The cover art features a central, stylized shield shape with a metallic border. Inside the shield, there are several action scenes from the game: a soldier in the upper left shouting with a raised fist, a tank in the upper right, and soldiers in combat in the lower half. The background is a dark, textured grey with a red and black striped banner running horizontally across the middle. The title 'CLOSE COMBAT' is rendered in large, bold, yellow-orange metallic letters with a red outline. Below it, 'Cross of Iron' is written in a white, gothic-style font with a black outline. The words 'GAME MANUAL' are printed in white, sans-serif capital letters across the bottom of the shield.

CLOSE COMBAT

Cross of Iron™

GAME MANUAL



CSO
SIMTEK™



EPILEPSY WARNING

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

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

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

Parental guidance is always suggested when children are using a computer and video games. Should you or your child experience dizziness, poor eyesight, eye or muscle twitching, loss of consciousness, feelings of disorientation or any type of involuntary movements or cramps while playing this game, turn it off immediately and consult your doctor before playing again.


PRECAUTIONS DURING USE:

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

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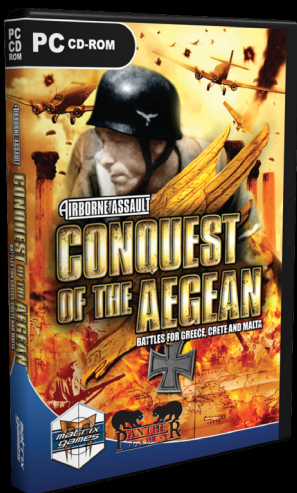
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1.0 CLOSE COMBAT – CROSS OF IRON™

Thank you for purchasing Close Combat – Cross of Iron™.

1.1 INSTALLATION

Please ensure your system meets the minimum requirements listed below in section 1.2, and if possible, the recommended system requirements in section 1.3. To install the game, refer to section 1.5, below.

1.2 MINIMUM SYSTEM REQUIREMENTS

To play *Close Combat – Cross of Iron*, your computer system must meet these requirements:

133 MHz CPU
32MB Free RAM
1MB Video RAM
Soundcard
Display capable of 1024x768 resolution
Windows 95/98/ME/2000/XP

1.3 RECOMMENDED SYSTEM REQUIREMENTS

For maximum performance, your computer system must meet these requirements:

300 MHz CPU
64 MB Free RAM
8Mb Video RAM
Soundcard
Display capable of 1024x768 resolution
Windows XP

1.4 INSTALLATION PROCEDURES

Insert the game CD into the CD-ROM drive. Setup will run automatically. If Setup does not start, run Setup.exe from the Windows directory on the CD.

When the Setup screen appears, click Install Close Combat. Double-click the Close Combat – Cross of Iron icon. On the introductory screen, click Play Close Combat. The introductory video plays, and the Main screen appears.

1.5 UNINSTALLING THE GAME

Please use the **Add/Remove Programs** option from the Windows Control Panel to uninstall the game.

1.6 PRODUCT UPDATES

In order to maintain our product excellence, Matrix Games releases updates containing new features, enhancements, and corrections to any known issues. Keeping up with these updates is made easy and is free by signing up for a Matrix Games Member account. When you're signed up, you can then register your Matrix Games products in order to receive access to these important

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1.7 GAME FORUMS

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

1.8 TECHNICAL SUPPORT

Should you have a technical problem with the game, the best way to get help is to post a note in the Technical Support sub-forum within the Close Combat forum at <http://www.matrixgames.com>. You'll then hear back from our personnel, or from one of the many helpful players of the game. This is usually the fastest way to get help. Alternatively, you can email your problem to support@matrixgames.com.

2.0 QUICK START



Install the game and start Close Combat – Cross of Iron.



On the Main Menu, click Play Game.

Name	Description	Date
D-Day Russia	Barbarossa	Summer 1941
Steamroller	On to Lvov	Summer 1941
Fighting in Hell	Next Stop Lvov	Summer 1941
Panzers in the Snow	The First Snows	Fall 1941
The First Fortification Ring	The Line in the Snow	Fall 1941
Next Stop Moscow	On to the Kremlin	Fall 1941
Battle for the Kremlin	Where is Stalin	Winter 1942
Pressing the Point	The Russians Outrun Themselves	Spring 1942
Race to the Daeger	Russian Exploitation	Spring 1942
Against the Wall	The Russians are Stopped	Spring 1942
Factory Workers' Settlement	Orlovka	Summer 1942
Red Barricades	The Assembly Hall	Fall 1942
Last Push on the Factories	Light at the End of the Tunnel	Fall 1942

On the Command screen, click the scenario you want to play.



Click Next.

FORGEE POOL

Unit Name	Count
1st SS Panzer	23
2nd SS Panzer	21
3rd SS Panzer	21
4th SS Panzer	20
5th SS Panzer	17
6th SS Panzer	17
7th SS Panzer	15
8th SS Panzer	11
9th SS Panzer	11
10th SS Panzer	11
11th SS Panzer	11
12th SS Panzer	11
13th SS Panzer	11
14th SS Panzer	11
15th SS Panzer	11
16th SS Panzer	11
17th SS Panzer	11
18th SS Panzer	11
19th SS Panzer	11
20th SS Panzer	11

ACTIVE ROSTER

Unit Name	Count
21st SS Panzer	11
22nd SS Panzer	11
23rd SS Panzer	11
24th SS Panzer	11
25th SS Panzer	11
26th SS Panzer	11
27th SS Panzer	11
28th SS Panzer	11
29th SS Panzer	11
30th SS Panzer	11

Requisition Points Remaining: 70

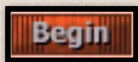
On the Requisition screen, review the troops you are going to take into battle. Click Next again.



On the Combat screen, deploy your troops. To do this, click and drag each unit to a new position. You do not have to do this; you can keep some, or all, of your troops in their default position(s).



If you want to issue starting orders to any of your units, right click on the unit and select the order from the pop-up window.
(The Defend or Ambush orders will be selected at scenario start by default.)



When you have your units positioned and any initial orders given, click Begin.

ON TO VICTORY!

3.0 BACKGROUND

Barbarossa, June, 1941.

A huge German army waits on that country's border with Russia. An even more immense Russian army stands by on the other side. Both are about to enter a massive four-year war unparalleled in history. From Finland to the Caucasus Mountains, over 5 million Germans will fight against the Russians while more than 30 million Russians battle the Germans. German casualties will exceed 3 million; Russian casualties, including civilians, a staggering 43 million.

It will be a conflict of contrasts: of warfare on endless plains and in city streets; of disciplined soldiers against untrained, unequipped conscripts; of exhausting summer heat and brutal winters so cold that rifle bolts shatter. Whole armies will panic and run; whole divisions will stand and fight to the last man. It will also be a conflict of similarities. On each side, brutal dictators terrorize civilians and order soldiers to fight to the death. Neither will stop until the other is completely destroyed.

It will be the greatest and longest land battle ever fought, starting as a conflagration rolling east toward Moscow, blazing along a 3,000-mile front, and then rolling back to consume Berlin. It will be a fire in the east that heralds a new world order.

Cross of Iron, July, 1943.

A titanic battle is born on the razor-edged arc of the Kursk salient in central Russia. From early July to late August, over two million combatants on both sides clashed in the largest battle the world has ever seen. On this, Hitler has hung the fragile fate of the Eastern Front, throwing in 50 divisions, including 17 priceless Panzer and Panzergrenadier divisions. In the end, a third of the Germans' tanks were burning hulks and over half the men involved dead, wounded, or captured. The Soviets suffered equally horrendous losses, but by this stage in the war, the Reds could easily make good on them...while the Germans were left with holes they could not fill.

Following their tremendous stand at Kursk, the Russians moved forward, crossing the Dnieper River at several points and capturing Kiev in the autumn of 1943. With the opening of the Italian front by the Western Allies, badly needed men and material were diverted to the Mediterranean theatre, leaving even less resources for the Germans in the east. From this point on, the Russians had ripped the strategic initiative from the Germans, who from this point on reacted to Soviet moves. The Germans were far from helpless, however, engineering brave stands and giving the Russians bloody noses, but the inexorable advance of the Red Army, fueled by far greater resources than the Germans could bring to bear, slowly ground the once proud Wehrmacht into dust.

The catastrophic days of 1943-1944 mark the beginning of the end for the Axis in the East. It also heralds the light at the end of the tunnel for the Russians. Over this twisted landscape littered with shattered iron giants and the blood of brave men, you will command either side as they continue to face off in a nearly limitless cauldron of conflict...

3.1 THE GAME

Close Combat – Cross of Iron transports you to the squad-level war in the eastern arena of World War II. Your men in the trenches respond like real soldiers – they react authentically to the stress of combat and are affected by their fatigue level, ability, physical and mental condition, and

other factors. The game puts you in command of a 'fire brigade' – a special company of elite troops moving among hot spots on the Eastern Front. You are responsible for keeping your men alive and for advancing your own rank, which, in turn, increases the size and quality of your forces. As the four years of conflict pass and both German and Russian technology improves, you can add new and better weapons to your arsenal.

You are in control of the scope and complexity of your game. You can start simple—with individual battles—and then progress to operations, campaigns, and finally, to the game's Grand Campaign. You can also design custom scenarios for battles. For example, you can set up a battle in which you are surrounded and outnumbered but have an advantage in firepower and experience over your opponent.

3.2 YOUR OBJECTIVE

Your objective is to win battles by inflicting casualties and capturing victory locations—points of strategic importance—without wasting your men. You use your skills on the battlefield and your abilities as a strategist to attain this objective. For example, you can win battles by being aggressive and using frontal or flanking assaults to capture the enemy's victory locations. You can also win by infiltrating the enemy's positions and launching surprise attacks. Or, you can take a defensive stance, successfully protect your victory locations against the enemy, and then counterattack your weakened foe.



Russian troops firing at German planes near Leningrad. The long-barreled weapon is a Panfilov antitank rifle. A holdover from World War I, its high velocity, 14.5mm slug was unable to penetrate most mid- to late-war tank armor.

Your choice of an offensive or a defensive battle has implications for the teams you choose and how you deploy them. If you plan on attacking, you need teams capable of movement (infantry teams) and of providing suppression fire (machine gun, mortar, and gun teams). You'll need to deploy some of your teams so they can suppress your opponent while the remainder attacks enemy positions. For defensive tactics, going heavy on firepower and light on mobility is the rule. However, you might want some mobile forces for rapid movement to danger points or for counterattacks. For further information on choosing teams and deploying them effectively, see the Strategy and Tactics section.

"You can no longer retreat across the Volga. There is only one road, the road that leads forward. Stalingrad will be saved by you, or be wiped out with you."- Russian orders to the troops in Stalingrad

3.3 SCENARIO TYPES

You can choose from three types of scenarios in Close Combat – Cross of Iron; battles, operations, and campaigns. Battles involve only one map; an Operation is a series of battles played one after another. For example, the Roads to Moscow Operation consists of four battles: Panzers in the Snow, The First Fortification Ring, Next Stop Moscow, and Battle for the Kremlin.

A Campaign takes place on an even greater scale: it is a series of Operations played one after another.

When you play operations or campaigns, the results carry over from battle to battle. For example, a team other than a command team that is wiped out in the first battle of an operation will not be available in subsequent battles of the operation. However, units that survive successive battles become better soldiers because their experience and cohesion improves with time.

Between each battle of an operation or campaign, you'll need to make decisions regarding the units that make up your fighting force. You can add new units to your surviving force, refit surviving units with new recruits and equipment, or choose to rest surviving units for refit in a later battle.

3.4 RANK AND PROMOTIONS

When you play campaigns, you receive promotions based how you perform during battles. Promotions are valuable because they improve the quality of commanders. As a commander improves, he can effectively command a larger area of the battlefield. Also, each time you are promoted, you can add a new unit to your fighting force. For example, if you are a first lieutenant and you're promoted to the rank of captain, you are allocated 14 teams instead of 13.

Higher rank carries a price, however; you are expected to maintain higher force strength and gain more victory locations than a commander at a lower rank.

4.0 STARTING THE GAME

The Main Screen has four options:

- Play Game (4.2+)
- Boot Camp (4.1)
- Battlemaker (10.0)
- Multiplayer (11.0)

4.1 ENTERING BOOT CAMP (OPTIONAL)

To get you started commanding troops, Close Combat – Cross of Iron provides Boot Camp, an online tutorial for learning basic battlefield skills. To start the tutorial, on the Main screen, click Boot Camp (Training). There are five Bootcamp scenarios in all, and for new players they should be followed in order (starting with number one and moving through number five). These training scenarios are:

- Boot Camp #1 – Learn the basics of moving troops.
- Boot Camp #2 – Learn how to issue firing and positioning orders.
- Boot Camp #3 – Learn how to launch an assault.
- Boot Camp #4 – Learn to monitor what's happening on the battlefield.
- Boot Camp #5 – Learn how to use armor

It might be a good idea to revisit the appropriate Boot Camp scenario if you are having trouble on the battlefield.

Although they do not present a full picture of the fighting on the Russian Front, the casualty statistics help define the totality and scale of the fighting. By war's end, the Russians mobilize nearly 35 million men and women into military service. Total Russian military casualties in the war probably exceed 23 million - nearly 9 million killed, 15 million wounded, and over 4 million captured or missing. Civilian deaths probably exceed 15 million, which means over 25 million Russian soldiers and civilians died on the Russian Front. By comparison, total American combat deaths in World War II, in both the European and Pacific Theaters, were less than 600,000.

4.2 CHOOSING A SCENARIO

You choose the scenario you want to play using the Command screen. Close Combat - Cross of Iron has built-in battles, operations, and campaigns that are based on actual World War II scenarios. Or you can create custom scenarios (see section 10.0), and then go back to the Command screen to start your custom game. You can also play saved games; you can start an operation one day, save it, and then pick up where you left off at another time.

TO BRING UP THE COMMAND SCREEN

On the Main screen, click Play a Game.

TO CHOOSE A SCENARIO TYPE

In the upper-left corner of the Command screen, in the Game Types list box, select the type of scenario you want to play: Historical Battles, Historical Operations, Historical Campaigns, Custom Scenarios, or Saved Games. (Saved Games is unavailable until you play a game and save it.)



A battery of Russian ZP39 85mm anti-aircraft guns. Although originally designed solely for an anti-aircraft role, the ZP39 - like its German counterpart, the FlaK 43 8.8cm AA gun - found much favor on the front lines as an antitank gun. Its high velocity 85mm rounds were devastating against even the heaviest of German armor.

TO BROWSE THE SCENARIOS

The box in the left portion of the screen contains a list showing the type of scenario you chose in the previous step. Click one and a thumbnail of the map you'll be contesting appears in the lower-left portion of the screen. If you're playing an operation, the screen shows all maps you'll be fighting for. If you're playing a campaign, the maps for the campaign's first operation appear. For a saved campaign, you see the maps for the operation you are about to begin.

To view information about another scenario, click it in the list box.

For more detailed information about any scenario, click the Briefing button on the toolbar. The briefing is fully explained in "Getting Your Briefing" later in this section.

TO CHOOSE SIDES

On the right side of the Command screen, click the flag of the side you want to play.

You can set other gameplay options at this time, as described in "Choosing Game Settings" later in this section.

TO LOAD THE SCENARIO YOU WANT TO PLAY

In the list box of scenarios, double-click the one you want to play. Or, if it is already selected, you can click Next to bring up the Requisition screen. For operations and campaigns, enter a name for the scenario in the dialog box that appears. Your game is automatically saved under this name after each battle.

4.3 VIEWING HISTORICAL INFORMATION (OPTIONAL)

If you are playing an operation or campaign, you can view historical information about it:

- On the toolbar, click History. The History screen appears.
- In the map, right-click the operation you want to read about. (Operations appear as red dots and are labeled with white text.)

5.0 ASSEMBLING YOUR FORCES

On the left side of the Requisition screen is the Force Pool list box, which displays the teams you can requisition. The teams in your fighting force appear on the right side, in the Active Roster list box. An asterisk denotes that a team is equipped for winter conditions.

In single battles and in the first battle of an operation, all team slots in the Active Roster except for one are already filled. As an operation or campaign progresses, you are given more team slots and requisition points—the currency you use to "buy" teams. The number of slots depends on your primary commander's rank; the higher the commander's rank, the more teams you're allowed (up to 15) and the higher the quality of the teams available to you. When you're playing campaigns, winning operations advances the rank of your commander, which gives you more team slots for the next battle.

You are given a fixed number of requisition points at the beginning of each battle, and you receive more as the operation progresses. Your requisition points are displayed in the lower-right corner of the Requisition screen.

5.1 VIEWING DIFFERENT TYPES AND QUALITY OF TEAMS

You can choose the type of teams in your force. Close Combat III includes command, infantry, armor, and support teams:

- Command teams provide command and control on the battlefield; they improve the performance of teams within their command radius.
- Infantry teams are foot soldiers armed primarily with rifles, submachine guns, and hand grenades. Infantry teams can also have heavier weapons, including machine guns, flamethrowers, and antitank (AT) weapons.
- Support teams include halftracks, field guns, mortars, machine guns, flamethrowers, and AT weapons.



A German 8cm mortar team. This photograph clearly shows how these teams could become fatigued when moving on foot. The three basic components (tube, base plate, and tripod) had a total weight of 124 pounds - without ammunition.

TO DISPLAY A DIFFERENT TYPE OF TEAM

Click the Team Types list box. The available team types appear.

TO DISPLAY A DIFFERENT QUALITY OF TEAM

You can choose the quality of the teams in your force; Close Combat - Cross of Iron includes conscript, regular, and elite units. Conscript units have poor training and adequate weapons; elite teams have the best training and finest weapons.

- Click the Team Quality list box. The available quality options appear.
- Click Conscripts, Regular, or Elite. The teams belonging to the degree of quality you chose appears in the Force Pool box.

5.2 GETTING INFORMATION ON UNITS

You can get both basic and detailed information about the teams displayed in the Force Pool list box. This information is displayed in the Unit Description box below the Force Pool list box.

TO SEE A UNIT DESCRIPTION

In the Force Pool list box, click a team.

TO SEE DETAILS ABOUT AND THE CURRENT STATUS OF A TEAM

- With the team selected, click the Details button.
- Detailed information and current status appears in the box. You can go back to the information you saw in the previous step by clicking Info. Or, you can view details on another team by clicking it in the Force Pool box.

TO GET THE SOUND AND NAME OF EACH WEAPON IN A TEAM

After clicking Details, click the picture of a weapon in the right portion of the box. Often, the most important difference between infantry teams is the types of weapons they carry.

5.3 MOVING TEAMS TO THE ACTIVE ROSTER

When you choose teams, you move them from the Force Pool to the Active Roster. After you fill all the slots or use all your requisition points, you can choose more teams only if you retire one from your active force. When you're playing an operation or campaign, you might not want to use all of your available requisition points for each battle; you can accumulate them to use in trouble spots later.

TO ADD A TEAM TO YOUR ACTIVE ROSTER

In the Force Pool box, double-click the team you want to add. The unit moves from the Force Pool box to the Active Force box.

TO RETIRE A TEAM FROM YOUR ACTIVE FORCE

In the Active Roster box, select the team you want to retire and click the Retire button. You can also double-click the team you want to retire. The unit moves to the Force Pool box.

TO CANCEL ALL OF YOUR SELECTIONS

On the toolbar, click Revert. The Force Pool and Active Roster return to their original state.

5.4 GETTING YOUR BRIEFING

The briefing includes a short description of the terrain and your disposition in the upcoming battle or operation. You can view your briefing any time prior to actually deploying troops and fighting.

- On the toolbar, click Briefing. The Briefing screen appears.
- Click the Battle Briefing button to display the battle briefing text or the Operation Briefing button to display the operation briefing text.

"...the only person who feared no one. He was not afraid of Stalin."
- Marshal Semyon Timoshenko's assessment of Marshal Georgi Zhukov

5.5 CHOOSING GAME SETTINGS (OPTIONAL)

The game settings currently in effect appear on the right side of the Command screen. You can use the default settings, or you can customize your game.

To bring up the Settings dialog box, click the Settings button, located in the upper-right portion of the Command screen.

CHOOSING PLAYER NAME AND SIDE

Your default player and online name is Commander unless changed during the Setup, but you can change this name to anything you choose:

- In the Settings dialog box, click the Battle Settings tab.
- Type the name you want to use.
- To choose which side you want to play, click either Command the Russians or Command the Germans. You can also pick a side on the Command screen by clicking the flag of the side you want to play.



Marshal Georgi Zhukov (1896-1974)

Zhukov is considered by the Russian people, and by most non-Russian military observers, to be the greatest military hero of the "Great Patriotic War." Zhukov's military skills are matched by a knack for politics and public relations, which keep him in Stalin's good graces for the duration of World War II. For most of the war, Zhukov is Deputy Supreme Commander in Chief of the Red Army.

In October 1941, Zhukov replaces Stalin's crony Voroshilov in an attempt to hold Leningrad, which the Germans have placed under siege. After Zhukov strengthens the city's defenses and arranges a supply system that eventually breaks the siege, he is named Commander in Chief of the Western Front, the force protecting Moscow.

In 1942, Zhukov commands the defense of Stalingrad and helps plan and direct the counteroffensive in which the entire German Sixth Army is surrounded and forced to surrender. After the Russian victory in the war's greatest tank battle at Kursk, Zhukov takes command of all the fronts facing the center of the German lines in June 1944. He directs these fronts to the Russians' great breakthrough—the collapse of Army Group Center in Belorussia. After the fall of Warsaw the Russians drive across Prussia, slowed only occasionally by supply problems, to the Battle of Berlin. The battle ends with Zhukov accepting the German surrender.

Following the war, Zhukov is given a series of obscure assignments by Stalin, who fears that Zhukov's great popularity makes him a political opponent. Stalin's grudging recognition of Zhukov's monumental military skills probably spare the marshal the fate suffered by millions of Stalin's political opponents. After Stalin's death in 1953, Zhukov's reputation is somewhat rehabilitated, but the ascent of his old rival Nikita Khrushchev assures Zhukov's permanent absence from Russian military leadership.

CHOOSING END BATTLE OPTIONS

You can choose one of three ways for a battle to end using the Battle Settings tab. Your choice is an important factor in determining what kind of battle to fight and which teams to select, as explained in section 8.0, "Strategy and Tactics."

- Fight to the finish - The fighting ends when one side is wiped out; this is the default setting.
- When time expires - The fighting ends when the timer runs out. You can set the timer for 1 to 99 minutes.
- After taking all victory locations - The fighting ends when you capture all the victory locations on the map. A further option - hold them for two minutes

- ends the battle only if you can hold the captured victory locations for two minutes. If the enemy recaptures a victory location before the two minutes expire, you must continue playing.

Battles can also end by either side calling a truce or fleeing as explained in section 7.0, "Fighting Battles, Operations, and Campaigns."

CHOOSING DIFFICULTY LEVEL

On the Difficulty tab in the Settings dialog box, use the slider to set your side's strength:

- **Recruit** - Your side is given every advantage in strength, morale, and supplies.
- **Veteran** - The sides are balanced as they were historically.
- **Hero** - Your side is initially at a disadvantage in strength and, in campaign mode, has far fewer resources available.

When you play your first few games, you might want to set the difficulty level to Recruit. As your skills improve, try the tougher settings.

Difficulty levels affect the number of daily requisition points you receive during an operation or campaign (at harder levels, you'll get fewer daily points). Levels also handicap your score by making battles more difficult to win and, in a campaign, making promotion points harder to gain. (For more information on scoring and promotion points, see section 7.0, "Fighting Battles, Operations, and Campaigns.")

"The effect of climate in Russia is to make things impassable in the mud of spring and autumn, unbearable in the heat of summer, and impossible in the depths of winter. Climate in Russia is a series of natural disasters." - Staff officer, German 12th Army

CHOOSING REALISM OPTIONS

You use the **Realism** tab in the Settings dialog box to set the degree to which you want the game to emulate a real battlefield. You can choose realism options for both your side and the enemy.

- **Always see the enemy** - Enemy units will always be visible. (Normally, Close Combat III gives you a limited—but realistic—view of the battlefield.) You can't see units that are hiding unless you click this option.
- **Never act on initiative** - Your units never act on their own; they act only when you give them orders.
- **Always have full enemy info** - You will receive summary information on the enemy teams (toolbar information, not Soldier Monitor information.).
- **Always obey orders** - Your units will do whatever you tell them to do.

The realism rating is determined by the number of checkboxes you have selected.

When you play your first few games, you might want to make the battlefield less realistic. For example, making enemy units always visible can help you plan your strategy and hone your tactics. As you gain experience, you can make your game more like a real battlefield.

"Military thought in the capitalist world has got into a blind alley. The dashing "theories" about a lightning war, or about small select armies of technicians, or about the air war which can replace all other military operations; all these theories arise from the bourgeoisie's deadly fear of the proletarian revolution. In its mechanical way, the imperialist bourgeoisie overrates equipment and underrates man." - Pravda (the official Soviet Communist Party newspaper), February 1939

6.0 Starting the Game

To start the game, on the Requisition screen, click Next.

The combat screen appears. To begin deployment and battle, see section 7.0, "Fighting Operations, Battles, and Campaigns."

6.1 CHOOSING ADDITIONAL OPTIONS (OPTIONAL)

The default gameplay options are adequate for most players. However, you can change them to give Close Combat - Cross of Iron the look and feel you want. Unlike the settings described earlier, you can change most game play options while you are playing a game.

Game play options include general options, team info bar and soldier outline options, and language options. Performance options help Close Combat - Cross of Iron perform best with your hardware and your level of experience.

TO BEGIN SETTING GAME OPTIONS

On the toolbar, click Options.

The Options dialog box appears. You can also bring up the Options box by clicking Options in the lower-left corner of the Combat screen, or by pressing F8 from any screen.

In a little less than three months (November 19, 1942 to February 2, 1943), the German Army Group South suffers staggering losses. The Russians destroy over 30 divisions; the remaining 16 divisions have 50% to 75% of their strength carved away. Total German losses in the Don, Volga, and Stalingrad regions amount to 1.5 million men, 3,500 tanks and self-propelled guns, 12,000 guns and mortars, and 3,000 planes.

CHOOSING OVERALL GAME PLAY OPTIONS

- Music
- Beginning and end-of-operation videos
- Game sounds, such as gunfire and soldiers' voices

CHOOSING LANGUAGE OPTIONS

You can choose to hear the soldiers' voices in English, German, or Russian using the General tab in the Options dialog box. Hearing the voices in German and Russian lends authenticity to

the game; however, if you don't speak these languages, you won't understand the audio messages sent by your teams. (Combat messages on the screen appear in English no matter what language you choose for the audio messages.)

CHOOSING GAME SPEED OPTIONS

You use the General tab in the Options dialog box to set game speed options. Game speed affects how quickly the game progresses in real time. If you set it to a slower speed, your men will move slower, giving you more time to think about your tactics. If you set it to a faster speed, action on the screen will be faster. To improve game performance on slower computers, choose the Slow option.

CHOOSING SCREEN RESOLUTION OPTIONS

You use the General tab in the Options dialog box to set screen resolution options. Close Combat – Cross of Iron must be played at a screen resolution of 800 x 600 or higher.

The game automatically detects which resolutions are available from your video hardware and drivers. If you experience slow play, bring their resolution down.

If you change the screen resolution, you must restart the game for the change to take effect.



A Russian crew hauls their AT gun through the snow. Red Army soldiers were used to such hardships, although the Russians became more and more mechanized as the war continued.

CHOOSING SCROLL SPEED OPTIONS

You use the General tab in the Options dialog box to set the game's scroll speed. The higher the scroll speed, the faster you can move around the map (without using the inset map).

CHOOSING SPECIFIC GAME PLAY OPTIONS

You can choose from the following specific game play options by selecting the checkboxes on the Game Play tab in the Options dialog box:

- Whether trees appear on the combat screen. (If you have a slower computer, remove trees for better performance.)
- Whether soldiers killed in action appear on the combat screen. (If you have a slower computer, remove soldiers killed in action for better performance.)
- Whether to display team data; team data shows the status of every team in your fighting force.
- Whether to display the soldier monitor; the soldier monitor shows the status of a team's individual soldiers.
- Whether to display the inset map. The inset map is a small map displayed in the combat screen to facilitate movement around the battlefield.

You can move the soldier monitor and inset map by right-clicking and then dragging to the screen location you want.

CHOOSING TEAM INFORMATION BAR OPTIONS

Team information bars appear (by default) just above each team in the normal view; you won't see them if you zoom in or out. These bars provide quick and easy-to-understand information about your units. You choose the type of information you want shown. For example, if you select Show Experience, the experience level of your teams appears in the team information bars.

You set these options using the list boxes on the Options dialog box's Game Play tab. If you don't want team information bars displayed at all, select Do Not Show.

CHOOSING SOLDIER OUTLINE OPTIONS

You can use soldier outlines to provide quick and easy-to-understand information about the individual soldiers in your fighting force. For example, you can select Show Ammo to have the outlines show supply of ammunition. Soldier outlines appear only in the normal and zoomed-in views.

You specify soldier outline options using the Game Play tab in the Option dialog box, as explained in the previous section.

The horrific losses in the first year of the war forced the Soviet Union to mobilize the entire population. As a result, women served in virtually every capacity in the Russian military. Women filled then-traditional roles as secretaries and nurses; however, Russian combat nurses often served in a front-line role similar to the American medic. Entire units of transport and combat pilots were composed of women. In fact, several units of women pilots flew biplanes in precision bombing missions at night. In most cases, the only concession to having women in regular Russian units was the addition of a gynecologist to the medical staff.

7.0 FIGHTING BATTLES, OPERATIONS, AND CAMPAIGNS

After you have chosen the scenario you want to play, reviewed your troops, and set any options you want, you are ready to march into battle. This section provides information on the mechanics of game play: surveying the battlefield, deploying your units and issuing orders to them, and using your weapons.

However, remember that playing Close Combat – Cross of Iron involves more than just mechanics. To best use the material in this section, study the corresponding sections in section 8.0, "Tactics and Strategy," and section 9.0, "Unit Tactics."

7.1 SURVEYING THE BATTLEFIELD

When you click Next from the Requisition screen, the combat screen appears. You are now ready to examine the map and deploy your troops.

You can zoom in or out of the map, as well as scroll to different areas of the map. You might want to zoom out prior to deploying troops to see a complete picture of the map and determine potential areas of strength and weakness.

TO ZOOM IN OR OUT

On the toolbar, click the zoom-in button (magnifying glass with a plus sign) or the zoom-out button (magnifying glass with a minus sign).

TO SCROLL THROUGH THE MAP

Move the mouse to the right, left, top, or bottom edge of the screen. You can also use the arrow keys to scroll.

TO VIEW AND MOVE THE INSET MAP

By default, a thumbnail of the map appears in the lower-left portion of the screen. To toggle the inset map on and off, click the Map button. To move the inset map to another location on the combat screen, right-click and drag it.

"...a race with death, which had no trouble catching up with us and was wrenching its victims out of our ranks in great batches, the army was increasingly pressed into a narrow corner of hell." - Joachim Wieder, author of Stalingrad

TO BRING A NEW PART OF THE MAP INTO THE COMBAT SCREEN

On the inset map, click the location you want to view. The combat screen repositions to show that area.

7.2 DEPLOYMENT ZONES

Note that different parts of the map are shaded. The un-shaded area is the portion of the map that you'll control at the beginning of the battle. You can deploy anywhere in the un-shaded portion. The dark gray areas are enemy-controlled and the light gray areas are neutral territory. After you click the Begin button, the shading disappears.

7.3 BUILDINGS AND TERRAIN

Some maps include buildings as well as natural terrain features such as hills, ditches, and foliage. Multistory buildings are indicated by numerals (2, 3, or 4) representing the number of floors in the building. Building roofs disappear as friendly troops enter and control the structures.

When teams (other than AT guns) enter a multistory building, they automatically move to the highest floor.

TO VIEW DETAILS OF A TERRAIN ELEMENT

Right-click and hold on the element. Information appears in the lower-left portion of the screen.

7.4 VICTORY LOCATIONS

Victory locations are buildings or terrain elements of strategic and tactical importance. If you are zoomed into the map, victory locations are designated by the flag of the side that controls them; if you are zoomed out or are viewing the inset map, crosses identify German victory locations and stars identify the Russian ones. (If both sides are currently engaged in battle for a particular victory location, half of each flag is shown.) Your objective is to capture the victory locations

belonging to the other side and replace their flag with yours, while protecting your own victory locations.

By September 1942, Russian losses are staggering. Military losses in killed and captured are at least 6 million, and perhaps as high as 10 million. Civilian losses are nearly as high; over 1 million civilians in Leningrad starve to death during the winter of 1941-1942. The territory lost to the Germans was the home to over 80 million people; millions die, tens of millions are displaced by one side or the other. The territory lost produced over 30 percent of Russian sugar, 70 percent of its pig iron, nearly 60 percent of its steel and mined coal, and roughly 40 percent of its electrical power, grain, and cattle.

Find the victory locations on the map: Note the position of the enemy's victory locations in relation to your deployment zone. If the enemy's victory locations are relatively far away and you're planning to attack rather than defend, you'll want teams with mobility and long- to medium-range firepower. For a defensive strategy, concentrate on protecting your own victory locations.

Check the terrain around the victory locations. If buildings surround the victory locations, bring in your teams with short-range firepower and high rates of fire. If a victory location is surrounded by open terrain, you'll need long- to medium-range firepower, as well as good support positions.

For more information on taking and defending victory locations, see section 8.0, "Strategy and Tactics."

7.5 MINEFIELDS

Red spheres on the map (when it is fully zoomed out) depict minefields; when you clear a section of a minefield, those spheres become green. For information about mines, see section 8.12, "Clearing Mines and Passing through Minefields," in the next section.

7.6 DEPLOYING UNITS

The computer initially deploys your troops for you. Although the default deployment may be satisfactory, you'll probably want to change it to fit your own battle plan. When deploying your units, consider your basic strategy (attacking or defending), the position of the victory locations, the type of teams you selected, and the terrain. For example, the deployment for the relatively treeless Kursk battlefield should be different than that for an urban battle such as Red Square. For information on developing your strategy, see section 8.0, "Strategy and Tactics."



Red Army infantrymen fight amidst the rubble of a Russian city. The soldier in the foreground is using OP 1923 machine gun, a French design from World War I.

You can move any or all of your units during deployment by clicking and dragging. You can also move groups by selecting two or more teams (group select), and then clicking and dragging. Teams retain

the same positions relative to each other at their new locations, and teams that will be off the map at their new location do not move. For more information, see "To issue the same order to a group of teams (group select)" later in this section.

TO CHECK FIELDS OF FIRE

All weapons except mortars and rockets require a clear line of sight for an effective field of fire. To check a team's field of fire during deployment, click the unit while pressing the ALT key and swing the target dot across the area of the map you want to cover. Note where the line changes color; where it turns red, something is obstructing your shot. For more information on line of sight and using your weapons, see "Using Your Weapons Effectively" later in this section.

TO MOVE YOUR UNITS TO A STARTING POSITION

- Click the unit you want to move. If you want to move units as a group (group select), click and hold a spot near one of the groups, and then drag a rectangle around the units you want to group.
- Drag the unit or units to the location you want.
- You can position your troops only on the unshaded areas of the map. If you attempt to drop units on a shaded portion, they snap back to their previous position.

TO ISSUE AN INITIAL ORDER

Follow the procedure described in "Issuing Orders," later in this section.

You'll issue most of your orders during battle, but you can issue one order to each team during deployment. The units will begin carrying out their initial order immediately after the battle starts.

With the exception of the Move order with multiple waypoints (for more information, see "Establishing Waypoints"), you can issue only one order per team prior to starting the battle. Issuing a second order or redeploying the unit cancels the first order.

7.7 STARTING THE BATTLE

To start the battle, click Begin.

Note that enemy units might not be visible at first. Like conditions on a real battlefield; your soldiers cannot see enemy teams hidden from view. Your opponent becomes visible only when one of your teams sees them; however, smoke and muzzle flashes from enemy fire may be visible before the enemy team members are visible.

When playing your first few games, try selecting the Always see the enemy option as described in the previous section. You'll be able to see all enemy troops on the map after your opponent has finished deployment.

7.8 ISSUING ORDERS

You use a menu to issue any of three types of orders: those that initiate movement (Sneak, Move, and Move Fast), those that require a target (Fire and Smoke), and those that have your units dig in and fight or prepare an ambush (Defend and Ambush).

Any order you issue remains in effect until your unit carries it out completely. Note, however, that the team might reject the order if, for example, their morale is low or they are being fired upon.

If you issue a new order before the first one is completed, the first order is canceled and the new one is carried out.

Note that you issue orders to an entire team, not to individual soldiers. Also, you cannot issue orders to a separated soldier.

TO ISSUE AN ORDER

- Right-click any soldier in the team you want to issue an order to. The orders menu appears.
- On the menu, click the order you want.
- If the order requires you to designate a position or target (Sneak, Move, Move Fast, Fire, or Smoke), click the location on the combat screen where you want the order to take place or end. An order dot appears, as explained in the "Interpreting Order Dots" section later in this section.
- If you have issued a defensive order (Defend or Ambush), you can specify a defend arc, as described in the "Digging In" section later in this section.

TO CHANGE AN ORDER YOU'VE ALREADY ISSUED

Issue a new order, using the procedure for issuing orders described previously. The original order is countermanded.

TO CANCEL AN ORDER WHILE YOU ARE ISSUING IT

Right-click before placing the order dot.

TO COUNTERMAND AN ORDER THAT YOU ISSUED PREVIOUSLY

Issue either the **Ambush** or the **Defend** order.

TO CHANGE THE TARGET OR DESTINATION OF AN ORDER

Drag the order dot to a new location.

TO ISSUE THE SAME ORDER TO A GROUP OF TEAMS (GROUP SELECT)

You can drag a rectangle around multiple teams (group select) and issue the same command to all of them. If you give your teams Move, Move Fast, or Sneak orders, the order dots appear in the same relative positions as the teams. If you issue a Defend or Ambush order, the teams hold their relative positions (as long as the cover and protection are sufficient). If you issue a Fire or Smoke order, the teams center on the selected target (if they can).

7.9 MOVING YOUR UNITS (SNEAK. MOVE. MOVE FAST)

The Sneak, Move, and Move Fast orders designate the speed of movement as well as how alert your troops are to danger around them as they move.

Sneak is your troops' slowest and safest rate of movement. (However, avoid sneaking to an enemy-occupied location; the risk of ambush is too great.) Sneaking soldiers crawl to their destination,

stick to the best cover, watch carefully for signs of the enemy, and try to avoid detection. When the unit reaches its destination, the Ambush order is in effect by default.

Move is the normal movement rate. When issued a Move order, the unit attempts to reach the destination while watching for, and defending against, possible attack. When the unit reaches its destination, the Defend order is in effect by default.

If you give a Move order to move a unit to an enemy-occupied location, they will try to get close and shoot it out with the enemy.

Move Fast is the maximum movement rate. Soldiers moving fast are less concerned with attack than they are with getting to their destination. This order is most effective when a unit has cover fire from one or more units. Soldiers given a Move Fast order run to their destination or sprint if they're under fire.

If you give a Move Fast order to move a unit to an enemy-occupied location, they will assault and try to engage the enemy in hand-to-hand combat. However, remember that moving fast will tire your soldiers much more rapidly than moving or sneaking.

7.10 ESTABLISHING WAYPOINTS

When you issue a Move, Move Fast, or Sneak command, you can specify the route you want a team to take by establishing waypoints. You can use waypoints for individual teams, or use group select and establish waypoints for a group of teams.

An important function of waypoints is to control a team's final facing. The direction you move a team with the final path segment determines the direction of its defend or ambush arc. You want to make sure the final facing places the arc where you need it.

- Select a team and issue a Move, Move Fast, or Sneak command.
- Drag the pointer to the position where you want the first waypoint.
- Hold down the SHIFT key, click the mouse button, and continue to hold down SHIFT. The first waypoint appears.
- Repeat steps 2 and 3 until you place the final order dot, and then release SHIFT. The final order dot appears.

7.11 TARGETING (FIRE, SMOKE)

Fire and Smoke are the targeting orders. If you attempt to lay a smoke screen or fire on a target that you can't reach, the order is ignored. Infantry team members cannot throw smoke grenades farther than 30 meters, or 15 meters if prone.

Because the targeting orders are important elements of the game, make sure you fully understand how and when to use your weapons. For more information, see "Using Your Weapons Effectively" later in this section.

7.12 DIGGING IN (DEFEND, AMBUSH)

Defend and Ambush are your "dig-in" orders.

Defend tells your men to take cover and stand their ground. They will return fire as necessary, although they may decide to take the offensive on their own.



Red Army soldiers haul a heavy Maxim machine gun into action on the front lines west of Stalingrad. Russian machine guns were often mounted on small carts to facilitate movement.

When you issue a Defend command, a blue arc appears in front of the team to indicate the size and direction of the territory the team is watching for approaching enemies. Defend is the default order for armor at the beginning of a battle.

TO ADJUST THE ARC

- Click and hold the arc.
- Drag the arc to the compass heading you want the team to defend.
- Click to establish the arc's position.

Ambush tells members of a unit to keep their heads down, and then launch an ambush when the enemy comes within 30 meters or closer. When you issue an Ambush command, a green arc appears, similar to the Defend command's blue arc. This is particularly valuable when your unit is out of ammunition or too injured to be of much use to you in the current battle. If they still have ammunition, your men will fire only if enemy soldiers pass very close to their hiding place. Ambush is the default order for infantry and support teams at the beginning of the battle, although no green ambush arc appears unless you specifically give the Ambush order.

7.13 INTERPRETING ORDER DOTS

After you issue an order, an order dot appears on the map to remind you which order you issued. The following table shows orders and the corresponding colors of the order dot.

Order	Color
Move	Blue
Move Fast	Purple
Sneak	Yellow
Fire	Orange (for suppression fire)
Red	For direct fire
Smoke	Gray
Ambush	Green arc
Defend	Blue arc

(For information on direct and suppression fire, see "Using Your Weapons Effectively," later in this section.)

With burning countryside behind them and Moscow ahead, this German antitank team rolls forward.

7.14 USING YOUR WEAPONS EFFECTIVELY

Because your supply of ammunition is finite, choose your targets carefully before you open fire.

Close Combat – Cross of Iron has two types of fire: direct and indirect. Direct fire requires a clear line of sight; indirect fire does not (although a clear line of sight can improve accuracy). The only indirect fire weapons at your disposal are mortars and rockets. Every other weapon—rifles, machine guns, tank mounted guns, and artillery—requires a clear line of sight.

Remember that all weapons have strengths and weaknesses. For example, rifle and machine gun fire probably will not destroy a tank (although it may reduce the effectiveness of an inexperienced tank team), but can be much more effective in close-quarters fighting than a tank. Tanks offer maximum firepower, mobility, and good protection, but have limited visibility; guns offer the firepower of a tank with less protection and mobility.

Some weapons, such as hand grenades, explosives, and Molotov cocktails, aren't subject to your orders. The teams only use them when they are in situations where such weapons will be effective. For example, a team in close proximity to an enemy position will use hand grenades.

For a graphic representation of the concepts described in this section, see the back cover of this manual.

7.15 DETERMINING RANGE

Range is the distance from a weapon to a target. Most weapons diminish in effectiveness as the distance increases. If you try to target an area out of the effective range of your weapon, the order will be ignored.

Weapons have different range capabilities. When you issue a Fire order, a range indicator (in meters) appears at the end of the fire line. The color of the range indicator tells you whether you are in range: green = good, yellow = adequate, red = poor, black = very poor.

7.16 DETERMINING LINE OF SIGHT

Line of sight is a measure of the obstructions between a weapon and a potential target. When you issue a Fire order and point to a target, the color of the line tracing from your weapon describes your line of sight:

- Bright green - The unit can see the target.
- Dark green- The unit cannot clearly see the target or is firing through obstructions.
- Red - The unit cannot fire through the obstruction; the order will be ignored.

Note that the game checks line of sight from each individual soldier to each enemy soldier. Line of sight might vary among soldiers on a team. If, for example, you issue the Fire command to a



team and only one soldier begins shooting, he is probably the only one with a clear line of sight to the enemy.

Line of sight for indirect fire uses different color coding, as explained in the next section.



It seems strange that Stalin continued to believe that Hitler would not attack the Soviet Union even after Barbarossa was launched. Stalin believed that his country would eventually fight a war with Germany. However, the Russian leader believed that war would come in 1944 or 1945, when his country was ready for it. Even though both the United States and Great Britain, supposedly Russian allies, sent warnings of the impending German attack, Stalin refused to listen. He also refused to listen to the warnings sounded by his own intelligence sources. Even commanders on the Polish frontier who asked for permission to put their troops on alert (based on observations of

German formations massing across the border) were told to do nothing. Stalin thought the Germans were trying to provoke the Russians, and that a Russian response would then give Germany justification for launching a blitzkrieg against Russia. The Russian leader realized that his country was not ready for war, and he did everything he could to avoid a war he didn't want, even if that meant ignoring the obvious.

In spite of Stalin's attitude, rumors of war were rampant in Berlin and Moscow. Stalin moved to squelch the rumors; Tass (the official Soviet news agency) issued a communiqué stating that Germany was observing the non-aggression pact just as strictly as the Russians and there were no indications that Germany had any intention of breaking the pact.

7.17 USING INDIRECT FIRE

When you're using mortars and rockets, you will see an orange line instead of a red or green line stretching to your target as you point to it. A brown line indicates that the target is not in the line of sight. This tells you that it is indirect fire—you are lobbing explosives at your target instead of firing at it directly. An orange order dot appears on the combat screen above the target for mortars. With indirect fire, accuracy depends on the experience of your team, as well as whether it can actually see the target from its position. Although you don't need a clear line of sight to hit a target using indirect fire, you have a greater chance of hitting your target if you can see it.

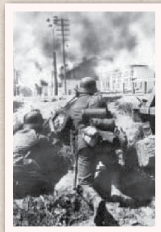
If a green or red line appears, your team is out of mortar rounds or rockets; they're now essentially an infantry team.

7.18 USING SUPPRESSION FIRE

You don't have to hit a target directly for a shot to be effective; suppression fire alone can sap enemy morale. For example, if you are attacking a building occupied by an enemy antitank (AT) unit, you can spray the building with machine gun fire. This suppression fire should make the

enemy keep their heads down, which reduces their effectiveness, and consequently, their ability to aim and fire. While the machine gun fire keeps them suppressed, your infantry or armor units can maneuver toward the building to destroy the enemy unit.

The heavier the fire, the greater the suppression effects on any enemies in the area. Make sure you don't move your own soldiers into an area that is being actively suppressed; they might accidentally get shot.



A German MG42 machine gun sweeps a street with fire to silence Russian foes.

7.19 TAKING PRISONERS AND RALLYING SEPARATED SOLDIERS

When enemy soldiers surrender to you, they become your prisoners. They move toward your side of the map and do not participate in the battle. To get enemy soldiers to surrender, you can try to bracket or surround them with suppression fire and then move into close range for an assault.

Because prisoners are worth three times more than their normal value at the conclusion of the scenario, try to capture your opponent's immobilized tanks and routing infantry.

You can recover your own surrendered soldiers by moving a team to them before they exit the map.

Soldiers can get separated from their units. A soldier may rejoin his group without encouragement if given enough time. To encourage a separated soldier to rally with his original team, you can move the team closer to him. Proximity of a commander can also help keep soldiers from leaving their unit or encourage a soldier to return to their unit.

"All planning must take into account the unalterable fact that the predicted strength of the Army field forces as of 1 November 1942 will be 300,000, or 13 percent, below established strength (approximately 3,200,000) and that it is no longer possible to reduce those numbers."
- Report from Organizational Branch, German High Command, September 8, 1942

7.20 VIEWING BATTLEFIELD STATUS

Close Combat - Cross of Iron provides two-way communication between the battlefield and you, the commander. You issue orders to your men, and they keep you up-to-date on their status using the message monitor in the lower-right portion of the screen. They also provide information on the enemy.

You can view detailed information on your teams. To display or hide this information, click the button to the right of the message monitor, at the extreme lower-right corner of the combat screen.

You can also listen for audio messages from your teams (if you have enabled sound for the game); each message displayed in the lower-right portion of the screen has a corresponding audio message.

7.21 ENDING A BATTLE

A battle can end several ways, depending on which option you selected in section 3.0.

Battles can also end if one side or the other offers a truce (which is then accepted) or flees from the battlefield.

If you call a truce and your opponent does not agree to it, you can either continue the fight, retreat, or flee. When you retreat, you do not surrender your teams; you just issue orders for them to move off the map. When you flee, the battle ends immediately. The game calculates the teams kept or lost, and the enemy takes control of the entire map.

"Our route was strewn with corpses that the snow soon covered as if in compassion..." - Joachim Wieder, author of Stalingrad

TO SIGNAL THAT YOU ARE WILLING TO CALL A TRUCE

On the toolbar, click the Truce button.

The battle ends when both sides have clicked Truce. If the truce is accepted while one side holds all victory locations on the map, then that side wins the map.

TO END THE BATTLE AND SURRENDER

On the toolbar, click the Flee button. You can also flee by issuing the Move order to all your teams and moving them off the right or left edge of the map.

TO QUIT THE GAME AFTER YOU CEASE-FIRE, RETREAT, OR FLEE

- On the Debriefing screen, click Main.
- On the Main screen, click Quit.
- To quit from any screen press ALT+F4.

TO STOP A BATTLE BUT STAY IN THE GAME

Press ESC. The battle stops and is not saved. This is useful if, for example, your battle is going poorly and you want to start over.

7.22 CHECKING THE STATUS OF YOUR SOLDIERS

You can check the status of the soldiers in your active roster at any time before or after combat. To bring up the Soldier screen, click the **Soldiers** button. This screen gives you detailed information on each soldier's health, history, kills, and medals.

7.23 WINNING AND LOSING: THE DEBRIEFING SCREEN

After a battle ends, the Debriefing screen shows you the results of your battle or the current status of your operation or campaign.

The upper-right portion of the screen tells you whether you scored a total, decisive, major, or minor victory, or the equivalent level of defeat.

The upper-left portion of the screen uses single or double arrows—and the point equivalent

of those arrows—to show whether you performed better or worse than expected during the latest scenario:

- Force strength - The measure of how well you kept your troops alive. Specifically, force strength is your surviving teams' requisition value plus any remaining requisition points, minus your starting teams' requisition value. Force Strength is the same for single battles and operations. For campaigns, you are given points from a cumulative score of the operations you fought.
- Casualties - The damage you inflicted on your opponent's troops. Prisoners are worth three times their normal value.
- Land gained - Victory locations taken, compared to the number you were expected to take.

To see the number of victory locations you were expected to take for a particular battle or operation, either select the scenario on the Command screen or view the briefing for that scenario. The map displays a statement telling you how many victory locations you need to take or hold to achieve an "Expected" score on the Debriefing screen. Deviations from that score determine the number and direction of the arrows appearing at the top of the screen. For example, if you are expected to take three victory locations and you take only two, you're given one arrow pointing down; if you take five, you're given two arrows pointing up.

"The Battle of Stalingrad was extremely fierce, and I personally can compare it only with the Battle for Moscow." - Marshal Georgi Zhukov

7.24 BATTLE SCORES

Battle scores are the sum of your base score and the three factors described previously—force strength, casualties, and land gained. Base score is based on rank. Because you are expected to fight more successfully as you move up in rank, your base score is highest when you are at the lowest rank and decreases as you rise in rank.

7.25 OPERATIONAL DEBRIEFING

The Operational Debriefing screen is similar to the Battle Briefing screen except that your battle score is determined within the current context of the operation. You can, for example, win a battle but still score a defeat if you haven't achieved your objectives for that part of the operation.

The Operational Debriefing screen shows your status at the current point of the operation. The status might change when you continue the operation.

7.26 CAMPAIGN DEBRIEFING

The Campaign Debriefing screen gives you information on promotion points, which you accumulate to elevate your rank.

You gain promotion points at the end of each operation. The Campaign Debriefing screen shows your running total of promotion points along with the number of points you need before you are promoted to the next rank.

You win a campaign by having more total promotion points than your opponent.



Red Army soldiers rush forward in a large-scale infantry attack in the Ukraine. Note the machine gun on its wheeled cart in the right foreground.

8.0 STRATEGY AND TACTICS

Strategy and tactics are the core of Close Combat III: The Russian Front. Strategy is the most basic part of your plan: you'll need to make overall decisions such as whether you will attack or defend or be aggressive or cautious. To a great extent, your strategy is driven by the end battle option you chose. For example, winning a 10-minute game requires a fundamentally different strategy than capturing all victory locations on the map.

Tactics defines how you accomplish your plan: if your strategy is to attack, how broad will your front be, and will you make a frontal or flank attack? What weapons will you use for suppression, and what routes will your troops take? If your strategy is to defend, will your defensive position be broad or deep, static or mobile? Good tactics help you drive your opponent from the map while preserving your own teams.

8.1 DETERMINING YOUR BASIC STRATEGY

Does the map have lots of open space or is it crowded with buildings? Open spaces mean long and wide fields of fire; you might want to make the enemy cross them instead of risking your own troops.

Is the ground dry, snowy, or muddy? Although armor moves well on snow and dry ground, it can bog down in mud.

Where are the elevations (hills and tall buildings)? If you can use elevated positions with long and wide fields of fire, you can suppress the enemy during an attack.

If you attack, what will your route be and where might the enemy be positioned? Look for routes that offer cover and protection (see "Using Cover and Protection" later in this section for a thorough description of these concepts). Sneak your troops forward to maintain surprise and prevent ambush.

If you defend, what positions should you hold to protect your victory locations? Find positions that offer good fields of fire. Place machine guns where they can sweep the approaches to your lines. Look for places that allow you to ambush and then withdraw.

How many troops will you have compared to the enemy? The higher you set the difficulty level, the more troops your opponent will have. Unless you have teams to spare, don't try to mount a full-scale assault or defend a large area.

8.2 MANAGING YOUR TEAMS

When selecting your fighting force, try for the optimal balance of mobility and firepower given your strategy and the terrain in which your troops will be fighting. For example, if your plan is to attack across open terrain, you'll want teams that are mobile (infantry or armor) and teams

that can provide suppression (a combination of machine guns, mortars, antitank (AT) guns, and armor). Too many infantry teams and too few tanks might leave your attack positions easily suppressed by a few tank rounds; too many tanks and too few infantrymen could force your tanks to take on antitank guns without infantry support.

The balance of firepower and mobility is equally important if you plan a defensive strategy. To make sure you can shift to danger points or launch counterattacks, combine tough but less mobile weapons (machine guns, mortars, flamethrowers, antitank guns, and antitank teams) with some easily transportable units (infantry, vehicles, and armor).

8.3 SELECTING TEAMS FOR YOUR FORCE

When you choose teams to include in your fighting force, consider not only what you want to accomplish; but also the number of teams you are allowed and what is currently available for selection. For example, if you plan on attacking aggressively with a limited number of requisition points, you might want to select the highest quality teams available to create an elite fighting force. Or, you can do the opposite: choose lower quality troops to maximize the number of men in your force (you might want more than one commander in this scenario to keep your conscripts under control).

When you're on the battlefield, make sure you don't ask teams to do something they are not suited for. For example, don't order a mortar team with a full complement of ammunition to move fast in a frontal assault against a machine gun. Don't send a rifle team to stop a tank unless it has an antitank weapon (Molotov cocktail or Panzerfaust). Likewise, don't order an unsupported flamethrower team to move across open terrain. Not only will these orders place your teams at high risk, they'll also drain your teams' morale.

The fighting for Stalingrad takes a horrific toll on both sides. Between August and early October, the German Sixth Army loses 7,700 dead, 30,000 wounded, and 1,100 missing. One Sixth Army division had an average battalion strength of 3 officers, 11 non-commissioned officers, and 62 soldiers. Russian losses are even higher.

The ferocity of the fighting at Stalingrad can be measured in the amount of ammunition consumed. Between January 10 and February 2, 1943, the Russian Don Front was the primary force charged with eliminating the encircled Germans. This front (or army group) fired over 900,000 artillery shells, 990,000 mortar rounds, and 24,000,000 rifle and machine gun rounds in 23 days.

8.4 ALLOCATING COMMANDERS

The higher ranked the commander, the more likely he can keep his men from panicking and rally other soldiers near him. Also, the higher the commander's rank, the larger the physical range in which soldiers are affected by that commander.

When you select your fighting force, Close Combat - Cross of Iron automatically puts a primary commander on your side. This commander represents you on the battlefield. You can choose to either lead the battle alone or add secondary commanders to expand your control. With more than one commander, you can try the following strategies:

- Execute a multi-pronged assault by building several small forces around commanders.
- Place commanders at critical points in a defensive formation.
- Keep a command team as a reserve to move to danger points and rally broken soldiers, or lead a counterattack.
- Elevate the performance of inexperienced units by teaming them with seasoned commanders.

8.5 PROMOTING MORALE AND COHESION

Good morale and cohesion are essential for good performance. Troops with bad morale might ignore their commander, panic, and eventually run. The primary way to keep morale high is to give units orders that are appropriate for them, as explained in "Selecting Teams for Your Force" earlier in this section.

Try not to isolate teams (where they can be outnumbered), and keep them away from areas strewn with dead and wounded. Don't let your teams get ambushed (caught out in the open while being shot at close range), shot at by a tank when they lack antitank capability, or fired at from multiple directions (surrounded). Low-quality teams or teams with no leaders perform very poorly when left to themselves. Try to keep these teams grouped with others or near a commander.

If a team's morale is sagging, you can improve it considerably by letting them ambush the enemy or destroy an enemy tank.

"We doubt the veracity of your information." - The response of Russian military intelligence after receiving repeated warnings from spy Richard Sorge about the impending launch of Barbarossa

8.6 USING SUPPRESSION AND MOVEMENT

You don't need to hit enemy soldiers to drive them from a position. Suppression—simply firing at the enemy to keep them from firing back—can reduce morale and effectiveness enough to make them keep their heads down while your teams maneuver. Suppression fire alone sometimes makes teams panic and run. It is effective even when your opponent has good cover; again, you might not score any kills, but you can make them keep their heads down and prevent them from firing back.

Although you can use any weapon for suppression, machine guns and mortars are especially suited to this task. But don't waste all of a team's ammunition on suppression; they might need it later to defend themselves.

8.7 USING TERRAIN TO YOUR BENEFIT

Always adapt your strategy and tactics to the conditions in which you're fighting. Open terrain means longer fields of fire and fewer places to hide, while closed terrain—cities, villages, and forests—reduces fields of fire and abounds with ambush possibilities. Summer and winter maps offer excellent mobility, but life-sapping cold can occur in some winter battles. Autumn and spring mean mud, and mobility is reduced to a slogging pace.

Regardless of the terrain or weather, look to the high ground—crest terrain and tall buildings.

Elevation always improves your field of fire. A couple of well-placed machine guns—positioned on a hill or in a multistory building—can dominate a map. Mortar accuracy improves because the team can see their target. You can widen an antitank gun's field of fire, increasing its chances of making multiple kills. You can even use elevation to destroy tanks; ambushes by antitank teams firing down on tanks from multistory buildings can be deadly.

FIGHTING IN THE STREETS

When you fight in and around streets and buildings, sight lines (and therefore, fields of fire) are constricted. Long-range weapons lose effectiveness, but weapons with high rates of fire become more valuable.

If you're attacking in the streets, you'll probably want to concentrate your forces, which enables units to support each other. Leapfrogging is very effective: use three teams to move from house to house; one team moves while the other two provide support and suppression. You can move units quickly until you engage the enemy because buildings mask your movements. After you encounter the enemy, go back to sneaking your units.

Because city streets constrict movement, tanks are not ideal in city fighting. Even though tank fire can penetrate virtually any building, tanks are also susceptible to ambush in confined areas. Lighter, more maneuverable vehicles (halftracks and armored cars) armed with machine guns are particularly valuable on city streets. Mortars are always effective against infantry. Heavy mortars (120mm) can blast through stone buildings, but 50mm mortars can barely penetrate wood.



Field Marshal Fedor von Bock (1880–1945)

Son of a Prussian general, Bock epitomizes the German officer class that detests National Socialism but serves Hitler faithfully. An experienced infantry commander in World War I, he rises rapidly in rank between the wars, and becomes one of three army group commanders during the early part of World War II. Bock's Army Group North sweeps aside its opposition in Poland. In the west his Army Group B overruns the Low Countries and plays a major role in the battle of France.

Bock is given command of Army Group Center in the attack on Russia. He advances from Poland to the outskirts of Moscow in the second half of 1941, but overextended supply lines, exhausted troops, the killing cold, and stiffening Russian resistance halt his advance. During the Russian counteroffensive in December 1941, Bock is relieved of command. In early 1942, he replaces Rundstedt as commander of Army Group South, and presides over the early successes in the drive toward the Caucasus Mountains. However, he is relieved of command - permanently - after another dispute with Hitler.

If you're outnumbered, city and village streets offer many excellent opportunities for ambushes. You can hit the enemy, and then pull back to another ambush position to maximize the effectiveness of your units. If you are defending in confined terrain, make sure you site your

heavy weapons where they have an effective field of fire. For example, place a machine gun and antitank gun where they can sweep the main road on the map. This forces the attackers onto secondary routes, where you can have ambushes waiting.

Note that most of the tactics that apply to city fighting are also workable when fighting in forests. Dense trees reduce sight lines (and therefore fields of fire) and constrict mobility. The major difference between cities and forests is that some tanks can knock down trees, but no tanks can flatten buildings, as the risk of throwing a track, damaging the gun barrel, or falling into a cellar is too great.

FIGHTING IN THE COUNTRY

When you fight in open terrain, sight lines are both long and wide. Short-range weapons such as submachine guns and flamethrowers lose effectiveness, but weapons with high rates of fire are as valuable as they are in city fighting.

Tanks and other armored vehicles have freedom of movement in open terrain, but remember that the enemy can see you coming. Finding and attacking the enemy's antitank units with your infantry is not as important as in city conditions; improved sight lines make the tanks somewhat more secure. However, you'll still want to try to draw enemy fire with infantry or scout vehicles before committing your tanks.

Because open terrain makes you highly visible to the enemy, move slowly and be patient. Use any available cover or protection to mask your movements, but expect the enemy to have these routes covered. Conversely, if you are defending, make sure you can put any approach routes under fire.

Despite your precautions, your units might still get trapped in the open. Ordering these teams to move forward or back can be counterproductive; instead, try ordering them to dig in (Ambush command), and then bring machine gun, mortar, antitank gun, or tank fire to bear on the teams that have your units pinned down.

Regardless of whether you are attacking or defending, using the edges of the map can be effective in open terrain. If you can advance forces along the edges, you might be able to catch the enemy in crossfire. Crossfire can rapidly crush the enemy, especially if accompanied by a flank or frontal assault.

When Hitler's troops entered Russia at 3 a.m. on June 22, 1941, his invasion forces were the largest ever gathered in history. Over 3 million soldiers, organized into 146 army divisions, combined with Romanian forces to the south and Finnish forces to the north, crossed the border with lightning speed, supported by 2,000 aircraft and 3,350 tanks. One month after Hitler ordered the invasion of Russia, he gave his army and officers the following orders: "Occupy it, administer it, exploit it."

8.8 ON THE ATTACK

Attacking can serve several purposes. You might want to capture an enemy position or kill enemy soldiers. You might attack to hold enemy forces in place while other units maneuver onto the enemy's flank. Or you might just want to divide the enemy's attention and make their job of defending more difficult.

The primary rule of attacking is to never send an unsupported unit directly at their objective—it's asking them to commit suicide. You give up the element of surprise and leave the enemy unsuppressed, which minimizes your chances of success. The only time you should throw an unsupported unit into an attack is when the survival of your whole force depends on it. For example, you might have to sacrifice a unit to enable the remainder of your force to withdraw or reach defensible positions.

PLANNING YOUR ATTACK

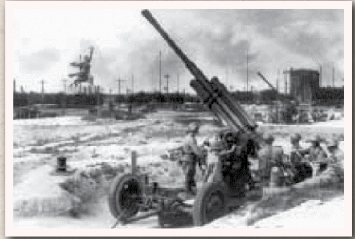
Plan your attack with care. Look for the positions you think the enemy will hold and the approaches you want to use: see if you can cover these positions with rifle and machine gun fire to provide suppression. Position mortars within range to add to the suppression and provide smoke (if you're planning a frontal assault). You might even want to position an antitank gun to provide suppression and counter any enemy tank units.

If you plan on using armor during your attack, you'll want to examine the routes they'll take. Plan to take them around minefields or have engineers precede them through mined areas. Make sure tanks can stay out of sight until you need them, but keep them close enough to the front line so their effect can be felt immediately.

You should take your plan of attack into account when you are deploying your troops. You'll want to deploy troops as close to their jump-off point as possible, where they can provide suppression fire, or where they can move up easily when the situation requires.

There are two basic types of attack: frontal assault and flank attack.

On the site of the Achievement Exhibition in Moscow, Russian antiaircraft guns wait for the Luftwaffe. The Germans and Russians did not resort to strategic bombing on the scale practiced by the United States and Great Britain.



LAUNCHING FRONTAL ASSAULTS

Because they'll cost you many of your own troops, you'll generally want to avoid frontal assaults. They also require plenty of resources; you'll need firepower to suppress the enemy while your assault teams move forward. However, frontal assaults do have one simple advantage: they decide the issue quickly and decisively.

Deployment is critical. You'll need at least one machine gun with a clear field of fire to the target; and a mortar team, preferably one that can see the target. Next, you'll need a commander who can either accompany the assault team or whose command radius encompasses the terrain up to the objective. Finally, make sure your assault team has the shortest or easiest possible route to traverse. This team should consist (ideally) of infantry armed with submachine guns, automatic rifles, and grenades; support units should be armed with weapons that can reach the target from where the team is deployed.

The following steps outline a good plan for conducting a frontal assault:

- Initiate the attack with suppression fire; issue **Fire** orders to your machine gun and mortar

teams. Let the teams fire for 30 to 60 seconds.

- Switch the mortar to smoke. If you have two mortar teams, one can keep up suppression while the other fires smoke.
- When the smoke begins to take effect, send your assaulting force forward with a Move Fast order. Attacking with more than one unit, especially if they attack from different compass points, can improve your chances of victory.
- As the assault unit moves forward, issue Fire orders to the support units, give Defend or Ambush orders to the mortar team (protecting the assault team from friendly fire), and keep the machine gun (or guns) firing until the assault team gets into the line of fire.
- After the assault team captures the location, give them the Defend or Ambush order and let them rest.

LAUNCHING FLANK ATTACKS

Flanking the enemy—attacking from the side or the rear—is often preferable to a frontal assault. While frontal assaults require superior numbers and overwhelming firepower, flank attacks need mobility and guile. Holding attacks (or demonstrations) are usually associated with flank attacks; the holding attack grabs the enemy's attention while the assault team maneuvers onto the enemy's flank and launches the attack.

Flank attacks have several advantages:

- They can help maintain surprise. This reduces the requirement for firepower, although more firepower never hurts.
- You can be more patient when executing a flank attack, increasing the chances that the enemy might reveal his positions first.
- You can sneak your troops into position, which enables them to avoid ambush, thereby reducing fatigue and increasing cohesion. Slow-moving teams can move heavier weapons without tiring; this is one case when ordering a machine gun into an attack might be worthwhile.
- They are demoralizing to the enemy. If a team receiving suppression fire from the front is suddenly subjected to fire on an exposed flank, they often panic and run.

Before attempting a flank attack, study the battlefield. Plan the route your assault team will take. Pick the location you want them to occupy before they launch their attack. Remember that flanking is less effective when your enemy is well protected on all sides. And, if the enemy outnumbers you, he can flank your flanking teams.



Russian antitank gun team moving a PP27 Model 1927 76mm infantry gun into position. The low-velocity of this gun rendered it ineffective against medium and heavy tanks except at close range. It was obsolete by 1943.

Initiate your flank attack by issuing a Sneak order (preferably with waypoints) to the assault team. Remember, be patient; surprise counts. As the assault team gets close to its jump-off point, start your suppression fire. You can

even make a holding attack, sending a low-grade unit forward to draw enemy fire. Time the suppression so that it is still active when the flank attack begins. Start the flank attack by issuing a Fire or Move Fast order. When the assault team occupies the enemy position, you can move other units forward.

You can also execute a double flank attack (envelopment); the objective of envelopment is to encircle the enemy. This strategy was executed on a grand scale, with devastating results, by the German army during the first six months of fighting on the Russian Front.

8.9 ON THE DEFENSE

When defending, determine whether your primary objective is to protect territory or inflict losses. When you protect territory, your forces must hold positions to the last man. Although this can cause heavy losses to the enemy, you also risk having your own forces wiped out. When you choose to inflict losses, your defense can be more mobile. You can set an ambush, engage the enemy, and then move to another advantageous position.

PLANNING YOUR DEFENSE

Plan your defense in much the same manner as you would plan an attack. Study the victory locations and determine whether they are defensible. (A multistory stone building with a good field of fire is defensible, while a single-story wood building surrounded by trees limiting the field of fire is not as defensible.) Check the fields of fire from positions that cover the approaches to the victory location. Holding positions that cover the victory location might be more defensible than the victory location itself.

"We will not surrender Moscow."
- Soviet leader Josef Stalin, October 19, 1941

Next, find the positions that give you the best fields of fire over the approaches to your positions. You should also see which enemy positions you can take under fire. Remember that the ideal way to stop your attackers is to start shooting at them before they launch their attack.

After you've determined the fields of fire for your key positions, decide if you'll fight a static or mobile defense. In a static defense, your troops hold their positions until they're overwhelmed; place your men in positions that maximize their protection. In a mobile defense, your men hold a position until it is no longer advantageous, and then move to a new position to take up the fight again. If you plan to use a mobile defense, you'll want to position teams so they can cover each other when they withdraw. A mobile defense, by definition, requires mobile teams; heavy infantry is an excellent choice because these units provide good firepower with mobility. Tanks and other vehicles are also excellent choices as long as they have room to maneuver.

If you think your opponent will use armor, site your antitank weapons where they have a good field of fire but are also protected from attack. Consider the terrain (open versus constricted) and weather (muddy versus dry or frozen) when placing your antitank weapons. In open terrain and muddy ground, concentrate your positions to cover the roads because tanks will be less able to travel cross-country.



Colonel General Heinz Guderian (1888-1954)

Guderian is the German officer most responsible for what becomes known as blitzkrieg; a combination of tanks, motorized infantry, and close support from ground attack aircraft.

Guderian, who served as a communications officer in World War I, advances the theory in the early 1930s that tanks are the primary weapon of attack in modern warfare. In 1937 he publishes a book (Achtung Panzer) that describes his theory of armored war. In 1938 he is appointed commander of mobile troops and advances to the rank of lieutenant general.

In the blitzkriegs against Poland and France, Guderian commands the XIX Panzer Corps, demonstrating to the world that his theories about armored warfare can be successfully applied to the battlefield.

Guderian's panzers lead the way when Hitler launches Barbarossa. He is advancing toward Moscow when Hitler diverts his forces into the Ukraine. Here Guderian's panzers help surround a vast Russian force at Kiev. Nonetheless, he is openly critical of Hitler for diverting the panzers from the thrust toward Moscow. Because of this and other disagreements with Hitler and Kluge, Guderian is relieved of command.

Guderian is recalled in 1943 and given the title of Inspector General of armored troops. He makes reforms and substantially reorganizes the panzer forces. After the bomb plot on Hitler's life, Guderian is appointed Chief of the General Staff. Hitler, however, continues to ignore Guderian's advice, especially his proposal that German forces withdraw to form a defensive line around Germany. On March 28, 1945 Hitler dismisses Guderian, thus losing the service of perhaps his best commander and military theorist.

DEPLOYING FOR DEFENSE

Deploying for defense has two key similarities to deploying for an attack. First, you want to deploy your units in their positions (or as close as possible) before the shooting starts. After your units are in place, give them Ambush orders. Second, you want to deploy in positions that offer the best combination of field of fire, cover, and protection.

Look for places that let your men control portions of the map. For example, a three-story house with a line of sight covering a road junction is a better position than the shell crater in the middle of the road junction. If you're deploying for a static defense, find locations where the enemy can come very close before you run the risk of being seen. Remember, the closer the enemy is to your position when you open fire, the less room they have to maneuver. If you open fire too early, you reveal your location before you have accomplished your objective.

Holding your fire also makes the enemy do the work: they must move, which signals their location and fatigues their troops. Give your troops the Ambush command, making it as difficult as possible for the enemy to flush your forces out. Deploy tanks back from the front line (unless they have an excellent hiding place near the front).

Also keep in mind that a good defense might require offensive maneuvers. If the key position on the entire map lies outside your deployment zone, you might need to capture the position before you can put up a good defense. A well-timed and well-placed counterattack can also play an important role in your defense; remember to keep a reserve, if you can, for this purpose.

When defending, pick positions that let you catch attacking units in crossfire. An ambush that utilizes crossfire is particularly devastating.

AMBUSHES AND COUNTERATTACKS

Setting an ambush is the most effective way of engaging the enemy. An ambush requires keeping your troops hidden as long as possible, and then opening fire into the flank or rear of the enemy.

Try an ambush when you have limited forces at your disposal; it maximizes your chances of eliminating an enemy unit, which helps you reduce the enemy's manpower advantage. Look for positions that let you stay hidden until the enemy is at point-blank range (30 to 50 meters). Your position should either offer excellent protection (if you want to continue to hold the position after you open fire) or a good escape route (if you want to withdraw after you've wiped out or chased off the enemy).

If you're caught in an ambush and can't find cover, rush the enemy. Although you have been caught by surprise, your opponent has moved very close to you and is easy to hit.

Counterattacks are much like ambushes: they're attacks that use surprise and the delivery of effective fire from an unexpected direction. Counterattacks are most effective against troops already tired and frazzled from fighting. For example, if you keep three attacking enemy units pinned down for several minutes with machine gun fire, a counterattack might route them.



A Russian antitank gun crew under fire.

8.10 USING COVER AND PROTECTION

Cover provides concealment; it hides you from the enemy. Protection keeps you from getting injured or killed. Some terrain, such as high grass, hides you effectively but offers little protection from enemy fire. In other terrain, such as a stone building, the enemy might be able to see you but probably can't hit you. Still other terrain elements, such as a deep ditch or stone wall, offer both cover and protection.

In general, the more powerful the weapon, the greater the degree of protection you'll need. For example, a wooden building might shield you from submachine gun fire, but will not protect you from a machine gun bullet or an antitank round. However, a stone building can withstand all weapons except the largest guns (75mm or greater), and pillboxes can withstand all but 100m guns or greater.

- Linear cover: walls, trenches, gullies. Provides good protection against enemy fire coming perpendicular to the line of cover, but poor concealment and protection from parallel fire.
- Light cover: high grass, bushes Provides good concealment, but very poor protection from enemy fire.
- Medium cover: trees, crests, embankments Protects from the front, but gives almost no cover from the side or the rear.
- Heavy cover: buildings, foxholes Offers excellent protection and concealment from multiple angles.

Some tips for using cover are:

- Make use of cover whenever you can. Avoid getting pinned in cover that provides poor concealment and protection.
- If you are attacked by an enemy who is using good cover, move your troops to equal or better terrain, or flank the enemy.

8.11 CHECKING FIELDS OF FIRE

Because the majority of weapons in the game are direct fire weapons, establishing good fields of fire is paramount. The field of fire equates to a team's line of sight; if a tree or building blocks a team's line of sight, then the team's field of fire is also blocked.

You can check a team's field of fire by issuing (and then canceling) a Fire order. When the target line is bright green, your field of fire is clear and effective. If the line turns dark green, the target is obscured but not blocked from view; your chances of hitting the target are reduced but a hit is still possible. If the line is red, you have no chance of hitting the target.

Remember also that your weapons govern the depth of your field of fire. Submachine guns, personal antitank weapons (such as Panzerfausts), and flamethrowers have the shortest range, while heavy guns have the longest range.



Marshal Ivan Konev (1897-1973)

Konev becomes a member of the Russian officer corps in 1926 after serving as a military commissar in the Russian Civil War. Konev is said to regard Marshal Georgi Zhukov as his nemesis because he serves most of his career on a parallel, but subordinate, career path.

Konev serves as commander in the Smolensk sector in the summer of 1941. From October 1941 through 1942 he commands the Kalinin Front, which helps stay the German advance on Moscow. In 1943, he is in charge of the Steppe Front during the great tank battle at Kursk. Later in 1943, Konev leads the Steppe (later Second Ukrainian) Front to victories at Kirovograd and Korsun-Sevchevosky. He is then given the First Ukrainian Front, with which Konev recaptures Lvov. Konev is promoted to Marshal in February 1944.

Konev's front, along with Zhukov's, advance across the Oder River and on to Berlin. Konev's forces continue on to the Elbe River, where they link up with American forces at Torgau.

8.12 CLEARING MINES AND PASSING THROUGH MINEFIELDS

Mines can stop or slow your advance; the enemy lays them to steer you into his kill zones. Though deadly, you can use several methods to help you pass through minefields safely:

- Use mine-rolling tanks, and keep them moving forward. Make sure you can suppress any armor or AT guns your minerollers encounter; maneuvering in minefields is treacherous at best. Because the minerollers are on the front of the tank, back up using extreme caution. Try to keep the path through the mines as direct as possible to avoid turns, which can accidentally detonate mines. You'll need to make several passes through the mines to clear a path wide enough for the safe passage of other armor, vehicles, and troops.
- Use engineer teams to clear mines. Move them using the Sneak command. Sneak infantry through minefields. Sneaking troops have a much smaller chance of detonating a mine than troops moving fast.
- Lay mortar fire or use an artillery barrage to detonate mines.
- Send conscripts into the minefields to clear a path for your better troops. (Unfortunately, both sides practiced this method during World War II.)

To check whether mines have been cleared, zoom out. Green spheres indicate a clear path through a minefield.

9.0 UNIT TACTICS

You manage several different types of units in Close Combat – Cross of Iron; each with its own advantages and disadvantages, strengths and weaknesses. This section describes the best ways to use each type of unit.

The Red Army on a march to get behind the Germans. The Germans were surprised time after time by seemingly impossible Russian movements. The Red Army traversed forests and swamps considered impassable by the Germans.



9.1 USING COMMAND TEAMS

Command teams are crucial to your battlefield success. They improve the performance of the units within their command radius by increasing the units' cohesion and mental stability. Command teams consist of a single officer, officer with staff, or officer and vehicle crew.

Unless you plan on playing a static defense with all troops in one command radius, you probably want to put more than one commander in your force. This expands your authority and control; you can build battle groups around your commanders and stage multi-pronged assaults.

Because commanders are your most valuable battlefield assets, you need to protect them, especially when fighting operations and campaigns. However, don't keep them too far away

from the action. If your troops are operating outside any command radius, their unit effectiveness declines.

9.2 USING INFANTRY TEAMS

Infantry is the backbone of any army. They range from poorly equipped and unskilled conscripts to heavily armed and well-trained veterans. Your infantry units can play a number of roles. They can serve as assault teams in flanking or frontal attacks on enemy positions, or they can provide suppression fire while other units advance. They can defend victory locations, serve as shock troops at critical junctures in a battle, or lie in ambush. You can also send infantry forward to rouse your opponent's antitank (AT) weapons and get them to reveal their positions.

Infantry teams are effective in varied terrain; they can fight equally well in open steppes, swampy forests, or city streets. By comparison, tanks and other vehicles are excellent on the steppes, but are of limited value in forests and close-quarters urban fighting.

Infantry units require the fewest requisition points, which fits the infantryman's historic position as the most easily spent currency on the battlefield. However, don't waste infantry in unsupported attacks—those undertaken without suppression fire—and assaults on enemy tanks (unless your infantry is armed with antitank weapons). These tactics will result in unnecessary casualties.

In deploying infantry teams, spread them out to reduce losses in case of mortar, rocket, and artillery fire. Also, panic can spread quickly if teams are too close together when one unit breaks and runs. However, units spread too sparsely cannot support each other. Make sure they are close enough to each other that their fields of fire overlap.

When moving your teams, take them short distances. If you order a team to move fast over a long distance, you increase the team's fatigue, increase the chances of being seen, and invite a flank attack. Break up long moves into segments using waypoints.

Never move infantry teams without support; use two or more infantry teams in conjunction with machine gun, mortar, and other heavy weapons.



Marshal Semyon Timoshenko (1895–1970)

Timoshenko is commander of the forces that take the full brunt of the German invasion in 1941. Although the Russians suffer staggering losses of men, equipment, and territory, Timoshenko delays the Germans long enough for Zhukov to save Moscow.

Timoshenko began his career in the cavalry and became a friend of Stalin's during the civil war. After service in Poland and Finland (bringing the war to a successful conclusion), he was made a marshal in 1940 and was charged with a major reorganization of the Red Army. Placed in command of the Southwestern Front in the fall of 1941, he is unable to stop the Germans from taking the Crimea. After his forces are routed in an offensive at Kharkov in May 1942, Timoshenko is relieved and transferred to the quieter Northwestern Front.

9.3 USING OTHER TEAMS AS INFANTRY

When mortar and other teams run out of ammunition, they function as infantry teams. However, use them carefully (especially if you're playing an operation or campaign); your gun teams are more valuable than your regular infantry units. The best way to use gun teams serving as infantry is as reserves. They can also help anchor your flank because they'll use their small arms if enemy infantry comes within range.

9.4 USING RIFLE TEAMS

Rifle teams include assault teams and reconnaissance. Because they become less fatigued than a unit with heavier weapons such as machine guns, mortars, or flamethrowers, use them to perform the majority of your movement—reconnaissance, flank movements, holding attacks, and frontal assaults.

Rifle team firepower varies according to the team and the situation. Units armed with only bolt action rifles are no match for a team of equal size, experience, and cohesion armed with semiautomatic rifles. Most rifles, manual or semiautomatic, have superior range to submachine guns, giving rifles an advantage in open terrain. Submachine guns have the edge in confined areas because of their smaller size and higher rate of fire.

Although rifles or submachine guns are no danger to tanks, rifle teams might have weapons (Panzerfausts, Molotovs, antitank grenades, or grenade bundles) that can destroy tanks, tank destroyers, or self-propelled guns. Rifle and submachine gun fire can damage lighter vehicles (halftracks and armored cars) at close range and suppress the crew of any open-top vehicle. Rifle teams can also successfully attack antitank gun teams (if they can avoid taking fire from the gun itself), mortar teams, and machine gun teams (if they can attack from the flank and the machine gun is being suppressed or held).

Breaking through the German line, Russian infantry and tank units advance in the Crimea.



9.5 USING ENGINEER TEAMS

Engineer teams are your most proficient and strongly armed infantry units. These teams include members armed with semiautomatic rifles, submachine guns, flamethrowers, antitank weapons, and even light machine guns. In addition to clearing mines, these teams make good assault teams because of their firepower; engineer teams can be devastating when attacking an enemy's flank. An engineer team's array of weapons make these units excellent for attacking enemy strong points or defending your victory locations.

9.6 USING SNIPERS

Snipers are deadly when the enemy has to cross a large open area. A sniper in deep cover can usually fire several shots before the enemy sees him. When he is found, pull him out of the line of fire and hide him in a new place. Snipers avoid shooting if they risk giving their position away, although they will shoot if being assaulted.

Snipers prefer to shoot at leaders. They can also hold up an enemy advance, buying you time to bring up reserves or withdraw other units to a more defensible position. Note, however, that snipers cannot capture or hold victory locations.

When attacked by a sniper, try to locate the source of the fire, use suppression fire to pin him, and then order your troops to charge or surround him.

9.7 USING SUPPORT TEAMS

Support teams include machine gun teams, flamethrowers, mortars, antitank gun teams, antitank teams, and halftracks.

USING MACHINE GUN TEAMS

Machine guns are your primary infantry support weapon. They can wipe out attacking units, stopping an attack almost before it begins. Use machine guns to suppress the enemy when you are attacking. When defending, they should cover the approaches to your victory locations.

Regardless of whether you're attacking or defending, check the sight lines of each machine gun team during deployment to ensure a good field of fire. For example, if you want to use a machine gun to suppress the enemy, you'll need a clear line of sight to the target area. Overlapping fields of fire are especially effective. If you can position machine guns such that they have clear fields of fire across the majority of a map, you have a good chance of dominating that map. You can also position machine guns on high ground or tall buildings to increase the depth and breadth of their field of fire. Make sure you keep your teams clear of a machine gun's line of sight; otherwise, they can be hit by friendly fire.

You'll want to move these heavy guns as little as possible, although sneaking a machine gun onto the flank can crumple an enemy's infantry positions. But watch out; after your machine guns take enemy teams under fire, the enemy will try to suppress them with machine gun and mortar fire. You can either withdraw your machine gun team to a safer location, or preferably, have other teams engage the enemy machine gun and mortar teams.

If your infantry teams come under machine gun fire, lay down a smoke screen to obscure your team's movement. Have the team either advance to engage the machine gun team in hand-to-hand combat, reposition quickly to attack the machine gun team's flank, or move to a protected position and have another unit maneuver to provide support.

Machine guns are ineffective against tanks, but they can be used successfully against halftracks and antitank guns.

USING FLAMETHROWER TEAMS

Flamethrowers are deadly weapons, but flamethrower teams are among your most vulnerable. One rifle bullet can send the whole unit up in flames. These teams consist of one or two soldiers with tanks of pressurized fuel strapped to their backs. Russian engineer teams also use flamethrowers. These weapons are heavy and restrict movement, and their limited range (less than 50 meters) makes them ineffective in open terrain.

In World War II, infantry teams heavily supported most flamethrower teams; you'll find this a successful tactic. Try to pin the enemy down with rifle, machine gun, and mortar fire while your flamethrower team moves into position. Flamethrowers can also be devastating when employed in close-quarters fighting (whether you're attacking or defending) or in an ambush. They can destroy any kind of team from the lightest infantry to the heaviest tanks.

If you're attacked by a flamethrower team, fire at the flamethrower or move quickly to get away. When you destroy a flamethrower, keep a safe distance; the resulting explosion can kill or injure nearby troops.

USING MORTAR TEAMS

Mortars have a high rate of fire and are very useful when the enemy is not in your line of sight. You can also use them to lay down smoke to protect your infantry's advance.

Mortars are most effective in open terrain and among trees; however, mortar rounds can explode in tree tops, giving any of your troops below a deadly shower of shrapnel. Mortars are long-range weapons; because of the arcing trajectory of the shell, they are useless at close range. Whenever your mortar teams don't have a target, issue an Ambush order so they don't waste ammunition. If you can afford it, include two mortar teams in your force; their combined fire can be devastating. Make sure to place them far apart to make the enemy's counter fire more difficult.

As with machine gun teams, avoid moving mortar teams as part of an assault. Their fatigue levels will go up and their effectiveness will lessen. Mortar teams run out of ammunition quickly; manage them wisely and don't waste their fire on targets they can't hurt such as heavy tanks. When a team does run out of ammunition, you can send them to the front line to use their rifles or submachine guns.

If a mortar team attacks you, try to determine the location of the enemy mortar team and fire your own mortars at that area. You can also lead an assault against your opponent's team.

"Each position, each meter of Soviet territory must be stubbornly defended, to the last drop of blood. We must cling to every inch of Soviet soil and defend it to the end!" - Part of Order 227 - the infamous "Not a Step Back" order - issued on July 28, 1942

USING ANTITANK GUN TEAMS

One defense against enemy tanks is antitank (AT) guns. In deploying AT guns, look for fields of fire that cover likely tank routes. Remember to aim for tanks' weakest points: the side or rear of German tanks and the rear of Russian tanks. Protect AT guns by placing them in buildings, trenches, or deep woods. Be sure to support antitank gun positions with infantry or machine gun teams; because antitank teams can't move very fast, they need to be protected.

Part of any good antitank defense is taking out enemy infantry without committing your antitank guns. Remember that infantry is sent forward to get antitank weapons to reveal their position. If you can use infantry, machine guns, and mortars to take out advancing infantry, you'll keep the enemy's tanks guessing about your antitank gun's location.

"The enemy is firing from every hole. You must not let yourself be seen." - A German soldier in Stalingrad

As with other weapons, accuracy and destructive power increase as the target moves closer. Firing on targets at long range can disrupt enemy operations before movement begins, but doing so also reveals the position of the gun when you have only a small chance of knocking out the target.

Give your antitank guns the Ambush command until you can get a good shot at enemy targets—

when a Fire order gives you a bright green target dot.

Although AT guns are primarily antitank weapons, they are also lethal against infantry and long-range targets. Because they are slow to move after they are deployed, make sure you set up your guns in a protected location with a good line of sight.

To defend against a gun, don't group up and don't hide in buildings. Spread out in a field, cautiously approach to a point within grenade range, and then charge the gun.

USING ANTITANK TEAMS

Whenever you can, use other units to draw the tank's attention so your antitank teams can approach their target without being detected. However, rather than maneuvering your antitank teams into position, try to deploy them in ambush positions so they don't have to move. You can then withdraw them to safety after they take out their target. Even when an enemy tank come within range of your antitank team, it might take more than one shot to kill it. Remember that tanks almost always turn toward the direction of attack; be ready to withdraw your antitank team if the situation deteriorates.

You can use antitank teams against targets other than tanks. They can be especially useful in taking out enemy antitank guns, which have little armor to penetrate. Their gun shields are useful only against small arms fire.

The Russian military was both inflexible in its methods and bereft of well-trained officers in its lower echelons (from the division level down through the ranks). An example of both shortcomings is the fighting around the Porechye bridgehead in July and August of 1941. Although the bridgehead was only two miles deep and a quarter-mile wide, the Russians showered over 2,000 artillery shells a day into the bridgehead; ground support aircraft bombed the bridgehead at least once a day.

However, swampy forest surrounded the bridgehead, making it impossible for the Russians to do anything but attack straight down the two roads leading toward the bridge, which they did as many as ten times a day. Tanks led off the attacks, echeloned several deep, followed by waves of infantry. The attacks were finally suspended when new attacks could not get around the 73 wrecked tanks and 2,000 dead comrades that choked the roads.

USING HALFTRACK AND ARMORED CAR TEAMS

Halftracks are lightly armored trucks equipped with mortars, rockets, machine guns, flamethrowers, and light antitank guns. They offer the same offensive firepower as infantry units carrying these weapons, along with greater speed and mobility. But because of halftracks' thin armor, they are no match for enemy tanks or antitank weapons.

Halftracks have long-range firepower but are vulnerable at close range. Even infantry, using grenades, can destroy these vehicles if they come too close.

Armored cars are light tanks on wheels. Although they lack the strong armor to take on antitank weapons or enemy tanks, their speed and low cost make them useful for scouting. Like halftracks,

armored cars have long-range firepower but are vulnerable at close range. Keep them at a safe distance from enemy firepower.

In cold weather, make sure you use vehicles equipped for winter conditions. Otherwise, they might be frozen in place at the beginning of a battle.

Russian ski troops being pulled toward the front by American-made light tanks. The Red Army suffered embarrassing losses to the Finnish ski troops during the Winter War in 1940; it is a measure of the Red Army's adaptability that tactics used against them were in turn used against the Germans.



9.8 USING ARMOR TEAMS

Armor teams include tanks, tank destroyers, and self-propelled (assault) guns. Even though small arms (rifle and machine gun) fire might not destroy tanks, it can suppress crews by forcing them to keep the hatches shut, reducing their ability to see. Because some tanks (such as Marders) are open-topped, they are very vulnerable to infantry at close range or higher elevations.

USING TANK TEAMS

Tanks are the lions of the battlefield, capable of killing anything they encounter. However, their poor visibility makes them easy prey for antitank (AT) weapons, particularly when an AT team is hidden in dense terrain. Clear the battlefield with your infantry before moving your armor into combat.

Tanks have both strong and vulnerable areas. As a rule, tanks have tough front and weak rear armor. German tanks also have penetrable side armor and are slower to maneuver, especially in adverse weather conditions. If a tank gets stuck or you want a tank to retreat, use the Move command. The tank will drive in reverse, keeping its strong front armor facing the enemy. Do not use the Move Fast command, which will make the tank turn around and expose its rear armor to enemy fire. Also, note that a moving tank is harder to hit than a standing tank, although a standing tank can fire more accurately than a moving one.

Whenever you want to send your tanks into battle, make sure infantry has cleared the way; you can use armor to support an infantry attack, but don't send armor into unexplored terrain unsupported.

As with other vehicles, tanks that are not equipped for winter conditions might be frozen in place at the beginning of a battle.

"However, an attack in the near future against Rumanian Third Army with the objective of cutting the railroad to Stalingrad and thereby threatening the German forces farther east and forcing a withdrawal from Stalingrad must be taken into consideration." - German intelligence appraisal, November 12, 1942

USING SELF-PROPELLED GUN AND TANK DESTROYER TEAMS

Tank destroyers and self-propelled (or assault) guns are generally inferior to tanks. Tanks have enclosed turrets that can swivel to engage targets; most tank destroyers and self-propelled guns have open turrets or limited traverse on their guns. Open turrets mean crews are susceptible to rifle, machine gun, and mortar fire; limited traverse means the vehicle must shift positions to engage targets at different compass points.

9.9 CONSERVING AMMUNITION

Some of your weapons have smaller supplies of ammunition than others. Because mortars, flamethrowers, and antitank weapons have limited ammunition, don't waste the efforts of these teams on targets they have little chance of hitting.

Issuing an Ambush order usually stops a team from firing. A team with this order will wait until the enemy gets within 30 meters or less before opening fire.



Field Marshal Gerd von Rundstedt (1873–1953)

An old-line Prussian general, Rundstedt leaves the Army before World War II. Recalled in 1939, he's given command of Army Group A, which invades Poland in September of that year. In May of 1940, he commands the same army group in the blitzkrieg against France, where his panzers isolate the British Expeditionary Force (BEF) at Dunkirk. Rundstedt's decision to halt his advance and reduce the British pocket by air strikes allows for the evacuation of most of the BEF to England.

Rundstedt is given command of Army Group South for the invasion of the Soviet Union. He is relieved of command after a dispute with Hitler, and then recalled again in 1942 to serve as Commander in Chief, West. For the duration of the war he's caught up in Hitler's almost constant shuffling of commanders, but Rundstedt acquits himself well wherever he serves.

9.10 ATTACKING CREWS IN VEHICLES

A crew in a vehicle that is buttoned up—that is, the entire crew is inside the vehicle—cannot easily spot enemy teams. If a vehicle is fired upon, its crew will button up, which makes them vulnerable to sneak attacks.

Crews that need to be exposed to fire the vehicle's main weapon are easy targets for small-arms fire.

10.0 BATTLEMAKER (CREATING SCENARIOS)

Along with its realistic combat model and real-time action, you can use Close Combat – Cross of Iron to create your own battlefield scenarios. You can customize the data composing your scenarios and adjust the mix and the numbers of troops on both the Russian and German sides.

For example, you can design a challenging battle in which one side has a high number of lightly armed, inexperienced infantry units, and the other has infantry units that are small in number but heavily armed and more experienced. You can define one single victory location to be defended by a single large force, or you can define many small victory locations, requiring that you spread out your forces to defend them. By adjusting these different elements of warfare, you can create a wide range of scenarios for testing your skills as a commander.

10.1 STARTING THE SCENARIO EDITOR

To start the scenario editor, on the Main screen, click Create A Scenario. The Scenario Edit screen appears.

After you start the scenario editor, the process of building any type of custom game is basically the same regardless of the game type:

- Select the type of game you want to build.
- Select the battle maps.
- Adjust the game settings.
- Edit the maps.
- Select the forces.
- Save the game, go to the Command screen, and play.

10.2 CHOOSING A GAME

The first step in creating a custom game is to decide what kind of game you want to serve as a starting point for your custom game.

In the Scenario Types list box, click the one of the following options:

- Historical Battle - To edit one of the battles that is provided with the game.
- Historical Operation - To edit one of the operations that is provided with the game.
- Custom Scenario - To edit a custom game that you built previously.
- New Scenario - To build a custom game from scratch.

If you chose New Scenario, the Map Selection screen appears immediately. If you selected any of the first three choices, select the specific battle, operation, or scenario you want to start with, and then click Next to bring up the Map Selection screen.

10.3 CHOOSING MAPS

The next step in creating a custom game is choosing the maps you want to include in your scenario. If you chose a historical battle or operation in the previous step, the Map Selection screen displays the default maps for the battle or operation in the lower portion of the screen.

A German artillery barrage aimed at Russian troops fighting near Kharkov in the Ukraine.

The Scenario Maps box includes all of the battle maps included in



Close Combat III. You can scroll through all the available maps and choose the map or maps you want. You can either add maps to the existing maps in the Scenario Map boxes, or replace existing maps with new maps:

To add a map between existing maps, click the map you want to add, drag it to the later of the two existing maps, and then release the mouse button. For example, if you want to add a map to the Kharkov Operation, you can drag a new map to the Scenario Map 2 box, which inserts the new map between the Kharkov 1 and 2 maps.

To add a map to the next available Scenario Map box, either drag it to the Scenario Map box or double-click it.

To delete a map, double-click the map you want to delete. The map moves from the Scenario Map box to the available maps.

To delete a map and replace it with a new one, double-click the map you want to delete, and then drag the map you want to add to the vacant box.

After you are done choosing your maps, click Next to bring up the Scenario Info screen.

10.4 ADJUSTING GAME SETTINGS

The next step in creating a custom game is adjusting the game settings using the Scenario Info screen. In this step, you'll determine the historical timeframe for your game, the number of days in your game, and the weather conditions. You also set the highest rank of the German and Russian commanders, requisition points, and ammunition supplies; as an option, you can create briefing text for both sides.

CHOOSING A SEASON AND YEAR

You use the Seasons list box to pick a season and year for your scenario. Your choice affects the units that are included in the force pool. For example, if you pick summer 1942 as the season and year, German Tiger and Russian Josef Stalin III tanks won't be included in the force pool—neither tank was being produced in 1942.

CHOOSING GAME LENGTH

The next step in creating a custom game is setting the number of days your battle or operation will last. You can have the number of days match the number of maps (up to five maps) or have more days (up to fifteen days) than maps. Use the Days list box to select the number of days you want.

CHOOSING THE WEATHER

In the Weather list box, click either **Clear** or **Frigid**.

CREATING OPTIONAL BRIEFING TEXT

The next step in creating a custom game is optional; you can type German and Russian briefing text that appears when you start the game. The briefing length is limited to the size of the text box in the Briefing dialog box.

Click the Briefing Text button. The Briefing dialog box appears with the cursor in the German

The Battlemaker

Scenario Briefing box.

Type the German briefing and then press TAB.

Type the Russian briefing in the Russian Scenario Briefing box and then click OK.

CHOOSING HISTORICAL UNIT ALLOCATION

Determine whether you want to allocate units based on their historical rarity. For example, if you base your custom game on the Korsun operation and restrict yourself to historical rarity, German Tiger tanks will not often appear in the force pool.

To use historical unit allocation, click the Restrict Players to Historical Rarity of Units button.

"Rations exhausted. Over 12,000 unattended wounded in the pocket. What orders should I give the troops, who have no more ammunition and are subjected to mass attacks supported by heavy artillery fire? The quickest decision is necessary since disintegration is already starting in some places. Confidence in the leadership still exists, however." - General Freidrich Paulus, Commander of the German Sixth Army, to Adolph Hitler, January 22, 1943

SETTING REQUISITION POINTS

If you are building a custom operation, you can set the number of requisition points each side receives on each day of the game. The higher you set the points, the more high-value teams you can add to your active roster.

You set the points for the first day of an operation using the Map Info screen. In the Map Info screen, click the Map Data button. The Scenario Information dialog box appears.

In the dialog box, select the number in the Germans Receive box, and then type the number of requisition points you want allocated to the Germans on Day 1.

Select the number in the Russians Receive box, and then type the number of requisition points you want allocated to the Russians on Day 1. Click OK.

You set the points for day two through the operation's end day using the Scenario Info screen.

Repeat the second step for each day in your game, and then click OK.

CHOOSING THE COMMANDERS' RANKS

On the side of the screen with German data, click the cross corresponding to the rank you want to assign to the German Commander. On the Russian side, click the star corresponding to the rank you want.

SETTING AMMUNITION LEVELS

The last step you complete on the Scenario Data screen is choosing each side's ammunition level. Bear in mind that the more ammunition your teams have, the heavier their loads when they move.



A Russian mortar crew readies for an attack. As the war progressed, the Red Army employed more and more mortars; over one million Russian mortar rounds were fired during the final push into Germany.

On both the German and the Russian sides of the screen, click the Full Ammo, 80%, or 60% button.

After you've adjusted all the game settings on the Scenario Data screen, click Next to bring up the Map Info screen.

10.5 EDITING MAP ELEMENTS

The Map Info screen shows the default victory locations and deployment zones. You use this screen to add or change victory locations, modify the deployment zones, target your artillery barrage, and edit map data.

ADDING, MOVING, AND DELETING VICTORY LOCATIONS

Victory locations appear in the Victory Location box in the upper-right corner of the Map Info screen. Victory locations are also displayed on the map as red-bordered boxes. When you click a victory location in the Victory Location box, that location is outlined in green on the map.

Each map in your custom game must have at least one victory location; no map can have more than eight victory locations. You can move, delete, or add victory locations.

TO ADD A VICTORY LOCATION

- Click the first map in your custom game (the map in the Scenario Map 1 box).
- Click the Victory Location button.
- Click the place on the map where you want to add the victory location. The Edit Victory Location dialog box appears.
- In the Location Name box, type a name for the new victory location.
- Complete the above steps for each map in your custom game.

TO MOVE A VICTORY LOCATION

On the map, drag the victory location to a new position.

TO EDIT OR DELETE A VICTORY LOCATION

- On the map, double-click the victory location you want to edit or delete. The Edit Victory Location dialog box appears.
- To rename or assign a new value to the victory location, specify the new information, and then click OK.
- To delete a victory location, click Delete.

10.6 EDITING DEPLOYMENT ZONES

Each map in Close Combat – Cross of Iron consists of Russian, German, and neutral deployment zones. You can use the scenario editor to redistribute territory as you choose. For example, if

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the Russians currently control a certain area of the map, you can give control of that area to the Germans instead.

"Up until then one believed in victory as an act of faith, but now there was no shadow of doubt: Victory was assured." - Russian writer and Stalingrad survivor Ilya Ehrenburg on the importance of the victory at Stalingrad

You can edit the deployment zones only on the first map of a custom game. The deployment zones on subsequent maps are determined by the outcome of the preceding battle. The map on the Map Info screen is divided into tiles. Each tile contains an indicator that shows which side can deploy in that tile: a star for Russians, a cross for Germans, and an empty tile for neutral territory. To edit deployment zones:

- Set the map mode to the side to which you want to assign territory: click the Russian Deployment, German Deployment, or Neutral Deployment button.
- Click the tile on the map you want to reassign. The tile's indicator shows its new designation, according to the side you chose in step 1. For example, if you assigned a former Russian tile to the Germans, the star in the center of the tile changes to a cross.

If you want to reassign a large number of tiles, you can drag over them instead of individually clicking each one.

- To change the map mode and assign territory to a new side, repeat step 1 by selecting a new side, and then repeat step 2.

SETTING BARRAGE COORDINATES

An artillery barrage is a concentrated delivery of artillery fire. In Close Combat - Cross of Iron, the barrage consists of two minutes of rocket fire (Katyushas) for the Russians or 150mm fire for the Germans. The Katyusha rounds tend to land in clusters, but they are not nearly as accurate as the German fire.

"...a symphony from hell." - Marshal Georgi Zhukov describing the Russian barrage that opened the battle at Kursk

If you want to include an artillery barrage in your custom scenario, you need to decide where to target it. You can target up to four map coordinates for your barrage; you can target a barrage on every map in your custom game. The barrage is heavy enough to damage buildings and destroy tanks. The more locations targeted, the more dispersed and harder to avoid the barrage is.

TO TARGET YOUR BARRAGE

- Click the Barrage button.
- Click the map locations you want to target. You can target up to four locations.

10.7 ENTERING SCENARIO INFORMATION

The final step on the Map Info screen is entering scenario information. This step includes determining the game's starting and ending maps and whether one side must control the map to win the battle.

You can also determine how many map requisition points will be awarded to each side when each map in your custom game is reached. Map requisition points are different from the day requisition points you chose on the Scenario Data screen. You receive day requisition points for each day in your game, regardless of whether you advance to another map. You receive map requisition points only when you advance to the next map.

TO CHANGE THE STARTING MAP

- In the Scenario Map boxes, click the map you want as your starting map, and then click Map Data. The Enter Scenario Information dialog box appears.
- Select the Starts on this map checkbox.
- Enter the number of map requisition points given to each side when they enter the map.

TO CHANGE THE END MAP

- The end map is the final map of an operation. In the Scenario Map boxes, click the map you want as your ending map, and then click Map Data. The Enter Scenario Information dialog box appears.
- Click the Ends on this map checkbox.
- Click either German Offensive, Russian Offensive, or Meeting Engagement. In the first two choices, the winning side needs to hold 80 percent or greater of the victory locations. For the Meeting Engagement choice, each side holds 50 percent.

TO CREATE CUSTOM BATTLE BRIEFING TEXT

- In the Scenario Map boxes, click the map for which you want to create briefing text, and then click the Map Data button. The Enter Scenario Information dialog box appears.
- Click the German Battle Briefing text area, type the German briefing text you want, and then press TAB.
- Type the Russian briefing text you want, and then click OK.

TO MOVE TO THE NEXT SCREEN

On the Map Info screen, click **Next**.

10.8 SELECTING FORCES

You use the next screen in the scenario editor to select the units that will fight for both the Germans and Russians. In most other respects, this screen (and the process of selecting forces) is the same as it is on the Requisition screen. It lists available troops, basic information about them, and what was pre-selected for you based on history. You can add or remove these units from your or your opponent's troop list.

All unit types are available to you regardless of which map you choose to play.

TO SELECT WHICH UNITS WILL FIGHT IN THE BATTLE

- Choose the side whose forces you create by clicking either the German or Russian button.

The Online Experience

- Click the Team Availability button to choose which year's forces you want displayed in the Force Pool box. You can choose any year during the war, or All to list all the forces available in Close Combat III.
- In the Force Pool box, double-click the unit you want to add to the Active Roster.
- Once you've chosen all the units you can (or want) for one side, click the name of the other side, and then pick teams for them.

10.9 SAVING AND PLAYING CUSTOM SCENARIOS

When you save your custom scenario, you assign it a name to appear in the listing of previously defined custom scenarios on the Command screen:

- On the Force Info screen, click **Next**.
- In the dialog box that appears, type the name you want to give your custom game (up to 14 alphanumeric characters), and then click **OK**.

Your new scenario will be listed along with any other custom scenarios on the Command screen. You play the customized battle just as you would any other battle.

"The kinship with nature, which the Russians have retained to a greater degree than the other peoples of Europe, is also responsible for the ability of the Russian soldier to adapt himself to terrain features, and actually to merge with them. He is a master of camouflage, entrenchment, and defense construction. With great speed he disappears into the earth, digging in with unflinching instinct so as to utilize the terrain to make his fortifications very difficult to discover. When the Russian has dug himself into his native soil and has molded himself into the landscape, he is a doubly dangerous opponent."
- Generaloberst Erhard Rauss, Commander, Fourth and Third Panzer Armies

10.10 COPYING CUSTOM GAMES

Your custom games are saved in the \games\battles folder on your hard drive. If you want to give your battle to another player or copy it to another computer, just copy the battle from your computer and paste it into the \games\battles folder on the other computer.

When the other player starts Close Combat – Cross of Iron, the custom scenario will appear with any other custom scenarios on the Command screen.

11.0 MULTIPLAYER GAMES

In single-player mode, your opponent is a computer's artificial intelligence program. Two-player mode pits you against a foe that may be even more challenging than the computer: another human being.

11.1 TYPES OF CONNECTIONS

You can use TCPIP to play Head to Head with another player.

Internet TCP/IP - Using this type of connection, you can play the game with another player in two ways: over a Local Area Network (LAN) using a network card or on the Internet. The TCP/IP protocol must be installed on both computers.

11.2 USING AN INTERNET TCP/IP CONNECTION

Use this procedure to start a two-player game using an Internet TCP/IP connection:

- Connect to your Internet service provider.
- On the Main screen, click Multiplayer; the Multiplayer screen appears.

In Connection Method, click the Internet TCP/IP button.

- If you are playing over a LAN, you can join any game listed on the screen: click it and then click the Join button. You can also double-click the game to join it. If a game you want to play has just started but has not yet appeared in the list, click the Refresh button.
- If you are playing over the Internet, click the Host IP button and enter the host's IP address; for example 192.168.129.12. The host's Internet address appears beneath the connection method; the host can tell you the address using e-mail or a second phone line.
- If you want to host a game, click the Host button, and then click the Choose a Battle button to bring up the Command screen. Then choose a game and settings. Your IP address appears on the screen under the connection method.

Next, click the Ready button, whether you are the host or the joiner. After both players have clicked this button, the host must click the Next button to start the game.

"The German could never assume that the Russian would be held back by terrain normally considered impassable. It was in just such places that his appearance, and frequently his attack, had to be expected."
- Generaloberst Erhard Rauss, Commander, Fourth and Third Panzer Armies

11.7 COMMUNICATING WITH YOUR OPPONENT

You can send messages to or receive messages from your opponent at any time during the game. The first line of a new message sent across the network appears at the bottom of the screen. You can then bring up a chat window to view the rest of the message and, if you want, to reply to that message.

If you receive a message while you're in game mode, the message appears over the game screen for a few moments, and then automatically disappears.

"The most common Russian form of combat was the use of mass. Human mass and mass of materiel were generally used unintelligently and without variation, but under the conditions, they were always effective. Both had to be available before they could be used so lavishly and were therefore dependent upon limitless Russian supplies. The Russian disdain for life-always present, but infinitely heightened by communism-favored this practice. A Russian attack which had been twice repulsed with unheard-of losses would be repeated a third and

fourth time at the same place and in the same fashion. Unimpressed by previous failures and losses, new waves always came on. An unusual inflexibility of mind and unimaginative obstinacy lay in this use of masses, and was dearly paid for. It is not possible to estimate Russian casualties in World War II with any degree of accuracy; there will always be a potential error of many hundred thousands. This inflexible method of warfare, with the objective of accomplishing everything through the use of human masses, is the most inhuman and costly possible." - Generaloberst Erhard Rauss, Commander, Fourth and Third Panzer Armies

TO SEND A MESSAGE PRIOR TO GAME PLAY

- If the chat window is not already on your screen, in the lower-left portion of the screen, click Chat or press ENTER.
- A chat window appears on the screen.
- Type your message, and then click ENTER. To close the chat window, click Chat again.

TO SEND A MESSAGE DURING GAME PLAY

- Click Chat or press ENTER.
- A black box appears above the toolbar.
- Type your message. To send it, press ENTER.

12.0 GERMAN UNIT FACTBOOK

GERMAN RIFLE TEAMS (SCHÜTZEN, INCLUDING ERSATZSCHÜTZEN)

Rifle teams were the backbone of the German army. Armed with bolt-action rifles that were accurate and effective at short to medium range, soldiers (infantrymen) fought their way across Russia – on foot. These teams had some antitank (AT) weapons; cluster bombs early in the war and Panzerfausts later on.



GERMAN SCOUT TEAMS (AUFKLÄRUNG)



German scout teams often served as "eyes" for the Wehrmacht. Armed primarily with MP-40 submachine guns or other automatic weapons, they were particularly effective in close-quarters fighting (house-to-house and in forests). Although scout teams had no antitank (AT) weapons early in the war, they had Panzerfausts later on.

GERMAN HEAVY ASSAULT TEAMS

(KAMPFSTAFFEL)

These German infantry teams carried heavy weapons, including the hand-held assault versions of the MG-42, the FG-42, cluster bombs (early war), and Panzerfausts



(later war). They laid down heavy fire effective at medium-to-long-range, but were slower than other infantry because of the weight of their heavy weapons.



GERMAN FLAMETHROWERS (FLAMMENWERFER UNITS)

German flamethrower teams were used against strong points, infantry, and vehicles. Flamethrowers were employed effectively in ambush or with plenty of infantry support. Unfortunately, these weapons were nearly as dangerous to their users as they were to the enemy. They were also very heavy, limiting mobility.

GERMAN MORTARS (GRANATENWERFER 5, 8, AND 12CM MORTARS)

The German Army used mortars as close support artillery, to support infantry attacks, break up enemy assaults, lay smoke screens, and shell enemy mortar and artillery units. The 5cm and 8cm mortar teams were mobile, but the 12cm mortar teams were hard to move. The Germans had to use mortar ammunition sparingly because of the shaky supply situation on the Russian Front.



GERMAN ANTITANK (AT) TEAMS

The Panzerschreck ("Tank Terror") was an electrically fired, hand-held rocket launcher used against tanks, vehicles, and other targets. This weapon's design was not unique; in fact, the Germans based the design on American bazookas captured in North Africa. Its weight (about 20 lbs) and length (nearly 65 in.) made the Panzerschreck cumbersome; however, it was very effective at ranges up to 125 meters.

GERMAN MG TEAMS (SCHWER)

The MG42 was perhaps the best machine gun of World War II. With its high rate of fire and interchangeable barrels, the MG42 proved devastating against infantry and light vehicles. One MG42 team in a well-protected position was more than a match against enemy infantry. This machine gun's relatively light weight (25 lbs) made German heavy machine gun teams more mobile than their Russian counterparts.



GERMAN ANTITANK (AT) GUNS (PAK 31-43, FLAK 43)

All German AT guns had a higher rate of fire than the equivalent caliber gun mounted on a tank. German AT guns were especially important early in the war, when Russian T-34 and KV1 tanks were far superior to German tanks in both firepower and armor. The Germans tried to position AT guns where they were sufficiently protected (in buildings or bunkers), camouflaged, and supported by infantry, machine guns, and mortar teams.



SDKFZ 250/7 (GERMAN HALFTRACKS - SDKFZ 250/251 VARIANTS)

German halftracks played a number of roles. When armed with machine guns, halftracks proved devastating against infantry. When armed with mortars or Wurfrahmen (medium-range rockets), halftracks were effective as mobile artillery. However, the halftracks' relatively thin armor made them susceptible to small arms and machine guns at short range.

SDKFZ 232 (GERMAN ARMORED CARS)

Armored cars were even faster than halftracks. German armored cars were normally armed with machine guns, but were no match for tanks. They were used primarily for reconnaissance or against infantry targets.



PANZER 35(T) (GERMAN LIGHT TANKS - PANZER MARK II, PANZER 35(T), PANZER 38(T))



German light tanks were used in the same manner as armored cars and halftracks, especially when the Germans recognized the superiority of the Russian T-34 medium tank.

GERMAN MEDIUM TANKS - EARLY WAR (PANZER MARK III, PANZER MARK IV)

Mainstays of German panzer (tank) units, the Panzer III and IV underwent constant improvement throughout the war; armor was thickened and weapons up gunned. Neither model ever gained equal footing against the Russian T-34; German tankers had to get dangerously close for their shells to penetrate the T-34's armor. Another disadvantage of the Panzer III and IV were their narrow treads, which easily bogged down in mud and snow.



GERMAN PANZER IV (MINE-ROLLER)

Both the Germans and Russians utilized tanks with front-mounted rollers that would detonate mines, allowing the tank to make clear a path through minefields. Both German and Russian models could clear mines moving forward but could be destroyed when backing over unexploded mines.

TIGER I (GERMAN HEAVY TANK)

First introduced in 1943, the Tiger I was the answer to the existing Russian heavy tanks, the KV-1 and KV-2, and the medium T-34 as well. The primary weaknesses of the Tiger were speed and maneuverability; it had neither. However, its nearly impenetrable armor and high-velocity 8.8cm gun were deadly against all mid-war opponents.





GERMAN FLAME TANK

The Hetzer, based on the Czech 38T chassis, was a well-armored tank destroyer. Combining a flamethrower with its 7.5cm main gun, the Hetzer provided a double threat. Its small size and maneuverability made this tank destroyer effective in close-quarter conditions, especially in urban fighting. The Hetzer's heavy flamethrower had a much greater range than infantry flamethrowers.

GERMAN SELF-PROPELLED ANTITANK (AT) GUNS (MARDER III, HUMMEL, NASHORN)

These tank destroyers were equipped with heavy guns but light armor. Consequently, they were used to engage enemy armor at medium to long range. They were reasonably fast, but their light armor and open turret made them vulnerable to enemy fire.



GERMAN INFANTRY SUPPORT TANKS (STUG III, STUG 38, STUH 42)



These self-propelled guns were heavily armored on their front to provide close infantry support. They were used primarily with infantry to make rapid advances against fixed targets. At short range these guns were also effective as tank destroyers.

GERMAN TANK DESTROYERS (JAGDPANZER IV, JAGDPANTHER, JAGDTIGER, HETZER)

Heavily armored, fixed-gun versions of the Panzer

IV, Panther, and King Tiger, these tank destroyers were some of the war's most effective. Both the JagdPanther and the JagdTiger had the armor and firepower to engage and destroy any tank the Russians fielded. However, without a traversing gun, these tank destroyers were vulnerable to maneuverable opponents and flank attacks.



HEAVY ASSAULT TANKS (FERDINAND, ELEFANT)



These heavy tank destroyers were based on the Tiger I chassis. With heavy armor and 8.8cm main guns, they were more than a match for any Russian tank. Their lack of speed and maneuverability, combined with forward-only machine guns, made these tank destroyers vulnerable to infantry with explosives or flamethrowers. But properly supported, they were devastating.

PANZER MARK V "PANTHER"

After their experience against the Russian T-34, the Germans designed and built the Panther. It had better armor and firepower than the Mark III or Mark IV; it was faster and far more maneuverable than the Tiger. Perhaps the best all-around tanks of the war, they were initially rushed to the Russian Front without adequate break-in time, which compromised mechanical reliability. A tough one-on-one match for all but the heaviest Russian tanks, Panthers were never produced in sufficient numbers to overcome the Russian T-34 and KV series.



PANZER MARK VI AUSF A TIGER II

Reaching the battlefield in late 1944 (both on the Russian Front and in the ill-fated Ardennes Offensive), the Tiger II was the heaviest tank of the war. A heavy version of the Panther rather than an update of the Tiger I, its only liabilities were low speed and cumbersome width. Too slow to fight in the open, the Tiger II was a formidable foe when fighting from cover or in formation.

PANZERFAUST (PANZERFAUST 30, 60 AND 100)

Not available until 1943, this simple hand-held, percussion-fired weapon could take out most Russian tanks less than 150 meters away. Throughout the rest of the war, one or two Panzerfausts were distributed to most German infantry units. Because the Panzerfaust was a single-shot, single-use weapon, the team needed to make sure they took a good shot, aiming for the side or rear of medium and heavy tanks.



ALTERNATE WEAPONS (GRENADES, SHAPED CHARGES)

Most German units were armed with small arms, including hand grenades. Grenades were effective in a wide variety of situations. Many infantry teams were armed with shaped charges—explosives shaped to penetrate the thickest tank armor. While devastatingly effective, the user had to get close for the charges to actually hit the tank.

13.0 RUSSIAN UNIT FACTBOOK



RIFLE TEAMS

As they were in the German Army, rifle teams were the backbone of the Red Army. Most Russian infantrymen were armed with bolt-action rifles accurate and effective at short to medium range. Russian infantrymen were often better supplied, but more poorly trained and led, than their German counterparts.

SNIPERS

made snipers. They served as both forward observers and officer hunters. Targeting officers helped reduce cohesion and morale of the affected unit. Snipers often received special training in hand-to-hand and close-quarter fighting.

Russian soldiers with excellent marksmanship were often



SHOCK INFANTRY

These Russian infantry teams carried rifles, submachine guns, and heavy weapons: machine guns, flamethrowers, explosives, and antitank (AT) rifles or bazookas. They laid down heavy fire effective at medium to long range, but were slower than other infantry because of the weight of their weapons.



ANTITANK (AT) RIFLES

Prior to the start of World War II, most tanks had light armor, and heavy, high-velocity rifles were the Red Army's preferred infantry AT weapon. Effective at up to 1,000 meters, these 14.5mm caliber rifles were used in large numbers early in the war. A lot of nerve and a good shot were needed to take out anything heavier than a Panzer II.



BAZOOKA (U.S. MADE) - RUSSIAN ROCKET LAUNCHER TEAMS

The United States shipped thousands of bazookas to Russia as part of the Lend Lease program; they proved so effective the Russians began producing them to replace their antitank (AT) rifle. As with German AT weapons, bazookas were most effective when used to take short-range shots at the side of a tank, or medium-range shots at the rear of a German tank.

LIGHT MG TEAMS

Like their MG42-toting counterparts in the German Army, teams carrying the Degtyarev Pakhotniy machine gun were mobile enough to keep pace with advancing infantry. Although this machine gun couldn't match the MG42's rate of fire, it was still effective against infantry, halftracks, armored cars, and wooden buildings.



HEAVY MG TEAMS

The Red Army started the war with the Maxim as the standard heavy machine gun. Based on a World War I design, it had a slow rate of fire, but it discharged a heavy slug with good muzzle velocity. The Goryunov was a more modern design that improved the rate of fire without reducing firepower. Both types were cumbersome to move and time-consuming to set up.



FLAMETHROWERS (ROKS-1 FLAMETHROWER)

Russian flamethrower teams were used against strong points, infantry, and vehicles. They were employed effectively in ambush or with plenty of infantry support. Like their German counterparts, these weapons were very heavy and nearly as dangerous to their users as they were to the enemy.

MORTAR TEAMS (50MM, 82MM, 120MM)

Russian mortar teams performed a similar role to that of the Germans. However, as the war progressed, the Russians added more and larger mortar contingents to their front line forces. The main difference between the German and Russian mortar teams was ammunition; the longer the war went on, the greater the Russian advantage in supplies.



ANTITANK (AT) INFANTRY GUNS (ZIK-37 45MM, ZIS-2 57MM, PP27 76.2MM, P39 76.2MM, ZP39 85MM AA)

At the start of the war, German tankers found Russian antitank guns superior to those they faced in Western Europe in 1940. Effective against all but the heaviest German tanks, Russian AT guns were almost always employed either in massed formations (for offensive operations) or in well-supported positions as part of an in-depth defense. The 8.5cm gun was also used on the upgunned upgunned T-34/85.

ARMORED CARS

Russian armored cars were used in much the same manner as German armored cars. They often served as command, reconnaissance, and infantry support vehicles. Their armored cars typified Russian war production: the design was simple but effective, and vast quantities were produced.



HALFTRACKS (U.S. M-3 HALFTRACK (LEND-LEASE))

Russian halftracks suffered the same weakness as German halftracks: they were fast, had firepower, but lacked armor. Even heavy machine gun fire could penetrate halftrack armor. However, they still proved effective as mobile weapons

platforms for machine guns, mortars, and light antitank (AT) guns.



LIGHT TANKS (HT-7M, HT-5, T-26C, T-60, T-70)

One Russian light tank earned the nickname "coffin for seven brothers." Russian light tanks were fast and maneuverable but hopelessly under-gunned and under-armored against any German tank heavier than a Panzer III. Although effective when employed as a halftrack or armored car, they were helpless against most tanks and AT guns.

MAIN MEDIUM TANK (T-34/76)

The workhorse tank of World War II, more T-34s were produced than any other tank in any army. It had a rugged chassis and wide tracks that gave it excellent all-around mobility. Its engine was powerful and reliable; the tank itself easy to operate and maintain. Sloped armor provided maximum protection while reducing weight. The 76.2mm gun was powerful enough to destroy any early-war German tank. This tank was refined throughout the war and inspired the Germans to design and build the Panther.



HEAVY TANKS – EARLY WAR (KV-1, KV-2)

The KV series of tanks, along with the T34, surprised the Germans; German officers and men had been told the Russians had only antiquated tanks and then very few of those. Although many Russian tanks were inferior, the KV-1 and KV-2 packed more punch than any German tank until the Tiger appeared in 1943. Slower and less well armored than the T-34, the KV series was still formidable.

IS-2 JOSEF STALIN II HEAVY TANK

The Josef Stalin II was the second generation of Russian heavy tanks. This tank surpassed the KV series; the armor and speed were improved while the main gun was up gunned to 122mm. Vulnerable against only the heaviest German guns, it was probably the best Russian heavy tank to actually see action on the Russian Front.



SP TANK DESTROYERS (SU-76, SU-85, SU-100, SU-122, SU-152, ISU-152)



Russian tank destroyers (TDs) and self-propelled (SP) guns had designs similar to their German counterparts: limited traverse main guns, heavy front armor, and reasonable speed and maneuverability. Vulnerable to flank attack, TDs and SP guns required support or protection on their flanks to survive.

T-34/85

This variant of the T-34 eliminated the original's most glaring weakness; the turret was enlarged to make room for a true gunner, relieving the tank's commander from his dual role of commander and gunner. The main gun was upgunned up gunned to 8.5cm, giving this tank enough firepower to take on all but the heaviest German tanks. Although not as well armored as the Panther, it was very capable of winning a head-to-head fight with one.



IS-3 JOSEF STALIN III HEAVY TANK

Historians still debate whether this tank actually saw combat during World War II. First seen by the Western observers at the May Day parade in Moscow in 1945, it was the best heavy tank anywhere at the end of the war. Faster and more maneuverable than any other heavy tank, its armor could stop all but the heaviest German guns. The high-velocity 122mm gun was more than a match for any German tank, although it took longer to reload than many other tank guns.

ANTIPERSONNEL WEAPONS (GRENADES, SHAPED CHARGES, AND MOLOTOV COCKTAILS)

Russian infantry was armed with both smoke and antipersonnel hand grenades. Many were also armed with shaped charges as antitank weapons. Molotov cocktails—bottles filled with flammable liquid and stopped with a rag that served as a fuse and detonator—were used against infantry, strong points, tanks, and vehicles.



14.0 Credits

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Our Strength

We thank God for giving us the ability and strength to complete this project and follow our dream.

We also like to thank our families and friends for giving us their non-stop love and support during this project.

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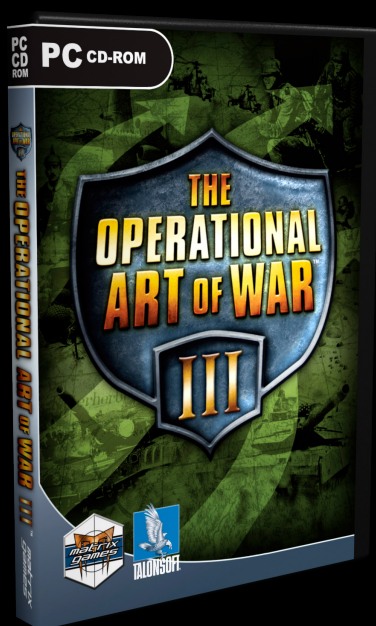
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