INTRODUCTION 1

SYSTEM REQUIREMENTS 1
Installing The Game 2

WHAT'S NEW 2
Force Pool Management 2
New Map Features 2
New Combat Dynamics 2
Starting The Game 2
Uninstalling The Game 3
Saving Files 3
Electronic Documentation 3

TROUBLESHOOTING 4
Sound And Video Cards 4
DirectX 7 Setup 4
Copy Protection 4

CONTACTING TECHNICAL SUPPORT 5
Technical Support 6
Online Technical Support 6
Mailing Address 6

GAMEPLAY 7

QUICK START 7

MAIN SCREEN 9
Play A Game 9
Boot Camp (Training) 10
Create A Scenario 10
Multiplayer 10

BOOT CAMP 10
Quick Tour 10
Monitors/Toolbars 10
Viewing The Terrain 11
Infantry Tactics 11
Armour Tactics 11

THE COMMAND SCREEN 11

THE BATTLE GROUP SCREEN 13

BATTLEFIELD CONTROLS 15
Basic Unit Orders 15
Hot Key Orders 15
Movement Orders 15
Vehicles 16
Indirect Paths/Waypoints 16
Fire 17
Line Of Sight And Range 17
Smoke 18
Defend 18
Ambush 19
Group Orders 19

OTHER CONTROLS 20
Naval Gun Fire, Mortar Barrages, And Air Strikes 20
Truce 21
Combat Messages 21
Options 21
Zoom Level 24
Unit Status 24

COMMAND AND MORALE 25
Rallying 25
Separation 25

THE BATTLEFIELD 26
Hills 26
Gullies, Trenches, and Gun Pits 26
Forests 27
Buildings 27
Rubble 28
Roads 28
Scrub 28
Mine Fields 28

ENDING A BATTLE 29
Victory Locations 29
Truce 29
Time 29
Morale Failure 29
Debriefing Screen 30

STRATEGIC LEVEL 31
The Strategic Map 31
Battle Groups 32
Strategic Turns 34
Weather 36
Air Strikes, Naval Gun Fire, And Mortar Support 37
Intelligence 38
Winning Campaigns And Operations 38

SCENARIO EDITOR 39
The Map 39

MULTIPLAYER 41
Using A TCP Connection 41
Using A UDP Connection 42
Using A Serial Connection 42
Using A Modem Connection 42
Using The MSN Gaming Zone 42
Using Mplayer 42
Communicating With Your Opponent 43

UNITS 44
Infantry 44
Mortars 45
Machine Guns 46
Flamethrowers 46
Anti Tank Guns 46
Crews 47
Vehicles 47
Tanks 47

VEHICLES 49
M3 Half-Track 49
M8 / M20 Armoured Cars 49
M5A1 Stuart Light Tank 49
M8 Howitzer Motor Carriage 49
M4 Sherman 49
M10 and M18 Tank Destroyers 50
SD KFZ 250/251 Half Tracks 50
Marder III 50
STUG III / STUH 42 50
Panzer II 50
Panzer III 51
Panzer IVG 51
Panzer V Panther 51
French Tanks 51
Russian Tanks 51

CREDITS 53
ATOMIC GAMES, INC. 53
SSI/Mattel 54

INTRODUCTION

On June 6th, 1944, the combined forces of the United States, Great Britain, Canada, and France launched the greatest amphibious invasion in the history of the world. The blow fell in Normandy, France, striking Adolph Hitler's Atlantic Wall with nine divisions of assault troops plus support from naval gunfire and massive air strikes. The Atlantic Wall would crumble before the weight of this onslaught, and Europe would be free of the Third Reich less than a year later.



CLOSE COMBAT: INVASION NORMANDY retells the story of this historic battle from the perspective of the men who fought for control of Europe. As the American Commander, you must fight your way off the beaches and take the important seaport of Cherbourg before the end of June. The German commander must delay the Americans at the beach and await reinforcements to throw the Allies back into the sea.

SYSTEM REQUIREMENTS

- Pentium 200 MHz IBM PC or compatible
- 32 MB of RAM
- Windows® 95 or 98 — Note: This is a Windows game and was not designed to be played on Windows® NT systems. Multitasking is not recommended when playing CLOSE COMBAT: INVASION NORMANDY
- An **uncompressed** hard drive with 250 MB free for the "Recommended" install
- 4 X CD-ROM drive or faster
- An SVGA video adapter with 4 MB of memory and a Colour SVGA Monitor
- A Windows compatible mouse
- DirectX7 certified drivers required

In addition to the basic system requirements, the game requires that DirectX ***7*** or later be installed in your system. The option to install DirectX 7 appears during the game installation. For network play, you need a DirectPlay compatible network adapter.

Installing the Game

You must install CLOSE COMBAT: INVASION NORMANDY game files to your hard drive and have the CLOSE COMBAT: INVASION NORMANDY CD in your CD-ROM drive to play this game or use the Scenario Builder.

To install the game, insert the CD into the CD-ROM drive. When the pop-up window appears, click on the Install option. If you have disabled the Windows Autorun, or if it does not function, use WINDOWS EXPLORER to open the CD and double-click on the Setup icon. Follow all on-screen prompts to complete the installation.

WHAT'S NEW

Force Pool Management

Each Battle Group now has a Force Pool from which to draw units. You can configure your Battle Groups before heading into battle, replace units lost in battle, and if you play the American side, Reinforce your troops, restoring your Force Pool to full strength (see page 13, "The Battle Group Screen" for more information).

New Map Features

In addition to the new, historically accurate maps of the entire Cotentin peninsula, from Utah Beach to Cherbourg, CLOSE COMBAT: INVASION NORMANDY has new defensive terrain features such as complex trench systems, pillboxes, hardened emplacements, dragon's teeth, barbed wire, and beach obstacles.

New Combat Dynamics

CLOSE COMBAT: INVASION NORMANDY adds a new support feature: naval bombardments. Allied ships off the coast can shell German positions to provide cover for the beach operations (see page 20, "Naval Gun Fire"). Also, airborne units now start the campaign game behind enemy lines; airborne units start with five days of supplies, from which they draw exclusively until exhaustion; after that, they must be connected to a supply depot by the road network in order to be in supply. Finally, units that were not historically present have been included in the Scenario Editor to allow you to create "what if" scenarios.

Starting the Game

Every time the CD-ROM drive is closed with the CD in place, the CLOSE COMBAT: INVASION NORMANDY Autorun program displays a menu with the options to run the game, run the Scenario Builder, install DirectX, uninstall the game, or view the README.TXT file. You can also start CLOSE COMBAT: INVASION NORMANDY by opening the Start menu, selecting Programs and choosing the folder where CLOSE COMBAT: INVASION NORMANDY was installed and left-clicking on the CLOSE COMBAT: INVASION NORMANDY program item.



For complete and specific "how to play" information, please refer to the rest of the manual. Some changes were made too late to include in this manual. Please read the README.TXT file in your game directory for more information.

Screen saver utilities should be turned off before starting to play CLOSE COMBAT: INVASION NORMANDY.

Uninstalling the Game

To uninstall the game, select that option from the Autorun menu, or choose Settings from the Start menu, and select Control Panel; in the Control Panel, select Add/Remove Programs, left-click on CLOSE COMBAT: INVASION NORMANDY, and click on the Add/Remove button. The game and all of its components are then removed from your hard drive, except for your saved games and/or edited scenarios.

Saving Games

CLOSE COMBAT: INVASION NORMANDY requires space on your hard drive for saved games and temporary files. Each saved game can take up to **1.5 MB** of hard drive space.

Electronic Documentation

If you do not already have the Adobe Acrobat Reader, you can install the software following these instructions. Insert the game CD in your CD-ROM drive. Use WINDOWS EXPLORER to open the CD, and double-click on the ACROWIN folder, located in the root directory. Double-click on the file entitled ACROREAD.EXE and follow the on-screen prompts.

Once Acrobat Reader is installed on your system, you can read README.PDF by opening the folder on your hard drive in which you installed the Adobe Acrobat reader, and double-clicking on the file ACROREAD.EXE. From the File menu of Adobe Acrobat, you may open the README.PDF located in the root directory of your game CD.

TROUBLESHOOTING

This section provides information that should help you solve some common problems.

Sound and Video Cards

This product requires Windows 95/98 and DirectX compliant sound and video cards. If you experience problems with sound or video while using this product please contact the manufacturer of your sound or video card for the latest DirectX certified drivers. If such drivers are not used, this product may not run properly on your system.

DirectX 7 Setup

This game requires DirectX 7 or later. If you do not have DirectX 7, then it can be installed or reinstalled from the CD. Installing DirectX 7 is an option when installing the game. You can also install it by using Windows Explorer to open the DIRECTX folder on the game CD. Double-click on DXSETUP.EXE to start the DirectX 7 install.

From within the installation program, you can also reinstall DirectX 7, test your driver's certification, or reinstate your previous audio and video drivers.

DirectX Disclaimer

CLOSE COMBAT: INVASION NORMANDY utilises Microsoft's DirectX sound and video drivers. DirectX is a programming tool created by Microsoft, and the installation of DirectX may cause video problems and system anomalies with computers using video drivers that are not DirectX certified. DirectX is a Microsoft product, and as such, this publisher cannot be responsible for changes that might occur to your computer system due to its installation. For DirectX related problems that cannot be fixed by updating to your video card's latest Windows driver set, you must contact either Microsoft or the manufacturer of your video card for further technical support or service.

Microsoft retains all intellectual property rights to DirectX. The user has been granted a limited license to use DirectX with Microsoft operating system products.

Copy Protection

In order to play CLOSE COMBAT: INVASION NORMANDY, the game CD must be in the CD-ROM drive.

UBI SOFT UK TECHNICAL SUPPORT

Technical support: 0870 800 6160 (local rate call)
Hints and tips hotline service: 0960 466 5200 (premium rate call)

On-line Support Options

Ubi Soft offers several on-line support options for their software products.
One of these is our website at: http://www.ubisoft.co.uk/support/
If you have a specific problem that is not addressed on our site, you can send your question to us via e-mail at: techsupport@ubisoft.co.uk
Please be as specific as you can be about the problem you are experiencing. Also include in the body of your e-mail: the name of the manufacturer of your computer system; the brand and speed of the processor; how much RAM you have, the version number of Windows you are using (if you aren't sure, right-click on the My Computer icon on your desktop and select 'Properties'), and the manufacturer name and model number of your video card, modem, and sound card.

Other Support Options

You can also contact Ubi Soft Customer Support by phone and fax. When you call, please have all of the above mentioned information ready.
UBI SOFT ENTERTAINMENT Ltd.
Chantry Court
Minorca Road
Weybridge
Surrey KT13 8DU

Tel: +44 (0) 870 800 6160
Fax:+44 (0) 1932 838 274

In Nederland: Telefoonnummer: 0900 202 6766 (50 cpm.) Tijden: maandag tot en met vrijdag van 09:30 tot 18:00 uur
E-mail: techsupport@ubisoft.nl

In Belgie: Telefoonnummer:02 73.25.57.7
E-mail: hotmail@ubisoft.be
Scandinavia: Ubi Soft Nordic Support
Ubi Soft Nordic offers different possibilities to obtain support.
On our website: http://www.ubisoft.dk
If you have a question, which is not described on our website, please e-mail us at: support@ubisoft.dk
Other ways of reaching us: By telephone or fax, please call:
Telephone: (0045) 38 32 02 50
Fax: (0045) 38 33 34 49

Australia: Technical Support Hot Line: 1902 262 102 (calls are charged at $1.98 per minute including GST. Higher from mobile and public phones)

We regret that we cannot offer game hints and tips, as the service is provided for technical difficulties only.

GAMEPLAY

CLOSE COMBAT: INVASION NORMANDY is a real time strategy game that puts the emphasis on REAL. During a battle, you command up to 15 units ranging from squads of infantry to heavy tanks. The soldiers under your command act like real soldiers. If you order them to exert themselves, they get tired, if the enemy shoots at them, they keep their heads down, and when in danger they get scared. If a soldier becomes too scared, he may stop listening to orders; he may even surrender or desert.

Your units have the same strengths and weaknesses that they would in real life, so in planning your strategy you need to think about what would work in the real world. Historically, real world tanks had a hard time detecting enemy infantry, and enemy infantry could easily sneak up on a tank and use explosives to disable or destroy it. Real world tanks used infantry to scout ahead of them; you are well advised to do the same.

Your goal during each battle is to do more than just kill the enemy. The invasion of Normandy was a battle about ground, about taking it and about defending it. Each map has a number of important strategic spots called "Victory Locations", and success or failure is determined by who holds them when a battle ends.

During Campaigns and Operations you have both strategic command of the battlefield and tactical control of every engagement. At the strategic level, you direct your Battle Groups along the network of roads that connects the towns and villages of the Cotentin region. You must deal with issues of supply, allocate sparse resources, and control your overall battle strategy.

QUICK START

Double-click on the CLOSE COMBAT: INVASION NORMANDY icon and start the game.



Once the game is started, go to the Main screen and select Play a Game. If this is your first time playing, you should consider playing the Boot Camp tutorial first.



Once on the Command screen, if you want to jump in quickly, choose a Battle listed in the window on the upper left hand side rather than a Campaign or Operation. Once you have decided which Battle you want to play, double-click on it.



This brings you to the Battle Group screen where you can look at the units you will be fighting the Battle with. You can rename them if you want, using the button on the bottom of the screen. By clicking on units, you can also look at their Experience Level and Morale.

When you're ready to fight, select Next from the lower right hand corner; this displays the Battle screen. When you first bring up the Battle screen, the action is frozen. This represents the pre-battle phase, during which you can place your troops. The darkened portion of the map represents where the enemy starts, the lightly shaded portion starts as no man's land, and the unshaded portion is yours.

General Schlieben, commander of the Port of Cherbourg called Rommel asking permission to surrender the Port of Cherbourg and his men on 25 June, 1944:

"Loss of the city shortly is unavoidable…2,000 wounded [are] without a possibility of being moved. Is the destruction of the remaining troops necessary as part of the general picture in view of the failure of effective counterattacks? Directive urgently requested."…"In addition to superiority in material and artillery, air force and tanks, heavy fire from the sea has started, directed by spotter planes."…"I must state in the line of duty, that further sacrifices cannot alter anything."



Place your troops to your best advantage; left-click on a unit and drag it to move it. You may also give orders to units during this stage. Right-click on a unit to give it an order. When placing Anti-Tank guns, which usually cannot move quickly, it is useful to check their fields of fire by giving them a Fire order and moving the cursor around. You can cancel the firing order by ordering the gun to Defend or Ambush. Infantry should usually start in cover, either in buildings, woods, or ditches. Command teams improve the performance of other teams nearby. To see the area over which a command team has influence, press the **Space** bar. The coloured circles displayed represent the extent of the team leader's command and control.

When you are satisfied with your troop placement, press the Begin button on the tool bar on the bottom of the screen.

While playing, keep in mind that the **F5-F7** keys control your pop-up menus and that you can issue orders to a unit by right-clicking on it. Air Strikes, Naval Gun Fire, and Mortar Barrage can each be used only once per Battle if they are available at all.

MAIN SCREEN

Play a Game



Left-clicking on the Play a Game option opens the Command screen. From the Command screen you may load a saved game or select any of the single player Battles, Operations, or Campaigns.

Boot Camp (Training)

The Boot Camp option opens the Boot Camp screen, where you may choose to play any of the five training scenarios. The tutorials include pop-up windows directing your actions and are designed to teach basic unit commands and tactics as well as strategic control. It is highly recommended that all novice players play through all five boot camps.

Create a Scenario

While CLOSE COMBAT: INVASION NORMANDY comes with a large number of pre-made Battles, Operations, and Campaigns, an easy-to-use tool has been provided for creating your own Battles, Operations, and Campaigns.

Multiplayer

While the AI computer opponent in the single player game does present a worthy opponent, there is something uniquely satisfying about outthinking a human being. CLOSE COMBAT: INVASION NORMANDY presents a number of options allowing two human players to square off.

BOOT CAMP



Boot Camp is an online tutorial that teaches basic unit commands and fundamental tactics. There are five boot camps; it is recommended that new players complete them in order from top to bottom. During the boot camps, you can always repeat the previous instruction by pressing **Ctrl+H**. You may exit boot camp at any time by pressing the **ESC** key.

Quick Tour

This explains how to give orders to a unit as well as basic targeting. Remember that right-clicking on a unit selects the unit and creates an order menu. Orders may be cancelled by right-clicking again, or by left-clicking off of the menu.

Monitors/Toolbars

This segment shows how to call in Air Strikes and Mortar Barrages, as well as monitoring team abilities and status. The prime things to remember from this boot camp are that the **F5** key toggles the Team Monitor, **F6** toggles the Inset Map, and **F7** toggles the Soldier Monitor.

Viewing the Terrain

This segment explains how to move your view around the map and the effects of terrain on units. The important things to remember are that you can left-click in the inset map to shift your view. You can zoom in and out with the Zoom buttons on the bottom of the screen. The properties of the various terrain types are also discussed.

Buildings provide great cover for infantry. Buildings with more than one story have a number on them. For purposes of determining line of sight, all units in a building are assumed to be on the top floor. A building's roof becomes invisible when you have men inside so you can see what is going on.

Infantry Tactics

This is a demonstration of basic infantry strategy, including the use of two or more teams to lay down suppressive fire and how to use smoke to cover advancing infantry. Basic mortar use is also covered.

Armour Tactics

This segment is short, but it teaches a vital lesson. Tanks are extremely vulnerable to infantry at close range and bad at detecting them. To protect against these two failings, armour works best when supported by infantry.

THE COMMAND SCREEN



The Command screen has three panels. The top left panel allows you to select from any of the pre-made Battles, Operations, and Campaigns. A Battle is a single engagement between German and American forces. It takes place on a single map, and the forces available to each side are fixed when the Battle begins. An Operation is a series of engagements between two Battle Groups on the strategic screen. Operations usually involve multiple engagements. A Campaign uses the strategic screen and has multiple Battle Groups on each side.

To load a saved game or to play a custom scenario, select it from the list in the lower left hand panel. Selecting them and clicking the **Delete** button deletes saved games and scenarios; deleting files is irreversible, so make sure you really want these files to be erased before you do this.

The right hand panel controls the parameters for new single and multiplayer games. At the top of the window you may select between playing either the Germans or the Americans.

Below that are two sliders indicating the Difficulty Level for each side. Recruit level difficulty provides better forces with higher morale. Line level plays at normal levels of force strength. At Elite level difficulty, that side starts with weakened forces. The Difficulty level also controls how quickly reinforcements pools regenerate over time.

Below the Difficulty sliders are the Realism Settings. You can change the indicators by clicking in the adjacent check boxes.

ALWAYS SEE ENEMY: Does exactly what it sounds like it should do. A side with this option chosen knows where the enemy is at all times. This can be an extremely useful option for new players as they learn the game.

NEVER ACT ON OWN INITIATIVE: Your soldiers never do anything unless they are specifically ordered to.

ALWAYS HAVE FULL ENEMY INFO: With this selected, the player always has access to the toolbar info of enemy units. This does not extend to Soldier Monitor information.

ALWAYS OBEY ORDERS: With this selected, your units always obey orders. This is for when you tire of your soldiers' senses of self-preservation.

Below the Realism Settings is the Force Morale indicator. You can change the indicator by clicking in the adjacent check box. The default settings are Force Morale enabled for Operations and Campaigns and disabled for Battles. You may enable or disable this function by clicking on the check box. **Designer's Note:** Be advised that disabling this option will severely alter play balance when playing Operations and Campaigns.

Below the Force Morale indicator are the Victory Condition settings. These determine what is required to win a battle and how much time you have to play a battle. The two-minute warning option allows a player who has no victory locations two minutes to capture one. **Designer's Note:** It is recommended that you play with the timer set to 15 minutes for optimum play against the Artificial Player.

The View Map tab along the bottom of the screen allows you to view the map used in a particular battle.

THE BATTLE GROUP SCREEN



Once you have selected your fight, you gain access to the Battle Group screen; this shows all the forces available for a particular battle. Left-clicking on any of the units listed selects the unit, showing its Experience Level, Morale, and armament in the bottom panel, as well as giving you a chance to rename the unit.

A new feature of the Battle Group Screen allows you to choose your forces from the Force Pool. To change your forces, you must Double-click on a unit to remove it from the Battle Group and return it to the Force Pool. Next, you must select a new unit from the list of units in the Battle Group Force Pool on the left hand side of the screen by Double-clicking on the unit in the Force Pool list. Single-clicking on the unit in the force pool list will show the unit's strength at the bottom of the screen. **Note:** removing a squad from your active roster will erase its history, including any experience bonuses or medals it has earned.

The button marked Reinforce is only present when you have chosen to play as the Americans and are playing an Operation or Campaign. This button refills the force pool for the Battle Group once it has been depleted. Reinforce can be selected only one time per Battle Group. Once it is used, it will not appear on the Battle Group Screen again. **Note:** the reinforce button will only work if the Battle Group is able to access a friendly major supply depot through the road net. If you try to Reinforce without such access, you will get a dialog box explaining that you are out of supply.

The button marked Rename allows you to rename the selected team.

The button marked Remove allows you to remove the selected team. When the selected team is removed, the next team in order of platoon precedence is selected. It may then be removed by clicking Remove again. This can be repeated until all teams are removed.

When a team is selected in the Force Pool and there is an open slot in the Battle Group screen the Add button appears in place of the Remove button. Clicking the Add button will fill an empty slot in the Battle Group with the selected team. To change the type of team to fill empty slots, simply select a different team by left-clicking on it in the Force Pool list.

The Revert button resets the Battle Group force to the computer-selected default force mix of the Battle Group.

The button marked Edit Opponent allows you to set the opposing side's Battle Group's team strength. It is only selectable when playing in single player mode.

The View Map button lets you preview the map with your area of deployment highlighted. The enemy deployment area is shown in a darker shade.

The button marked Soldier takes you to the Soldier Screen. The Soldier Screen shows the Health, Morale, Leadership, Intelligence, Strength, and Experience for each soldier in the unit as well as accumulated achievements such as kills, medals, acts of bravery, or acts of cowardice.

Health represents the physical status of the soldier.

Morale indicates the willingness of a soldier to fight on. Soldiers with high morale are braver and are more willing to face danger than men with poor morale.



Leadership represents the ability of a man to improve the morale of the men around him and to keep his team together. However, when a unit leader with a high leadership level dies, it can have a devastating effect on unit morale.

Intelligence reflects how likely the soldier is to go berserk or panic in a firefight. Intelligent men are less likely to make such fatal errors.

Strength determines how quickly the soldier becomes fatigued when moving and affects how severe his wounds are if he is shot. The stronger the man, the longer he can keep going.

Experience is vital for a soldier and can affect a wide range of abilities, ranging from how good a shot he is, to how well he can hide himself in Ambush, to how well he conserves ammo. More experienced soldiers do just about everything better than green troops.

Each soldier also has his kills and achievements listed as a cumulative total in Operations and Campaigns.

The button marked Previous takes you back to the command Screen so you can select another Battle or exit the game.

The Next button takes you to the battlefield to begin fighting.

BATTLEFIELD CONTROLS

Basic Unit Orders



Right-clicking on any unit brings up a popup menu listing possible orders for that unit. These orders are: Move, Move Fast, Sneak, Fire, Smoke, Defend, and Ambush. Not all orders will be available at all times. For example, a tank that has thrown a tread can neither Move, Move Fast, nor Sneak. Once you bring up the popup menu, an order may then be selected by left-clicking on the order option. If you change your mind and do not wish to issue an order, either right or left-clicking on the map removes the popup menu. Order options that a unit cannot perform are shaded gray.

Hot Key Orders

All orders can also be given by hot key commands. To give an order by hot key, left-click on the unit, then press the appropriate key.

Z.....Move	**C**.....Sneak	**B**.....Smoke	**M**.....Ambush
X.....Move Fast	**V**.....Fire	**N**.....Defend	

Movement Orders

Units have three movement commands: Sneak, Move, and Move Fast. After you select the menu order, place the cursor where you want the selected unit to go and left-click. If you wish to cancel the movement order during this phase hit **Backspace** on your keyboard. When you give a movement order, a coloured dot appears on the map, marking the unit's destination. The unit attempts to reach its destination by whatever movement type you have selected. The colour of the dot corresponds with the type of movement order given.

Move.....Blue	Sneak.....Yellow	Move Fast.....Purple

Once placed, the destination dot can be moved to another location by left-clicking and dragging it.

Sneak

When sneaking, your men crawl forward cautiously and quietly. Sneak is the slowest of all movement types. In addition to being stealthy themselves, sneaking troops have an improved chance of finding concealed enemies. Sneaking troops never initiate combat; this makes sneaking undesirable in potential close combat situations. Using Sneak through a minefield is the best way for infantry to traverse this type of terrain. Engineers/Pioniere teams will clear minefields when they sneak though them. You may want to check the overview map to see if the minefields changed to green to verify the clearing of minefield elements on the map.

When a squad of men has moved to a location using Sneak movement, they then revert to Ambush mode.



Move
This orders infantry to cautiously advance. Infantry on the move are not quite as stealthy or as observant as men who are sneaking, but they are faster. Moving infantry initiates combat if the opportunity arises. Using Move through a minefield is dangerous.

When infantry reach a location they have Moved to, they then revert to Defend mode.

Move Fast
These orders cause infantry to move as quickly as they can. While running, soldiers focus on getting to their destination and do not try to use cover at all. They engage in hand to hand combat if the enemy gets in their way. Running men are not observant and tire quickly. Using Move Fast through a minefield is very dangerous for your troops.

Infantry that Move Fast will revert to Defend mode when they reach their destination.

Vehicles

Vehicles are not stealthy, particularly tanks. However, a sneaking tank is at maximum watchfulness and at its slowest speed. Vehicles, unlike infantry teams, will initiate combat in Sneak mode. A tank on the move is somewhat faster and slightly less observant. A tank that is sneaking or moving attempts to maintain its original armour arc as much as possible. For example, a tank that is facing the enemy could be ordered to back up using the Move command.

Tanks ordered to Move Fast turn to face their destination and then move there at maximum possible speed.

Tanks can fire while following any movement order, although their rate of fire and accuracy decrease.

Indirect Paths/Waypoints



Rather than having your units move in a straight line, it is possible to order infantry and vehicles to follow an indirect route. Routes are determined by setting waypoints. To set waypoints, right-click on a unit as normal and determine which type of movement you desire, then press and hold the shift key and plot the path you wish the unit to take by left-clicking on the screen. Each number that appears represents a point the unit passes through on its way to its destination. When you have completed your path, release the shift key and the unit proceeds as ordered. You can place a total of 20 waypoints. Set waypoints can also be selected and dragged to alter a unit's path.

Fire

While your soldiers are capable of firing on their own initiative, it is often useful to direct their fire. The Fire option brings up a targeting circle. The targeting circle is connected to the firing unit by a coloured line.

When the circle is not sitting above an enemy unit, it appears as a thin, white circle. When placed on an enemy unit, the circle either turns green, yellow, red, or black. This colour corresponds with the chance that a shot will hit the enemy unit.

Green.....100-60% **Red** 29-10%

Yellow.....59-30% **Black**.....9-0%

When deciding whether or not to order a unit to Fire, it is important to consider the situation. If a unit is laying down suppression fire, it does not have to actually kill the enemy to have the desired effect. On the other hand, a small Bazooka team waiting in ambush while an armoured column approaches had better wait for a killing shot.

Line of Sight and Range

The colour of the line connecting the targeting circle to the firing unit indicates line of sight.

For direct fire weapons, the line is light green for clear lines of sight, dark green for lines of sight obscured by foliage or smoke, and red for lines of sight that are blocked. Infantry line of sight is determined for each soldier individually, so enemies visible to one soldier might not be seen by another. For indirect firing weapons, the connecting line is orange for targets in line of sight and brown for targets beyond line of sight. Teams that fire indirect weapons, such as mortar squads, do not need line of sight to hit their targets. However, having a clear line of sight greatly increases the accuracy of indirect fire.

The number by the targeting circle represents the distance from the firing unit. This distance is particularly important for infantry, whose anti-tank weapons and flamethrowers have short effective ranges. The distance number by the targeting circle also indicates range effects.

Green .....The unit is within effective range.

Yellow .....The distance is too close or too far away; the weapon has reduced effectiveness.

Black.....The distance is too close or too far away for the weapon to be effective at all.

If a line of sight is obstructed, a white number appears along the targeting line indicating the range to the obstruction. If a line of sight is partially obstructed by smoke or foliage and then completely blocked further along, both ranges are indicated.

Partial obstruction by smoke or foliage prevents the attacker from specifically targeting enemies, but the firing unit can lay down fire in the hopes of suppressing the enemy or getting lucky.

Smoke



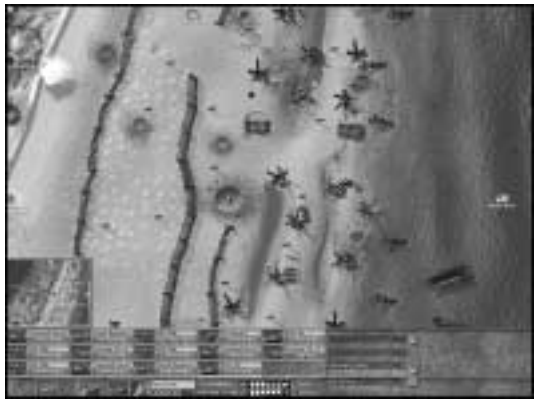
There are times in battle when the ability to conceal yourself from the enemy, even partially, can be the difference between victory and death. Vehicles and infantry on both sides are often equipped with smoke grenades. Units hiding behind smoke are harder to detect, and if they are detected, it is impossible to target them specifically. Smoke has roughly the same effect as partial obstruction by foliage; units may still Fire in a general area behind smoke in the hopes of suppressing the enemy.

The Smoke command brings up a targeting circle for firing smoke grenades. Mortar teams can lay down smoke virtually anywhere on the map; soldiers can throw smoke grenades a maximum of 30 meters.

Some vehicles and guns have the ability to fire smoke rounds, which can reach out to the weapon's maximum range. If a unit has smoke rounds, the Smoke command is available on the unit menu. Some vehicles have smoke dischargers and/or smoke mortars. These work in the same way as smoke rounds.

Units, both tanks and infantry, often use smoke on their own when they come under sudden attack in an attempt to screen themselves from enemy fire.

Defend



Units that have been ordered to Defend stop, seek whatever cover is available, and engage any target of opportunity. When ordered to Defend, a blue arc appears above the unit; this indicates the direction that unit is facing. To change the direction of defensive facing, left-click the highlighted arc; a blue circle appears above the unit. Move the cursor to the arc, drag the arc to the point on the circle that you wish the unit to face, and left-click again. Anti-tank guns and tanks rotate to face that direction and infantry seeks cover defending from that direction. Defending units engage enemies not in the blue arc, but only if those enemies are very close. Units that are defending will fire on targets of opportunity that they have at least a 30% chance of killing. That is equivalent to a yellow or green targeting circle.

Defend is the default setting for tanks. When not under specific orders, tanks Defend the area in front of them.

Ambush

Ordering a unit to Ambush is similar to the order to Defend. As in Defend mode, the units stop in place and seek cover, but ambushing units only attack when an enemy comes within 30 meters. When a unit is ordered to Ambush, a green arc appears above the unit. This works in the same way as the blue arc in the Defend order. To change the direction that the unit is ordered to ambush, left-click on the green arc, move the arc to the proper facing, and left-click again to release. A unit in Ambush mode is generally harder to detect for the enemy compared to a unit on Defend.

It is vital for any successful commander to understand the importance of the Ambush order. Infantry are generally far more effective at close range, and many anti-tank weapons are more effective from the side or rear. Keeping infantry, bazooka and concealed AT guns hidden until the right moment can be critical to success.

Group Orders

Orders may be issued to multiple units at the same time. To select the units to be given orders, left-click on the screen and drag the cursor. This creates a darkened area on the map; release the left mouse button when all the units you wish to order are inside the darkened area. A second way for a group to be formed is to hold down the shift key and then left-click on each unit you wish to give an order to.

Any order given to one unit is given to all selected units. If ordered to move, they attempt to maintain their current relative positions when they reach their destinations. Remember that if you give the order to Fire, line of sight is individually determined for each unit, and for each soldier in each unit.

Once created, up to 9 groups can be saved into memory by pressing **Ctrl (1-9)** while the group is selected. To later recall the group press the corresponding number **(1-9)** without pressing **Ctrl**. If the number is pressed a second time, it centres the map on the group.

To end giving orders to multiple units, simply create a darkened selector box around a single unit.

General Rommel's reply to General Schlieben.

"You will continue to fight until the last cartridge in accordance with the order from the Fuhrer."

OTHER CONTROLS

When first on the battlefield screen, the game is frozen because combat has not yet started. This allows time to survey the battlefield, redeploy units, set options, and plan strategy.

Naval Gun Fire, Mortar Barrages, and Air Strikes



If available, Mortar Barrages, Naval Gun Fire, and Air Strikes can be selected from the icons on the tool bar on the lower left side of the screen. A new targeting crosshair appears; left-click on where you want the air strike, naval gunfire, or mortar barrage to occur. It is important to remember that once Naval Gun Fire, the Mortar Barrage, or an Air Strike is used, it is not available for the rest of that engagement.

Air Strikes are carried out by a single plane making one pass over the location. The type of plane is randomly determined from a list of four available. The type of aircraft available is noted in the Combat Messages window. The plane comes from a randomly determined direction and strafes and/or drops bombs in the target area. Air Strikes are not available at the start of the battle. Air Strikes become available 5-12 minutes into the battle. Only the Americans can call in Air Strikes; historically, there was too little German air support to warrant inclusion in the game.

American Planes

P-51 Mustang.....6x 0.50cal M2 machine guns

P-38 Lightning.....4x 0.50cal M2 machine guns, 1x 20mm machine cannon, 2x 500 or 1000lb bombs (always two bombs)

P-47 Thunderbolt.....8x 0.50cal M2 machine guns, 6x M8 11.5cm rockets or 2x M43 500lb bombs

A-26 Invader.....8x 0.50cal M2 machine guns plus bombs

Mortar Barrages

Mortar Barrages are called in the same way Air Strikes are. They consist of four 80mm mortars, all firing at once. The battery of mortars fires a total of between 40 and 60 rounds. Like on-board units' mortar fire, mortar barrages are not always accurate, so be careful not to call a barrage that would endanger your own troops. If it is available during a battle, the mortar barrage option appears after 1-3 minutes for the Americans and after 3-5 minutes for the Germans.

Naval Gun Fire

Naval Gun Fire barrages are called in the same way as Air Strikes. Naval barrages consist of four 5-inch guns from destroyers lying off the beach, all firing at once. This battery of guns fires between 10 and 20 rounds. Like Mortar Barrages, Naval Gun Fire is not always accurate, so be careful not to call it in where it would endanger your own troops. Only Americans have Naval Gun Fire available in battle and then only on select maps.

Truce

The Truce command offers the enemy a chance to call an end to the fighting. If the enemy offers a truce, you may accept by clicking the Truce button. If one side offers a truce and the other does not accept the offer, fighting continues. If a truce is agreed to, both sides declare a cease fire and stop fighting. The battlefield remains contested and in the condition it was at the moment the truce was declared.

Combat Messages



The Combat Messages window informs you of the situation on the battlefield. If the message concerns a unit, you may centre the view on that unit by clicking on the message.

Options

The Options button appears in the lower left hand corner of the map. The Options are made up of three panels, Game Play, General, and About. These can be selected using the tabs on the top of the screen.

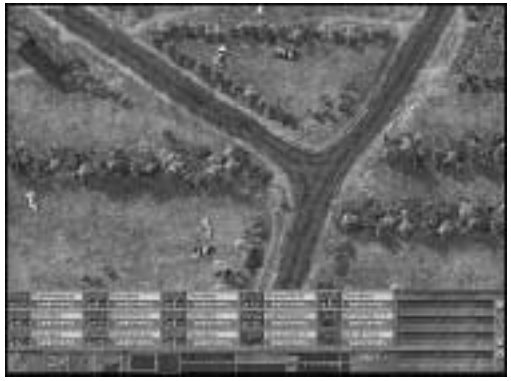
The top two options in Game Play control battlefield graphics. Remove Killed Soldiers removes the bodies of dead and incapacitated soldiers so that you can concentrate on the living, and Remove Trees makes the foliage on trees invisible, although it still affects line of sight.

In the centre of the Game Play panel, the Status Indicators control the highlighted bar and coloured outlines of friendly units. These can be set to reflect any number of conditions, ranging from morale, to ammunition supply, to unit health. Set these to whatever you feel you need to know about your men. The outline colours use the same colour spectrum as the target dots. When the outline colour is green, the troops are in good cover. When the outline is black, they are in poor cover.

Below the Status Indicators are toggles for:

Team Data Inset Map Soldier Monitor

Team Data



Defaults as on, displays all the teams on your side of the battle on the bottom of the screen, and shows their current status. You may also select a team by clicking on it from this window. Team Data can also be turned on and off with the **F5** key.

Inset Map



This is a miniature map of the battlefield that appears on the screen. This map may be repositioned on the screen by right-clicking and dragging it. Left-clicking on a portion of the Inset Map centres the screen in that location. You can target units under the map by normal means. You can select units under the minimap by right-clicking on them. The highlighted rectangle on the Inset Map represents the current screen. The Inset Map can be toggled on or off with the **F6** key.

Soldier Monitor



The soldier's name, the soldier's role in the team, and current Health/Morale state are shown along the top. Current Actions, Weapon in use, and Ammunition level for the type of ammunition in use are displayed at the bottom.

This gives detailed reports on whatever unit is currently selected, showing the weapon type, ammunition level, and state of morale for every man in the unit. If a soldier has low morale or comes under fire, his current action can be very different from what you order him to do. The Soldier Monitor can be turned on and off with the **F7** key. The Soldier Monitor may also be repositioned on the screen by right-clicking and dragging it.

Possible Morale States

Healthy .....Soldier is in good health.

Injured .....Soldier is hurt but can still perform actions at a reduced capacity.

Incapacitated .....Soldier is seriously injured and unable to perform any actions.

Dead .....Someone back home is getting a telegram.

Winded .....Soldier is tired but able to recover with a short break; his performance is slightly affected.

Fatigued .....Soldier is completely exhausted, desperately needs a rest, and can hardly act. His performance is severely affected.

Panicked.....The soldier is losing it. His combat efficiency is dramatically affected. He may calm down given time, but you might want to keep the squad around him until he relaxes.

Broken .....The soldier has stopped obeying orders and is thinking about making a run for it. As with panicked soldiers, he may calm down given time, and the presence of a battlefield commander and his unit may help bring him around.

Routed .....The soldier has decided to make a run for it; he cannot be recovered.

Suppressed .....The soldier is taking cover from enemy fire while firing back. His accuracy when firing his weapon is reduced.

Pinned .....The soldier is taking heavy fire and is spending more time hiding than firing. His accuracy is reduced, and he is unlikely to follow a movement order.

Cowering.....The soldier is staying put, keeping his head down, and will only fire occasionally.

Stunned.....An explosion has temporarily knocked the soldier out. He will regain consciousness again soon.

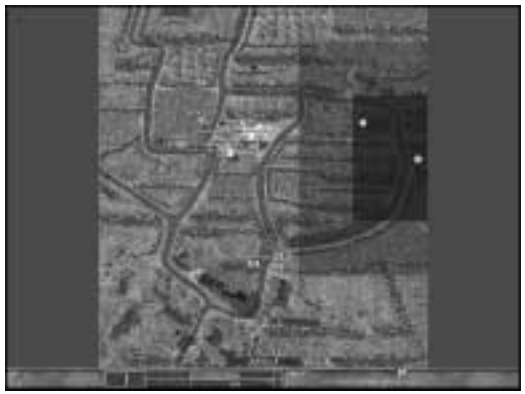
Heroic.....The soldier is feeling confident and is at an increased level of performance.

Fanatic .....More than confident, the soldier takes chances and is gunning for a medal.

Berserk.....The soldier feels invulnerable and attacks the enemy without fear. Such displays of fearlessness inspire those around him.

The General sub-screen under Options provides such options as Game Speed, Screen Resolution, and Scroll Speed. This screen also allows for the music, intro videos, and sounds to be toggled on and off. It also controls what language German units will speak.

Zoom Level



Zoom control is in the lower left hand corner of the map, beside the Options button. Aside from the default zoom option, the map can be zoomed out, at which point all units are represented by coloured boxes. While it is generally easier to control the game from the default zoom level, the zoomed out map is often useful for planning initial placement or to get a brief glimpse of how the battle is progressing. One of the best uses for the maximum zoom out level is to check the areas affected by your command teams. The **Space** bar shows the command radius of each commander, making it easy to see who is benefiting from officers and who is not.

Unit Status

Unit status takes up the bottom centre of the screen. It shows the type of unit, what it is doing, the health of its men, and how effective it is against infantry and tanks at various ranges. The ranges denoted are 20, 40, 80,160, 320, and 640 meters. The top graph, marked AP, represents effectiveness against infantry and the lower, marked AT, effectiveness against tanks. The graph below demonstrates how an infantry squad can be highly effective against a tank, but only if they can get in at close range.



The Colour of the faces indicates the status of the men in the Unit.

Green.....Healthy

Yellow.....Injured

Orange.....Incapacitated

Black.....Panicked

White.....Surrendered

Red.....Dead

COMMAND AND MORALE

While each unit has some kind of leader who leads his troops into battle, each unit's fighting effectiveness and morale is improved by being close to a higher ranking commander, who can direct the efforts of those men under his command. Keeping battlefield commanders near units on the front improves performance and morale dramatically. The higher ranking a commander, the larger the battlefield area he is able to administer. Pressing the **Space** bar on the battlefield shows the command radius of command personnel. The colour of the circle indicates the quality of the commander.

Green.....High

Yellow.....Medium

Red.....Low

Black.....Very Low

During the placement phase, and during battle, it is often useful to zoom the map out, press the **Space** bar, and make sure that your commanders are positioned to provide leadership to the troops.

As a battle progresses, some soldiers may lose morale. Receiving enemy fire, having their officers die, being flanked or ambushed, being around too many dead bodies, or facing too many enemies can all sap a soldier's will to fight. Eventually, a soldier may panic, run from the fight, or even surrender to the enemy. Convincing enemy troops to surrender by breaking their morale can be a very efficient way to win battles. Prisoners are walked off with raised hands to the map edge; they can be recaptured/freed if your own teams reach them before they leave the map.

Aside from competent command, you can improve soldiers' morale by successfully ambushing the enemy. Infantry that manage to destroy enemy tanks also get a large morale boost during the current battle.

Rallying

Soldiers that are routed will rally after a time. If they are within the command radius of a command team, this time period will be shorter. If the broken soldier is not within the command radius of a leader, the time needed to rally the soldier will be longer.

Separation

Occasionally, a soldier may get separated from his unit. This can happen from either panic or simple fortunes of war. If this happens, the soldier attempts to find his way back to his unit. This process can be hastened by moving the unit closer to their lost man. The presence of a commander can also assist in keeping groups together and bringing in separated men.

THE BATTLEFIELD

In many cases, the terrain of a battlefield can be the best resource a commander has. A clump of trees, an abandoned house, or a drainage ditch can all be powerful tools in the right hands. Right-click and hold the button down with the cursor over a terrain feature to get information about it. Details are displayed in the lower-left corner of the screen.

Hills



Holding the high ground is an old military tactic, and it does have its benefits. Units on top of hills can see over obstacles, giving them a good view and line of sight. The drawback is that once detected, all the enemy units can fire at your elevated team. Also, moving uphill slows units down; moving downhill is generally faster. This is useful if you do not want enemies to reach you or to make a quick get away. However, perhaps the most useful trait of hills is that hills block line of sight. Units can hide behind hills to avoid detection and to protect their flanks.

Gullies, Trenches, and Gun Pits



While units cannot cross deep water, shallow water can generally be crossed. Depressions in the earth left by running water can also serve as excellent natural protection. Gullies and trenches conceal soldiers and make them harder to hit, but they can become death traps if the enemy can flank the position and fire down the trench.

Gun pits are circular trenches dug for mortars and AT guns.

In Campaigns or Operations, if a Battle Group does not move for a turn, they are considered to be resting. If a resting Battle Group is attacked, any Infantry or AT gun it places in the open automatically starts in either a trench or a gun pit.

Forests



Forests provide something of a mixed blessing. Troops moving through forests have a great deal of cover. Tree trunks block fire, and the foliage of the trees prevents units from being specifically targeted. This cover works both ways, so units have a hard time firing out of forests. This unusual feature makes forests a natural place for flamethrowers, which can use the cover to approach the enemy. The ability of infantry to hide in forests makes them a dangerous place for tanks, and tanks should avoid forests unless absolutely necessary. Mortar fire into forests creates airbursts. This enhances the effect of these weapons on infantry. Remember that the **Ctrl+T** command can be used to hide the foliage of forests. The foliage is still there and affects the game, but you can see the units much more easily.

Buildings



The key to understanding how to use and deal with buildings is that buildings are incredibly useful to units inside them, particularly infantry. Building roofs provide cover from mortar fire, building walls provide good concealment and hard cover from enemy fire, and tall buildings allow clear fields of fire over low-level obstructions. This makes them extremely valuable for infantry and AT gun units, and a menace to tanks. A tank on its own generally cannot detect infantry in a building until it is within Ambush range. A wise commander will go to great lengths to avoid putting a tank anywhere near a building that has not been checked out by friendly infantry first.

When approaching a building, it is often useful to deploy Smoke to allow units to advance without fear of detection. It is also good practice to Fire machine guns at buildings as your infantry units approach to suppress any enemy units that might be in the building.

Because AT guns have only limited mobility and are vulnerable to mortar fire, buildings are generally a good choice for placement. Unfortunately, placing an AT gun in a building also tends to limit its field of fire. Only light AT guns may be placed in buildings.

While all buildings conceal troops from the enemy, the stronger the building the more cover it offers from enemy fire. Wooden buildings provide no protection from cannon fire and only limited protection from other kinds of attacks. Stone buildings provide greater protection, and protect against small calibre cannon attacks. The few reinforced military installations found in the Cotentin region provide shelter from all but the most punishing attacks.

Rubble

Rubble can be treated like buildings in most cases, but in the absence of a roof, mortar fire becomes a factor.

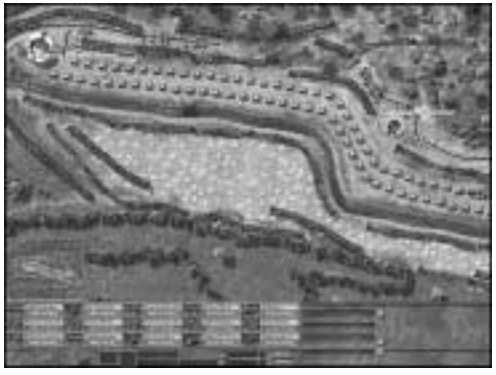
Roads

Roads provide a simple trade off. Moving along a road is generally faster than slogging through the mud, but roads are, by their very nature, flat open places without obstacles to hide behind.

Scrub

Not every plant is a tree, and sometimes a bush is all that a soldier needs to hide behind as he lies in wait for the enemy. However, once he is discovered, that soldier may find that a bush cannot stop a bullet.

Mine Fields



Mine fields are used to defend areas and slow the enemy without using valuable and vulnerable manpower. You do not place mine fields; they are automatically deployed if available in a battle. Mine fields can be detected by expanding out to maximum zoom where mine fields are noted in red. Vehicles and Infantry teams crossing mine fields can be damaged or even destroyed. There are several ways to deal with mine fields.

Engineer/Pioniere units are skilled at removing mines. Engineers/Pionieres passing through a mine field while ordered to Sneak disarm any mines they come across.

Other infantry types can Sneak across mine fields with only a small chance of detonating mines. Infantry that are Moving or Moving Fast face great danger from mines.

Finally, if all else fails, concentrated mortar or barrage fire can be used to detonate mine fields, but this is not a very efficient solution and some mines may be missed.

The easiest way to deal with mine fields is to move around them if possible.

ENDING A BATTLE

Battles can end in a number of different ways. In single battle games, many of these possible endings can be de-selected in the lower right hand corner of the Command Screen.

Victory Locations



On each map, there are a number of victory locations. Victory locations represent either important strategic locations or other points of military interest. If either side controls all victory locations on a map, they win that engagement; the opposing force is given two minutes to recapture at least one location or be forced to retreat off the map if the Two Minute option is selected. Each victory location is marked with a flag. A mixed flag represents victory locations controlled by neither side. To capture a victory location, move any unit other than a sniper to the location. Victory locations are also used to score a battle. Each victory location is worth 1-3 points depending on its position and font size. Victory locations with larger fonts are worth more points. Victory locations along map borders are generally worth only one point.

Truce

A battle may be ended if both sides agree to end it. To propose a truce, click the Truce button on the tool bar in the lower right hand corner. Both players must agree to a truce for the fighting to stop. Once a truce is offered, you may accept by pressing the Truce button. A Truce offer that is not accepted can be withdrawn by clicking the Truce button again and can be offered again at a later stage.

Time

In battles with a time limit, the engagement ends when the clock runs out. It is recommended to set the timer to 15 minutes for best game play against the artificial opponent.

Morale Failure

When you play an Operation or Campaign, either historical or one you have made with the scenario editor, the Force Morale end-of-battle option is always enabled. You may disable this function by checking the box on the command screen. For individual battles, either historical or self-made, the default setting for Force Morale is off. **Designer's Note:** Be advised that disabling Force Morale will severely alter play balance when playing Operations and Campaigns. The Operations and Campaigns that are included in the game have been designed to be played with Force Morale enabled.

If a battle ends because of a truce or time-out, the battlefield is still split between the forces. In Campaigns or Operations, the deployments for the following cycle are based on how far each side pushed during the previous battle.

If a battle ends because of a morale failure, the Battle Group that flees loses 1-3 victory locations depending on the ratio of the winner's Force Morale to the loser's Force Morale. In addition, the Battle Group will lose two teams chosen at random from its force mix as a rearguard/breakout force loss penalty. If the victor has 33% more force morale than the loser, the winner will gain one victory location. If the ratio is between 33% and 66% the victor will gain two victory locations. If the ratio is greater than 66% the victor will gain three victory locations. If the fleeing side still has any victory locations left, the field continues to be split based on previous positions; otherwise, the losing side is pushed off the map.

If a Battle Group is pushed off of a map, it is disbanded. If the Battle Group was still in supply when it was disbanded, there is a 75% chance that each team makes it back to be added to the Battle Group 's force pool.

If one side destroys all enemy units, they hold the field, and the enemy Battle Group is disbanded. This very rarely happens because the losing side generally flees from morale failure first.

Debriefing Screen



When a battle ends, the Debriefing Screen appears. The Debriefing Screen indicates which side won, why they won, and what areas they controlled on the map. Lightened portions of the map indicate areas that ended up under your control.

The Details button on the lower left hand side of the screen changes the debriefing screen to show specific casualty figures for both sides. The Text button returns to the original screen.

The Soldier button allows you to see how your individual soldiers performed in battle. Use the Team Icon buttons in the lower part of the screen to cycle through your units. Note that small **+** and **-** marks denote changes in a soldier's attributes. The soldier's medals, acts of bravery, acts of cowardice, and kills for the last battle fought are also listed.

The Campaign Debrief tab at the top of the screen brings up a map of the Campaign area showing the regions each side controls, and listing the current Campaign score. The Details button on the Campaign Debrief screen lists the total losses incurred on each side during the entire Campaign.

When you are done viewing the battle results, the Next button advances you to the next Battle or strategic turn.

STRATEGIC LEVEL



The Strategic screen controls the movements of Battle Groups for Operation and Campaign play. At this level, you determine the battle plan, not for squads of men on the battlefield, but for "D-Day – Invasion Normandy" itself. Each of the Battle Groups represents a unit roughly of battalion size that fought in Normandy. The result of combat between Battle Groups represents the success or failure of the entire formation.

Will you press forward on all fronts or secure an area?

Will you achieve what Germany historically could not?

The Strategic Map

The Strategic Map shows the general region that most of the Normandy battles were fought over. The map scrolls to allow more detail.

During a particular Campaign or Operation, some or all of the Strategic Map may be available. Each available region has its own coloured square in its centre. This square denotes who controls the region or if that region is currently contested. It also shows where supply depots are. Roads connect regions. A Battle Group cannot move from one region to another unless a road connects them and the Battle Group controls the victory location connected with the road it is taking.

American Control.....White Star on Green

German Control .....Black Cross

Mixed Control.....1/2 White star - 1/2 Black Cross

American Major Supply Depot.....Green Barrels

German Major Supply Depot .....Gray Barrels

American Minor Supply Depot .....Green Barrel

German Minor Supply Depot.....Gray Barrel

Detected enemy and friendly Battle Groups are visible on the Strategic screen. You can look at any Battle Group by left-clicking on it. This displays the units that make up the Battle Group on the task bar at the bottom of the screen. Click on any unit in the Battle Group to examine the Soldier screen for that unit.



American and German Battle Groups also show a star or cross above them. The colour of this icon displays the approximate relative firepower of each Battle Group.

Green .....Strong AT and AP

Yellow .....Moderate AT and strong AP

Orange.....Moderate AT and AP

Red.....Weak AT and moderate AP

Black .....Very weak AT and weak AP

Units with low firepower are best used defensively, to prevent enemy advance while your stronger units attack. A properly led infantry group can hold even the heaviest armoured column at bay.

Weather Indicator

At the top left hand corner of the Strategic Map is the weather indicator showing the current weather for the strategic turn being played.

Ground Condition Indicator

Below the weather indicator is the current ground condition for the strategic turn being played.

Strategic Turn Indicators

Below the ground condition indicator are the Strategic Turn Indicators showing the current date, the ending date for the scenario, and the current time. Clicking on the arrows next to the scenario length indicator shows reinforcement Battle Groups and where they may arrive on the date shown. The dates run from the 6th of June to the 30th of June 1944.

Battle Groups

Battle Groups represent a force roughly the size of the lead element in a regimental combat group. These Battle Groups are composed of various forces: infantry, tanks, and other vehicles and support teams. A full strength Battle Group can have 15 units in play. As combat occurs, Battle Groups take losses, and these are replaced from a limited pool of reinforcements. Reinforcement pools slowly replenish as the days pass. **Note:** the reinforcement pools function automatically; these are forces distinct from the Force Pool.

Repair and Replacement

Tanks that have been damaged and infantry units that have taken losses are able to make some repairs in the field. All damaged tanks are assigned for field repair after each battle. 40% of damaged tanks can be made functional, but the rest are either too damaged for repair and/or scrapped for parts to repair the 40% that survive.

Any infantry team that has 60% or more of its soldiers killed or seriously wounded is disbanded and its survivors either sent to other units or rotated to the rear. Infantry units that take less than 60% losses are assumed to find replacement men from disbanded infantry units or from new men brought up from the rear.

Scrapped tanks and disbanded infantry units must be replaced from the unit's reserve Force Pool.

Replacements do not strictly come forward from "rear" areas. They are also supplied from the larger organisation to which your Battle Group belongs. Even when surrounded, your Battle Group can receive replacements because it is assumed they are being sent over from company or division HQ, which has been surrounded along with your Battle Group.

Disbanding

Battle Groups are disbanded whenever the player chooses or whenever they are forced to leave a map either through loss of victory locations or from morale failure. If a Battle Group that disbands is in supply when it disbands, all of its units are returned to its reinforcement pool. If you have only one Battle Group remaining, you may not willingly disband it.

Disbanding a weakened Battle Group that is in supply can be an excellent way of clearing a road for better-equipped Battle Groups moving up. This allows the weakened Battle Group to reform in the rear.

If a Battle Group voluntarily disbands while it is out of supply, it loses all of its vehicles, and 50% of its infantry units are captured before they return to the group's supply depot.

If an unsupplied Battle Group is forced to disband involuntarily, because it is forced off a map, it loses all of its vehicles, then 75% of its infantry units are captured. This can be a crippling loss.

Reforming and Reinforcements

When a unit disbands, it tries to reform on the map on the morning of the following day. The unit will reform at a friendly supply dump held by its side first; then if none are available, it will reform at an enemy held friendly major supply depot.

Reinforcement units will arrive when the scenario defines the moment of arrival. These units will arrive at pre-determined supply depots. If the depot is friendly owned, then the unit is free to move. If the depot is enemy owned and an enemy BG is on that depot map, then the unit has to fight its way onto the map.

In either case, reforming or reinforcing, the unit will bounce to the nearest supply dump if the designated supply dump contains a friendly unit.

Supply

Units receive fuel and ammunition from friendly supply dumps. A unit can receive supplies from any friendly dump that it can trace a path back to that passes only through friendly, uncontested territory. This is the line of supply, and if you can cut it, you can drastically reduce the combat efficiency of the unit you have cut off. A unit that has been cut off is described as "out of supply." For each turn that an unsupplied unit engages in combat, it drops one supply level in ammunition and fuel. Loss of ammunition supply cuts ammunition starting levels during battles. Loss of fuel does not affect tanks immediately. However, once fuel supplies reach Low, there is an increasing chance that each vehicle begins each battle out of fuel and thus immobile.

Fuel Levels

Supply State	Effect
High	Normal
Normal	Normal
Low	30% Chance for vehicle immobility
None	60% Chance for vehicle immobility

Ammunition Levels

Supply State	Effect
High	100% Optimum
Normal	80% Optimum
Low	60% Optimum
None	30% Optimum

A Battle Group that is out of supply and is low on fuel can capture fuel from enemy major supply dumps. To use enemy fuel, the Battle Group must occupy the dump; once it leaves the dump, the fuel supply starts to diminish as normal. Enemy major supply dumps only provide fuel on site; no supply line is created. Unfortunately, enemy supply dumps do not provide ammunition.

In addition to loss of supplies, units that are out of supply have a more difficult time repairing damaged tanks. A Battle Group whose ammunition supply has reached "low" only has a 75% chance for damaged tanks to be replaced to the force pool. A Battle Group whose supply level has reached "none" is unable to repair tanks at all until it gets re-supplied.

Strategic Turns

Each strategic turn represents several hours of fighting. There are two strategic turns over the course of a day. Reinforcement Battle Groups only arrive on the morning turn. During each strategic turn, you may move each Battle Group you control, and assign any air strikes, mortar barrages, or naval barrages that are available. If you feel it necessary, you may also disband any Battle Groups. When you have finished your turn, hit Execute; this brings up the Strategic Results screen. The game is automatically saved at this point. After reviewing the results of your decision, you play out any consequent battles in random order.

Moving Battle Groups



To move a Battle Group, left-click on the Battle Group. When the Battle Group is selected, movement arrows will appear pointing to all areas that the Battle Group may legally move to. After you have decided where you want to move your Battle Group, you drag it to an adjacent territory. Battle Groups in uncontested territories may move along any connecting road. In areas that are of mixed control, you may only move along roads for which you hold the victory locations.

The Strategic Results screen indicates the outcome of the moves for the turn and if any battles are to occur. To fight the battles listed, or to advance to the next strategic turn left-click on Next. The order in which the battles are fought is from north to south and from west to east.

Note: Each side is only allowed to have one Battle Group in each region at a time.

You may move a Battle Group into a region that you already occupy. However, if the group currently in the region does not move out of it, the other group will not advance. If you order two units into the same location, the orders issued to the second unit cancel out the orders given to the first. It is possible for more than one unit to use a road, so units may switch places. When ordered to do so, a two-way arrow is displayed on the map.

All movement on each turn happens simultaneously. If two adjacent enemy forces move at each other, the battle occurs on the map of the slower Battle Group. Reconnaissance groups are faster than motorised groups, and motorised groups are faster than infantry. If the German and American Battle Groups are the same speed, the tie goes to the Germans and the battle is fought on the American map.

Resting and Digging In

A Battle Group that does not move during a strategic turn is considered to have rested. Battle Groups that have rested recover lost morale and have time to dig in.

If a Battle Group that is resting is attacked, it defends its map from prepared positions. When an infantry or support unit is placed on an open stretch of ground, a trench or gun pit is placed under them, providing cover where there was previously none. These fortifications are permanent, and appear on the battlefield in future battles. Enemy troops are unaware of field fortifications until they have a line of sight, so what may appear to an attacker as an open field on a map could actually be a vast network of enemy trenches.

Infantry trenches are dug based on the unit's facing, so it is important to establish facing before hitting Begin.

Weather

Weather affects the availability of Air Strikes, Mortar Support, and Naval Gun Fire. Generally, the clearer the weather, the more support is available. Pre-generated scenarios use the real life weather conditions of D-Day. User-created scenarios can opt for random weather effects. Weather also affects supply. During storm turns, the supply dumps for the Americans are downgraded by one level.

Weather Model

The following is a list by date of the historical weather conditions during the D-Day campaign in Normandy.

Date	Weather	Date	Weather
June 6th	Overcast	June 19th	Storm
June 7th	Light Overcast	June 20th	Storm
June 8th	Light Overcast	June 21st	Storm
June 9th	Overcast	June 22nd	Light Overcast
June 10th	Light Overcast	June 23rd	Clear
June 11th	Clear	June 24th	Clear
June 12th	Clear	June 25th	Clear
June 13th	Clear	June 26th	Clear
June 14th	Clear	June 27th	Clear
June 15th	Clear	June 28th	Light Overcast
June 16th	Overcast	June 29th	Light Overcast
June 17th	Light Overcast	June 30th	Light Overcast
June 18th	Light Overcast		

Variable weather would run along these probabilities:

Base Weather Role	Next Turn Weather Modifier
Overcast 0-25	-5 modifier
Light Overcast 25-50	-3 modifier
Storm 51 -63	Automatic for three turns then random again.
Clear 64-99	+6 modifier

The weather always starts in Overcast.

Air Strikes, Naval Gun Fire, and Mortar Support



Air Strikes, Naval Gun Fire, and Mortar Support are available from buttons on the lower left hand corner of the map. The number by the various support options indicates the number of support missions available each day. It is important to remember that there are two turns in a day. If Mortar Support, Naval Gun Fire, or an Air Strike is assigned but not used during a morning battle, then the support mission is returned for use in an afternoon battle. To assign support, click on the appropriate symbol and drag it to the unit you wish to support. Mortar Support, Naval Gun Fire, and Air Strikes are assigned to units, not to regions. A unit may have all three types of support for a battle, but never more than one of each. To remove a support mission from a unit and place it back in the available pool, left-click on the tab that appears above the unit on the strategic map.

Note: the following charts show the default settings; playing with the Historical Weather Conditions option turned on will alter the availability of Air Strikes and Naval Gun Fire.

Mortar Barrage Availability

German (per day)

June 6 0

June 7-8 3

June 9-11 4

June 12-18 3

June 19-30 2

American (per day)

June 6 0

June 7 3

June 8 4

June 9-11 5

June 12-30 6

Air Strike Availability

German – None

American (per day)

June 6.....0	June 15.....5
June 7.....2	June 16.....3
June 8.....5	June 17.....4
June 9.....1	June 18.....0
June 10-12.....0	June 19.....1
June 13.....2	June20-30.....2
June 14.....4	

Naval Strike Availability

German – None

American (per day)

June 6-11.....2
June 12-22.....1
June 23-30.....2

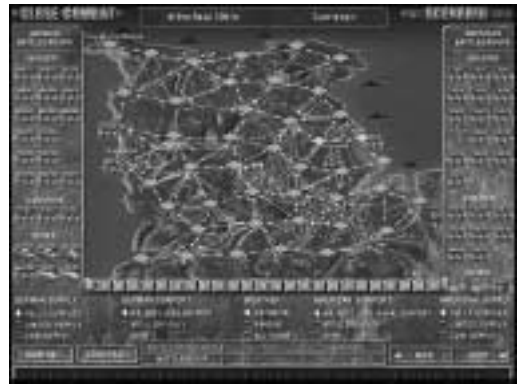
Intelligence

When on the strategic map screen, you are usually unable to see the enemy. On a clear or light overcast day, American forces can see the entire German force because of their air superiority. Otherwise, the only enemy Battle Groups you can detect on the map are ones that you have fought with during the previous turn.

Winning Campaigns and Operations

Campaigns and Operations continue until the pre-determined ending date or until one side has complete control of all map areas. If a strategic layer game ends because of time running out, then each side totals points for every victory location on every map in the scenario and the player with the most points wins. Remember, each victory location is worth between 1-3 points. The only exception in scoring is during the Grand Campaign in the Campaign section. When playing the Grand Campaign your score is based not on total victory location points, but on how each player does compared to how each side performed historically.

SCENARIO EDITOR



The Scenario Editor is a very easy to use feature that allows you to design your own Campaigns and Operations. It is strongly suggested that you become familiar with the strategic screen and play a few Campaigns before designing your own.

The Map

The map screen shows the entire strategic map, but all of the location boxes are blacked out. Left-click on a location to rotate through all its possible control and supply states. Choosing a Battle Group and placing it on a blackened map automatically turns its control to the Battle Group's nationality.

The possible starting states are:

- American control (no supply depot)
- German control (no supply depot)
- Split control (no supply depot)
- American control (American major supply depot)
- Split control (American major supply depot)
- German control (American major supply depot)
- German control (German major supply depot)
- Split control (German major supply depot)
- American control (German minor supply depot)
- American control (American minor supply depot)
- Split control (American minor supply depot)
- German control (American minor supply depot)
- German control (German minor supply depot)
- Split control (German minor supply depot)
- American control (German minor supply depot)

Every map must be contiguous; there should be a possible path from every region to every other region. Avoid unconnected islands. For Campaigns and Operations, each side must also have at least one supply depot.

Once you have set all of the initial starting states on the map, you should turn your attention to the date bar. The date bar starts with two sliding markers, one on each side. These represent the starting and ending dates of your Campaign. To change the starting and ending dates, click and drag the bars to the dates that you would like.



If you click on a date, a small gray arrow appears over it. This arrow represents the date that Battle Groups appear on the map. Changing the date allows you to have reinforcements arrive during different days of the Campaign. Dates that you have set reinforcements to arrive are marked with an **R**.

When looking at the Scenario Editor map, you will only see the units that first appear on the date that is currently selected.

To place a Battle Group, left-click on it, and then drag it to the location where you wish it to start. Remember that each side can have only one Battle Group at each location. Each side must have at least one Battle Group appear at some time during the Campaign.

Once you have selected the Battle Groups you wish to appear, you can set the levels of available supplies for each side. This affects ammunition and fuel levels for each side, and at Low Supply there is a chance for tanks and vehicles to be out of fuel during each battle.

You can also set the availability of mortar barrages, naval gun fire, and air support, as well as the weather, from the buttons on the bottom of the screen. When you are done, you may save the scenario you have created.

Scenarios that consist of just one map are Battles. Scenarios that contain multiple maps and/or multiple Battle Groups are Operations or Campaigns. In all cases, multi-map battles require all maps included in the scenario to be contiguous; in other words, you must be able to trace along a road from any map in the scenario to any other map in the scenario. Any map left unclaimed is inaccessible to the user once the game has started.

Now all you need to do is save the game. A popup window appears asking for the name of the battle as well as a short description. Once you have named and saved it, this battle is available on the command screen.

To create Operations and Campaigns all you need to do is add more maps, giving each side at least one supply depot, and more Battle Groups. Remember that you can have units appear on the strategic map after the first day by clicking on the date you want them to appear and then placing them. There is a gray arrow overlaid on the date the units are appearing.

MULTIPLAYER



Multiplayer games operate by having one player, called the Host, start a game. The second player Joins the game that the Host creates. To play a multiplayer game, the computer that hosts the game and the joining computer must both have a copy of the game CD.

Internet TCP: Using this type of connection, you can play the game with another player over a LAN (Local Area Network) or over the Internet.

Internet UDP: Faster, though slightly less stable than TCP, players may elect to connect over the Internet or a LAN using the UDP protocol.

Modem: Two computers with modems can connect over phone lines.

Serial Connection: You can also link to another player over a null-modem cable.

Using a TCP Connection

After both players have connected through their ISPs, both should select Multiplayer from the Main Screen. From the Multiplayer screen, select the Internet TCP button.

If you are playing over a LAN, you can join any game listed. To join a game, left-click on it, then left-click on Join, or simply double-click on the game you want to join. To get a current list of available games, click the Search for Games button.

If you want to join an Internet game, select the Host IP button and enter the host's IP address. The host's IP address appears on the bottom of their screen. You need to find out from the host player what their IP address is. When you are done, select ready and wait for the host to start the game.

If you want to host the game, click on the Host button. Your IP address appears on the bottom of the screen. You must inform the second player of your IP address so that they can join. After electing to host a game, the Select a Battle button brings you to the Command Screen where you can select the Battle, Operation, or Campaign and realism settings. When you have made your selections, select Ready. When the second player has joined, select Next to start the game.



Using a UDP Connection

Other than selecting then using the different protocol, connecting with UDP is virtually the same as using TCP.

Using a Serial Connection

Power down both machines and connect their serial ports with a null-modem cable. Restart the machines and start the game; select Multiplayer, then Serial Connection. A box appears requesting port, baud rate, stop bits, parity, and flow control. Other than the port, these settings need to be the same for both machines. Once this is done, players may Host and Join as they do in TCP games.

Using a Modem Connection:

To connect via a modem, both players select multiplayer, then select the modem connection method. The player hosting the game should select Host, verify their modem from the pop up list, and click the Answer button. To join a game, click on the Call button. When the popup menu appears, either click on the host's name and click on Join, or Double-click on the host's name.

Using the MSN Gaming Zone

The MSN Gaming Zone (the Zone) is a free multiplayer gaming service available over the Internet at http://www.zone.com. To access the Zone, you need an Internet connection and Netscape Navigator 4.0 or later or Internet Explorer 3.2 or later.

The first time you log into The Zone, you are asked to create an account and to download the Zone software. Prompts in The Zone will direct you. Once you have created an account and installed the Zone software, visit The Zone website and select CLOSE COMBAT: INVASION NORMANDY from the strategy games menu. Once in the CLOSE COMBAT: INVASION NORMANDY area of the Zone, choose a game room. You may then either click on any unoccupied table to host a game or choose an occupied table and play against a person waiting to host. The Zone has a built in chat feature, making it easy to find other players. Next to each player's name is a coloured bar indicating his or her latency (the quality of their connection to the Zone). When starting a game, try and play with people with green indicators. Make sure you check your password when logging on to the Zone every time you log on. If you have trouble with Zone connections try using the Zone as a matchmaking service and connect using the UDP method.

Using Mplayer

Installing mplayer.com is simple. Just follow these easy steps and you are on your way to the excitement of online multiplayer gaming!

1. There are several ways to install mplayer.com from CLOSE COMBAT: INVASION NORMANDY.

- From the game CD-ROM Autorun Menu: Select the option to Play on mplayer.com
- From the Windows 95/98 Start Menu: Select this game and the option to Play on mplayer.com

From the Program folder: Click on the icon to Play on mplayer.com

2. This will start the mplayer.com installer, which will:

- Check for mplayer.com — if you don't have it, the program will install everything you need! Just follow the easy install instructions at the prompts. During the process, you will set up an mplayer.com account and select your mplayer.com member name and password.

3. After installing mplayer.com, your Web browser will launch and connect you to the mplayer.com game page:

- Make sure your game CD-ROM is in the disk drive.
- Now click on 'Play Now' to log onto mplayer.com and head to the Lobby of your game.
- Before entering the game's Lobby, we will automatically download any additional files you might need to make the game playable on mplayer.com.

4. Now you are in your game's Lobby on mplayer.com.

- Chat with other players by typing your message and pressing Enter.
- To enter a Game Room, double-click on a green Room icon.
- If you want to create a new Game Room, click on the Create Room button.

5. Almost there!

- If you enter an existing Game Room, Click on the 'Ready to Play?' button, or,
- If you create a Room, wait for players, then click on the 'Launch Game' button.

6. Have fun playing on mplayer.com!

Communicating with Your Opponent

You can send messages to your opponent at any time.

To send a message during play, press **ENTER**. Type in your message and then press **ENTER**. The message appears briefly on the other player's screen.

UNITS

The battles in the Cotentin region were conducted by hundreds of thousands of men



using a wide array of weapons and vehicles.

Infantry

Light Infantry

Light infantry are armed with rifles, submachine-guns, and grenades. Because they are less encumbered, light infantry can travel good distances without becoming tired. This makes them well suited for attacking flanks and probing open territory.

Medium Infantry

Medium infantry have rifles, submachine-guns, grenades, and machine guns like the Browning Automatic Rifle (BAR). Medium infantry are well rounded in terms of both mobility and firepower.

Heavy Infantry

Heavy infantry have even more firepower, such as flamethrowers, panzerfausts, and demolition charges. Well suited to close combat, heavy infantry can also be quite effective against tanks, if they can get close enough for a shot with a Panzerfaust or an anti-tank rifle grenade; this also applies to a lesser degree to the lighter armed infantry teams. Because of the heavy weight of their gear, heavy infantry are slow and can quickly become winded.

Snipers

Snipers are deadly, long-range shooters who work alone. They are more accurate at long range, are more likely to target enemy leaders, and are more likely to kill, but they have a low rate of fire. Snipers are easily suppressed once they are discovered and should switch positions regularly. Remember that the talent of a sniper is not in the amount of enemies he kills directly; by targeting officers and suppressing enemy troops at long range, he can sap enemy morale and reduce their efficiency.

Engineers

Engineers have heavy firepower, such as flamethrowers, panzerfausts, and demolition charges. Well suited to close combat, engineers can also be quite effective against tanks if they can get close enough. Because of the heavy weight of their gear, engineers are slow and can quickly become winded. In addition to the heavy armament, engineers can clear lanes through mine fields as well.

Scouts

Scouts are lightly armed and used for infiltrating enemy lines to check deployments and set ambushes. They are quick and stealthy. They are faster and less likely to be discovered than average infantry. They are very effective at close range but not effective at long range. Scouts are particularly valuable in urban combat.

AT Infantry

Infantry anti-tank teams are armed with weapons like the Panzerschreck and the Bazooka. Infantry AT weapons generally have a low rate of fire and limited ammunition. Bazookas are often only effective against the sides, rear, or top of German armour. Panzerschreck teams are effective against most armour from any angle. These weapons are penalised for concealment and accuracy because of their back blast when the rocket is fired. It is best to set these teams up and let them fire at tanks on their own rather than issue them fire commands. AT teams should use concealment and surprise to be effective.

Basic Infantry Tactics

During the Normandy campaign, the ratio between infantry and tanks was hundreds to one. Infantry being the principal component of the battle, it is vital that you use them properly. Infantry are extremely vulnerable to virtually every other unit when in the open. They should always be kept under some kind of cover: buildings, bunkers, trenches, forest, or smoke if necessary. When facing armour, infantry should assume Ambush positions and attack from the side or rear. Close assaulting tanks using grenades from ambush or under cover of smoke can also be effective.

Secondary Weapons

In addition to their primary weapons, many soldiers carry secondary specialist weapons like explosive grenades, pistols, panzerfausts, rifle grenades and demolition charges. The number of these weapons available for each unit is listed on the Battle Group screen. When the opportunity arises to use these weapons, your soldiers do so automatically.

Mortars

Mortar crews engage the enemy with indirect fire, lobbing powerful explosive shells great distances. While a mortar team is more accurate while firing at targets they can see, they are often best positioned well away from the front line where they can hammer enemy infantry and light vehicles from safety.

The heavier a mortar is, the slower the rate of fire but the more powerful the shell. Heavy and medium mortars are powerful enough to be used against buildings. Mortars can also lend vital support to friendly units by dropping smoke at great distance.

Mortars are also effective against light vehicles, particularly open-topped vehicles such as half-tracks.

Mortar Tactics

A mortar is more of a tool than a weapon. It is important to understand that in most cases, the inaccurate nature of mortars make them only marginally useful at killing. Mortars are useless against any tank with an armoured top and only kill an infantryman if the shell it launches lands very close. Aside from its immense power to suppress infantry, where the mortar shines is in destroying AT guns in the open, and for dropping smoke anywhere on the map.



Nothing lessens the blow of enemy ambush like the power to shower your units in smoke while they pull a hasty retreat.

AT guns make good targets for mortars. AT guns are unarmoured, generally immobile, and need line of sight to return fire. When an AT gun is detected in the open, it is often wise to pull your troops back and simply pound the gun until it is disabled. If the gun is inside a building, dropping smoke in front of the building can temporarily blind the gun.

Machine Guns

Machine guns are highly effective against infantry and light vehicles and are extremely effective at suppression. However, heavy machine gun crews can only move their weapons slowly and require time to set up the weapon when they reach a new position. Because they are difficult to move and slow to set up, machine guns are often set up in buildings or other such cover locations to prevent them from being destroyed by mortar fire.

Machine Gun Tactics

Machine guns are powerful weapons and are even more useful in that they generally do not require close supervision. Place machine guns in well protected areas, preferably with a roof and a wide field of fire, and they can work wonders against enemy infantry and light vehicles. A successful Ambush attack by machine guns can be devastating. If a machine gun draws the attention of enemy armour, it is definitely time to retreat.

Flamethrowers

These are very effective against both infantry and armour, but have a very short range and limited shots. They are heavy and slow moving, but do not require a setup period and can be fired on the run. As might be imagined, flamethrowers tend to set fires. Troops with flame-throwers are extremely vulnerable and can actually explode if hit.

Flamethrower Tactics

Flamethrower teams require a great deal of support from other friendly infantry. Their short range and vulnerability require either total surprise or that the enemy be well suppressed. When fighting armour, other infantry units can provide support to flamethrower teams by fixing the enemy's attention elsewhere.

Anti Tank Guns

Anti-tank guns are field pieces, modern cannons placed in the field to deal with enemy armour. AT guns are generally immobile, although smaller versions can be dragged about by their gun crews. Inexpensive to produce but unarmoured, AT guns require a mix of surprise and proper placement to be effective. AT guns can be highly effective against infantry, but are often better left hiding in wait for enemy armour that friendly infantry is unable to deal with.

AT Gun Tactics

There are two schools of thought regarding AT gun tactics. The first school says that AT guns should be placed on hills and in other places with wide views and wide fields of fire. This ensures that the AT gun has a chance to target and hopefully destroy the enemy, but it also leaves the gun vulnerable to return fire or mortar bombardment.

The alternative is to conceal AT guns in buildings. This provides both concealment for the gun and protection for the crew. The downside to this strategy is that the AT gun's field of fire is generally very restricted, and the building only offers limited protection against tank rounds.

Crews

Vehicle crews have little value outside the vehicle and generally try to leave the battlefield after abandoning their vehicle.

Gun crews are armed. They will use their rifles against infantry targets. If the gun runs out of ammo, they will defend the gun; if the gun is destroyed, they try to leave as vehicle crews do.

Vehicles

CLOSE COMBAT: INVASION NORMANDY contains a wide variety of Allied and German vehicles.

Half-tracks and Light Vehicles

Half-tracks and other light vehicles allow the rapid deployment of heavy anti-infantry support and occasionally anti-armour weapons. However, vehicles like half-tracks and armoured cars are only lightly armoured and vulnerable not only to anti-tank weapons but to rifle fire from the sides and top when a height advantage comes into play.

Light Vehicle Tactics

Light vehicles have traded off armour for speed. Use that speed to launch flanking attacks and to reinforce infantry and tanks from a distance. Never bring a light vehicle anywhere near an enemy tank. Remember to stay on the move as well or risk drawing enemy mortar fire, which can punch right through the top of an armoured car or half-track.

Tanks

A tank is virtually invulnerable to small arms fire. Tanks can carry machine guns to use against infantry, high explosive charges (HE) for longer ranged attacks against infantry (like a hand grenade with a greater range), and armour piercing rounds (AP) that are effective against all but the heaviest tanks. While tanks may seem like the lords of the battlefield, a tank is vulnerable to properly armed infantry who can get close enough. Tanks are well placed behind advancing infantry, lending their considerable firepower while allowing the infantry to ferret out anti-tank teams and other infantry that might lie in wait.

When not in immediate danger, tank crews generally keep portholes and the top hatch open. This allows maximum visibility, although it does allow the possibility of surprise attacks while partly vulnerable, particularly from snipers. Once danger is recognised, such ports are closed, affording protection but limiting visibility.

As a general rule, tanks have much heavier armour on the front then they do on the sides or rear. Please refer to "Vehicles" on page 49 for an explanation of how movement affects facing.

Mobile Guns

These weapons have large guns that can fire HE and AP rounds like tanks, but they are not heavily armoured. They have good firepower, but little defence, and cost less than tanks. Mobile guns generally have no turret, firing only forward over a limited arc. While not nearly as flexible as tanks, their powerful forward guns are often the only way of dealing with armour from the front.

Flamethrower Tanks.

These are very effective against both infantry and armour, but the flamethrower weapon has a very short range. Because of their severe range limitations, Flamethrower Tanks need to stay away from conventional tanks using buildings, foliage, smoke, and hills for cover until they can get close enough to strike.

Basic Armour Tactics

While great books have been written about the high art of tank vs. tank warfare, the basic principal is very simple. Whenever possible, be positioned in such a way so that you are shooting at an enemy's weak side or rear armour while he is shooting at your thick front armour. Also try to bring several of your tanks' guns to bear on an isolated enemy tank.

Also remember that infantry cannot harm tanks at long range but can destroy them with a close range ambush on the sides or rear. To avoid this, tanks should act as support vehicles, using infantry to ferret out enemy infantry and concealed AT guns. Once the enemy is found, the tank can then blast away from range.

Utah Beach — early morning, June 6, 1944

Prior to dawn on June 6, 1944, Utah beach was completely obscured by smoke from naval and air bombardments while 30,000 men and 3,500 vehicles were assembled offshore waiting for the sun to rise.

Finally, the first waves of the US 4th Infantry Division landed at low tide while the water level was well below the beach obstacles. Although the Americans had to cross hundreds of yards of open beach to reach the dunes, enemy fire was sporadic at best. While infantry and tanks cleared enemy bunkers, teams of engineers demolished as many obstacles as they could before the tide rose and covered them.

Although some fighting took place around the German strongholds, American infantry began to move off the beaches over flooded lagoons and met up with men from the 101st Airborne Division by 1300 hours. By nightfall, a bridgehead had been established and was being held firmly against sparse and uncoordinated attacks.

VEHICLES

M3 Half-Track



A half-track is a hybrid vehicle with two wheels in the front and tracks in the rear. The M3 HT usually mounted a machine gun in a ring turret. M3s were also effective as mortar carriers. While they do possess tank treads in the rear, half-tracks are very thinly armoured and can be damaged or even destroyed by rifle fire.

M8 / M20 Armoured Cars



The M8 is a six-wheeled armoured car. Well armed for such a light vehicle, the M8 mounts a 37mm gun along with two machine guns. The M8 must use its speed, as high as 55 MPH, to defend itself. A version of the M8 removed the turret and replaced it with a single ring-mounted machine gun. This version, called the M20, was used both for transport and as a command vehicle.

M5A1 Stuart Light Tank / M8 Howitzer Motor Carriage



The M5A1 is a fast light tank. Armed with a 37 mm gun and two machine guns, the M5A1 is well suited for work against enemy light vehicles and infantry. However, its main gun is inadequate for anti-armour combat. The M5A1 was a modified version of the M3A3 with a new turret and other modifications but was armed in the same manner. The M8 was a modification of the Stuart chassis featuring a short-barrelled 75mm howitzer in an open-topped turret.

M4 Sherman



The workhorse American tank, there were almost 50,000 M4 produced. The M4 saw numerous variations as modifications and upgrades were made to the vehicle. The original M4 mounted a 75mm gun and three machine guns and had lighter armour than its German counterparts. The 75mm gun proved largely inadequate and most modifications centred on increasing firepower. Later M4's were upgraded with a long barrelled, high velocity, 76mm gun; and some were even modified to mount a 105mm howitzer. Other modified versions included a version with a hull mounted flamethrower.

M10 and M18 Tank Destroyers



Based on a modified M4 hull, the M10 mounts a 76.2 mm cannon in an open topped turret. It also carries a machine gun mounted on the rear of the turret. Aside from its open top, the M10 is reasonably well armoured. While the M10 descended from a modified Sherman chassis, the M18 Hellcat was an original design with an excellent power-to-weight ratio. Its speed and low profile are traded off with its light armour and an open-topped turret. Nevertheless, the M18 proved rather successful and popular; it mounted a 76mm main gun and a flexible .50 cal heavy machine gun on the rear of the turret.

Sd Kfz 250/251 Half Tracks



The German SdKfz 250 and SdKfz 251 Half Track series were commonly used as troop transports and support vehicles; the SdKfz 250 series was the smaller one of these otherwise roughly similar vehicles. Originally mounting a removable forward-firing machine gun and a second removable anti-aircraft machine gun on a rear mount, these Half-Tracks saw numerous versions mounting various AT guns, rockets, mortars and flame throwers. They are open-topped, and their weak armour only offers limited protection against small arms fire.

Marder III



The Marder III is a hybrid light tank destroyer made from a Czech chassis. The version featured in Close Combat: Invasion Normandy uses a captured Russian 76.2mm gun and a Czech made machine gun. The Marder III had an open top and almost no back armour to speak of, making it particularly vulnerable to mortar and infantry attack. Despite appearances the gun is not in a turret but fixed forward.

StuG III / StuH 42



Designed as an infantry support vehicle and, if necessary, a tank killer, the StuG III has a 75mm cannon mounted in the chassis as well as a machine gun. The StuG III is somewhat under-armoured for a tank destroyer; this is only partly compensated for by its low profile. A more powerful version was later introduced, the StuH 42, which was utilised more as mobile artillery since it mounted a 105mm howitzer in place of the 75mm gun. The StuH 42 also mounted better armour protection then the StuG III, 10cm in the front.

Panzer II



The Mark II is a light German tank of pre-war design. Its armament of one 2cm machine cannon and a machine gun was useless against tanks, and its very light armour made it highly vulnerable. By 1944, this type had largely been withdrawn from frontline service. Some were still used for reconnaissance, training, or occupational duties.

Panzer III



By the time of the invasion, few Mark III tanks were left in active service; some of them were modified and used as Befehlspanzer command tanks. Armed with a 5cm main gun and a pair of machine guns, their relatively light armour and weak main gun made them obsolete by the tank standards of 1944.

Panzer IVG



Armed with a 75mm gun and a pair of machine guns, the Mark IV tank mixed good firepower, speed, and armour protection. Although somewhat outclassed by the German Panther, the Mark IV was easily a match for any American tank in the Cotentin region. Although, historically speaking, there were no Mark IV tanks in the Normandy fighting portrayed in Close Combat: Invasion Normandy, optional Battle Groups for the campaign do have some available.

Panzer V Panther



Built in response to improvements in Russian tank design, the Panther tank is considered by many to be the best tank design of the war. Faster and better armoured than the Mark IV, the Panther makes maximum use of its long-barrelled 75mm cannon. Although, historically speaking, there were no Mark V tanks in the Normandy fighting portrayed in Close Combat: Invasion Normandy, optional Battle Groups for the campaign do have some available.

French Tanks



These tanks include the Renault R35, Somua S35, Hotchkiss H39, and Char B1 bis French tank models. All are pre-1940 designs and are obsolete tanks. Captured from the French early in the war, they were used as training vehicles and for occupational duties and were all the Germans had in the area at the time of the invasion. They did do well against the lightly armed American paratroopers on the first two days of the campaign.

Russian Tanks



These include the T-26 and BT-7. These are old model Russian tanks captured on the Eastern Front and used as training vehicles in the same manner as the French tanks listed above.



Supreme Headquarters Allied Expeditionary Force
Soldiers, Sailors, and Airmen of the Allied Expeditionary Force

You are about to embark on the Great Crusade, toward which we have striven these many months. The eyes of the world are upon you. In company with our brave Allies and brothers-in-arms on other Fronts, you will bring about the destruction of the German war machine, the elimination of Nazi tyranny over the oppressed peoples of Europe, and security for ourselves in a free world.

Your task will not be an easy one. Your enemy is well trained, well equipped, and battle-hardened. He will fight savagely.

But this is the year 1944. Much has happened since the Nazi triumphs of 1940-41. The United Nations have inflicted upon the Germans great defeats, in open battle, man-to-man. Our air offensive has seriously reduced their strength in the air and their capacity to wage war on the ground. Our Home Fronts have given us an overwhelming superiority in weapons and munitions of war, and placed at our disposal great reserves of trained fighting men. The tide has turned. The free men of the world are marching together in victory.

I have full confidence in your courage, devotion to duty, and skill in battle. We will accept nothing less than full victory. Good luck. And let us beseech the blessing of the Almighty God upon this great and noble undertaking.

Signed: Dwight D. Eisenhower

3 November 1943
Top Secret
The Fuhrer

Directive No. 51

For the last two and one-half years the bitter and costly struggle against Bolshevism has made the utmost demands upon the bulk of our military resources and energies. This commitment was in keeping with the most serious danger, and the over-all situation. The situation has since changed. The threat from the East remains, but an even greater danger looms in the West: the Anglo-American landing. In the East, the vastness of the space will, as a last resort, permit a loss of territory even on a major scale, without suffering a mortal blow to Germany's chance for survival.

Not so in the West. If the enemy here succeeds in penetrating our defenses on a wide front, consequences of staggering proportions will follow within a short time. All signs point to an offensive against the Western Front of Europe no later than spring, and perhaps earlier…

Should the enemy nevertheless force a landing by concentrating his armed might, he must be hit by the full fury of our counterattack…

I expect that all agencies will make a supreme effort toward utilising every moment of the remaining time in preparing for the decisive battle in the West.

All authorities will guard against wasting time and energy in useless prejurisdictional squabbles, and will direct all their efforts toward strengthening our defensive and offensive power.

Signed: Adolf Hitler

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