TABLE OF CONTENTS

Imagine that you are the Panzer General.

Your tactical skills are tested in armored assaults, amphibious invasions, paradrops, naval engagements, and fierce aerial combat for control of the skies. Go from triumph to triumph, invading and seizing the capitals of Great Britain, the Soviet Union, and ultimately the United States of America.

Can you achieve a place in history?

GETTING STARTED

If you want to get a quick start, refer to the "Tutorial/Quick Start" section of the manual which begins on page 2. It provides a step-by-step battle plan to familiarize you with the menus and aspects of a PANZER GENERAL scenario, and should help you win the first battle of the 1939 full war campaign. If, however, you prefer to familiarize yourself with the game as a whole, turn to the "Basic Menus, Windows and Buttons" and "Game Play" sections on pages 14, and 27, respectively.

What Comes with this Game?

Your game box should contain this User Manual, a data card, and an PANZER GENERAL CD. This User Manual explains how to play and contains important information on menus, scenarios, and unit classes and equipment. To play, follow the installation instructions on the data card.

Copy Protection

There is no physical copy protection on your PANZER GENERAL CD, but in order to play the game the CD must be in the CD-ROM drive.

Using the Mouse

In PANZER GENERAL whenever the mouse passes over a button or hex, a description appears in an Information Bar on the screen. This makes identifying buttons and units easy during gameplay.

For Windows

In this book, the term "click" means moving the mouse pointer to the desired area on the screen and pressing the left mouse button.

"Right-click" means moving the mouse pointer to the desired area and pressing the right mouse button.

For Macintosh

In this book, the term "click" means moving the mouse pointer to the desired area on the screen and pressing the mouse button.

"Option-click" means moving the mouse pointer to the desired area, holding down the Option key, and pressing the mouse button.

The proper use of roads is most important when using wheeled vehicles — they move twice as fast.

TUTORIAL / QUICK START

This tutorial provides step-by-step suggestions to familiarize you quickly and easily with the basic menus, options, and units in the first PANZER GENERAL battle scenario of the 1939 full war campaign.

After the cinematic opening screen appears, press the arrow button at the bottom of the screen to start. From the Campaign Selection screen, you can play any one of five campaigns. A campaign takes you through a series of scenarios in which your success or failure in each scenario determines the conditions in the next one. For the tutorial, you just want to play a single scenario, so click on the Scenario button at the bottom of the screen.
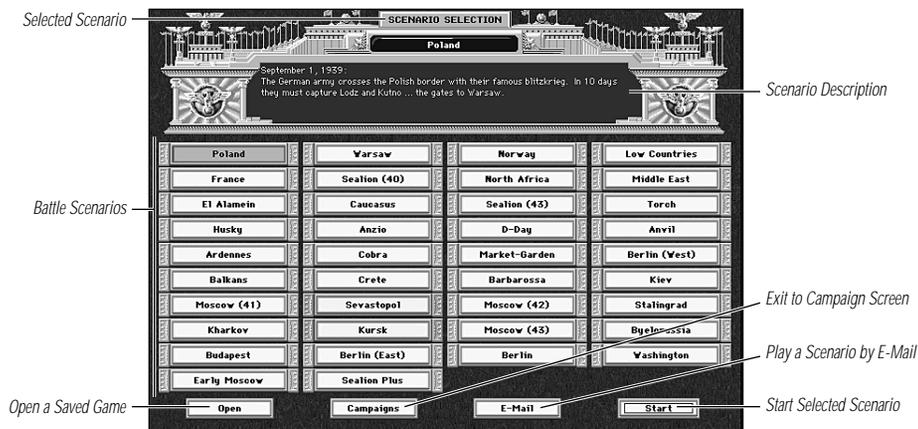
You now see the Scenario Selection Screen. Click on Poland as the scenario you want to play, then click Start at the bottom of the window.
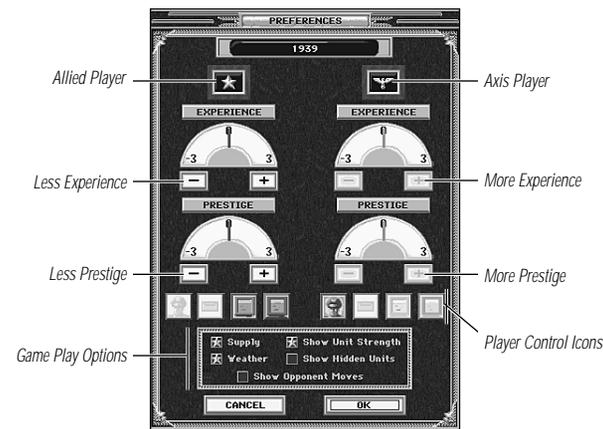
This brings up the Preferences window, which permits you to control the difficulty of the game. You should reduce the difficulty of the scenario by adjusting the settings for the AI. The gauges and buttons under the star control the Allied player, so click on the minus buttons under the gauges once or twice to reduce the prestige and experience for the AI. You should also click on the "green computer" button to switch the switch it from its "aggressive" strategy to its "cautious" strategy. Once you have adjusted the difficulty, click on "OK" at the bottom of the window.

A dialogue box appears which asks if you wish to assign a dossier to the game. This enables you to keep a record of the games you have played, but you can skip it for now. Click on "No."

A short video clip from the era is displayed in a window. To restart the clip, click on the left-hand Film Rewind button. To bypass the clip, click on the right-hand Skip button.

A map of the battle appears followed by a painting of the battlefield which displays the date, the turn number, the number of turns in the scenario, and the weather conditions. Click anywhere on this painting to begin play.

The Main Game window appears displaying the battlefield. The highlighted hexes are those visible to your troops. Your panzer units are gray and ready for battle.

Game Turns

Each scenario in PANZER GENERAL is made up of a number of "turns." In each turn you and your enemy are given a chance to move units, attack enemy units, resupply units, and so on. When your turn is done and you have moved or given orders to all of your units, click on End Turn. Afterward, the enemy moves its units and completes the turn.
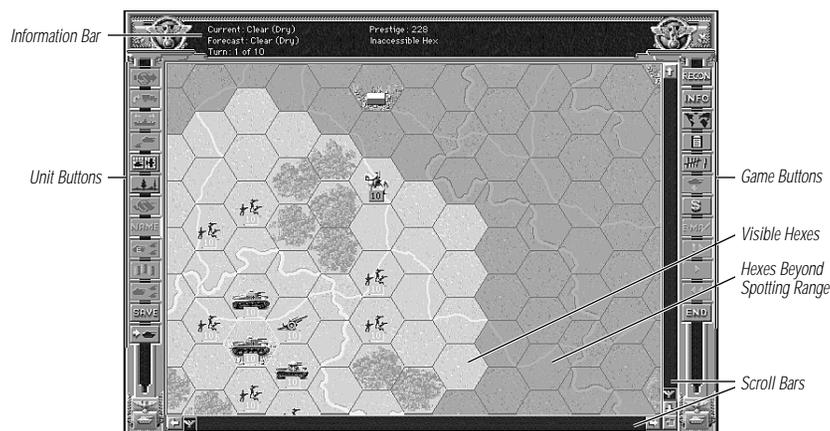
Along the top of the screen are your current prestige points, hex descriptions, and weather conditions. Prestige Points play an important part in your success in PANZER GENERAL and are discussed in further detail in the "Game Play" section of this manual, starting on page 27.

Click on any gray unit to make it ready for orders. On the map the lighted hexes are the hexes that the unit you selected can move to. Be aware that it cannot move to a hex occupied by another unit (with the exception of an air unit). Now look at the Information Bar at the top of the window. In the left section is the currently selected unit's name, type, strength, experience, and entrenchment level. In the middle section a description of the hex under the cursor appears, unless you are about to commit your unit to battle — then the "expected losses" appear. On the right is a description of any unit (yours or the enemy's) the mouse icon is currently over, including its name, type, strength, experience, and entrenchment level.

Move the mouse icon over other units to see their summary information. You may also wish to click on the "Info" button on the right side of the window to bring up the Information Window. This provides additional information about any unit under the cursor. For now, option-click or right-click on any unoccupied hex which does not appear highlighted to un-select that unit.

Notice that when your mouse icon is over a button, that button's function is displayed in the center section at the top of the screen. Use this feature to examine menu buttons until you are familiar with them.

Pull down the Game menu from the menu bar and select the Preferences window again. From here you may click on the checkbox for Show Hidden Units to see the locations and strengths of enemy units. You may also wish to click the checkbox for Weather so that your first game is unaffected by rainy or snowy weather.

Note: If you find the going difficult, a tactic you can use versus the computer is to choose Hidden Units Off every turn, then switch it on before you end each of your turns. That way you get to see the enemy, but when the enemy moves, he can't see you! As you become a more accomplished general, however, you may feel that defeating your enemy on honorable terms is more appropriate and you may choose not to use this feature.

You are now ready to begin the Poland scenario.

Remember that in PANZER GENERAL . . .

♦ *Clicking on a unit makes it ready for orders, and the hex-border that unit is in turns light green.*

♦ *Menus and buttons appear along both sides of the screen, and button descriptions appear in the top center section of the screen.*

Battle Plan

Although a variety of battle plans can be successful in PANZER GENERAL scenarios, the following is a sound plan for "Poland," the first scenario of the 1939 campaign. The date is September 1, 1939 and your army's orders are to conquer the enemy with a lightning fast attack, a "blitzkrieg." In 10 days they must capture the cities of Lodz and Kutno.

View Strategic Map
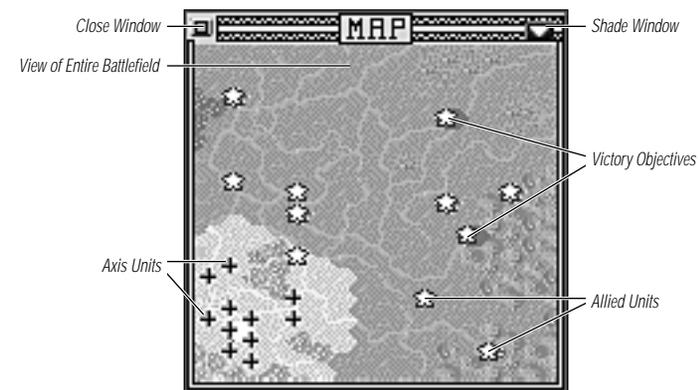
As the soon-to-be-great (or greatest!) Panzer General, it is always a good idea to start every battle by viewing the Strategic Map of the battleground and formulating a battle plan. Select Strategic Map from the buttons on the right side. A map appears, displaying: the entire battlefield, your Axis units with black German

crosses, Allied forces with gold stars, and your battle objectives in bright green. White hexes are your already-controlled objectives which have been won and must be held throughout the battle.

To view a portion of the map up close, move your pointer over the section you wish to see and click. The map in the Main Game window changes to show you the section you wanted. To see the rest of the map, use the scroll bars or the arrow keys. The Autoscroll item under the Game menu switches on an autoscrolling feature; with it on, move the pointer to the surrounding screen border according to the direction you wish to move. The screen scrolls in that direction until you move the pointer back onto the Main Game window.

Divide and Conquer

As a Panzer General you have been trained to strike fast by capturing your objectives with armored spearheads, surrounding slow-moving enemy defenders, and crushing them with your infantry and artillery following behind. Your battle plan therefore focuses on organizing your forces into flexible, combined-arms battle groups, each aimed at a specific objective. Enemy forces in non-critical sectors can be ignored or dispatched with small detachments.

In this battle, your most effective plan is to divide your units into two Battlegroups, one a northern attack force to take the cities of Kalisz and Kutno and the other a southern attack force to take the city of Lodz. Other cities earn you additional prestige but cost you more than they are worth if they delay your seizure of the objectives you have been ordered to take.

The battle plans for each Battlegroup and their turn-by-turn implementation are described below.

♦ Battlegroup North should include 2 tank units, 3-4 infantry units, and an artillery unit towed by a truck. After defeating the 10th Polish Cavalry unit, the battlegroup is to quickly besiege and capture the city of Kalisz. With newly-gained prestige, another tank unit should be added to the force as it moves on to crush enemy tank units, cross the Warta river, and then lay siege to the city of Kutno.

♦ Battlegroup South should include one tank unit, 2-3 infantry units, an artillery unit with truck-transport which you shall purchase in the first turn, and several infantry units with transport capability. This battlegroup is to head east across the Warta River, bypass the cities of Radomsko to the south and Ozorkow to the north, and besiege the heavily defended city of Lodz.

Cities other than Lodz and Kutno are secondary to your battle objectives and should only be attacked if in the direct path of your units (like Kalisz). In later scenarios, however, you can risk units against other cities to gain more Prestige Points.

Prestige Points

Prestige rather than money is the medium of exchange in Panzer General. *Prestige Points represent the influence you have earned with the high command by taking and holding cities, destroying enemy units, and winning battles as quickly and decisively as possible. In the same manner, however, losing cities, losing units, and losing battles costs you prestige.*

You can exchange Prestige Points for new units, replacements, and new equipment for existing units.

Turn 1

Battlegroup North

Your orders are to attack the 10th Polish Cavalry unit with tank units, then with infantry units.

In this scenario, it is best to lead attacks versus enemy infantry and artillery units in clear terrain with tanks first and infantry following second.

Units that have acted are indicated by having changed to a bronze color (and in the Strategic Map their icon shades to a bronze hue). This allows you to easily see which units you have moved and which you have not.

Click on a tank unit to select it for movement. A green hex border marks the currently active unit. Each unit has a movement point allowance per turn that is spent as it moves. The number of movement points it costs to enter each hex depends on the terrain entered. It takes a unit's full turn to enter a river hex except where there is a bridge. The hexes to which a selected unit can move are highlighted and the fuel cost to move into any hex the mouse icon is over appears in the middle of the information bar. In Panzer General, most units can both move and attack in their turn. For this scenario, you need to know that tanks and infantry can attack either before or after moving, but artillery can only attack before moving.

When moving a unit, and before selecting another unit to be moved, you can cancel your move by *immediately* selecting Abort Move from the Unit buttons. In effect, Abort Move returns the status of your unit to the pre-order phase. This is useful in case you change your mind about a move or wish to move another unit first.

Keep in mind that once a unit has moved and you have either option-clicked, right-clicked, or moved on to select another unit, you cannot go back except to look at unit statistics.

To attack, move the tank unit to a lighted hex adjacent to an enemy unit. If at this time you are concerned about which enemy units are appropriate to attack, the attack option (cross-hairs) appears when you pass the mouse icon over an enemy, and the Expected Losses appear at the top center section of the screen.

The Attack number is the losses projected for the attacking force (your unit), and the Defend number is the projected losses for the unit being attacked. Keep in mind that these are *projected* losses; they may not be the same in actual battle! When you decide to attack, click when the cross-hairs target is over the enemy unit.

As battle ensues, unit losses are indicated on the unit strength flags, and battle details are listed at the top of the screen.

Use another tank unit to attack the 10th Polish Cavalry, then attack (if possible) with 1-2 infantry units.

Once the 10th Polish Cavalry unit is eliminated, or retreats, try to move the artillery unit into its transport (truck) and up to the northern tip of the forest. If you cannot move it this turn, try to do so next turn.

To load the artillery unit into its transport, click to select the unit and click on the Mount Unit button. Once the unit is mounted, the highlighted movement area is widened.

Move any other Battlegroup North units (totaling two tanks and three infantry) within two hexes of Kalisz to prepare for the siege next turn.

Battlegroup South

Your orders are to move a tank unit as far east toward the Warta river as possible, followed by infantry units in transports and an artillery unit you purchase. Leave one infantry unit to protect the city of Breslau. If no transport is available for an infantry unit, use it to flank the other units and provide quick defense.

Once again, in this scenario it is best to lead attacks versus enemy infantry or cavalry with a tank first and infantry following after.

To load units into their transports, click to select the unit and choose the Mount Unit button. Once a unit is mounted, the highlighted movement area is widened. Click on a highlighted hex to move there. Transport moves can be taken back by pressing the Undo Move button.

Units in transports do not have high defensive capabilities. If at all possible, first dismount units before attacking the enemy.

Note: In later scenarios, if you want to purchase a transport for an infantry unit, you must move the unit into a friendly city hex and choose Upgrade Unit.

To ensure success, you should purchase an artillery unit with transport capability. To get another artillery unit you use your influence with the high command, or "Prestige Points," to purchase a unit.
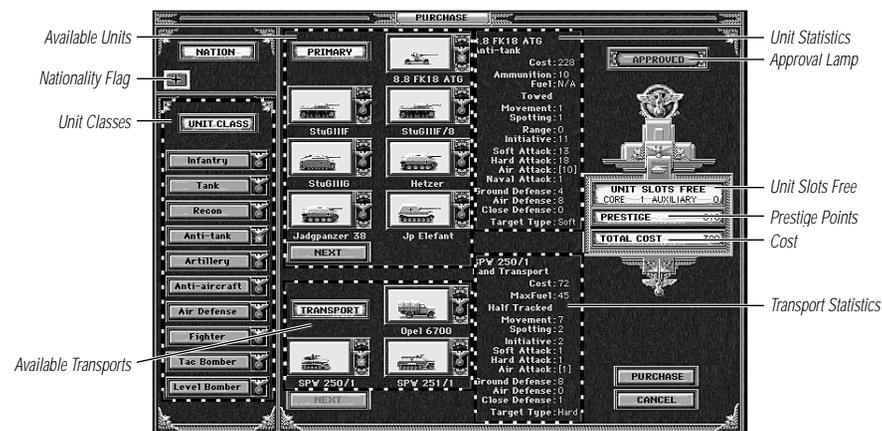
Select the $ button from the buttons on the right side of the screen and the Purchase Unit Menu appears. The left side of the screen displays unit classes available with a green light and not-yet available with a black light. Units which are above the cost of your current Prestige Points are indicated by a red light. Click on Artillery to see the available artillery class units. When you click on the 7.5 leFk 16nA artillery unit, the unit's statistics appear along the right side of the screen, next to the Prestige Points, Unit Slots Free, and Total Cost sections. The single unit (more become available in the future) costs 84 Prestige Points.

If transport is available for a unit, it appears with its statistics on the lower section of the screen. There are two choices of transport for your artillery unit: either the Opel truck transport, or the SPW half-tracked transport. Click on one to choose it and view its statistics. The new total cost for both the unit and the transport appears.

Select Purchase from the lower-right corner to confirm the purchase. If you want to cancel a purchase before placing the unit on the map, click the Cancel button.

Be aware that units you purchase appear in friendly or captured cities where there is no adjacent hex occupied by an enemy, so your artillery unit should appear around the city of Breslau. Move your mouse icon to a highlighted hex and click to place the unit. Next turn you should load it onto a transport and move it along with the southern attack force.

The last button on the right side of the screen is the End Turn button which opens a dialog box. Click on Yes to confirm the end of your turn.

Turn 2

Battlegroup North

Your advance on Turn 1 should have placed you in position to attack and capture the city of Kalisz. After you do so, purchase a new tank with your newly-won prestige.

Click on the artillery transport in the forest and dismount them using the Dismount button from the Unit menu. Place the mouse icon over Kalisz and cross-hairs appear. Even if the casualties the artillery can inflict are minimal, when you attack the city the entrenchment level of the defending Polish infantry should be weakened. Since the artillery unit is making a ranged attack, it suffers no risk of losses by bombarding. After shooting, you can choose to move the artillery one hex while remaining deployed or Mount it to move it to another location. Remember that units mounted in trucks or half-tracks fight poorly. Do not move the artillery next to Kalisz as it may block your other units and it can bombard just as well from 2 hexes away. If you choose not to mount the artillery unit, right- or option-click to end its turn.

Beware of cities defended by infantry with artillery adjacent to them, as the artillery can support the infantry by shooting at your units as they attack the infantry. If an artillery unit is adjacent to Kalisz, try to attack and destroy, drive away, or at least weaken the artillery unit before assaulting the city. This should not be hard since artillery are vulnerable to attacks by tanks and infantry.

When you capture Kalisz, click on Purchase Unit to purchase a new tank unit (a Pz III or Pz IID is recommended) with your accumulated Prestige Points. Highlighted hexes indicate where the new unit may deploy. If you want to cancel a purchase before the unit is deployed, click on a hex which does not appear highlighted.

If you have not captured Kalisz, repeat the attack next turn.

Battlegroup South

Your goal is to cross the Warta River, blitz through any enemy units which may have approached, and continue on to Lodz. Move the tank leading the Battlegroup across the river with the infantry in trucks behind. Be sure to Mount the artillery unit you purchased at Breslau and move it as far east as possible.

If you find that you are forgetting which units have moved and which have not, choose the Forces Review button. A display shows which units have moved with a red frame and which are available to move with a green frame. Click on a unit then click on the Go to Unit button to go to it.

Coordinated use of infantry and armored units is the key to successful offensives.

Turn 3

Battlegroup North

Continue to move tank units northeast across the river towards Kutno. Attack enemy artillery and armored vehicles, as these can do serious damage to your infantry as they follow behind your tanks. Leave an infantry unit which has suffered the most behind in or near Kalisz as a garrison and replace its losses (see below).

Pace yourself and beware of the urge to launch a premature attack on Kutno. First, clear away any enemy units near the city which might interfere with your attack, then bombard the city with your artillery while your infantry move into position to attack.

You may have suffered serious casualties in some units up to this point. It is good practice to promptly reinforce units with low strengths by selecting the Replacements button. A unit can receive replacements only if it does not take any other action during the turn (except mounting or dismounting). If units have fallen below 8 strength points they should receive replacements. Strengthening your infantry before the assault on Kutno may delay the attack, but it gives you more time to drive away nearby enemy units and allows you to deploy your artillery in range of the city to commence a bombardment. Keep in mind that enemy units adjacent to your unit getting replacements reduce or even prevent the replacements from arriving.

Battlegroup South

Use your tank unit to attack enemy cavalry, particularly enemy tank units you have spotted. Because infantry are vulnerable while mounted in trucks, dismount them at the beginning of the turn and advance them towards Lodz on foot. Move your artillery, if possible, within a 2-hex range of Lodz to allow it to dismount next turn and begin a bombardment. Since they are vulnerable to any enemy attacks, take care to put tank or infantry units between any enemy units nearby.

Turn 4

Battlegroup North

You may want to build another infantry unit near Kalisz to allow the garrison unit to help the continuing attack on Kutno.

Battlegroup South

Bombard Lodz for several turns with artillery before sending in your infantry. This avoids the risk of your troops being massacred if the Poles put up a "rugged defense." Do not divert units from the effort against Lodz by attempting to attack the nearby cities of Ozorkow or Brzeziny. Once Lodz is taken, you may be able to capture another city.

Turns 5-10

Be aware that tank units can run out of fuel and all units can run out of ammo. To avoid this, units can use their turn to resupply by selecting the Supply Unit button. Units cannot resupply when adjacent to enemy units, unless in a city, airfield, or port. Units that receive Replacements are automatically re-supplied at the same time.

Battlegroup North should be able to take Kutno easily within a turn or two. Be wary, however, of enemy units attacking from the city of Posen in the west. They can move towards Kutno, Kalisz, or your base at Breslau. Detaching a unit to guard Breslau ensures against this risk. If Kutno falls immediately, you can send forces west towards Posen or south to help in the attack on Lodz, which may take a little longer since Battlegroup South is somewhat weaker. When both Kutno and Lodz have been taken, the scenario immediately ends. You want to report the capture of both cities to the General Staff as soon as possible to maximize your growing prestige.

After the Battle

After the battle you may inspect the battlefield before choosing to Save or Exit your game. Don't worry if your first experience in the Poland scenario ended without gaining the mission objectives, or with an Allied victory. PANZER GENERAL is designed to be thought-provoking and challenging — there is more than one approach to victory. War is often as much a battle against time and terrain as it is against the enemy, and even the best-laid plans can be defeated by bad weather, rugged defense, or just plain bad luck.

You now know the basics of playing PANZER GENERAL. The interface is highly intuitive and you may wish to simply continue playing or read through the manual for more detailed information about the game mechanics and for tactical advice.

Tactics Checklist

♦ When a unit attacks, it uses one unit of ammo. When it's out of ammo, it can't attack another unit, and must resupply (when not adjacent to an enemy unit).

♦ Cities secondary to your battle objectives should only be attacked if in the direct path of your units. On the other hand, in later scenarios, risking units to capture other cities gains you more Prestige Points.

♦ All units have movement points which are expended as the unit moves. Each hex costs a number of movement points, based on the type of terrain entered. When you move a unit the legal hexes that unit may move to are highlighted. As the cursor moves over a new hex, the amount of movement appears at the bottom of the screen. When you move units across rivers without using available roads or crossings, all movement points for those units are used.

♦ Check your units' ammo frequently, and if low, resupply.

♦ Replace weakened units even when they are close to enemy positions. It's better to suffer loss than annihilation.

♦ Mount units which have transports whenever possible, but be sure there is armored protection close by. A given unit can only embark on a naval transport at a port or coastal city. Only infantry, light artillery, and light anti-tank units may use air transports at an airfield. Embarking or Disembarking a unit can only be done at the beginning of the unit's turn. Naval transport units can disembark into an adjacent land square, air transport can only disembark at airports, while paratroopers can disembark anywhere. Disembarking ends the unit's turn.

♦ Replacements, Disband, Upgrade, and Elite Replacements can only be done at the beginning of the unit's turn. If any of these options are chosen, the unit's turn ends.

♦ Abort Move returns a unit to pre-order status, and cannot be used after the unit has acted by attacking, resupplying, receiving replacements, or revealing hidden units, among other things. If you right-click, option-click, or select another unit after moving a unit it ends the first unit's turn.

♦ Keep in mind that in the second battle of the 1939 campaign (the battle of Warsaw), aircraft units are available and are necessary for an Axis success.

♦ Even though the "Expected Losses" may not be in your favor, you may still need to sacrifice some of your unit strength to achieve your goals. This is especially important when attacking enemy units with high entrenchment levels. Even though the attack may not be effective, the enemy entrenchment level lowers at least one point, and is more vulnerable the next turn.

♦ The enemy cannot place newly-purchased units around its cities if you have a unit adjacent to the city.

Other tactics on game play in general can be found in the "Strategy Notes" section, beginning on page 55.

THE BASIC MENUS, WINDOWS, AND BUTTONS

Currently Selected Campaign

Campaign Description

Campaign Buttons

View Scenarios

Open a Saved or E-Mail Game

Start Currently Selected Campaign

This section provides step-by-step suggestions to familiarize you quickly and easily with the basic menus, windows, and buttons in PANZER GENERAL.

The Campaign Selection Window

There are five campaigns in PANZER GENERAL: 1939, the 1941 East or West Fronts, or the 1943 East or West Fronts. Each campaign is made up of several scenarios based on historic battles from World War II.

When the Campaign Selection window appears, the 1939 campaign is already selected. To play this campaign, click on the Start button in the lower right-hand corner of the screen. When you are more familiar with the game, use the Open button to load saved games, and the Scenarios button to play individual battle scenarios.

Preferences

The Preferences window permits you to set the levels of Axis and Allied Experience and Prestige, player or computer control, and gameplay options. PANZER GENERAL can be played as a one- or two-player game; one side is the Axis, and the other is the Allies.

Experience and Prestige Settings

You can adjust the Experience and Prestige of the Axis player and the Allied player. The right part of the gauge represents more experience. This feature is useful for balancing sides in two-player games.

Player Control

Click on the following icons to select the Allied player and the Axis Player.

♦ Human

♦ E-Mail Opponent

♦ Easy Computer Opponent (Green)

♦ Hard Computer Opponent (Red)

For one-player games (like campaign games), click on the Green Computer (CPU) button under the Axis column to set the AI (Artificial Intelligence) to easy mode. When you feel that you can challenge the computer, choose the Red Computer button for a higher level of difficulty. For E-Mail games, select yourself as the Human player, and the envelope icon for your E-Mail opponent — after choosing E-Mail play these settings cannot be changed.

Supply

Toggles the automatic supply rules on and off. See the "Automatic Resupply" section on page 37 for more information.

Show Unit Strength

Hides or shows the strength plaque of each unit.

Weather

Toggles effects of realistic weather conditions during the game. Beginning players may want to leave this option off while they are learning the game.

Show Hidden Units

Changes the view on the map in the Main Game window to show or hide all of the opponent's units. Computer attacks are always shown.

Once you've set the Preferences to your taste, click on the OK button.

Note: The Preferences can be changed at any time during the game, except for E-Mail games, which have the Preferences locked once the game has started. The Preferences can still be viewed during an E-Mail game, but not changed.

Before the Game Begins

You may skip any of the opening cinematics by clicking on the arrow button in the lower right-hand corner.

♦ The Movie window displays background information on the conflict.

♦ The Narrator window displays information about the task that lies ahead of you.

♦ A geographic map indicates the location of the scenario and the nations involved.

♦ A painting bearing the title of the scenario appears.

♦ The Weather Painting displays the turn number, the number of turns remaining, the date, the current weather, and the condition of the ground.

♦ Click on the Weather Painting to start a scenario. The Main Game window, containing the Battlefield, appears.

The Main Game Window

Unit Buttons — *Game Buttons*
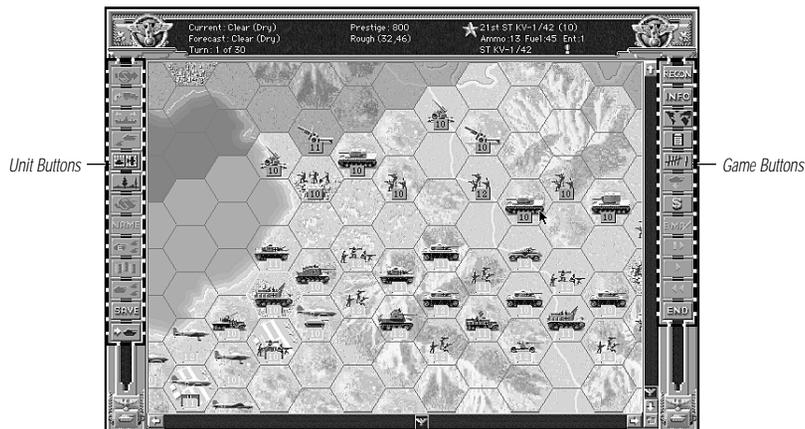
The Main Game window is where the action of PANZER GENERAL takes place. There are four main parts to this screen: the Information Bar at the top of the screen, the Battlefield in the center, the Game Buttons on the right side, and the Unit Buttons on the left side. In addition, there is a Macintosh or Windows Menu Bar at the top of the screen which provides easy access to game menus and windows.

Be careful to monitor your ammo and fuel levels when in desert terrain.

The Information Bar

At the top of the Main Game window the Information Bar displays the current weather, unit information, and hex descriptions. Notice that when your mouse pointer is over a button on the sides of Main Game window, that button's function is displayed. Consult these definitions until you are familiar with all of the buttons.

The Battlefield

The Battlefield displays the area where all movement and combat take place. In two-player games, one player controls all of the Axis forces, and the other controls all of the Allied forces. The campaign games are for a single player who controls the Axis forces.

The map scale varies from region to region, as does the size of the units represented. There can be only one unit per hex, except that an air unit can occupy the same hex as a ground or naval unit.

The following features appear on the map:

♦ 12 different types of terrain.

♦ Nationality flags indicating city, port, and airfield ownership.

♦ Victory Objective hexes denoted by a nationality flag with a gold hex border.

♦ Mud and snow conditions, represented by a change in the color of map hexes.

♦ Neutral hexes, bordered in blue (e.g. Sweden or Switzerland). No units may enter these hexes.

To view different parts of the Battlefield, click on the scroll bars at the bottom and right sides of the Battlefield, or click on the Recon button.

Game Buttons

The left-hand side of the Main Game window has buttons that affect units. These buttons change based on the active unit and what options are available. Options that are unavailable appear darkened. Along the right side of the Main Game window are buttons that affect the game globally, including: a Strategic Map of the Battlefield, the Purchase window for buying new units, and the Forces Review for examining the status of all your units.

The Recon Window

To open the Recon window, click on the Recon button. Click on the direction in which you want to move the view of the Battlefield, or use the arrow keys or number pad on the keyboard. Note: For easy moving, click on the eagle in the center of the Recon window and hold down the mouse button. Now the direction arrows activate when you move the mouse pointer over them. In this way you can continue scrolling in one direction or scroll in other directions without having to press the arrow buttons repeatedly. When you let go of the mouse button, the map stops scrolling.

The Recon window, like the Map and Unit Information windows, can be moved on the Battlefield to allow better viewing and use. To move the window, click on the window's top bar and drag it where you want. To hide (or "shade") the contents of the window, click on the triangle in the upper-right corner, and click on it again to return to the window. To remove the entire window, click on the close box in the upper-left corner.

Unit Information Window

Use the Information window to view the complete statistics for the unit currently under the mouse pointer. You can compare the combat capabilities of units in the Battlefield by moving the mouse over different units. Definitions of unit statistics can be found in the "Unit Statistic Description" section on page 44.

Strategic Map

The Strategic Map shows the entire Battlefield as well as surface or air units, depending on which view mode you are in. The Map is a floating window and can be moved like the Recon window. Axis units are indicated with black German crosses; Allied forces with gold stars; and your battle objectives are in bright green. Hexes that are solid white are objectives which have been taken and must be held throughout the battle.

To view a portion of the map up close, click in the Map window on the section you wish to see. The Main Game window now contains the section you selected.

Forces Review

Brings up the Forces Review window that lists all of the units currently under your command. Units that have already acted this turn have a red square around them; those that are waiting for orders have a green square. You can view a unit's statistics by clicking on it or go directly to a unit by selecting it, then pressing the Go To Unit button at the bottom of the window; the Forces Review window disappears, and the desired unit is selected in the Main Game window.

Casualties

Displays Axis and Allied unit losses for campaigns and scenarios.

Deployment Window

Brings up a floating window containing the core units to be deployed on the Battlefield. The Deployment window automatically comes up before the first turn of a scenario during campaign play. To place a unit on the Battlefield click on it, then click on a highlighted Battlefield hex. Note that one air unit and one land unit can occupy the same hex.

Purchase Unit

Add new units to the core army if more core units are available, or to auxiliary forces if only auxiliary units are available. You purchase units with Prestige Points and place them in or adjacent to friendly cities (if land units) and friendly airfields (if air units). You cannot purchase ships. See the "Buying Units" section of this manual on page 39 for more information.

E-Mail Comment

Brings up a dialog box during E-Mail games for inserting comments to your opponent. When your opponent plays back the turn, the comments appear at the point in the turn that you inserted the comment. For more information on playing by E-Mail, refer to the "How to Play E-Mail" section on page 42.

Step Forward

Steps forward through one unit's actions during playback of an E-Mail turn that you receive from an opponent.

Playback Turn

Plays back an opponent's E-Mail turn until the end.

Rewind Turn

Rewinds to the beginning of an E-Mail turn received from an opponent. You can review an opponent's E-Mail move several times this way.

End Turn

Ends your turn and proceeds to the opponent's turn.

Unit Buttons

The Unit Buttons are along the left side of the Main Game window. Most of these buttons provide options which are applicable to the unit you currently have on the Battlefield. Be aware, however, that some commands require the unit's turn to execute, so once the action is completed, the unit cannot do anything else that turn.

Abort Move

This button is available when you have selected a destination hex for the unit's move. When a unit has moved (but before it has attacked), it can return to its point of departure without any adverse affects (like fuel consumption). If the unit moves next to any previously-hidden enemy units, it cannot undo its move.

Mount/Dismount

Units can move more quickly when using organic transport, but are more vulnerable to attacks. After you Mount/Dismount and move your unit, you must then choose whether or not you want to abort the move. The move you just made cannot be taken back unless selected immediately after the unit's movement. A mounted unit appears in the Main Game window as the form of transport, (for example, a truck or half-track icon).

Embark/Disembark

Embarking and disembarking units onto or from air or naval units can only be done at the beginning of a unit's turn, i.e. a unit may not move or fight before embarking or disembarking. Disembarking ends the unit's turn; a unit may not move or attack after disembarking. Embarking and disembarking are not equivalent to mounting and dismounting. A unit may not assume the same embarkation state more than once during a turn. For the differences between Air and Sea Embarkation, refer to the "Air and Sea Embarkation" sections on page 33.

Upgrade

Activates the Upgrade Unit screen and enables you to change the type of unit within its class and add organic transport if available. You can only upgrade units when deploying for a campaign scenario or during a scenario when in a friendly city (or, in the case of air units, over a friendly airfield or aircraft carrier) with no adjacent enemy units. Upgrading costs Prestige Points and expends that unit's turn.

View Surface/Air Units

Toggles between viewing your land and air forces. When both a surface and air unit occupy the same hex, the view determines which one of the icons is large and which is small on the Battlefield. The large one is the one that you select by clicking on it. Keep in mind that the Strategic Map window shows either the currently-viewed air units or land units, not both.

Show Terrain

Removes hexes, ownership flags, and units to reveal the terrain. Click again to exit this mode.

Disband Unit

Disbanding units can be useful when you've reached the limit on the number of units allowed. Weak units can be disbanded in order to make space for new units which are more effective in given circumstances. For example, you may want to disband an inexperienced infantry unit in order to purchase a tactical bomber to soften enemy defenses. Disbanding a doomed unit also denies the enemy Prestige Points for destroying the unit.

When you elect to disband a unit, a dialog box appears to ask for confirmation. If you cancel the disbanding order, then the unit can still act, and remains selected. A unit can be disbanded anywhere on the map. For instance, an infantry unit in an air transport can disband over the middle of the ocean.

Disbanding does not increase your own Prestige Points.

NAME Name Unit

You can personalize units with new names that are up to eighteen characters long. These names remain in effect until the end of the scenario or through the entire campaign. You may want, for example, to name units according to their capabilities or how you intend to organize them in battlegroups. Keep in mind that units are numbered consecutively by the computer in each scenario, thus slightly changing the names you choose.

Elite Replacements

Elite replacements are treated the same way as regular replacements except that: they do not reduce the unit's experience level; they cost four times as much; and they provide double resupply for the unit. Although expensive, elite replacements are cheaper, point-for-point, than building a new unit with no experience.

Elite replacements allow a unit to become "overstrength," in other words, have a strength greater than 10. A unit may have a maximum strength equal to 10 plus its number of levels of experience. For example: when a unit at full-strength with one experience level receives elite replacements, its strength increases to 11. Between campaign scenarios, under-strength units are brought up to strength 10 via elite replacements.

Supply Unit

Supplies the selected unit with up to half its maximum capacity; this is the only action that the unit can take during its turn. Units receiving replacements automatically resupply and units receiving elite replacements receive double-resupply. Adjacent enemy units prevent resupply except as part of receiving replacements. Snow and rain reduce resupply by one-third. When a unit is on a desert hex, it resupplies at a rate one-fourth of normal. A unit is always guaranteed to receive a minimum resupply of 1 ammo and 1 fuel.

Be sure to reconnoiter the attack area well. Spotting is important!

Replacements

Replace lost strength points (to strength 10 maximum) and automatically resupply the unit as described under "Supply Unit." This action ends that unit's turn. Replacements normally begin with 0 experience which is averaged with the unit's current experience to generate a new experience level. This depends on what level the experience was set to on the Preferences screen. Units can get replacements anywhere, except that air units can receive replacements only when in a friendly airfield or carrier hex, and naval units can get replacements only when in a port. A unit receives fewer replacements if an enemy unit is adjacent. If three enemy units are adjacent, the unit cannot receive any replacements. Bad weather and desert terrain also reduce replacements.

SAVE Save Game

Provides a quick way for saving the game to the current save file.

Next Unit

Selects the next unit waiting for orders. If all units have already acted, the icon becomes shaded. Mounting or dismounting a unit does not count as an action.

The Menu Bar

Separate from the Main Game window is the white Menu bar at the top of the screen. Use these menus to quickly change preferences, view windows, and more.

The Org Table

The Org Table can be found under the Apple menu on the Power Mac version and the File menu in the Windows® 95 version. It provides the following information:

♦ The version number of PANZER GENERAL.

♦ Indicates how much memory the application has free.

♦ The name of the registered user.

♦ The names of the commanders for the active dossiers for the Axis and the Allies.

♦ The total time elapsed: DAYS: HOURS: MINUTES: SECONDS.

♦ Overall Clock: How long you've spent playing Allied General since you pulled it out of the box.

♦ Current Sortie: The time elapsed since you launched the game.

♦ Current Campaign: The time elapsed on the currently active campaign.

♦ Current Scenario: The time elapsed on the currently active scenario.

♦ Your win/loss record for Campaign and Scenario play; E-Mail games count toward your scenario record.

The Reset button will reset clocks, win/loss counters, and the commanding officer.

File Menu

New automatically restarts the game and returns to the Campaign Selection screen.

Open allows you to open a saved game or E-Mail game.

Save allows you to save and name the current game.

Save As allows the current game to be saved under a new save file name.

Create Dossier creates an encrypted file where a general's performance is rated and recorded. Dossiers cannot be created for computer players, only human players.

Active Dossiers allows the player to see which general's dossier will get credit for scenarios played. The player may assign existing dossiers or create new ones from this window. The player may click on the name of either side's active dossiers to bring up those records in a Review Dossier window.

Review Dossier allows the player to see a record of scenarios played using that dossier.

Quit or Exit exits PANZER GENERAL.

Edit Menu

Only the Settings window is active from the Edit Menu.

Settings

Lower Volume — *Increase Volume*

In this window you can:

♦ Change or mute the volume of the music and sound effects in the game or turn them off altogether.

♦ Turn the history recorder on or off, which lists all of the movements of each unit in each turn.

♦ Display or hide hexside borders.

♦ Display or hide the combat animations.

Once the settings are as you like, click on the OK button.

Game Menu

The Game Menu has options to speed game play.

End Turn ends the turn in the same manner as clicking on the End button.

Finish AI Turn Now completes the computer player's turn without displaying the Main Game window.

Preferences opens the Preferences window. Refer to the "Preferences" section on page 14 for more information.

Autoscroll toggles the Autoscrolling feature on or off. When on, moving the mouse pointer to the edge of the window causes the map to scroll that direction.

Slow Combat Messages increases the amount of time that combat messages are displayed.

Windows Menu

This menu provides an alternative way to open several of the information windows normally accessed through the on-screen buttons, such as Recon or Show Casualties. Two unique options are the Show Intelligence and Show History options. In addition, there are options to Show All Panels and Hide All Panels which opens or closes the Recon, Info, and Strategic Map windows.

Show Intelligence

The Show Intelligence menu displays all keyboard commands for PANZER GENERAL and provides additional information.

Show History
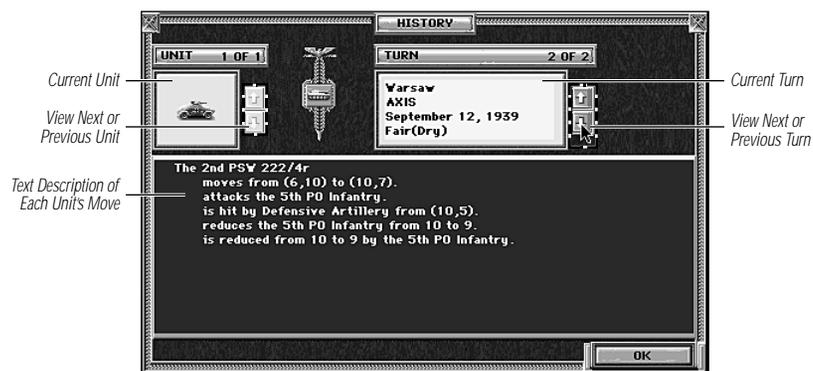
The History window records the actions of each unit for each player on a turn-by-turn basis. The units are listed in the order that they acted during the turn. Only the units that act in a turn are listed in the history.

The arrows on the right-hand side of the Turn window increase and decrease the turn counter. The arrows on the Unit window scroll through each unit that acted during the turn.

The actions of the units are recorded in a file with a name that corresponds to the saved game file name. For example, if you save your current game in a file named "Mygame.sav", then the history file is named "Mygame.his".

You can view the contents of the history file with a text editor or word processor. For safety, make a copy of the history file on your hard drive, and examine the copy there.

PANZER GENERAL stores the location of the history file in the saved game. If PANZER GENERAL cannot find the history file where it expects it, it asks you to find it. If you want, you can have PANZER GENERAL start a new history file.

Note: History files are not generated during E-Mail games.

In PANZER GENERAL, there is no substitute for victory.

GAME PLAY

The Campaign Game

In the extended campaign game, your career as a general can cover the entire war. If you do well, you can win the war. If you do poorly, you could be prematurely retired by the General Staff or even lose the war. You play a key role in decisive battles, but the burden of a war on two fronts means you cannot fight in both places at the same time. At certain points in each campaign you have the opportunity to switch fronts, and, if your successes against England or the Soviet Union are decisive, you may end the war on one or both fronts altogether.

The campaign game covers the entire war, but you may choose to start your career at any of five different points: the 1939 Blitzkrieg, the 1941 East or West Fronts, or the 1943 East or West Fronts. How well you do can change the course of history.

In the campaign game, you control a "core group" of units and, in most battles, non-core or "auxiliary" units. The core group's strength flags are black on gray, and the auxiliary units' strength flags are white on gray. Auxiliary units serve with you only for the duration of the battle, while you take surviving core units with you to the next campaign battle. Your units gain combat experience and can be upgraded with new equipment over time.

Your core units are already deployed in the first scenario of any campaign. In later campaign scenarios, you may deploy your core units freely within designated deployment zones.

The 1939 Blitzkrieg

Beginning in September of 1939, the battle for Poland is the first in a series of blitzkrieg campaigns across Europe, where successful generalship takes you from Warsaw to Oslo to Paris. The speed and degree of success of your offensive in each campaign affects your resources in future campaigns. If you do particularly well, you may have sufficient time and prestige to lead an invasion of Great Britain, thus ending the war on the Western Front with a decisive blow. If you cannot conquer Britain now, or later, the English shall remain a thorn in your side for years to come.

The 1939 campaign is recommended as a starting point because the Allies are not yet able to bring their superior economic power to bear against you. Their forces are easier to defeat, giving you the opportunity to win the war on the Western Front earlier in preparation for the inevitable showdown with the Soviet Union.

The 1941 Western Front

Beginning in March 1941, you attempt to crush the Allied forces in North Africa and seize Egypt, the gateway to the Middle East. If you are successful, you may be able to lead an invasion of Britain or attack the Soviet Union's oil fields through the Caucasus Mountains on your way to further glory.

The 1941 Eastern Front

You begin your career leading the central spearhead of the greatest invasion in history — Operation Barbarossa, the conquest of the Soviet Union. If your initial thrust is decisive, you may earn the prestige necessary to avoid a diversion towards Kiev and instead press on directly to Moscow before mud and snow bring your panzers to a frustrating crawl.

The 1943 Western Front

In 1943, heavily committed on the Eastern Front, the Axis had only limited forces to protect thousands of miles of European coastline against an Allied invasion that could come anywhere. You begin your career in Sicily, facing the first Allied invasion of western Europe. Unless you transfer to the Eastern Front, you may have a chance to stop the Allies on the beaches in Italy and in Normandy. If you cannot contain the Allies in France or force them back with a last, desperate winter counter-offensive in the Ardennes, then your last chance is to avert total defeat at the gates of Berlin and win a tolerable armistice.

The 1943 Eastern Front

You begin the 1943 campaign in the east with a slashing counteroffensive aimed at cutting off the overextended spearheads of the Red Army, confident of victory after their winter offensive sent your troops reeling back all along your front. If you recapture Kharkov and your other objectives, you gain the initiative and the prestige necessary to drive once more toward Moscow and end the war in the east. If you fail, you have only a few more opportunities to stop the Soviet steamroller on its road to Berlin.

Scenario Selection Window

There are thirty-eight individual scenarios you can choose to play in PANZER GENERAL, from the burning deserts of North Africa to the frigid terrain of Norway, even major Axis assaults like Stalingrad and the battle of the Ardennes.

Click on the Open button to play a saved scenario, campaign, or E-Mail game.

To go to the Campaign Selection screen, click on the Campaign button.

To start a new E-Mail game using the currently selected scenario, click on the E-Mail button.

To play a single scenario, simply click on a scenario name and then click on the Start button.

Beginning a Battle

You begin a battle by selecting a scenario or a campaign game. In the campaign game, you control a group of core units through the various battles you fight. Auxiliary units, which have their strength numbers in white, are available for the duration of that battle only. Surviving core units gain experience through combat, and your unit combinations reflect your own preferences. As you progress through the campaign, the number of core units available to you increases.

In campaign play, you have the option of deploying your core units within specified deployment areas before the first turn of each scenario. There is no deployment phase for non-campaign games (like E-Mail, two-player, or a single scenario).

Game Turns

In PANZER GENERAL, each scenario has a specific number of "turns." Each turn is comprised of two parts: The Axis phase, during which the Axis player acts while the Allied player observes, followed by a similar phase for the Allied player. In all games, the Axis acts first during a turn.

In each turn you and your opponent are given a chance to move units, attack enemy units, resupply units, and so on. When your turn is done and you have moved or given orders to all of your units, click on the End button. Afterward, the opponent moves his units and completes the turn.

During a turn each unit can move once, and attack once, in either order. Exception: artillery and air defense units can only shoot before they move. Units which have moved are indicated by changing color to bronze.

If a unit acts, and another unit is selected, no further actions can be taken by the first unit. ("You already took your hand off that piece; you can't move it back.")

Example: You move Unit A to a hex adjacent to an enemy unit; you then select Unit B. Unit A cannot attack this turn; selecting Unit B signaled the end of Unit A's turn.

Weather

Weather is randomly determined based on actual weather conditions for the month of the year and weather zone in which a battle occurs. Weather may change between fair weather and storm fronts. Storm fronts can last for a number of days and have the possibility of generating only overcast weather or becoming rainstorms or snowstorms. It never rains or snows in North Africa. Note: during rain or snow storms aircraft cannot attack.

Bad weather generally helps the defender and the side with air inferiority because of the inability of air units to attack and their reduced scouting ability during bad weather. Interludes of bad weather are good times to resupply and rebuild units or make them overstrength while waiting for the weather to clear.

Deploying Troops
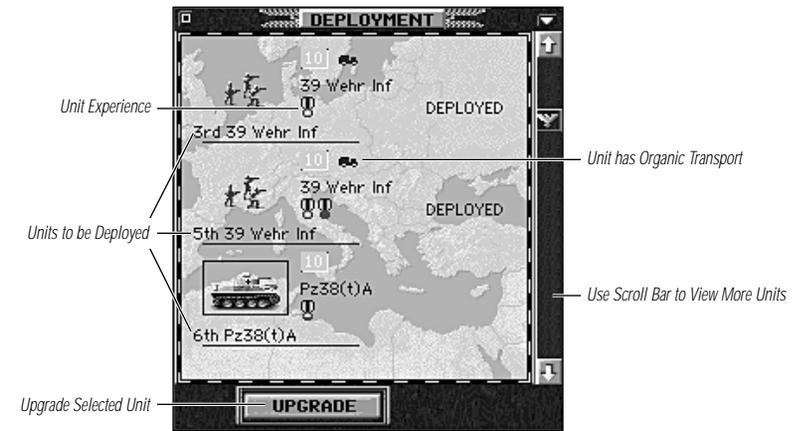
When you are given the chance to deploy your troops at the beginning of a scenario it is best to start by viewing the Battlefield on the Strategic Map and evaluating its tactical possibilities. See the section "Strategy Notes," on page 55 for some tips on planning your battle. Once you've planned your strategy, start deployment with your spearhead units and then follow with the rest. The Deployment window allows you to see all of your available units at one time, upgrade their equipment (including providing them with organic transport) and select which ones to place. Select a unit in the Deployment window, and click on a hex in a highlighted deployment area to place the unit; right-clicking (or Option-clicking) on a placed unit removes it from the map.

Moving Units

Click on any unshaded unit to make it ready for orders. The selected unit can move to any hex that is illuminated; it cannot move to a hex occupied by another unit. (Exception: An air unit can occupy the same hex as a ground unit.)

Movement Cost

Each unit has a movement point allowance per turn that is spent as it moves. The movement point cost of each hex depends on the terrain in the hex, weather conditions, and the unit movement type. After selecting a unit, when the cursor moves over a lighted hex the amount of movement expended to reach that hex is displayed at the top of the screen. Every movement point a unit uses costs 1 fuel, except that when the ground is covered with snow all ground units pay double fuel costs, i.e. two fuel points per movement point; snow does not reduce the distance that a unit can move. No matter how much they move, air units consume a minimum of half their movement allowance in fuel every turn.

Movement ends prematurely if a unit moves adjacent to or is ambushed by (moves into) a previously-hidden unit. An ambush is treated as an attack with the defender receiving an automatic rugged defense. Entering a river hex ends a ground unit's movement, except when the river surface is frozen. It may exit river hexes normally the following turn. Dismounted bridging engineers may serve as bridges, eliminating this penalty for the hexes engineers occupy.

Abort Move

After moving a unit to another hex you can cancel that move by immediately selecting the Abort Move button from the Unit buttons. Abort Move does not permit you to undo attacks, nor does it let you undo moves which spot enemy units. If the unit did not attack before moving, undoing the move permits you to take any action with the unit: attack, movement, resupply, and so on.

Keep in mind that once a unit has moved and you have selected another unit, you cannot select that unit again except to look at unit statistics.

Which Units Have Moved?

If you find that you are forgetting which units have moved and which have not, the Forces Review window, available through the Forces Review button on the right-hand side of the Main Game window, provides an overall view of which units have acted and which have not. A green border indicates that unit has not yet acted this turn; a red border indicates that a unit has completed its turn. The screen also displays unit strength, experience, name, and statistics. If you have more than ten units, use the Next and Previous buttons to see your other units. For definitions of what the unit statistics mean, refer to the "Unit Statistic Descriptions" section on page 44.

Mounting and Dismounting Units

A unit can only mount and dismount prior to moving; a unit that has moved via transport must remain in the vehicle at the end of the move. A unit cannot mount, move, and then dismount.

A mounted unit can perform the same actions as a dismounted unit: get replacements, upgrade, disband, resupply, and so on.

Organic transport is transport which is permanently assigned to a unit and cannot be shared (i.e., trucks or half-tracks).

Note: In later scenarios, if you want to purchase a transport for an existing unit, you must move the unit into a friendly city hex and choose Upgrade from the unit menu.

Embarking and Disembarking Air and Naval Units

All cities adjacent to an ocean hex act as ports for the purpose of embarking on troop transports. At the beginning of each scenario that uses air and naval transport, transport units are given to each side. These transports represent the allocation of air transports and naval transports to your army. These transports are used to move units around the map and over the sea. When you move the cursor over a friendly port, coastal port, or airfield, the current transports available appear at the top of the screen. When you embark a unit, it uses one transport available. When you disembark a unit, it frees one available transport.

Air Embarkation

Units can embark in a plane from a friendly airport hex; units can disembark only onto an unoccupied airport hex. A unit may disembark when the airport hex is owned by an enemy nation.

When a unit embarks onto an Air Transport, the unit icon is replaced by the Air Transport icon.

Only certain classes of units can embark in a plane: infantry, light anti-tank, and light artillery.

A unit cannot take its organic transport with it when it embarks in an aircraft; it must abandon the transport. The game asks for confirmation for abandoning the transport.

There is a fixed number of air transport units available in a scenario. Even if a unit can legitimately embark, there might not be an air transport available, in which case the Embark button is not available.

Players cannot purchase air transport units. When an air transport unit is destroyed, it cannot be replaced.

If the unit is on the airport hex at the beginning of the turn, the unit can embark and move in the air transport during the same turn.

Paratroops and rangers need not disembark at an airfield; they may select the hex the air transport occupies or any adjacent ground hex as their drop zone, but they may drift from the selected drop zone.

Sea Embarkation

Most ground units can use sea transports; naval and air units cannot.

Units can embark on naval transports only at ports or coastal cities.

Infantry units are the best assault forces in rough terrain.

unit with organic transport can take its transport with it when it embarks into a sea craft; it does not need to abandon the organic transport. A unit is dismounted when it disembarks, regardless of the state it had when it embarked (mounted or dismounted).

Sea transports can disembark on any unoccupied coastal hex; they do not need to get out in a port. Note that sea transports cannot disembark into coastal cities.

A unit that disembarks into an unoccupied enemy port captures it. Remember that only infantry, tank, anti-tank, and recon units can capture cities.

Combat Rules

Attacking

The attack option (cross-hairs) appears when you pass the mouse pointer over an enemy, and the Expected Losses appear in the Information Bar.

The Attack number is the losses projected for the attacking force (your unit), and the Defend number is the projected losses for the unit being attacked. Keep in mind that these are projected losses; they may not be the same in actual battle! When you decide to attack, click when the cross-hairs target is over the enemy unit.

As battle ensues, unit losses are indicated on the unit strength flags, and battle details are listed in the Information Bar.

A unit may move and attack, or attack then move, with the exception of artillery, air defense, or anti-tank units which cannot attack after moving.

Initiative

Initiative is determined by the equipment used in battle, the terrain upon which the battle takes place, and the experience of the units. It is also adjusted by a randomly generated score of 0-2 to help simulate the uncertainty of battle.

If an ambush or rugged defense occurs, the attacker's initiative is 0.

Spotting Units

If the Show Hidden Units preference is off, all hexes become hidden at the beginning of each turn except those that are within 1 hex of a friendly city, port, or airfield or within the spotting range of friendly units. Air units' spotting range is halved by overcast weather and reduced to 1 hex when it is raining or snowing. Other units' spotting ranges are halved when it is raining or snowing.

Once a hex is spotted during a player's turn, it remains spotted for the entire turn. Any time a friendly unit moves and does not abort its move, it spots all hexes within its spotting range. Terrain has no effect on spotting.

Enemy units within your unit's spotting range are automatically spotted except for enemy U-boats, which you have a 50% chance of spotting unless they are adjacent to one of your units.

Zone of Control

A unit exerts a zone of control into the six hexes around it. Surface units' zones of control affect only surface units and air units' zones of control affect only air units. When you move a unit into the zone of control of an enemy unit, your unit's movement is stopped and it must either attack or end its turn. If your unit was ordered to move to a point which takes it through a hex occupied by a previously hidden enemy unit, your unit is ambushed by the enemy unit and your unit's turn ends after combat is resolved.

Using Artillery and Ranged Attacks

Since artillery units make ranged attacks, they can attack with no risk of losses by bombarding distant enemy units. After shooting, you can choose to move the artillery one hex while remaining deployed or mount it to move them to another location. Remember that units mounted in trucks or half-tracks fight poorly. Do not move the artillery too close to enemy units; use their ranged attacks to their advantage. Artillery are vulnerable to attacks by tanks and infantry.

Units with ranges of one or more hexes can make ranged attacks, i.e., shooting at the enemy without the enemy being able to fire back (except that capital ship class units can shoot back using indirect fire when shot at by other capital ships). Units with a range of 0 must attack into the target unit's hex, giving the defending unit the opportunity to shoot back.

Supporting Fire

Under certain circumstances, units adjacent to the defending unit shoot at the attacker prior to normal combat. Artillery units contribute 'defensive fire' in support of any adjacent ground units. Air defense units contribute defensive fire for any adjacent ground units against air attacks. Fighters adjacent to defending bombers or ground units may intercept attacking air units, but fighters may make only one interception per turn, and each attacking air unit may be intercepted only once. Each of the above events occurs before normal combat; the attacker cannot respond to defensive fire. If the attacker has no more strength points in the firing order (all of them destroyed or suppressed), the attack is broken off immediately.

Each time a unit shoots it uses one ammo point. Defending units can easily use up several points of ammo in a single turn when defending themselves or adjacent units.

Rugged Defense

A rugged defense can occur in two ways: (1) if a unit's movement takes it into the hex of a hidden enemy an ambush occurs (for air and naval units this misfortune is called "out of the sun" and "surprise contact"), which is automatically treated as a rugged defense, and (2) if an entrenched unit is subject to a non-ranged attack by a ground unit, there is a risk of a rugged defense based on the relative experience, the unit type, and the defender's entrenchment level. If the entrenchment level is 0, or if the attacker is a pioniere or engineer, there is no risk of a rugged defense.

The concept of rugged defense represents ambush or the ability to open fire with surprise at close range, conditions which favor the defender and can devastate an attacker. Rugged defense really helps infantry, particularly well entrenched infantry.

Repeated attacks on such a unit, however, will disrupt an entrenched unit, force it out of good tactical position and give the attacker intelligence useful for further attacks.

Suppression

Each non-suppressed strength point makes an individual attack on the enemy using the unit's attack and defense values. Suppressed elements do not count in the firing order, but suppression (other than suppression resulting from level bombers) lasts only for the duration of the current combat. The number of strength points in the firing order is also halved by rain or snow for ground troops and by overcast weather for air units (air units may not attack in rain or snow). It is also halved if the unit has run out of fuel (if it runs out of ammo, it can't attack).

Terrain

Careful attention to terrain is well worth it. Rivers are probably the most significant obstacle and make excellent positions to defend behind. Bridging units are very helpful in terrain with many rivers, but few roads or bridges. Cities, besides being victory objectives and prestigious to capture and hold, are the next most significant obstacle because of the strength they offer the defense. In cities, swamps, and mountains opposing unit's initiative difference is minimized (because of the close range combat involved) and entrenchment and experience levels become key.

Cities, woods, and mountains also allow defending and attacking infantry to shoot against the close defense number of the enemy unit as mentioned above (except that infantry attacking against infantry who succeed in putting up a rugged defense shoot at the defender's ground defense value).

Refueling Air Units

Air units automatically refuel when over or adjacent to a friendly airfield, or when over a friendly aircraft carrier. When the current fuel number for an air unit turns red, this indicates it has used up half or more of its fuel and you should start checking to make sure it has sufficient fuel to return to a friendly airbase. Aircraft are capable of flying beyond their safety range; a hex is shaded red if the aircraft flying there does not have sufficient fuel to reach a friendly airport. Since there is no blocking terrain for aircraft, one that is low on fuel may cause a majority of the screen to turn red.

Air units that run out of fuel which are not on or adjacent to an airfield or over an aircraft carrier crash and are destroyed. Air units use a minimum of half their movement allowance in fuel every turn, regardless of the distance they travel.

Supply Rules

There are two types of supply: ammunition and fuel. Each time a unit shoots, it uses one point of ammo. Every movement point a unit uses costs it one point of fuel. Exceptions: when the ground is covered with snow all non-air units use two fuel points for each movement point; air units that are not on or adjacent to airfields use fuel equal to at least one-half of their movement capability every turn, but are not affected by snow limitations.

Automatic Resupply

If the Supply preference is selected on the Preferences window, the following automatically resupply: air units which are on or adjacent to airfields, naval units which are in port, and ground units which have not acted. Ground units may not

resupply, however, if there are enemy units adjacent to them and if they are not in a town. The resupply rate is limited by the proximity of enemy units, terrain, and bad weather.

Air units which are out of fuel and not adjacent to an airfield are eliminated.

Units normally receive half of their ammo and fuel maximums during resupply. Units receiving Replacements automatically receive resupply, and units receiving Elite Replacements get double the resupply.

Weather Effects on Supply

If it is raining or snowing and a unit is not in a friendly city, port, or airfield, the unit gets less supply. If there are more than two adjacent enemies, the unit may not resupply. Units also get less supply in the desert.

Replacements

Don't let units fight until they are destroyed — if they can be recovered with even 1 strength point left, they can be rebuilt more cheaply per strength point than buying a new unit (even if using elite replacements) and get to keep their experience as a bonus. This represents the importance of veteran cadres to the performance of new recruits.

The importance of preserving units has many tactical implications. One is to ensure that units which risk heavy losses shoot before moving so they can retreat to safety if grievously weakened. The corollary of this principle is, of course, to mercilessly wipe out crippled enemy units to keep the enemy from rebuilding them.

Victory Conditions

Battles are won by taking or holding some or all of the Victory Objective hexes (depending on the scenario), which are represented by gold-bordered hexes on the Battlefield and by green or white highlights on the Strategic Map. Capturing towns that are not Victory Objectives gains you Prestige Points, but does not affect the victory conditions, so you should always focus on capturing the objectives you have been ordered to take. Only units of the tank, anti-tank, recon, and infantry classes can capture cities, ports, and airfields, although other troop types can occupy them and prevent their use by the enemy.

True Neutrals

True neutrals are countries like Sweden or Switzerland which no one is allowed in or over. These hexes are indicated on the Battlefield with blue hex sides.

Prestige Points

Prestige Points represent the influence you have earned with the high command by taking and holding Victory Objectives and cities, destroying enemy units, and winning battles as quickly and decisively as possible. In the same manner, however, losing cities and battles reduces your prestige. You can exchange Prestige Points for new units, replacements, and new equipment for existing units. Note that you must pay the full prestige cost of new equipment even if the cost of the new equipment for a unit is less than that of the old equipment given up.

Buying Units

Click the $ button on the right-hand side of the Main Game window and the Purchase window appears. The left side of the Purchase window displays unit classes "available" with a green light; "not-yet available" units are not lighted. Units which are above the cost of your current Prestige Points are indicated by a red light. When you click on a unit, the unit's statistics appear along the right side of the screen, next to Your Prestige, Unit Slots Free, and Total Cost sections. If transport is available for a unit, it appears with its statistics on the lower section of the screen. Click on one to choose it and view its statistics. The new total cost for both the unit and the transport appears.

Select Purchase from the lower-right corner to confirm the purchase. If you want to cancel a purchase before placing the unit on the Battlefield, right-click (or Option-click) anywhere.

Note: Units may not be purchased in newly-won cities until two turns after the cities are captured, and a clear line of supply three hexes wide exists between the captured city and a friendly city. If an enemy unit is in this three-hex supply line, then units cannot be purchased.

Prestige Costs

The prestige cost of units only roughly correlates with their effectiveness, so examine combat values closely before purchasing or upgrading equipment. Remember that an expensive purchase or upgrade has to be balanced against the need for enough prestige to afford elite replacements for your Core units during a tough battle.
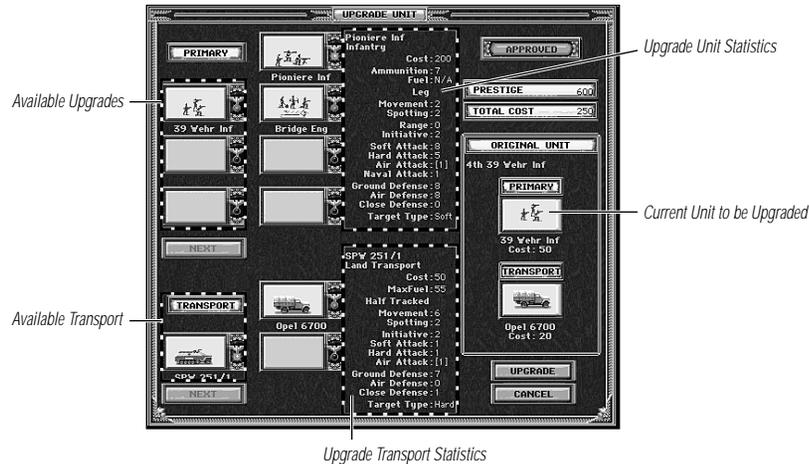
Maximum fuel capacity and especially maximum ammo capacity need to be carefully examined. This is more of a constraint if the unit is advancing than if stationary on defense. Remember that a unit can easily use up several rounds of ammo in a turn if repeatedly attacked, or if providing defensive fire in support of adjacent units that are being attacked.

Close defense is another statistic that you can regret having overlooked if the unit runs into infantry in the woods and city hexes common to most battlefields, because you defend using your close defense rather than ground defense value. Make sure to check enemy unit types and strength.

Start by comparing your attack values and defense values against each other to see who has more destructive potential in a fair fight. Then compare initiative values to see who is more likely to initiate combat first, bearing in mind that unit experience can count for as much as 3 initiative levels.

Experience tends to be very important in fighter combat, where initiative values don't differ much and where attack values are high relative to defense values — the better pilot often gets in a devastating first shot. It is less important in early-war tank combat, where attack values tend to be lower compared with defense values.

Upgrading Units

Available Upgrades

Available Transport

Upgrade Transport Statistics

Upgrade Unit Statistics

Current Unit to be Upgraded

Tanks are most effective in open terrain.

You can only upgrade units when deploying for a campaign scenario or during a scenario when a unit is in a friendly city (or, in the case of air units, over a friendly airfield or aircraft carrier) with no adjacent enemy units. Select the unit type you desire and its transport, if applicable, then click on the Upgrade button. Upgrading costs Prestige Points and expends that unit's turn. The Upgrade Unit screen displays the different types of upgrades available, transport (if available), unit statistics, and the original unit being upgraded.

Overstrength Units

A unit with an experience level of 1 or greater may be made overstrength by adding elite replacements when it is already at 10 or more strength points. You may only do this as long as the current unit strength is less than 10 plus the unit's experience level. For example, a unit with two experience levels may have a maximum strength of 12. Each time the player takes elite replacements under these conditions the strength of the unit increases by 1.

Improving units to overstrength status is a combination of numbers and quality that can smash some enemy units with a single attack. Building up to overstrength takes time, however, and artillery and air bombardment against you have the annoying effect of cutting these units back down to size.

New Equipment Available

When new equipment becomes available for purchase it appears in a New Equipment window which lists the equipment's statistics.

HOW TO PLAY BY E-MAIL

To start an E-Mail game, select a scenario from the Scenario Selection screen and click on the E-Mail button.

Player 1

Starting the E-Mail Game

It is assumed that you, the player playing a PANZER GENERAL, starts the E-Mail game process. Your opponent plays an Allied General.

Setting E-Mail Preferences

Whoever initiates the E-Mail game sets the Preferences. Choose the Experience and Prestige each player is to receive, as well as the Options which are active during the game. These preferences cannot be changed once play has begun, so make sure your opponent agrees on the preferences before they are set!

Choose a Password

To make sure that no one else can play your side of the battle, enter in a password by first clicking inside the green bar. When the blinking cursor appears, type in your password and click the OK button.

Choose a Name for the E-Mail Game

Here you can type in the name of the E-Mail game you are playing. The default name is "Move1.eml". To save the game with this name, click on the OK button.

Play the Game

After naming the E-Mail game, the first turn begins and you move your units.

Recording Light

Note that a red "recording" light blinks on and off while you are playing the E-Mail game. This shows that your moves are being recorded for your opponent to watch.

Insert E-Mail Comments

As you play, you can insert comments to your opponent by clicking on the E-Mail Comments button and typing in the message. When finished, click on the OK button. When your opponent plays back the turn the comments appear in the order in which they were made.

Ending Your Turn

When you are finished moving units and making E-Mail comments, click on the End button to end your turn. A message appears stating that the current move was successfully saved to the E-Mail file you named when you began. Click on the OK button to continue. Afterwards, send the saved E-Mail file to your opponent through E-Mail.

Player 2

When you receive an E-Mail game from your opponent, go to the Scenario Screen and click on the Open button. E-Mail games are identified with ".eml" at the end. Choose the E-Mail game you want to play and open it.

Starting Move Message

When you begin to play the E-Mail game a message appears and displays the move, the player's turn, and the weather conditions. Click on Play to continue.

Watching Player 1's Turn

A green "Play" light flashes, indicating that you can now play back your opponent's moves by using the following buttons.

Step Forward

Steps forward unit-by-unit during playback of an E-Mail turn that you receive from an opponent.

Playback Turn

Plays back an opponent's E-Mail turn until the end.
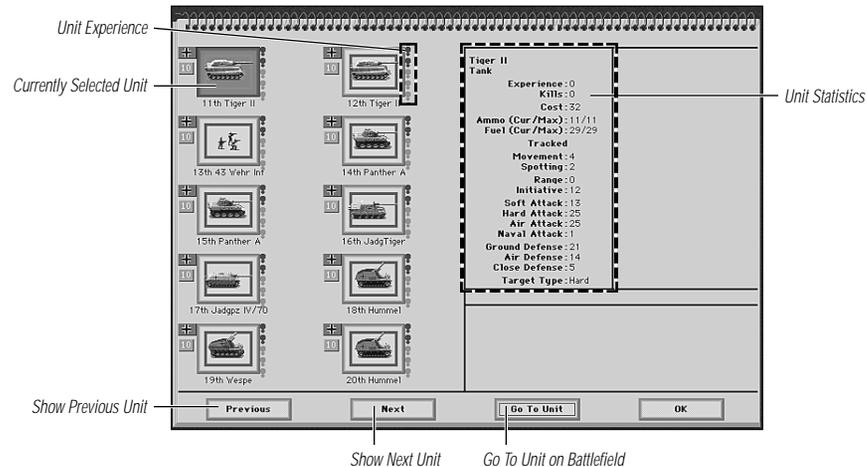
Rewind Turn

Rewinds to the beginning of an E-Mail turn received from an opponent. You can review an opponent's E-Mail move several times this way.

Player 2's Turn

After you have finished watching your opponent move his units, it is your turn. Refer to the steps that Player 1 used to choose a password, choose a name for the E-Mail game (like "Move2.eml"), play the turn, insert comments, and end your turn. Afterwards, send the saved E-Mail file to your opponent through E-Mail.

UNIT STATISTIC DESCRIPTIONS

Unit Experience

Currently Selected Unit

Unit Statistics

Tiger II
Tank
    Experience:0
        Kills:0
         Cost:32
Ammo (Cur/Max):11/11
Fuel (Cur/Max):29/29
        Tracked
      Movement:4
       Spotting:2
          Range:0
       Initiative:12
     Soft Attack:13
     Hard Attack:25
      Air Attack:25
    Naval Attack:1
 Ground Defense:21
      Air Defense:14
   Close Defense:5
    Target Type:Hard

Show Previous Unit

Show Next Unit   *Go To Unit on Battlefield*

Current Fuel

The amount of fuel the unit currently has. Avoid running out of fuel while adjacent to the enemy or you can be trapped and unable to resupply. Units that run out of fuel have their number of strength points halved for combat purposes.

Maximum Fuel

The maximum fuel capacity of the unit. For certain units this capacity also reflects susceptibility to breakdowns.

Current Ammo

The amount of ammo the unit currently has. Avoid running out of ammo, as without it you cannot shoot at the enemy. Note that many rounds of ammo can be consumed in a single turn if a unit defends against several enemy attacks.

Maximum Ammo

The maximum ammo capacity of the unit. Each instance of combat (whether attack or defense) expends one ammo point.

Entrenchment

This unit's current total entrenchment level. All ground units can entrench, but at different rates. All terrain types have a base entrenchment level from 0-4 which ground units in that hex with lower entrenchment levels automatically

obtain at the end of their turn. Units that have not moved are assumed to dig in each turn even if they attack, resupply, and so on. Each turn the unit does not move, it digs in. Infantry is best at entrenching, and anti-aircraft and tanks are the worst. Units can entrench up to a maximum of 5 levels above the base entrenchment level for the terrain. If a unit moves out of the hex it loses all its entrenchment levels, so pick a good position before digging in.

Each attack on an entrenched unit, whether successful or not, reduces its entrenchment level by one level. Repeated attacks in a single turn can even reduce the entrenchment level below the base level for the terrain, thus facilitating further attacks during the same turn.

Base entrenchment levels are: 4 for fortifications, 3 for cities, 2 for forests, bocage (intertwined hedgerows), and mountains, 1 for rough terrain and non-city port facilities, and 0 for everything else.

Entrenchment levels are a key concept in the game; units able to dig into a prepared position are tougher to root out. Entrenchment levels are reduced by attacks or bombardment of entrenched ground units. Entrenchment levels are a feature of units, not terrain, but affect combat much as terrain does — they make a devastating "Rugged Defense" more likely.

In the game, the way to attack a strongly entrenched unit is with a combination of aerial and artillery preparatory bombardment, followed by ground attacks by one or more units. Entrenching takes time unless a unit begins a scenario entrenched. Some units can take more advantage of ground and therefore can entrench more quickly than others in the game. Moving units have a zero entrenchment level, but gain the base entrenchment level of the particular terrain they end in when they stop. German Pioniere and Allied Engineer units ignore entrenchment, making them valuable units during this type of assault.

Experience

Each time a unit takes part in a combat it gains experience, and the more successful it is in combat, the more experience points it gains. An experience level is symbolized by a medal in a unit's summary information. The maximum experience level a unit can achieve is 5. When two units fight, their relative experience levels affect who shoots first and determine relative casualties. Experience also determines overstrength size, reduces the risk of rugged defense, and modifies initiative. Units with 2 or 3 experience levels should be considered veteran troops and those with 4 or 5 levels elite troops. Elite replacements should be used to preserve the quality of veteran and elite units. Making veteran and elite units overstrength is valuable because they are better able to withstand and inflict casualties in combat.

Once destroyed, an experienced unit can never be replaced.

In addition to getting a chance of shooting first, experienced units lose fewer casualties and inflict more casualties than would otherwise be the case. Units gain experience by fighting and gain the most by destroying more experienced enemy units, units with better equipment, or at least forcing them to retreat.

Strength

Units begin with 10 strength points. Losses are suffered in strength points, and a unit reduced to 0 strength points is destroyed. Units with experience have their maximum strength increased by 1 per experience level, up to a maximum strength of 15 points at 5 experience levels. Units can add overstrength points at a rate of one per turn by selecting elite replacements. Overstrength units are very potent in battle.

Kills

The number of enemy units a unit has destroyed in the current scenario or, over the course of a campaign.

Suppression

This indicates the number of a unit's strength points suppressed by enemy shooting. The unit's number of remaining strength points are used to shoot back in that turn. Most suppression lasts only for the duration of a single combat, but level bombers can suppress units for the player's turn, thus facilitating further attacks on the suppressed unit. Defending units whose suppression number is greater than or equal to their current strength, retreat or surrender.

UNIT EQUIPMENT STATISTIC DESCRIPTIONS

Class of Unit Equipment

This indicates the unit class (infantry, tank, recon, anti-tank, artillery, anti-air-craft, air defense, fighter, tac bomber, level bomber, fortification, destroyer, capital ship, submarine, carrier).

Cost

The prestige point cost of building a new unit of this type.

Maximum Ammo

The amount of ammunition the unit equipment begins with.

Maximum Fuel

The amount of fuel the unit class begins with.

Movement Method

The different methods of movement units may use are: leg, towed, wheeled, half-tracked, tracked, off-road, all-terrain, naval, and air. Units with leg or towed movement have no fuel rating, and can acquire organic transport for greater mobility.

Spotting

The hex radius within which a unit can spot all enemy units in fair weather. Note that there are no terrain restrictions on spotting; for example, a mountain hex does not block spotting beyond it.

Range

The unit's shooting range in hexes. A range of '0' means that only targets adjacent to the unit can be attacked.

Initiative

In combat, the unit with the greater initiative attacks first. In the case of identical initiative, attacks are simultaneous. Experience and the terrain of the defending unit modify initiative values. Initiative plays a critical role in that the unit that attacks last can use only its remaining strength.

Proper use of self-propelled artillery enhances the defense of adjacent units.

Soft Attack

The unit's attack value against "soft targets" such as infantry, trucks, and towed weapons. A bracketed value indicates that the unit may not initiate combat against a soft target, but may respond with that strength when attacked.

Hard Attack

The unit's attack value against "hard targets" such as tanks, recon, and half-tracks. A bracketed value indicates that the unit may not initiate combat against a hard target, but may respond with that strength when attacked.

Air Attack

The unit's attack value against air targets. A bracketed value indicates that the unit may not initiate combat against an air target, but may respond with that strength when attacked.

Naval Attack

The unit's attack value against naval targets. A bracketed value indicates that the unit may not initiate combat against a naval target, but may respond with that strength when attacked.

Ground Defense

The unit's defense value against attacks by land and naval units.

Air Defense

The unit's defense value against air units and air units' defense value against all attacks.

Close Defense

The unit's ability to defend itself in disadvantageous situations. These situations result when a unit unexpectedly encounters an enemy, and are announced by the game as "Rugged Defense!," "Surprise Contact," and "Out of the Sun!" When any unit attacks infantry which puts up a rugged defense, the attacking unit uses its close defense value. When combating infantry in city or forest hexes, ground units suffer the handicap of using their close defense values. Infantry do not retain this advantage when they are in clear terrain. Since close defense values are usually less than ground defense values, this makes infantry more dangerous in favorable terrain.

Target Type

There are four target types: Soft, Hard, Air, and Naval. Each unit has a separate attack value against each type of target.

Transport

If a unit has organic transport, statistics for the unit's values while mounted are displayed below the unit's normal statistics. When a unit has mounted or embarked in a transport, that unit uses the attack and defensive ratings of the transport. In general, units are vulnerable when in transport. A unit must abandon organic transport in order to embark on air transport.

UNIT CLASS DESCRIPTIONS

All pieces of equipment, referred to as units, are grouped into one of 18 different classes of equipment in PANZER GENERAL. Below is a list describing the classes, types available within each class, and their tactical role.

Ground Classes

Anti-Aircraft

The primary use of the anti-aircraft (AA) class is to respond quickly to enemy air units. Unlike the air defense class, AA units may fire and move or visa versa and can attack ground units. AA can keep up with a quick moving attack force, and if properly used, assist in mopping up enemy infantry. Protect AA from enemy tank, anti-tank, and artillery units and you may find them very useful. Unlike air defense units, AA must be in the same hex as enemy air units to attack them.

Air Defense

Like artillery, air defense units cannot attack after they have moved; unlike artillery, however, they cannot attack ground units. They are ideally suited for defending relatively stationary ground units against enemy airpower in defensive battles, but given time and proper protection, they can also be useful when brought up to support your offensives by fending off enemy aerial counterattacks. Because of their ranged attack and protective fire capability, well placed air defense units can keep enemy aircraft at bay around a vital city, or protect a difficult ground assault from disruption.

Anti-Tank

The anti-tank (AT) class is divided into two unit types: towed anti-tank weapons and self-propelled anti-tank weapons (often referred to as "Tank Destroyers" TDs). The towed type are excellent on defense, especially if heavily entrenched, but their vulnerability while being towed by trucks or half-tracks makes them difficult to use effectively on the attack. When attacking, use tank destroyers instead. TDs are much cheaper than tanks for the equivalent gun size, but less well-armored and lack a rotating turret. This means that they can use their initiative to get in the first shot when defending against tank attacks, but always fire second when attacking tanks themselves. This makes attacks on tanks risky unless they are already seriously weakened. The key to TD tactics against tanks is moving offensively but fighting defensively — rather than attacking enemy armor, move TDs into positions where the enemy armor is forced to attack you. For example, while your tanks strike deep through enemy lines, TDs can be used to block enemy armored counterattacks on the flanks of the advance. Although their intended purpose is to fight tanks, TDs make excellent tank-substitutes for overrunning other troops.

Artillery

Artillery cannot attack after moving. Artillery units, like anti-tank units, are divided into towed and self-propelled categories, but the difference is less significant because they are too vulnerable, even when armored, to confront the enemy directly — their role is instead to bombard the enemy from a distance in support of other friendly troops. The main advantage of self-propelled artillery is that it can keep moving without having to mount and dismount. Towed artillery, in comparison, is very vulnerable and unable to fire in defense of itself on adjacent enemy units. Artillery is suitable for softening up enemy soft targets prior to an offensive attack (even if they inflict no losses, each bombardment attack reduces the enemy's entrenchment level), and equally valuable because of their ability to provide defensive fire when adjacent ground units are attacked by enemy ground units. Artillery is best deployed immediately behind friendly units where it can support them on both offense and defense. Artillery support is especially critical if you want your infantry to have a chance of stopping armored attacks in the open.

Fort

The fort class is divided into two types: "forts," which are networks of immovable, strongly-built heavy artillery and infantry positions, and "strongpoints," which are lighter networks of pillboxes and light field fortifications. Since forts have ample reserves of ammo and strong attack values, they should shoot aggressively at any enemy that approaches. A combination of artillery and aerial bombardment followed by an assault by engineer or pioniere units is the proven method of capturing enemy forts and strongpoints that cannot be bypassed.

Infantry

The infantry class consists of several different types of units. Infantry are the most common troop type in any army and are the most versatile. Their advantage lies not in their speed but in their ability to fight in cities, forests, and other difficult terrain without the penalties suffered by most other classes. Although vulnerable to artillery fire and armored vehicles when in open terrain, they are almost impossible to dig out of well-entrenched defensive positions unless attacked by other infantry and artillery in coordination. Even the most powerful armored offensive can be halted or seriously delayed by a single well-positioned and well-entrenched infantry unit if the armored units lack proper support.

Engineer and pioniere units are excellent at assaulting heavily entrenched positions because their special training and equipment enables them to avoid the risk of a rugged defense. Bridging engineers, indicated by a bridging icon, carry bridging equipment that allows them to serve as a bridge for other friendly units while dismounted in a river hex. Paratroops and rangers are lightly-armed but highly-trained infantry able to paradrop from air transports. Heavy weapons infantry have higher

attack values than ordinary infantry and so are more suitable for assault roles, but move more slowly, making them prime candidates for transporting. Cavalry in this period are actually mounted infantry, with relatively low combat values but high mobility without the expense and vulnerability of organic transport.

Recon

The recon class consists of highly mobile but lightly armored units with superior spotting ranges (which is very important if using realistic spotting rules). They can pinpoint the location of enemy units, seize and hold cities and other objectives temporarily, and successfully attack weakened enemy units and vulnerable units such as units mounted on organic transport. Recon units are most useful in offensive battles, and having one as a pathfinder for each major advance saves you time and helps you avoid ambushes.

Tank

Because of its speed, armor, and heavy weaponry, the tank class is most able to take aggressive risks and survive. But beware of overconfidence — although tanks dominate open country, they are vulnerable to infantry in cities, forests, and rough terrain; can be stopped by anti-tank guns and tank destroyers; and require air support when the enemy is able to use tactical bombers against them. A successful general does not win with tanks alone.

Truck

The truck class includes trucks, half-tracks, and a few fully-tracked vehicles used as organic transport (i.e., it is specifically assigned to a unit and cannot be shared). Organic transport is useful for giving otherwise slow units greater mobility but, while mounted, units use the weak combat values of the transport and are easily destroyed. Troops moving by truck should therefore be protected from enemy ground and air attack at all times. Trucks are faster on roads, but half-tracks have a higher defense and move more quickly in difficult terrain.

Air Classes

Air Transport

Most scenarios include a pool of air transport points. Air transport is non-organic transport which allows infantry, light artillery, and light anti-tank units to embark at friendly airfields and disembark at any unoccupied airfield (enemy airfields may be seized in this way). Paratroops and rangers can "jump" in any non-city hex. See the "Embark/Disembark" description in the Unit Menu on page 21 for

information about transporting units by air. Note that air transports are highly vulnerable to both enemy fighters and air defense units and require fighter escorts, particularly for paradrops behind enemy lines.

Fighter

The tank and the airplane were the decisive new weapons of the war, and the fighter class is your key to obtaining air superiority. The fighter class is highly effective attacking enemy air units, and is able to protect adjacent friendly bomber and ground units through its ability to intercept air missions against them. Fighters can strafe infantry, artillery, and transport units with some effect and help soften up entrenchments, but their primary mission is to clear the skies of enemy fighters and enemy bombers. Losses in fighter combats are typically heavy, so getting the first shot through superior initiative and experience is critical.

Level Bomber

The level bomber class consists of high-altitude, long-range bombers with large bomb loads but limited accuracy. They attack by "carpet bombing" ground targets including cities, ports, and airfields. They tend to suppress rather than destroy targets, but this is advantageous because enemy units suppressed by your level bombers remain suppressed for the entire turn. Successful attacks by level bombers reduce fuel and ammo points of enemy units. Level bombers are the only class that can assist other units' attacks by inflicting prolonged suppression.

Level bombers only attack the hex they are in, and are immune to all ground units except for AA and air defense units. When they bomb a victory hex, located in a city, port, or airfield, they inflict prestige damage on the enemy and have a significant chance of destroying its usefulness (which is represented in the game when it converts to neutral ownership). Only dismounted infantry can recapture/repair a neutralized city, port, or airfield.

Tactical Bomber

The tactical bomber class includes aircraft designed for ground attack, which can only attack ground targets; and fighter-bombers, which can also attack enemy air units (though they are generally less effective than fighters). Tactical bombers are useful against a variety of targets, including vulnerable targets such as transport and artillery, but also against more difficult targets such as the submarine, tank, and anti-tank classes. Tactical bombers can also be used to soften up entrenched positions. Note that fighter escorts are essential to the survival of tactical bombers if the enemy possesses fighters.

Sea Classes

Capital Ship

The capital ship class includes battleships, battle-cruisers, heavy cruisers, and light cruisers. Capital ships have the ability to make ranged attacks and may move and shoot in either order. They are best used to defeat the enemy fleet, but after a naval victory can support the ground forces with off-shore bombardment, especially against soft targets. Capital ships shot at by other capital ships are entitled to shoot back with a ranged attack with any surviving unsuppressed strength points. All capital ships repair extremely slowly, making it rarely worthwhile to obtain replacements for them.

Carrier

The carrier class acts as a mobile airfield for fighters and tactical bombers, but, unlike airfields, carriers can resupply only air units in the same hex. Carriers have excellent spotting ranges but are vulnerable to naval attacks, and their high cost makes them very attractive targets in terms of prestige.

Destroyer

The destroyer class consists of destroyers, destroyer escorts, patrol craft, and torpedo boats. Destroyer class units are the only naval units able to attack submarines, and always attack first against submarines they attack during their turn, but are easily destroyed by capital ships. Use screens of destroyer class vessels to protect heavier ships from submarines. Together with tactical bombers, they can form effective sub-killer task groups.

Sea Transport

Sea transport is extremely important in amphibious invasion scenarios. Sea transport is non-organic transport which allows ground units to embark at friendly port facilities or coastal cities and disembark in any unoccupied coastal hex. See the "Sea Embarkation" section on page 33 for more information. Note that sea transports should be protected by naval and air covering forces because they are highly vulnerable to enemy naval units and, to a lesser extent, to enemy tactical bombers.

Submarine

The submarine class can be deadly against enemy heavy naval units because destroyer class naval units and tactical bombers are the only units that can attack them. Submarines always shoot first when they attack during their turn. When submarines are attacked, they are often able to evade the attack by maneuvering or submerging.

STRATEGY NOTES

Tactics Checklist

Remember that in PANZER GENERAL:

♦ Clicking activates buttons and units in hexes.

♦ Clicking on a unit makes it ready for orders.

♦ All buttons appear along the sides of the screen, and button descriptions appear in the top center section of the screen when you pass the mouse cursor over them.

♦ When a unit attacks, it uses one unit of ammo. When it's out of ammo, it can't attack another unit, and must resupply (when not adjacent to an enemy unit).

♦ Cities secondary to your battle objectives should only be attacked if in the direct path of your units. On the other hand, in later scenarios, risking units to capture other cities gains you more Prestige Points.

♦ All units have movement points which are expended as the unit moves. Each hex costs a number of movement points, based on the type of terrain entered. When you select a unit the legal hexes that unit may move to are highlighted. When you move units across rivers without using available roads or crossings, all movement points for those units are used.

♦ Replace weakened units even when they are close to enemy positions. It's better to suffer loss than annihilation.

♦ Mount units which have transports whenever possible, but be sure there is armored protection close by. A given unit can only embark on a naval transport at a port or coastal city. Only infantry, light artillery, and light anti-tank units may use air transports at an airfield. Embarking or disembarking a unit can only be done at the beginning of the unit's turn. Naval transport units can disembark into an adjacent land square, air transport can only disembark at airports, while paratroopers can disembark anywhere. Disembarking ends the unit's turn.

♦ Replacements, Disband, Upgrade, and Elite Replacements can only be done at the beginning of the unit's turn. If any of these options are chosen, the unit's turn ends.

♦ Abort Move returns a unit to pre-order status, and cannot be used after the unit has acted by attacking, resupplying, receiving replacements, and so on. Right-clicking after moving a unit ends that unit's turn.

♦ Even though the "Expected Losses" may not be in your favor, you may still need to sacrifice some of your unit strength to achieve your goals. This is especially important when attacking enemy units with high entrenchment levels. Even though the attack may not be effective, the enemy entrenchment level decreases by at least one point, and is more vulnerable the next turn.

♦ The enemy cannot place newly-purchased units around one of its cities if you have a unit adjacent to that city.

♦ Surround centers of resistance such as cities and strike deep beyond them to force the enemy to mobilize and defend its rear areas. This makes the bypassed cities easier to take than if you wore yourself down in an immediate direct assault on them. Placing troops next to the city prevents the enemy from building more units there.

♦ Use the Strategic Map to select good avenues of attack, preferably open tank country with few obstacles the enemy can use as defensive positions to hold up your advance.

♦ Organize your forces into objective-oriented battlegroups and, if necessary, separate city garrison units. Battlegroups should combine units with compatible movement speeds.

♦ Start each battle with a plan to deal with issues of naval and air superiority.

♦ Good siege tactics against heavily-entrenched troops are to bombard them with artillery to weaken their entrenchments, and to place friendly infantry units adjacent to the defending unit to prevent it from "replacing" its losses. When it is sufficiently weakened, the infantry units attack the defending unit, destroying it or forcing it to retreat. The city can then be occupied or captured by an infantry unit (or a tank, AT, or recon unit — artillery units cannot capture cities). It is very dangerous to try to attack cities with tank units, as they often suffer crippling losses in such unfavorable terrain for tanks. Tank units work best in the open against enemy infantry, cavalry, artillery, and tank units.

CREDITS

Halestorm Credits

Technical Lead and Panzer General Port Programming	**Michael Fullerton**
Allied General Programming	**Anthony L. Farmer, Michael Fullerton, Brian Hales, Ed Smith, Jeremy Werner, Heiser Hales**
HCL Chief Architect	**Michael Fullerton**
HCL Programmers	**Ed Smith, Brian Hales, Anthony L. Farmer**
Art Director	**Mitch Pergola**
Lead Artist	**Charles London**
Additional Art	**Mitch Pergola**
Executive Producer	**Mitch Pergola**
Producer	**Jonathan Korman**

Strategic Simulations Inc. — Panzer General Port

Producer	**Carl Norman**
Associate Producer	**Rick Martinez**
Rule Book Editors	**Jonathan Kromrey, Mark Whisler**
Test Supervisor	**Glen Cureton**
Product Testers	**Dion Burgoyne, Mike Hawkins, Richard Wagenet**
Graphic Design and DTP	LOUIS SAEKOW DESIGN: **David Boudreau and Leedara Zola**

Strategic Simulations Inc. — Panzer General (DOS)

Producer	**Bret Berry**
Associate Producer	**Rick Martinez**
Additional Associate Producers	**Rick White, William Dunn**
Game Design	**SSI Special Projects Group**
Campaign Game Design	**Joel Billings**
Scenario Design	**Chuck Kroegel**
Programmer	**Paul Murray**
Art	**Dave Jensen**
Audio Programming Director	**Ralph Thomas**
Audio Programmer	**Ron Calonje**
Music	**Doug Brandon**
Voice Director	**Tim August**
Voice Talent	**Barry Lank**
Map Design	**Michael Kroon, Shane Hensley**
Data Manager	**Caron White**
Lead Product Tester	**John Cloud**
Product Testers	**Jason Dawdy, Forrest Elam, Jeff Peña, Michael Higgins**

Special Thanks (Alphabetically) To: *Mike Bench, Keith Brors, Chris Clifford, Josh Cloud, Ben Cooley, Lee Crawford, Diane Duffey, Jeff Groteboer, Don McClure, Bruce Mickelson, Steven S. Okano, C. Peabert Perry and John "Crawdaddy" Ross*

WHAT TO DO IF YOU HAVE A DEFECTIVE CD OR 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. Due to the complex nature of our simulations, however, some program errors may go undetected until after publication. In addition to errors in the program, there are occasionally problems with the media itself. We experience the industry standard of approximately a 3 to 5% failure rate of duplicated disks. Before assuming that the media is defective, make sure to check your disk drive. Up to 95% of the media 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 defective media, please return the disk or CD only (keep all other parts of the game) to our Customer Support Department, along with a note describing the problem you have encountered. Replacement media will be provided upon our receipt of the defective media.

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.

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 self-addressed, stamped 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.