of 50% of its efficiency permanently. This check is made only once a turn.

Norway

Axis units can be supplied in Norway, even without a harbor. The unit will receive a supply value of 9 if:

- the year is 1940
- the weather is clear
- the unit is located in a Norway coastal hex
- the North Sea is in sea supply (there is an Axis ship located there)

Rommel

Rommel is the only army group with 3 AP. However, Rommel will only receive 2 AP if Rommel is in Russia and the Russian winter has not yet started. Other modifiers will take place after that normally.

Homeguard

The strength of all CW ground units in England is doubled for combat. You will see the normal strength

on the counter, but it will be modified in the combat display. This rule does not apply to Malta and African CW territory.

Paratroops

Paratroop units can be put into preparation mode from the Unit Menu during any impulse. During any subsequent first or second impulse, they are allowed to take part in assaults up to 4 hexes away. In this event, paratroop units have a 25% chance of disabling the defender's terrain bonus, a 20% chance of disrupting the defender, and they automatically disable the effect of rivers. Paratroop units do not move when they take part in an assault. They stay in the original hex. While in preparation mode, they have an asterisk that replaces their AP number on the unit counter.

UNIT REORGANIZATION

After calculating Preparation Points and just before purchasing units, an automatic Refit of lost Strength Points (SP) will take place. Every unit which is on the map will have its SP restored to its maximum SP. This costs 1 PP for each SP of ground units and 2 PP for each SP of Air Units. The amount of refitting is limited to the number of PPs in the pool. To be eligible for refitting the unit must not be isolated. Weather has no effects on refitting.

REINFORCEMENTS

In the first or second Impulse of each turn all newly produced units can be brought onto the map. To do so move the cursor on an empty hex which is adjacent to a city or port hex and select NEW.

Examples:

- Commonwealth units must not be inserted in France. Of course you can transport any unit to France normally.
- Commonwealth units can be inserted next to Alexandria, as Alexandria is a Major City.
- If the Axis captures any city, it can be used to insert German units.

VICTORY CONDITIONS

The Allied player wins whenever Germany and Italy are conquered. The Axis player wins whenever England and Russia are conquered. Otherwise, the game ends after the July/August 1945 turn.

Conquering a Country

A nation is conquered if all of its cities are enemy-controlled. A nation can never be reconquered. Some exceptions are noted below:

Commonwealth (CW): To conquer the CW you must occupy both Liverpool and London; Malta does not have to be conquered.

Vichy: After the impulse the Axis took Paris, Bordeaux, Marseille, or Brest in, the Axis player may be asked to install a Vichy government. If Vichy is installed then the following takes place:

- all French units are permanently removed
- French territory south of Paris will become Vichy, the remaining French territory will become German
- Vichy is a neutral state
- Axis units located in Vichy become reserve
- Allied units located in former France are eliminated (dissolved for the computer)

If the Axis does not to install Vichy, then about 80% of the French units currently not on map are permanently removed.

Poland: After an Axis conquest of Poland the eastern part of Poland will become Russian, while the western part will become German territory. Any German units which are on Russian territory at this point will be placed in reserve.

Russia: Whenever Russia has reached 15 collapse points, then it will surrender. Collapse points are awarded once per turn and are displayed by a message on the screen. Whenever the Axis player controls Moscow, Leningrad, and Stalingrad, collapse points start accumulating. The number of collapse points for the five Russian cities is as follows:

CITY	COLLAPSE POINTS
Leningrad	1
Sevastapol	1
Baku	2
Gorki	3
Saratov	4

SCENARIOS

Below is a summary of each scenario and some of the short-term objectives which you can wish to accomplish. Each scenario will only end if the enemy's cities are conquered (see Victory Conditions above) or the game reaches the end of the Jul/Aug 1945 turn.

Poland 1939

This scenario starts Sep/Oct 1939 with Germany poised on the Polish frontier ready to unleash its devastating blitzkrieg attack. Light German forces are on the France/Benelux borders. The German player should attack Poland immediately and then attack France/Benelux as soon as sufficient forces are available. Review the section on "Blitzkrieg" on page 42. Allied forces should attempt to delay the German advances as much as possible trying to avoid being eliminated. Dissolved units can be purchased and come back on the map on the next turn.

Fall of France 1940

This scenario starts May/Jun 1940 with Germany already having conquered Poland and Norway. It is now ready to attack France/Benelux. Germany should attack France/Benelux remembering to garrison Poland enough so Russia does not enter the war prematurely. Allied forces should attempt to delay the German advances as much as possible, trying to avoid being eliminated. Dissolved units can be purchased and come back on the map on the next turn.

Operation Barbarossa 1941

This scenario starts May/Jun 1941 with Germany having now defeated Poland, Norway, Benelux, and France. Germany has deployed its main forces on the Russian front ready to again unleash its armored power. Germany should lightly garrison the western front. Attack Russia and drive towards Moscow at full speed. To conquer Russia, Germany has to take Moscow and achieve 15 collapse points. The Axis player should remember the effects of Russian Winter and Russian Partisans. Eliminate units by cutting off their retreat routes so they will not be dissolved and come back next turn. The Allied player needs to give ground in Russia and avoid being surrounded by Axis units. Defend Moscow at all costs.

Drive to Stalingrad 1942

This scenario starts Jul/Aug 1942 with the main battle action in Russia. Germany could try another offensive against Moscow or instead drive south and southeast to take the resource centers in order to deprive Russia of them and also to increase Axis production. To stop Russia, Germany must cut Russian production by the capture of cities and resource centers. Russian strategy should be to defend Moscow and keep as many cities and resource centers as possible in its control. Use limited counterattacks when feasible.

Kursk 1943

This scenario starts Jul/Aug 1943 with the battle of Kursk on the Russian Front which turned into a disaster for the German army. The German player should be careful where it attacks avoiding Russian strong points. Another possible strategy is to let the Russian player attack and then counterattack when the Russian units have overextended themselves. The German player should be preparing for the inevitable Allied amphibious invasion of Europe by placing units in the ports and fortifying ports and empty coastal hexes with its engineer unit. The Allied player in Russia should attack at the German weak points in the line attempting to surround and eliminate Axis forces as much as possible. The western Allies need to decide upon where and when to invade Europe. The invasion must be in clear weather and on the first impulse only.

D-Day 1944

This scenario starts Mar/Apr 1944 with the western Allies poised for the invasion of Europe. The March turn is only one impulse long and the Axis player is restricted in his movement of most of his units on the western front. The Allied player should carefully select his target being mindful of German-fortified coastal areas. The Mulberry should be used initially and a port captured quickly. The Allies should attempt to surround German forces and eliminate them whenever possible. All German cities need to be captured to defeat Germany so coordination between Russian and western Allied forces is essential. German forces should attempt to contain the western Allied invasion in a narrow beachhead, keeping the majority of forces to counter the Russian advances. If it begins looking hopeless, possibly retreat to the south and defend the southern German cities. The German forces should try to delay the Allied advances as much as possible.

STRATEGY AND TACTICS

There are many different strategic options available in the game which can lead to victory. This section will discuss a few strategies for the Allied and Axis players and also discuss how to use some of the various rules to your advantage.

Allied Player Strategy

When you are ready to amphibiously invade Europe, you have a few alternatives to consider. You can invade in: northwest Germany/ Netherlands, western France near Brest, Spain, southern France, Italy, or Greece. Before you decide on your main landings you should make sure the beachhead and surrounding areas are within 7 hexes of your air units to give you additional support unless the enemy is very weak. You may want to make some preliminary landings in nearby areas to secure safe areas for your air units to give you closer support. Spain, Italy, southern France, and Greece have mountainous terrain which is slower and provides better defensive positions for the Axis player. These are farther away from the heart of Germany, but are also probably less defended. Keeping sizable forces in Africa and England will help keep the German player off balance.

The Russian player should try to give ground in the initial Russian assault instead of trying to hold every inch. After a few impulses the German units will outrun their Army Groups and their effectiveness will decrease due to a lack of supply. Hold Moscow at all costs. You can use your engineer unit to build up a line of fortifications around the city to help in its defense. Try to keep as many cities and resource centers as

possible since your production points come from these. Do not let the Axis player get into southern Russia and take the valuable resource centers as they will give Germany a large boost to their production and severely curtail your own. Try to avoid letting the Axis player surround your units. Elimination means a full year's delay before they can be repurchased and at full cost whereas a dissolved unit in supply can be bought the next turn at 40% the cost. Use your engineer unit to strengthen your lines. Use a few groups of reserves behind your front lines to help counter any German breakthroughs and counterattack his panzer units.

Axis Player Strategy

Initial German strategy should probably be close to the actual historical strategy in invading Poland and Benelux/France in 1939 and 1940. Place your air units on the coastline and attack English air and land units. If you can reduce them enough, you may want to consider an invasion of England with your artificial harbor. The time for this would be May or July 1941 which gives you time to build your transports and an artificial harbor. London must be your objective since you need to capture a port within the turn. You can use your paratroop unit to negate terrain advantages. In defending against the inevitable invasion of Europe, try to keep enough reserve forces to seal off any beachheads and defend the ports vigorously. Try to fortify the coastline as much as possible.

In dealing with Russia your invasion time should be May 1941 to give you time to reach Moscow in 1941. To conquer Russia you must capture this city so your main thrust with your best units should be north of the Pripet Marshes, the large area of swamps in the middle of the Russian line. Concentrate all of your panzer forces and head as fast as possible towards Moscow. Bypass resistance where possible, letting the infantry do the mopping up. Use your panzers to surround and cut off the retreat routes of Russian units. Try to eliminate them so they will not come back the next turn. Once Moscow has been captured you should go after some of the Russian cities which will cause the Russian government to collapse. Try to garrison captured Russian cities to cut down on partisan activity. If you fail to conquer Russia, try to capture as many Russian cities as possible to deny him of further production. Keep mobile reserve panzer groups behind the line to take advantage of counterattack or offensive opportunities that might occur. Use your engineer unit to fortify weak areas.

General Tactics/Strategy

Your production needs are dependent upon your overall strategy. If you are going to amphibiously invade, you will need to build transports and an artificial harbor. If the enemy fleet is fairly strong, you will also need combat ships to protect the transports. You should usually try to produce as many ground units as possible, upgrading them when sufficient PPs are available. You will need to also place research points into the AT and Heavy panzer areas to be able to upgrade your units. Air units are always good to have around as they boost your attacks/defense. Strategic bombers can help reduce enemy movement allowances if you target oil centers. Your other targets cause the enemy to spend more on building new units.

Research areas are very important. To upgrade units and also to provide more effective tank and anti-tank support, it is usually a good idea to place 3 research points in AT and Heavy Panzer areas and spread one point among most of the other areas. MRLS and Panzerfaust are other areas that need to be built up as well. What areas you concentrate in are dependent upon your overall strategy and what the enemy is doing as well.

In attacking forts or units behind rivers, paratroops provide an excellent method to negate the defender's advantage. Also try to surround and cut off the fortified position from supplies if it is too tough to take. Getting an MRLS combat result will also halve the defender. Use air power to help soften up the defender as well.

Use Reserve and Operational Movement to transfer mobile forces around your front to keep the enemy off balance and provide you with additional strength to hit a weak spot in the enemy line. Use it also to transfer units over long distances between fronts.

Use your engineer unit to build fortifications in weak areas or to give additional defensive power to areas where the enemy can be or is attacking. Build them on and around key cities and ports or along coastlines to help defend against amphibious invasions.

In politics it is usually not a good idea to pressure a country which the enemy player is probably going to declare war on. Reserve your points to help keep your Alliance Levels above 50 points and enemy Alliance Levels below 50 points. Focus on countries which are closer to the 100 level so they will join you or keep pro-enemy forces away from reaching 100. Avoid countries which have high Break Values as they are resistant to pressure.

In land combat the use of Assault is vital to help concentrate your forces to gain better odds which cause more defender losses and reduce

your own. At times moving one assault team away and moving another team in can be enough pressure to crack a strong position. A weakened enemy unit can be dissolved or eliminated by an Overrun if the assault has failed. The best tactic to employ is to surround enemy units cutting them off from their supplies. Units that are removed with no supply lines are eliminated and cannot be repurchased for a full year. A wide envelopment maneuver with panzer units cutting deep into rear areas can cut off the supply line allowing the slower infantry to mop up the reduced enemy units.

TUTORIAL

The tutorial below will help you to understand a few of the game mechanics. Besides the tutorial you should read the "Quick Start" section to get an overview of the game. The tutorial assumes you are using a mouse and have already installed the game and gone through the Sound Card Setup routine and are at the Setup Menu. Whenever any reference is given to click the mouse, it means to click the left mouse button (unless otherwise stated).

In the Setup Menu place the mouse pointer over the SCENARIO button and click. Next select the Poland 1939 scenario by clicking the mouse while the pointer is on the SELECT button. You are now back in the Setup Menu. To see that the Axis player is human-controlled, make sure that the button AXIS computer player does *not* have a check mark to the right of the button description. If there is a check mark, place the pointer over AXIS and click to remove the checkmark. Now make sure that the button ALLIED computer player *does* have a check mark to the right of the button description so that the Allied player will be computer-controlled. Next place the pointer over the button GAME and click. This will start the game.

The game map will now be displayed. The red cursor is in the middle of the map. The right-hand portion of the map shows Germany and western Poland. The German army (gray units) is poised to launch their invasion of Poland. In the lower-right hand corner of the screen is a text box showing that it is the Axis turn, the date is Sep/Oct 1939, and it is the first impulse. Each turn is composed of a number of random impulses (1-10). Each player has an impulse to move/fight. Currently it is the Axis' turn. Place the mouse pointer over the INFO button and click. Next select WEATHER and click. The weather is clear (the map background color is green). If the weather was mud, the background

would be a yellowish/brown color and if snow the color would be gray. Move the mouse pointer outside of the weather text window and click; this removes the window from the screen. In the lower left corner of the screen is an information box which currently shows 17/14 which means that the cursor is over the hex located at x coordinate 17 and y coordinate 14. The box to the right is a strategic map display; if you click on any point of this reduced map, it will center the normal map at those coordinates. The box to the right of the map is blank for now. It is used to display any units that are in Reserve, which could be placed on the map. New units that have come out of production or units that have been placed into Reserve status are shown in this box.

Place the mouse pointer on the topmost light gray German unit on the screen (5-2) and click. The left corner text box shows that the cursor is at 20/11 and the unit is named Bock. Click again. The unit's information is now displayed showing that it has a strength of 6, a maximum Action Point (AP) allowance of 2, a morale of 85%, an efficiency of 85%, and a supply value of 10. Move the mouse pointer just one hex to the east (right) across the border and click. The unit should move to the new hex. Note that the unit is now a (5-1). The first number is the unit's effective strength, which is the strength modified by morale. The second number is the number of APs the unit has left. The unit used one AP to move the one hex. It will use the last AP to attack. Click the right mouse button to exit from the unit and return to the Main Menu.

Next move the mouse pointer to the German (3-6) panzer unit and click twice. The unit should be Hoth with a strength of 4 and a morale of 87%. Move the mouse pointer two hexes away in the SE direction where the pick and shovel symbol (resource center) is and click. The panzer unit should have moved to the new hex and should show (3-4) on the unit counter. Click the right mouse button to exit from the unit. Move the pointer one hex to the NE to the Polish (1-2) unit in the woods and click. Place the pointer over the STRIKE button and click. The German air unit Luftfl.1 (4-2) has an effective strength of 3 and is now attacking the Polish unit with an Air Strike. Note that the air unit is now (2-1) which means that its effective air strength is now only 2 and it can make 1 more Air Strike. The second number is the number of Air Strikes the unit can perform. Also, air units have a range of 7 hexes. Now move the pointer over the ASSAULT button and click. The Polish unit is now highlighted in red and the German Hoth panzer unit (3-4) is also

highlighted white. You are now asked a question to "Part in Assault YES NO." Click over the YES button. The (5-1) unit is now highlighted. Click on YES again. The (4-3) unit is highlighted. Click on YES again. The combat result is now displayed. Due to randomness not all combats will be the same. The information window shows you are assaulting the Pomerehon unit. Your effective strength is 10.7 and the enemy effective strength is probably between .6-.8. The odds are 10 : 1, the maximum odds. Combat icon symbols should be displayed on the very bottom line of the combat results window (see the section "Combat Icons" for a description of the icons). There is a good chance at these odds that the Polish unit will be dissolved. If so, the unit will be removed from the map; otherwise the unit should retreat. Note that one Action Point has been subtracted from each of the three units that attacked. Once a unit has Assaulted in an impulse, it cannot Assault again until the next impulse.

Now move the pointer to the German (4-3) unit which is one hex below the German (4-7) panzer unit. Click twice on the unit. Place the mouse pointer one hex to the NE and click. The unit should move and be at (4-2) adjacent to two Polish units. Click the right button to exit. Next place the pointer on the German (4-7) panzer unit and click twice. Place the cursor one hex to the SE and click. The unit now shows (4-6). Place the pointer two hexes east and click. The unit is now (4-3) expending one AP for the first hex and two APs for the second hex using infiltration movement, which is moving from one hex which is next to an enemy unit directly to another hex which is also adjacent to an enemy unit. Click the right button to exit. Move the pointer to the SW to the Polish Krakow (1-2) unit in hex 22/1 and click. Place the pointer in the STRIKE button and click to launch your Air Strike. Next place the pointer over the ASSAULT button and click. Click on the YES button three times. The Polish unit attacked can be dissolved (removed from the map) or retreat depending upon the random in the combat result.

Move the pointer to the German (3-3) unit located in the upper-right part of the screen 3 hexes north of the Polish capital of Warsaw. Click twice to access the unit. Move the 3.Armee unit to the SW one hex. Place the pointer on the adjacent Polish unit (1-2) and click. You have now just attempted to Overrun (attack) the Polish unit with just the one German unit. The odds are not high since you only have one unit; the Polish unit will probably not retreat.

Move the pointer westward to the German (2-4) unit located in the city of Berlin, which is next to two German air units. Click the mouse button. Now click the right mouse button. This will center the map on Berlin. Click the left button to access the 29.Korps unit. Move the pointer two hexes to the west and click. The unit should move showing (2-2). Now place the pointer over the OOPS button and click. The unit should move back to Berlin and again be at (2-4). The OOPS option allows you to take back your movement to either move somewhere else or exit. Next click on the OPERAT. button. Place the pointer in one of the two resource centers to the SW and click. Next click on the MOVE TO button which will move the unit using Operational Movement. A maximum of one unit per impulse can use this special movement allowing you to move up to 10 hexes away. The (2-4) unit is now at (2-0). Click the right button to exit.

Now place the pointer on the German (2-4) unit in the city of Hamburg, which is on the coast five hexes to the north. Click twice. The 17.Korps unit should be displayed. Place the pointer over the RESERVE button and click. A window should appear showing that you have three transport points left. Moving each unit by Reserve Movement costs one transport point. Click on the RESERVE button in the window. The unit should be removed from the map and placed into Reserve status; its unit symbol appears in the third text box on the bottom of the screen. All units in Reserve and new units coming out of production will appear in this box reminding you to deploy the units on the map. All units placed in Reserve must be placed back again on the map before you end your impulse. Now move the pointer one hex east of Berlin (which is next to two air units). Click on the NEW button. The Reinforcement Menu should now appear with the 17.Korps unit displayed. Click on the INSERT button. The (2-4) unit should now be placed on the map and appear as

(1-0). The unit's strength shown on the counter has decreased since the unit lost morale points as it moved. All Reserve units must be placed back on the map on or adjacent to a city in a hex which is friendly-controlled. To see the controlled hexes, click on the CNTL button. First the Axis controlled hexes are displayed and next the Allied hexes. Click on the CLEAR button which will remove all of the units from the map so you can see the terrain under the units more clearly. Next click on the MAP button. The entire map is displayed. Click on the SEA button which displays the seven sea zones on the map shown with either white or blue squares. Click on CNTL which shows you the hexes you control on the map. COUNTR displays the various countries on the map. If you wanted to see a different portion of the normal map, you could click on a location on the map and then select GET. Select GET to return to the normal map.

Click on the INFO button and then click on the RESEARCH button. Your current research settings are displayed. The MRLS (Multiple Rocket Launchers) is outlined. Click on the LESS button which removes one research point from the MRLS. Place the pointer over the words "Heavy tank" and click. Click on the MORE button. You now have two research points allocated to Heavy Tanks. Select VIEW to display the research standings for both sides. The Allied player's standings are approximate with a question mark next to the numbers. Move the pointer outside of the windows and click three times to return you to the Main Menu. Click on END to end the impulse. This ends the tutorial section.

HISTORICAL TIMELINE

DATE	PLACE	EVENT
Sep/Oct 1939	Poland	Germans invade
Sep/Oct 1939	Warsaw	Germans capture
Sep/Oct 1939	Poland	Surrenders
Nov/Dec 1939	Finland	Russia invades
Jan/Feb 1940	Finland	Surrenders
Mar/Apr 1940	Denmark	Germans invade
Mar/Apr 1940	Denmark	Surrenders
Mar/Apr 1940	Norway	Germans invade
Mar/Apr 1940	Oslo	Germans capture
Mar/Apr 1940	Norway	Surrenders
May/Jun 1940	Norway	Allies land at Narvik
May/Jun 1940	Norway	Allies withdraw troops
May/Jun 1940	Netherlands	Germany invades
May/Jun 1940	Belgium	Germany invades
May/Jun 1940	France	Germany invades
May/Jun 1940	Antwerp	Germany captures
May/Jun 1940	Paris	Germany captures
May/Jun 1940	Brest	Germany captures
May/Jun 1940	Bordeaux	Germany captures
May/Jun 1940	Netherlands	Surrenders
May/Jun 1940	Belgium	Surrenders
May/Jun 1940	France	Surrenders
May/Jun 1940	Italy	Joins Axis
Jul/Aug 1940	Hungary	Joins Axis
Jul/Aug 1940	Rumania	Joins Axis
Sep/Oct 1940	Egypt	Italy invades

DATE	PLACE	EVENT
Nov/Dec 1940	Greece	Italy invades
Nov/Dec 1940	Egypt	Allies attack Italians
Jan/Feb 1941	Bulgaria	Joins Axis
Jan/Feb 1941	Tobruk	Allies capture
Mar/Apr 1941	Yugoslavia	Germany invades
Mar/Apr 1941	Belgrade	Germany captures
Mar/Apr 1941	Yugoslavia	Surrenders
Mar/Apr 1941	Greece	Germany invades
Mar/Apr 1941	Athens	Axis capture
Mar/Apr 1941	Greece	Allies evacuate
Mar/Apr 1941	Tobruk	Allied forces isolated
May/Jun 1941	Crete	Germany invades
May/Jun 1941	Crete	Allies evacuate
May/Jun 1941	Russia	Germany invades
May/Jun 1941	Minsk	Axis capture
May/Jun 1941	Riga	Axis capture
Jul/Aug 1941	Kiev	Axis capture
Sep/Oct 1941	Odessa	Axis capture
Sep/Oct 1941	Smolensk	Axis capture
Sep/Oct 1941	Kursk	Axis capture
Nov/Dec 1941	Tobruk	Allied forces relieved
Nov/Dec 1941	Stalino	Axis capture
May/Jun 1942	Tobruk	Axis capture
Jul/Aug 1942	Egypt	1st Battle of El Alamein
Jul/Aug 1942	Voronezh	Axis capture
Jul/Aug 1942	Rostov	Axis capture
Jul/Aug 1942	Maykop	Axis capture

DATE	PLACE	EVENT
Sep/Oct 1942	Stalingrad	Axis attack
Sep/Oct 1942	Egypt	2nd Battle of El Alamein
Nov/Dec 1942	Morocco	Allies amphibiously invade
Nov/Dec 1942	Algeria	Allies amphibiously invade
Nov/Dec 1942	Tunisia	Allies attack
Nov/Dec 1942	Stalingrad	Russian counterattack
Jan/Feb 1943	Maykop	Russians capture
Jan/Feb 1943	Rostov	Russians capture
Jan/Feb 1943	Voronezh	Russians capture
Jan/Feb 1943	Kursk	Russians capture
Jan/Feb 1943	Tripoli	Allies capture
Jan/Feb 1943	Tunisia	Battle of Kasserine Pass
May/Jun 1943	Tunis	Allies capture
Jul/Aug 1943	Kursk	Battle of Kursk
Jul/Aug 1943	Sicily	Allies invade/capture
Sep/Oct 1943	Smolensk	Russians capture
Sep/Oct 1943	Stalino	Russians capture
Sep/Oct 1943	Taranto	Allies capture
Sep/Oct 1943	Italy	Surrenders
Nov/Dec 1943	Kiev	Russians capture
Mar/Apr 1944	Odessa	Russians capture
May/Jun 1944	France	Allies invade Normandy
May/Jun 1944	Rome	Allies capture

DATE	PLACE	EVENT
Jul/Aug 1944	Minsk	Russians capture
Jul/Aug 1944	Bucharest	Russians capture
Jul/Aug 1944	Marseilles	Allies capture
Jul/Aug 1944	Paris	Allies capture
Sep/Oct 1944	Netherlands	Operation Market-Garden
Sep/Oct 1944	Riga	Russians capture
Sep/Oct 1944	Belgrade	Russians capture
Sep/Oct 1944	Brest	Allies capture
Sep/Oct 1944	Antwerp	Allies capture
Nov/Dec 1944	Belgium	Battle of the Bulge
Jan/Feb 1945	Budapest	Russians capture
Jan/Feb 1945	Warsaw	Russians capture
Mar/Apr 1945	Munich	Allies capture
Mar/Apr 1945	Hannover	Allies capture
Mar/Apr 1945	Cologne	Allies capture
Mar/Apr 1945	Genoa	Allies capture
May/Jun 1945	Trieste	Allies capture
May/Jun 1945	Hamburg	Allies capture
May/Jun 1945	Konigsberg	Russians capture
May/Jun 1945	Prague	Russians capture
May/Jun 1945	Berlin	Russians capture
May/Jun 1945	Germany	Surrenders

GAME ABBREVIATIONS

AA	Anti-Aircraft
AP	Action Point
ASW	Anti-Submarine Warfare
A-T	Anti-Tank
BB	Battleship
CV	Carrier
CW	Commonwealth
GGR	German Garrison Requirement
GGV	German Garrison Value
MRLS	Multiple Rocket Launchers
OB	Order of Battle
PP	Production Point
RP	Research Point
SBP	Strategic Bombing Point
SP	Strength Point
SP	Supply Partition
SV	Supply Value
ZOC	Zone of Control

ORDER OF BATTLE

The Orders of Battle are listed for each player in each scenario. The following information is displayed for each unit:

NAME: name

TYPE: type

S: Strength Points

C: Capacity (for Transporter Naval units)

EF: Efficiency

A: Action Points

RV: Raid Value (for naval units)

PP: production point cost to buy the unit

T: the number of turns in production before the unit arrives

39, 40, 41, 42, 43, or 44: which of the scenarios the unit is in.

The status of each unit is coded for each scenario:

"M": the unit is on the map

"B": you can buy the unit

"I": the unit is in production

"R": the unit is in Reserve.

The unit values were taken from the Poland 1939 scenario. Some of the efficiencies, Action Points, and production costs are different (usually higher) in the later scenarios.

Additionally, the following abbreviations are used for "TYPE" in the tables:

AG = Army Group

AFV = Panzer (Armored-Fighting Vehicle)

COR = Corps

HAR = Artificial Harbor

ESC = Escort

TRA = Transport

AIR = Air-Uni

ARM = Army

ENG = Engineer

PARA = Paratroop

CAR = Carrier

SUB = Submarine

Allied Country's Armies

British Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
Alexander	AG	6	2	70	20	5	M	B	M	M	M	M
Montgom.	AG	6	2	75	21	5	B	R	B	M	M	M
AASF	AIR	5	2	80	16	5	B	B	B	B	M	M
RAF	AIR	5	2	85	17	5	M	M	M	M	M	M
1.Homgrd	COR	2	2	55	5	2	-	-	-	-	-	M
8.Army	ARM	4	4	70	16	2	M	M	M	M	M	M
BEF	ARM	4	4	70	16	2	M	M	-	B	B	M
Beirut	COR	1	3	20	2	2	M	M	-	-	-	-
Br.1.Cps	COR	2	4	70	9	2	M	M	M	M	M	M
Br.10.Cps	COR	2	4	75	9	2	B	B	M	B	M	B
Br.12.Cps	COR	2	4	70	9	2	B	B	M	M	M	M
Br.2.Army	ARM	4	4	65	15	3	B	B	B	B	B	M
Br.2.Cps	COR	2	4	65	8	2	M	M	M	M	M	M
Br.30.Cps	COR	2	4	65	8	2	M	M	M	M	M	B
Br.5.Army	ARM	4	4	70	16	2	-	-	M	M	B	B
Can.2.Cps	COR	2	4	75	9	2	B	M	M	M	M	M
Cn.1.Army	COR	4	4	75	17	3	B	B	B	B	M	M
Free Frnch	COR	2	4	65	8	2	B	B	B	M	B	M
Gibraltar	COR	1	2	60	4	2	M	M	M	B	M	M
Malta	COR	1	2	60	4	2	M	M	M	M	M	M
Pol.2.Cps	COR	2	4	65	8	2	B	B	M	M	M	M
Mulberry	HAR	3	0	80	9	5	B	B	B	B	R	R

French Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
DCR	AFV	2	5	60	8	4	M	M	-	-	-	-
CinC AF	AIR	5	2	60	13	5	M	M	-	-	-	-
OC Air	AIR	5	2	60	19	3	B	B	-	-	-	-
DeGaulle	AG	5	2	70	17	5	B	B	-	-	-	-
1.Army	ARM	4	2	55	10	2	M	M	-	-	-	-
2.Army	ARM	4	2	60	11	2	M	M	-	-	-	-
3.Army	ARM	4	2	60	11	2	M	M	-	-	-	-
4.Army	ARM	4	2	65	12	2	M	M	-	-	-	-
5.Army	ARM	4	2	50	9	2	M	M	-	-	-	-
6.Army	ARM	4	2	60	11	2	M	M	-	-	-	-
7.Army	ARM	4	2	60	11	2	M	M	-	-	-	-
8.Army	ARM	4	2	55	10	2	M	M	-	-	-	-
9.Army	ARM	4	2	60	11	2	M	M	-	-	-	-
10.Army	ARM	4	2	55	10	3	B	M	-	-	-	-
11.Army	ARM	4	2	50	9	3	B	M	-	-	-	-
Frz 7	COR	2	2	65	8	2	B	-	-	-	-	-
Garrison	COR	1	2	55	4	2	M	M	-	-	-	-
Garrison	COR	1	2	55	4	2	M	M	-	-	-	-
Leg.Etran.	COR	3	2	70	10	2	M	M	-	-	-	-

Polish Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
Pol.AF	AIR	3	1	50	7	2	M	-	-	-	-	-
Karpaten	COR	4	2	60	11	2	M	-	-	-	-	-
Krakow	COR	4	2	55	10	2	M	-	-	-	-	-
Lodz	COR	4	2	55	10	2	M	-	-	-	-	-
Modlin	COR	4	2	55	10	2	M	-	-	-	-	-
Narew	COR	4	2	55	10	2	M	-	-	-	-	-
Pomerhon	COR	4	2	55	10	2	M	-	-	-	-	-
Poznan	COR	4	2	55	10	2	M	-	-	-	-	-
Warsaw	COR	4	2	55	10	2	M	-	-	-	-	-

United States Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
Patton	AFV	4	6	90	24	4	B	B	B	R	M	M
8.USAF	AIR	5	2	90	18	5	B	B	B	M	M	M
Bradley	AG	5	2	70	17	5	B	B	B	B	B	M
Eisenhow.	AG	6	2	80	22	5	B	B	B	R	M	M
9.USAF	AIR	5	2	90	18	5	B	B	B	B	M	M
15.USAF	AIR	5	2	90	18	5	B	B	B	B	B	M
1.US Arm	ARM	4	4	70	16	2	B	B	B	M	M	M
3.US Arm	ARM	4	4	70	16	2	B	B	B	R	M	M
5.US Arm	ARM	4	4	70	17	2	B	B	B	B	M	M
7.US Arm	ARM	4	4	70	16	2	B	B	B	B	B	R
9.US Arm	ARM	4	4	70	16	2	B	B	B	B	B	B
US II Cps	COR	2	4	80	10	2	B	B	B	M	M	M
US VI Cps	COR	2	4	70	7	2	B	B	B	B	R	M
US-Para	PARA	2	3	90	14	4	B	B	B	B	B	M

Russian Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
1st Tank	AFV	4	4	40	14	4	M	M	M	M	M	M
2nd Tank	AFV	4	4	45	15	4	B	B	B	R	M	M
4th Tank	AFV	4	4	45	15	4	B	B	B	B	B	M
1.Gd Tank	AFV	4	5	60	19	4	B	B	B	B	M	M
2.Gd.Tank	AFV	4	5	55	18	4	B	B	B	B	R	M
Red.3.AF	AIR	5	2	60	13	5	B	B	B	M	M	M
Red.4.AF	AIR	5	2	60	13	5	B	B	B	B	B	M
Red.16.AF	AIR	5	2	60	13	5	B	B	B	B	M	M
1.Shock	ARM	5	4	65	23	-	I	R	R	M	M	M
2.Shock	ARM	5	4	60	22	-	I	R	R	M	M	M
3.Shock	ARM	5	4	55	20	-	I	R	R	M	M	M
Brjansk.F	AG	7	2	40	20	4	B	B	B	B	B	M
NW Front	AG	7	2	40	20	4	B	B	M	M	M	M
S. Front	AG	7	2	40	20	4	B	B	M	M	M	M
W.Front	AG	7	2	45	21	4	B	B	B	M	M	M
Zhukov	AG	7	2	60	25	4	B	B	B	B	M	M
3.Army	COR	3	2	35	7	1	M	M	M	M	M	M

Russian Army cont.

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
4.Army	COR	3	2	35	8	1	M	M	M	M	M	M
5.Army	COR	3	2	35	8	1	M	M	M	M	M	M
6.Army	COR	3	2	30	7	1	M	M	M	M	M	M
8.Army	COR	3	2	35	8	1	M	M	M	M	M	M
9.Army	COR	3	2	40	9	1	M	M	M	M	M	M
10.Army	COR	3	2	40	9	1	M	M	M	M	M	M
11.Army	COR	3	2	35	8	1	M	M	M	M	M	M
12.Army	COR	3	2	35	8	1	M	M	M	M	M	M
13.Army	COR	3	2	35	8	1	M	M	M	M	M	M
16.Army	COR	3	2	35	8	1	B	B	B	B	B	B
18.Army	COR	3	2	35	8	1	M	M	M	M	M	M
19.Army	COR	3	2	35	8	1	B	B	B	B	B	B
20.Army	COR	3	2	30	7	1	M	M	M	M	M	M
21.Army	COR	3	2	35	8	1	M	M	M	M	M	M
22.Army	COR	3	2	35	8	1	B	B	B	M	M	M
23.Army	COR	4	2	35	10	1	M	M	M	M	M	M
24.Army	COR	3	2	30	7	1	B	B	B	M	M	M
26.Army	COR	3	2	35	8	1	M	M	M	M	M	M
28.Army	COR	3	2	35	8	1	B	B	B	B	B	B
29.Army	COR	3	2	40	9	1	B	B	B	M	B	B
30.Army	COR	3	2	35	8	1	B	B	B	B	B	B
34.Army	COR	3	2	35	8	1	B	B	B	M	M	M
38.Army	COR	3	2	35	8	1	M	M	M	M	M	M
42.Army	COR	3	2	40	9	1	B	M	M	M	M	M
43.Army	COR	3	2	35	8	1	B	B	B	B	B	B
50.Army	COR	3	2	35	8	1	B	B	B	B	B	B
52.Army	COR	3	2	30	7	1	B	B	M	M	M	M
54.Army	COR	3	2	35	8	1	B	B	R	M	M	M
59.Army	COR	3	2	35	8	1	B	B	B	M	M	M
1.Cav.Cps	COR	2	2	40	6	1	B	R	M	M	M	M
2.Cav.Cps	COR	2	2	35	6	1	B	B	M	M	M	M
Engineer	ENG	2	3	35	12	4	B	R	M	M	M	M
GDS Para	PARA	2	3	55	12	4	B	B	B	B	R	M

ORDER OF BATTLE – NEUTRAL COUNTRY'S ARMIES

Greek Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
Gre.Mtn	COR	2	2	70	8	-	-	-	-	-	-	-
Gre.Army	COR	2	2	60	7	-	-	-	-	-	-	-

Rumanian Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
1.Rum.Ar	ARM	2	2	55	6	3	B	B	-	-	-	-
2.Rum.Ar	ARM	2	2	55	6	3	B	B	-	-	-	-
3.Rum.Ar	ARM	4	2	45	9	3	B	B	M	M	M	M
4.Rum.Ar	ARM	4	2	50	9	3	-	-	M	M	M	M

Benelux Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
Belg.Army	COR	3	2	60	9	-	-	M	-	-	-	-

Norwegian Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
Norg. Arm	COR	2	2	60	7	-	-	-	-	-	-	-

Persian Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
Kuwait	COR	2	2	55	6	-	-	-	-	-	-	-
Iraq	COR	2	2	50	6	-	-	-	-	-	-	-

Spanish Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
1.Span.Cp	COR	3	2	65	10	-	-	-	-	-	-	-
2.Span.Cp	COR	3	2	60	9	-	-	-	-	-	-	-
3.Span.Cp	COR	3	2	60	9	-	-	-	-	-	-	-
4.Span.Cp	COR	3	2	60	9	-	-	-	-	-	-	-
5.Span.Cp	COR	3	2	55	8	-	-	-	-	-	-	-
6.Span.Cp	COR	3	2	50	8	-	-	-	-	-	-	-
Garrison	COR	2	2	45	8	-	-	-	-	-	-	-

Swedish Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
1.Swed.Ar	COR	3	2	60	9	-	-	-	-	-	-	-
2.Swed.Ar	COR	3	2	60	9	-	-	-	-	-	-	-

Bulgarian Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
1.Bulg.Ar	ARM	2	2	55	6	3	B	B	-	-	-	-
2.Bulg.Ar	ARM	2	2	55	6	3	B	B	-	-	-	-
Bulg.Corp	COR	2	3	35	5	3	-	-	M	M	M	M

Swiss Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
1.Swiss.Ar	ARM	3	2	60	9	-	-	-	-	-	-	-
2.Swiss.Ar	ARM	3	2	60	9	-	-	-	-	-	-	-

Hungarian Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
1.Hun.Ar	ARM	2	2	55	6	3	B	B	-	-	-	-
2.Hun.Ar	ARM	4	2	55	10	3	B	B	-	-	-	-
Hun.Corps	COR	2	4	55	7	3	-	-	M	M	M	M

Turkish Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
1.Turk.Ar	COR	3	2	60	9	-	-	-	-	-	-	-
2.Turk.Ar	COR	3	2	55	8	-	-	-	-	-	-	-
3.Turk.Ar	COR	3	2	55	8	-	-	-	-	-	-	-
4.Turk.Ar	COR	3	2	50	8	-	-	-	-	-	-	-
5.Turk.Ar	COR	3	2	50	8	-	-	-	-	-	-	-

Yugoslavian Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
Belgrade	COR	2	2	60	7	-	-	-	-	-	-	-
Zagreb	COR	2	2	55	6	-	-	-	-	-	-	-
Slov.Ex.C	COR	2	4	50	7	2	-	-	B	M	M	M

ORDER OF BATTLE – AXIS COUNTRY'S ARMIES

Finnish Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
Finn.4.Cps	COR	2	4	75	9	2	M	M	M	M	M	M
Finn.2.Cps	COR	2	4	75	9	2	M	M	M	M	M	M
Finn.SE-A	ARM	4	3	70	14	3	B	B	B	R	M	M

German Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
Guderian	AFV	4	7	99	28	4	M	M	M	B	B	M
Hoepner	AFV	4	6	90	24	4	B	B	M	M	M	M
Hoth	AFV	4	6	90	24	4	M	M	M	M	M	M
Kleist	AFV	4	6	95	25	4	B	B	M	M	M	M
Manteuffel	AFV	4	6	95	25	4	B	B	B	M	M	B
Bock	AG	6	2	85	23	5	M	M	M	M	-	-
Kesselring	AG	6	2	95	26	5	B	B	B	B	R	M
Kluge	AG	6	2	85	27	5	-	-	-	-	M	M
Manstein	AG	6	2	99	27	5	B	M	M	M	M	M
Rommel	AG	4	3	90	20	5	B	B	M	M	M	M
Rundstedt	AG	6	2	95	26	5	M	M	M	M	M	M
Luftfl.I	AIR	5	2	90	18	5	M	M	M	M	M	M
Luftfl.II	AIR	5	2	90	18	5	M	M	M	M	M	M
Luftfl.IV	AIR	5	2	85	17	5	B	B	B	B	B	B
Luftfl.X	AIR	5	2	90	18	5	B	B	B	M	M	M
3.Armee	ARM	6	3	70	20	3	M	M	M	M	M	B
4.Armee	ARM	6	3	70	20	3	M	M	M	M	M	M
6.Armee	ARM	6	3	70	20	3	B	M	M	M	M	M
8.Armee	ARM	6	3	70	20	3	M	B	B	B	B	M
14.Armee	ARM	6	3	80	23	3	B	B	B	B	B	B
16.Armee	ARM	6	3	80	23	3	B	R	B	M	B	M
17.Armee	ARM	6	3	80	23	3	B	B	B	M	M	B
10.Armee	ARM	6	3	70	20	3	B	B	B	B	B	B
11.Armee	ARM	6	3	70	20	3	B	B	M	M	M	B
1.Korps	COR	2	4	80	10	2	M	M	M	M	M	M
2.Korps	COR	2	4	75	9	2	B	B	M	M	M	M

German Army cont.

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
4.Korps	COR	2	4	80	10	2	M	M	M	M	M	M
5.Korps	COR	2	4	80	10	2	M	R	M	M	M	M
6.Korps	COR	2	4	80	10	2	B	B	B	M	B	M
7.Korps	COR	2	4	80	10	2	M	M	M	M	M	M
8.Korps	COR	2	4	80	10	2	B	B	M	M	M	M
10.Korps	COR	2	4	75	9	2	B	B	B	M	M	M
11.Korps	COR	2	4	75	9	2	B	B	B	M	B	M
12.Korps	COR	2	4	80	10	2	M	M	M	M	M	M
17.Korps	COR	2	4	80	10	2	M	M	M	M	M	M
26.Korps	COR	2	4	80	10	2	M	M	M	M	M	M
29.Korps	COR	2	4	80	10	2	M	M	M	M	M	M
30.Korps	COR	2	4	80	10	2	M	M	M	M	M	M
42.Korps	COR	2	4	80	10	2	B	B	B	M	B	M
49.Gebjgr	COR	2	4	85	10	2	B	M	M	M	M	M
51.Korps	COR	2	4	80	10	2	B	B	B	M	M	M
53.Korps	COR	2	4	80	10	2	B	B	B	M	M	M
Bef 101	COR	2	4	60	8	2	B	B	B	M	M	M
Bef 102	COR	2	4	60	8	2	B	B	B	B	B	M
Pionere	ENG	2	4	70	15	4	B	R	R	M	M	M
g.Freheit	HAR	3	0	80	12	5	B	B	B	B	B	B
Fsjgr	PARA	2	3	95	14	4	B	M	M	B	M	M

Italian Army

NAME	TYPE	S	A	EF	PP	T	39	40	41	42	43	44
Ariete	AFV	2	5	55	8	5	B	B	M	M	B	-
Garibaldi	AG	6	3	55	16	5	M	M	M	M	B	-
It.AF1	AIR	4	2	70	12	5	B	M	M	M	M	-
It.AF2	AIR	4	2	70	12	5	B	R	M	M	B	-
2.It.Army	ARM	4	2	55	10	2	M	M	M	M	M	-
6.It.Army	ARM	4	2	50	9	2	M	M	M	M	M	-
8.It.Army	ARM	4	2	55	10	3	B	B	M	M	B	-
9.It.Army	ARM	4	2	50	9	2	M	M	M	M	M	-
11.It.Army	ARM	4	2	50	9	2	M	M	M	M	M	-
2.It.Cps	COR	2	3	50	6	2	M	-	-	-	-	-
9.It.Cps	COR	2	3	50	6	2	-	M	M	M	B	-
10.It.Cps	COR	2	3	55	6	2	M	M	M	M	M	-
20.It.Cps	COR	2	3	55	6	2	M	M	M	M	B	
21.It.Cps	COR	2	3	50	6	3	B	B	B	M	B	-
IT.Exp.A.	COR	4	2	55	10	3	B	B	B	B	B	-

AXIS COUNTRY'S NAVAL FORCES

German Navy

NAME	TYPE	S/C	RV	PP	T	39	40	41	42	43	44
Seydlitz	CAR	4	3	15	9	B	B	B	B	B	B
Zeppelin	CAR	4	3	15	9	B	B	B	B	B	B
Bismarck	ESC	5	4	12	7	B	R	M	B	-	-
Gneisenau	ESC	4	3	10	7	M	M	M	M	M	M
Scharnh.	ESC	4	3	10	7	M	M	M	M	M	-
Tirpiz	ESC	5	4	12	7	B	B	B	M	M	M
U1	SUB	2	4	6	3	M	M	M	M	M	M
U2	SUB	2	4	6	3	B	M	M	M	M	M
U3	SUB	2	4	6	3	B	B	R	M	M	B
U4	SUB	2	4	6	3	B	B	B	R	M	B
Helgoland	TRA	2	0	6	4	B	B	B	B	B	B
Juetland	TRA	1	0	4	4	B	B	B	B	B	B
Kiel	TRA	2	0	6	4	M	M	M	M	M	M

Italian Navy

NAME	TYPE	S/C	RV	PP	T	39	40	41	42	43	44
Ceasare	ESC	3	2	8	7	M	M	M	M	M	-
Doria	ESC	3	1	7	7	M	M	M	M	M	-
Duilio	ESC	3	1	7	7	M	M	M	M	M	-
Impero	ESC	4	3	10	7	B	B	B	B	B	-
Littorio	ESC	4	3	10	7	M	M	M	M	M	-
Roma	ESC	4	3	10	7	B	B	B	R	M	-
Veneto	ESC	4	3	10	7	B	B	B	M	M	-
It.Sub	SUB	2	4	6	3	B	B	B	B	B	-
It.Tran.1	TRA	2	0	6	4	M	M	M	M	M	-
It.Tran.2	TRA	1	0	4	4	B	B	B	B	B	-

ALLIED COUNTRY'S NAVAL FORCES

British Navy

NAME	TYPE	S/C	RV	PP	T	39	40	41	42	43	44
Ark Royal	CAR	4	2	14	9	M	M	M	M	M	M
Glorious	CAR	3	2	12	9	M	M	M	M	M	M
Conqueror	ESC	4	2	9	7	B	B	M	M	M	M
Hood	ESC	4	2	9	7	M	M	M	M	M	M
Malaya	ESC	4	2	9	7	M	M	M	M	M	M
Nelson	ESC	5	2	10	7	M	M	M	M	M	M
Q.Elizab.	ESC	4	2	9	7	M	M	M	M	M	M
Repulse	ESC	3	2	8	7	M	M	M	M	M	M
Rodney	ESC	5	2	10	7	M	M	M	M	M	M
Valiant	ESC	4	2	9	7	M	M	M	M	M	M
Vanguard	ESC	4	2	9	7	B	B	B	B	B	B
Warspite	ESC	4	2	9	7	M	M	M	M	M	M
Br.Tran.1	TRA	2	0	6	4	M	M	M	M	M	M

French Navy

NAME	TYPE	S/C	RV	PP	T	39	40	41	42	43	44
Dunkerque	ESC	4	2	9	7	M	M	-	-	-	-
Gascoine	ESC	4	2	9	7	M	M	-	-	-	-
Lorraine	ESC	3	2	8	7	M	M	-	-	-	-

United States Navy

NAME	TYPE	S/C	RV	PP	T	39	40	41	42	43	44
Montana	ESC	5	2	10	7	B	-	-	B	B	M
Texas	ESC	3	2	8	7	B	B	B	M	M	M
Ranger	CAR	4	2	14	9	B	B	B	M	M	M
Nevada	ESC	4	2	9	7	B	B	B	M	M	M
Arkansas	ESC	5	2	10	7	B	B	B	M	M	M
Ohio	ESC	5	2	10	7	B	B	B	B	B	B
US.Tran.1	TRA	2	0	6	4	B	B	B	M	M	M
US.Tran.2	TRA	3	0	8	4	B	B	B	B	M	M
US.Tran.3	TRA	3	0	8	4	B	B	B	B	B	B

Russian Navy

NAME	TYPE	S/C	RV	PP	T	39	40	41	42	43	44
SU-Sub	SUB	1	3	4	3	M	M	M	M	M	M
Oct.Rev	ESC	2	2	7	3	M	M	M	M	M	M
Sovjetzki	ESC	3	2	8	7	M	M	M	M	M	M

CREDITS

CLASH OF STEEL Developed by
MARTIN SCHOLZ

Strategic Simulations, Inc.

Rule Book Author
DAVE LANDREY

Rule Book Editors
ANDRÉ VRIGNAUD, EILEEN MATSUMI

Producer
BRET BERRY

Associate Producer
JAMES YOUNG

Testers
STEVEN OKANO, TOM MACDEVITT, CHRIS WARSHAUER

Graphic Design and DTP
LOUIS SAEKOW DESIGN: DAVID BOUDREAU, LEEDARA SEARS

Printing
A&A PRINTERS AND LITHOGRAPHERS INC.

QUESTIONS OR PROBLEMS?

Our main business number is (408) 737-6800. **If you encounter disk or system related problems you can call our Technical Support Staff at (408) 737-6850 between 11 a.m. and 5 p.m., Pacific Time, Monday through Friday, holidays excluded.** NO GAME PLAYING HINTS WILL BE GIVEN THROUGH THIS NUMBER. You can write to us for hints at: Hints, Strategic Simulations, Inc., 675 Almanor Avenue, Suite 201, Sunnyvale, CA 94086 (include a stamped self-addressed envelope for reply).

IBM COMPATIBLE COMPUTER INFORMATION:

Many of our games will work on IBM compatible computers. If you own an IBM compatible computer we suggest that you consult with our **Technical Support Staff at (408) 737-6850** between 11 a.m. and 5 p.m., Pacific Time, Monday through Friday, (holidays excluded) to see if an SSI game you're considering purchasing is compatible with your computer. If we have insufficient data to determine compatibility, you may wish to purchase the game and test for compatibility yourself. If the game proves to be incompatible, you may return it within 14 days with your dated receipt and we will refund your money. Or, if you return the game within 30 days, you may exchange the game for another.

STRATEGIC SIMULATIONS, INC. LIMITED WARRANTY

Strategic Simulations, Inc. ("SSI") warrants that the diskette(s) on which the enclosed program is recorded will be free from defects in materials and workmanship for a period of 30 days from the date of purchase. If within 30 days of purchase the diskette(s) prove defective in any way, you may return the diskette(s) to:

Strategic Simulations, Inc., 675 Almanor Avenue, Suite 201, Sunnyvale, CA 94086-2901

SSI will replace the diskette(s) free of charge. In addition, if the diskette(s) prove defective at any time after the first 30 days, return the diskette(s) to SSI and SSI will replace the diskette(s) for a charge of $10.00 (each disk) plus $4.00 for shipping and handling. California residents, add applicable sales tax.

SSI MAKES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE SOFTWARE PROGRAM RECORDED ON THE DISKETTE OR THE GAME DESCRIBED IN THIS RULE BOOK, THEIR QUALITY, PERFORMANCE, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. THE PROGRAM AND GAME ARE SOLD "AS IS." THE ENTIRE RISK AS TO THEIR QUALITY AND PERFORMANCE IS WITH THE BUYER. IN NO EVENT WILL SSI BE LIABLE FOR DIRECT, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY DEFECT IN THE PROGRAM OR GAME EVEN IF SSI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. (SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF IMPLIED WARRANTIES OR LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.)

The enclosed software program and this Rule Book are copyrighted. All rights are reserved. This Rule Book may not be copied, photographed, reproduced, or translated or reduced to any electrical medium or machine-readable form, in whole or in part, without prior written consent from SSI. The program accompanying this Rule Book may be copied, by the original purchaser only, as necessary for use on the computer for which it was purchased.

©1993 Strategic Simulations, Inc. All Rights Reserved.

WHAT TO DO IF YOU HAVE A DEFECTIVE DISK

Each of our games undergoes extensive playtesting prior to its release. Through this process we hope to uncover and correct any errors in programming. However, due to the complex nature of our simulations, some program errors may go undetected until after publication. In addition to errors in the program, there are occasionally problems with the disk itself. We experience the industry standard of approximately a 3 to 5% failure rate of duplicated disks. Before assuming that a disk is defective, make sure to check your disk drive. Up to 95% of the disks returned to us as defective will run fine on our computer systems. Often the problem is with a disk drive that needs servicing for alignment, speed, or cleaning.

Should you have a defective disk, please return the disk only (keep all other parts of the game) to our Customer Support Department, along with a note describing the problem you have encountered. A replacement disk will be provided upon our receipt of the defective disk.

Should you uncover an error in the program, return both your game disk and any "save game" disks to our Customer Support Department. Please enclose a description of what was taking place in the game when the error occurred. Upon correction of the program error, we will return an updated disk to you.

Always make sure to include your name, address, and daytime telephone number with any correspondence. We will do our best to see that any problems are corrected as soon as possible.

KEYBOARD HOT KEY COMMANDS

MAIN MENU:

U	MENU
E	END
A	ASSAULT
S	STRIKE
V	NAVY
N	NEW
L	UNLOAD
P	PRODUCT
M	MAP
I	INFO
C	CNTL
R	CLEAR
*	STRIKE

UNIT MENU:

P	OPERAT.
R	RESERVE
H	AMPHIB
B	REBASE
A	PREPARE
F	FORTIFY
M	MOVE
O	OOPS

INFORMATION MENU:

S	STATUS
E	SEA ZONE
H	HISTORY
O	OB
R	RESEARCH
P	POLITICS
B	BOMBER
W	WEATHER

SETUP MENU:

G	GAME
C	SCENARIO
L	LOAD
S	SAVE
A	AXIS
I	ALLIED
R	RULES
O	COMP
D	EDIT

RULES OPTIONS MENU:

S	SELECT
C	CHAOS
H	HOLD
P	PARTISAN
J	JAPAN
L	LIBERATE

EDIT GAME OPTIONS MENU:

S	SOUND
P	PANZER
M	MORE
I	IMPULS
T	AUTO
C	SCROLL
R	ATTACK
O	D6SOUND
N	D6ANIM
H	HEXGRID
L	SLIDE
U	UNITEXIT
/	ASSULT

ATTACKER COMBAT ICONS:



Russian Infiltration

MRLS Shatters Defender

Paratroop Shatters Defender

Attacker SP Loss

Attacker Dissolved

DEFENDER COMBAT ICONS:



SP Loss-Defender

Retreat-Defender

German Mobile Defense

Defender Dissolved

GENERAL COMBAT ICONS:



German Kampfgruppe

AT Barrier

Eliminated

Panzer Battle

Failed Check-Dissolved