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■ INSTALLATION & LICENSING

■ INSTALLATION FROM DISC

In order to install the game, insert the game disc into the DVD drive.

(PC) The Installation Menu should appear if you have CD Autostart enabled on your computer. Click on the "Install Game" option to begin the installation process. If you have CD Autostart disabled, or if the Installation Menu does not appear, please browse the contents of the disc and simply double-click on the file called "Setup.exe". That will manually launch the game installer.

(Mac) For the Mac version, simply open the disc icon and copy the game application into a place on your harddrive (e.g. the Applications folder).

■ Installation for Download Version

After you have successfully downloaded the Combat Mission: Fortress Italy - Gustav Line setup file, double-click on it to launch the installer.

Note: you should keep the downloaded installer file!

Battlefront.com does not offer infinite digital storage, and your download will expire. So it is a good idea to keep the installer file you downloaded and copy it somewhere safe (e.g. burn to disc, USB stick or external harddrive) so you can reinstall the game later on.

■ LICENSE OVERVIEW

Combat Mission: Fortress Italy - Gustav Line is protected by an online activation system that helps us restrict the illegal distribution of the software without being annoying or intrusive to the legitimate customer.

■ HOW TO FIND YOUR LICENSE KEY

For download versions, it is the same code that you used to download your game. You will find your license key saved in your online account at www.battlefront.com/store. After logging in, click on the "My Account" link from the top menu. If you forgot your login, go to www.battlefront.com/lostpw to retrieve a new random password as well as your username in the same email. The username is called "user account" in the email.

For mail delivery only versions, the license key is printed on the product itself, usually on the back of the case or the game manual, sometimes inside the case or manual cover, depending on the product. Do not lose this label because we may not be able to retrieve your license key for you if you do!

LICENSING

When you first run CM:FI Gustav Line, after the initial install, you will be prompted to activate your copy . In most cases all you need to do is:

- a) make sure the computer on which you have installed the game has an active online connection to the internet
 - b) choose "Online Activation" from the dialog window
 - b) enter your license key into the correct field.
 - c) hit the "Activate" button and wait a few seconds while your license authorizes.

If you wish to install the game on a computer which has no internet connection, you must perform what is called a "Manual License Request". After launching the game:

- a) click on the "Manual Activation" button
- b) write down or memorize the Authorization Request Code presented to you
- c) on a computer that is connected to the internet, go to http://www.battlefront.com/activate
- d) enter your License Key and the Authorization Request Code in the appropriate place
- e) write down or memorize the Authorization Code
- f) go back to the computer where the game is installed. Launch the game again and click on "Manual Activation". Ignore the Request code and click on the Next button. Enter the Authorization Code from step e above

Off-line licensing is also a good workaround for online computers which experience problems with

a firewall, router or proxy settings and cannot establish an internet connection to the activation servers.

ADDITIONAL ACTIVATIONS

Our End User License Agreement (see page 4 of this manual) allows you to have the game activated on one PC and one backup PC. Our online activation system enforces this limit, but will allow you two additional activations without asking questions (so called "overflow activations"). These Overflow Activations are meant to be used when you switch to a new PC and would like to continue playing the game there.

Note: there is no way to "unlicense" a previously activated copy on a computer. Which has the advantage that you can't ever forget to do so: ^)

In addition to the above 4 activations, you can add one extra activation to your key every 365 days. In order to do this, please point your browser to http://www.battlefront.com/activate. You will be asked to login and enter your license key.

Note: If you forgot your login, go to "www.battlefront. com/lostpw" to retrieve a new random password as well as your username in the same email. The username is "called "user account" in the email.

If your key is eligible for an additional activation (e.g. if it was not already requested less than 365 days ago), then you'll be notified of it and the activation is automatically added to your key, so you can use it immediately again.

Should you ever need an additional activation more than once within the 365 days period, then you can always contact our License Activation Support staff (see below).

LICENSE ACTIVATION SUPPORT

Battlefront.com prides itself on customer service, and this continues with the implementation of the online licensing system. Please check out our Knowledgebase section which explains how online activation works in detail:

http://www.battlefront.com/helpdesk

If you ever need specific assistance, do not hesitate to email us with a description of your problem. We usually respond within 1 working day.

Please note: only the original Battlefront.com version of the game is using our Online Activation System. If you have purchased your game elsewhere (e.g. in a store), then you probably have the retail version of the game, which is NOT using our Online Activation System.

MODULES

Modules like CM:FI Gustav Line are not standalone games! They require the base game (in this case, Combat Mission: Fortress Italy) to play. It is therefore VERY IMPORTANT to install the Module in the correct location, i.e. inside the previously installed CMFI base game directory.

Note: if you purchased the module as part of a bundle together with the base game, then this is taken care of automatically during installation of course!

The installer will try to find out where the base game is installed automatically and suggest the correct location, but this may not always work 100% correctly, especially if you didnit use the default installation paths, or if you have a non-Battlefront localised version of CMFI. Please doublecheck where your installation folder is therefore BEFORE installing the Module (the Installer Menu will remind you of that).

If you have a non-Battlefront version of the base game which requires the CD in the drive in order to play, then by installing the Gustav Line Module this will no longer be required.

IMPORTANT! After you have the Gustav Line Module installed, you will never need to patch the base game of CMFI separately. All future Gustav Line patches will also include the corresponding patch to the base game of CMFI.

MULTIPLE MODULES: REINSTALLING / PATCHING

The important thing to keep in mind (and probably the biggest potential source of confusion) is this:

If you have a CMFI module, then you do not need your base game key (ever again), and you do not have to patch/activate your base game separately (ever again)!

When you activate a module with a module key, or patch a module, the base game is activated/ patched automatically as well. There is no need to license/patch the base game separately. Below is the correct way to (re-)install CMFI and modules. If you do not have a module listed below, simply skip that step:

- 1- install the base game, Combat Mission: Fortress Italy. This will typically be v1.00 or v1.01.
- 2- install the Gustav Line Module. This will update your game to v1.10.
- 2b- use your Gustav Line Module license key to activate. This will activate both the base game AND the module.
 - 3- if available, install the next Module. This will update your game to v1.20.
 - 3b- use your next module license key to activate.
 - 4- if available, install the third module. This will update your game to v1.30.
- 4b- use your third module key to activate. This will activate both the base game and the module in one go.
- 5- if available, install the latest patch for CMFI. Usually,only one patch is required to update all game components, including the base game and modules.
- Note: It is important to patch as the last step (IF a newer patch is available, i.e. in the case of the Gustav Line Module, a patch that is at least v1.11 or higher...)! This will ensure that your game and all modules are up to date; otherwise you may unintentionally downgrade your game to an older version by installing an older module.

USEFUL SHORTCUT LINKS

The Installation program adds a number of useful links into your (PC) Windows Start>Programs group / (Mac) game installation folder by default, such as:

■ DIRECT LINK TO THE PDF MANUAL

The game documentation is included as an Adobe PDF (Adobe Reader required from www.adobe.com) file, and it can be accessed quickly from here.

■ ACTIVATE LINK

In order to manually activate your module, please visit www.battlefront.com/helpdesk, click on Submit Ticket, and enter your game title, license key and Authorization Request code.

■ VERSION CHECK LINK

This is a quick way to check for updates online. The link is pre-coded to know which version of the game you have installed, and will automatically inform you if any patches or updates for your specific game combination are available.

■ ENCYCLOPEDIA

The following section is a quick reference guide for new vehicles and weapon systems introduced in the Gustav Line module.

■ UNITED STATES ARMY

TANKS

Note: The United States did not field M4A3 Sherman tanks on the Italian front, with the exception of some M4A3s equipped with 76 mm cannons beginning in the latter half of 1944.

■ M4 SHERMAN (LATE)

The M4 (Late) is like the M4 (Mid) except:

- ... Overall manufacturing quality of armor improves from mediocre to fair.
- ... Nose armor (lower front hull) is conventionally sloped.

Available beginning... January 1944 Formations equipped... Tank battalions



■ M4A1 SHERMAN (LATE)

The M4A1 (Late) is like the M4A1 (Mid) except:

- ... Overall manufacturing quality of armor improves from mediocre to fair.
- ... Nose armor (lower front hull) is conventionally sloped.

Available beginning... January 1944 Formations equipped... Tank battalions



TANK DESTROYERS

■ M10 GMC (GUN MOTOR CARRIAGE)

The M10 GMC is a United States tank destroyer based on the M4 Sherman tank chassis. It was numerically the most important U.S. tank destroyer of World War II and combined a reasonably potent anti-tank weapon with a turreted platform. The M10 turret only had a partial roof over its front third. This allowed better visibility and easier servicing of the weapon at an obvious cost of increased vulnerability.

The M10 GMC first saw action in North Africa. The M10 did not see service in Sicily, but re-entered combat with the invasion of Italy. Despite the introduction of more-powerful replacements, it remained in service until the end of the war. The British christened it the "Wolverine."

Available beginning... September 1943 Formations equipped... Tank destroyer battalions



SELF-PROPELLED ASSAULT GUNS

■ M8 HMC (HOWITZER MOTOR CARRIAGE)

The Howitzer Motor Carriage M8, sometimes known as the M8 Scott, was a self-propelled howitzer vehicle of the United States, developed on the chassis of the Light Tank M5. Its armament consisted of a new open topped turret armed with a 75 mm M2 howitzer (later an 75 mm M3 howitzer which were reworks of the M1A1 pack howitzer). In most units the M8 HMC replaced the interim T30 HMC.

Available beginning... September 1943 Formations equipped... Cavalry and reconnaissance units, armored infantry battalions



ARMORED CARS

■ M8 ARMORED CAR (EARLY)

The M8 Light Armored Car was a 6x6 armored car produced by the Ford Motor Company during the Second World War. Dubbed the "Greyhound" by the British, the M8 entered service in 1943. It was designed to serve as the primary basic command and communication combat vehicle of the U.S. Cavalry Reconnaissance Troops. The M8 is armed with a 37 mm cannon (with canister shot available) and a .30 caliber coaxial machine gun.

Available beginning... September 1943 Formations equipped... Cavalry and reconnaissance units



■ M8 ARMORED CAR (MID)

The later model of the M8 Light Armored Car is equipped with a modified suspension and a M2HB .50 caliber heavy machinegun mounted above the turret.

Available beginning... March 1944
Formations equipped... Cavalry and reconnaissance units



■ M20 SCOUT CAR

The M20 Armored Utility Car, also known as the M20 Scout Car, was an M8 Light Armored Car with the turret replaced by a low, armored open-topped superstructure and an AA ring mount for a .50 caliber M2HB heavy machinegun. The M20 was primarily used as a command vehicle and for forward reconnaissance, but many also served as APCs and cargo carriers. It offered high speed and excellent mobility along with a degree of protection against small arms fire and shrapnel. Due to shortages at the front, in some units the M3A1 White Scout Car continued to be used in place of the M20 Scout Car.

Available beginning... September 1943 Formations equipped... Cavalry and reconnaissance units, tank destroyer battalions



HALFTRACKS

■ M2A1 HALFTRACK

A later production model of the M2 Halftrack, the M2A1 moved the .50 caliber machinegun from the skate rail to a new M49 machinegun ring mount and "pulpit".

Available beginning... January 1944 Formations equipped... Various mechanized units



■ M3A1 HALFTRACK

Like the M2A1 Halftrack, the M3A1 Halftrack is a later production model of the M3 Halftrack with the M49 mount and "pulpit" installed.

Available beginning... January 1944 Formations equipped... Various mechanized units



■ M21 MORTAR CARRIER HALFTRACK

With the basic dissatisfaction of the M4 series of Mortar Motor Carriages, the Ordnance Department issued a requirement in 1943 to mate the M1 81mm Mortar to the M3 series halftracks that were then currently in production. A pedestal mounted .50 caliber M2HB heavy machinegun replaced the M1919 .30 caliber machinegun.

Note: firing the mortar from within the M21 halftrack is currently not allowed in CM:FI. You will have to dismount the mortar team before they can fire their mortar.

Available beginning... February 1944

Formations equipped... Armored infantry and tank battalions



■ M15 AA HALFTRACK

The M15 CGMC (Combination Gun Motor Carriage) is a M3 Halftrack modified to mount anti-aircraft guns. A production version of the highly successful T28E1 prototype, Autocar began production of the M15 CGMC in February 1943. The vehicle had a crew of seven and featured a M1A3 37 mm autocannon flanked by two .50 caliber M2HB heavy machineguns. The gun mount and crew were protected by an armored superstructure which traversed with the combined gun mount.

Available beginning... July 1943 Formations equipped... Self-propelled anti-aircraft batteries

Note: In CM:FI. halftrack AA guns cannot fire directly to the front of the vehicle, over the cab.



■ M15A1 AA HALFTRACK

The M15A1 CGMC is a later production model of the M15.

Available beginning... December 1943

Formations equipped... Self-propelled anti-aircraft batteries

Note: In CM:FI. halftrack AA guns cannot fire directly to the front of the vehicle, over the cab.



M16 AA HALFTRACK

Also known as the "Meat Chopper", the M16 MGMC (Multiple Gun Motor Carriage) was an anti-aircraft halftrack built by White Motor Company. The M16 MGMC carried a Maxson M45D Quadmount bristling with four .50 caliber M2TTHB heavy machineguns. Based on the M3 Halftrack, the M16 MGMC started as the T58 prototype, which was essentially a M13 MGMC with a new gun mount and four machine guns instead of two.

Available beginning... January 1944

Formations equipped... Beginning January 1944, the third and fourth platoons of self-propelled anti-aircraft batteries



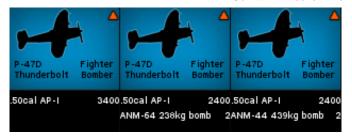
Note: In CM:FI. halftrack AA guns cannot fire directly to the front of the vehicle, over the cab.

■ US AIR ASSETS

■ P-47D THUNDERBOLT FIGHTER BOMBER

Republic Aviation's P-47 Thunderbolt, also known as the "Jug", was the largest, heaviest, and most expensive single reciprocating engine fighter aircraft in history. It was one of the main United States Army Air Forces (USAAF) fighters of World War II. The P-47 was very effective in air combat but proved especially adept at ground attack. It had eight .50 caliber machine guns, four per wing. When fully loaded the P-47 could weigh up to eight tons.

Configurations.....Strafe, Light, Heavy Available beginning... September 1943



■ U.S. ARTILLERY ASSETS

■ M18 INCH GUN

The 8 inch Gun M-1 was a 203 mm towed heavy gun developed in the United States. Available beginning... April 1944



■ M1 8 INCH HOWITZER

The M1 203 mm howitzer was a towed howitzer used by the United States Army. Originally designated the 8 inch Howitzer M1, it was designed during the buildup to World War II as a counterpart to the German 17 cm K 18 gun.

Rate of fire30 rounds/hour Available beginning... September 1943



■ M1 240MM HOWITZER

The 240 mm howitzer M1, popularly nicknamed the "Black Dragon", was a towed howitzer used by the United States Army. The 240 mm M1 was designed to replace the World War One era 240 mm Howitzer M1918 which was outdated by the 1940s. The 240 mm howitzer was the most powerful weapon deployed by US field artillery units during World War II, able to fire a 360 lb (160 kg) high explosive projectile 25,225 yards (23 km). It was the largest field piece used by the US Army during the war except for naval ordnance adapted into railway guns. The weapon addressed the requirement for super heavy field artillery capable of attacking heavily reinforced targets.

Rate of fire30 rounds/hour Available beginning... September 1943



U.S. WEAPONS

■ M1 GARAND (W/ M7 RIFLE GRENADE LAUNCHER)



The Rifle Grenade Launcher, M7 was a 22 mm rifle grenade launcher attachment for the M1 Garand rifle. The M7 was a tube-shaped device, one end slotting over the barrel of the rifle, the other end holding the grenade in place. Blank cartridges were loaded into the rifle prior to firing. When fired, the expanding gases generated by the cartridges propelled the grenade forward with considerable force. The M7 could fire grenades up to 350 meters (375 yards). Fragmentation, anti-armor and smoke grenades were available for the M7.

Due to equipment shortages, the M1903A3 Springfield with M1 Grenade Launcher was still used as the grenadier rifle in many units otherwise equipped with the M1 Garand.

Available beginning... March 1944 in formations with Excellent equipment quality

■ M1919A6 LMG



The M1919A6 was an attempt to make the M1919A4 heavy machinegun into a light machine gun by attaching a butt stock and lighter barrel - 4 lb (1.8 kg) instead of 7 lb (3.2 kg). The A6 version was in fact heavier than the A4 without its tripod, at 32 lb (15 kg), though its bipod made for faster deployment and enabled the machine gun team to dispense with one man (the tripod bearer). The M1919A6 was trialed in small numbers at Anzio.

■ U.S. HEAVY WEAPONS

■ 76 MM L/50 M5 ANTI-TANK GUN

The 3 inch Gun M5 combined the 3-inch (76.2 mm) barrel of the anti-aircraft gun T9 and elements of the 105 mm howitzer M2. The M5 was issued exclusively to the US Army tank destroyer battalions and the first unit equipped with the M5 saw combat in Italy in October 1943. While the M5 outperformed earlier anti-tank guns in US service, its effective employment was hindered by its heavy weight and ammunition-related issues.

Available beginning... October 1943 Formations equipped... Tank destroyer battalion (towed)



■ 40 MM BOFORS ANTI-AIRCRAFT GUN

The Bofors gun is a Swedish-designed 40 mm autocannon designed in the early 1930s. In US service it was known as the 40 mm Automatic Gun M1. The Bofors gun can fire up to 120 shells a minute with a muzzle velocity of 881 meters per second, in both high explosive and armor piercing. During World War 2 the Bofors was used by most Allied forces as an anti-aircraft gun; the design proved to be extremely popular, and the Bofors is still seeing service in various militaries as of 2013.

Available beginning... July 1943 Formations equipped... Anti-aircraft batteries



■ M51 QUAD .50 CAL

The M51 was a quad .50 caliber machinegun mount on a trailer. The M51 was located in anti-aircraft batteries alongside 40 mm and 90 mm guns, providing defensive firepower and increased coverage. Although the M51 suffered from subpar mobility, it made up for it with a blistering rate of fire: up to 2,200 rounds per minute to an effective range of 2,200 meters.

Available beginning... September 1943 Formations equipped... Anti-aircraft batteries



■ GERMAN WEHRMACHT

TANKS

■ PANZER IVH (LATE)

The PzIVH (Late) is like the PzIVH (Early) except that the hull front was finally interlocked with the hull sides, correcting earlier flaws in the hull armor.

Available beginning... October 1943 Formations equipped... Panzer battalions



■ PANZER VA PANTHER (EARLY)

Panther is the common name of a medium tank fielded by Germany in World War II that served from mid-1943 to the end of the war. The Panther's excellent combination of firepower, mobility, and protection served as a benchmark for other nations' late war and immediate post-war tank designs, and it is frequently regarded as one of the best tank designs of World War II. Until 1944, it was designated as the Panzerkampfwagen V Panther and had the ordnance inventory designation of Sd.Kfz. 171. On 27 February 1944, Hitler ordered that the Roman numeral V be deleted from the designation.

The Panther tank was a compromise of various requirements. While sharing essentially the same engine as the Tiger I tank, it had better frontal armor, better gun penetration, was lighter overall and thus faster, and could handle rough terrain better than the Tigers. The tradeoff was weaker side armor; the Panther proved to be deadly in open country and shooting from long range, but vulnerable to close quarters combat. Also, the 75 mm gun fired a slightly smaller shell than the Tiger's 88 mm gun, providing less high explosive firepower against infantry. The Panther was far cheaper to produce than the Tiger, and only slightly more expensive than the Panzer IV.

The Panther made a late entrance to the Italian Front, due to both the priority of the Eastern Front and the difficulty of the Italian terrain. Although a single Panther-equipped Panzer battalion was transferred to Italy in February 1944, the battalion did not see serious combat in Italy until May 1944.

The Panther VA (Early) has these features which vary in other models:

 79 main gun rounds
 110 mm turret front armor
 63 mm face-hardened nose (lower-front hull) armor
 Upper side hull armor 40 mm @40°
Hull sides are face-hardened
 16 mm hull top armor
 30 mm hull bottom armor
 Bow MG is "letterbox" style
55 kph maximum speed, 690 hp engine

Available beginning... February 1944

Formations equipped... Panzer battalions (Heer only)



■ PANZER VA PANTHER (MID)

The Panther VA (Mid) is like the Panther VA (Early) except:

...... Bow MG is "ball mount" style

...... 46kph maximum speed, 600hp engine (governed)

Available beginning... February 1944

Formations equipped... Panzer battalions (Heer only)



■ PANZER VIE TIGER (MID)

The Tiger (Mid) is like the Tiger (Early) except:

...... New low-profile cupola equipped with seven periscopes

..... New aun sight

......Zimmerit coating added

......Pistol port removed

Available beginning... February 1944

Formations equipped... Heavy Panzer battalions (Heer only)



■ PANZER VIE TIGER (LATE)

The late production model added the "Nahverteidigungswaffe" close-defense system and increased top armor protection; however, many armor plates had a lower standard of "hardness" due to production shortcuts.

Available beginning... March 1944 Formations equipped... Heavy Panzer battalions (Heer only)



■ TANK DESTROYERS

■ ELEFANT

The Elefant, initially known as the Ferdinand, was a heavy tank destroyer based on the Porsche Tiger chassis. The Ferdinand underwent a rapid development, starting in late 1942 and ending with 91 vehicles being completed by Nibelungenwerke by May 1943, in time for the Kursk offensive. Crewed by six men, the Ferdinand sported a powerful 88 mm PaK 43/2 L/71 gun, and a formidable 200 mm of frontal armor. The Ferdinand weighed 65 tons and could reach speeds of 30 kilometers per hour.

Based on the battle experiences of Kursk, 48 Ferdinands were modified; these vehicles became known as Elefants. The Elefant added a ball-mounted MG 34 to the hull front in order to increase protection against infantry, a commander's cupola for enhanced vision, and zimmerit coating. A single heavy Panzerjäger company possessing eleven Elefants was sent to the Anzio beachhead in February 1944.

Available beginning... February 1944 Formations equipped... Heavy Panzerjäger company (Heer only)



■ NASHORN (LATE)

The Nashorn (sometimes referred to as the Hornisse) was an expedient tank destroyer fielded by the Wehrmacht beginning in 1943. The Nashorn was created by marrying a Pak 43 88 mm gun with a Hummel chassis. The resulting vehicle was mobile and able to penetrate any Allied tank at long range, although it was very lightly armored and had a high profile.

Development of the Nashorn began in 1942 when the need for a self-propelled 88 mm PaK43 was realized.100 vehicles were built in time for the Kursk offensive in 1943, and through the course of the war 494 were built in total. Nashorns equipped heavy Panzerjäger battalions, one of which was sent to Italy in February 1944.

Available beginning... February 1944 Formations equipped... Heavy Panzerjäger battalion (Heer only)



■ MARDER IIIM

The Marder III is the name for a series of World War II German tank destroyers built on the chassis of the Panzer 38(t). The German word "Marder" means "Marten" (an agile, slender forest animal) in English. They were in production from 1942 to 1944 and served until the end of the war.

The last variant, Marder III Ausf.M, Sd.Kfz. 138, was based on the Panzer 38(t) Ausf. M and armed with the 75 mm PaK 40 anti-tank gun. In this variant, the engine was moved from the rear to the middle between the driver and the rest of the crew. Because there was no engine in the rear, the gun and the crew did not have to sit on top of the engine deck as in previous models, decreasing crew exposure as well as visibility.

Available beginning... September 1943 Formations equipped... Panzerjäger battalions



■ JAGDPANZER IV (EARLY)

The Jagdpanzer IV was a tank destroyer based on the Panzer IV chassis. Minor modifications and improvements were made throughout the production runs of all variants, as well as several field improvements, the most common being the addition of armor sideskirts. The early production version features 60 mm upper front hull armor, and 30 mm upper side hull armor. The bow MG 42 is operated by the loader (or an extra crewman in the "HQ" version).

Available beginning... March 1944 Formations equipped... Armored Panzerjäger battalions



■ JAGDPANZER IV (MID)

In the mid production version of the Jpz IV, the firing port for the driver's MP44 was removed.

Available beginning... April 1944
Formations equipped... Armored Panzeriäger battalions



■ SELF-PROPELLED ASSAULT GUNS

■ STURMPANZER IV (MID)

The Sturmpanzer IV, often referred to as the Brummbär, was a heavy assault gun first used at the battle of Kursk. The Sturmpanzer IV was a Panzer IV chassis with a casemate-style armored superstructure added. The vehicle carried a 150 mm StuH 43 L/12 gun, ideally suited for close infantry support. The front superstructure had 100 mm of armor, while the front hull had 80 mm of armor. The (Mid) variant of the Sturmpanzer IV represents the second series production line based on the Pz IV Ausf. H chassis. A driver periscope replaced the sliding-shutter visor. One independent Sturmpanzer battalion was sent to the Anzio beachhead in February 1944.

Available beginning... February 1944 Formations equipped... Sturmpanzer battalion (Heer only)



■ STUG IIIG (MID)

Later G versions from November 1943 were fitted with the Topfblende (pot mantlet) (often called a Saukopf (pig's head)) gun mantlet without coaxial mount. This cast mantlet with organic shape was more effective at deflecting shots than the "box" mantlet.

Available beginning... November 1943 Formations equipped... Sturmgeschütz Brigades, Panzerjäger battalions



■ STUH 42 (MID)

The mid production model of the StuH 42 is equivalent to the StuG III (Mid) and uses the rounded "Saukopf" gun mantlet.

Available beginning... November 1943

Formations equipped... Sturmgeschütz Brigades, Panzerjäger battalions



HALFTRACKS

■ SPW 251/1 (AUSF. C AND AUSF. D)

The Sd.Kfz. 251 (Sonderkraftfahrzeug 251) half-track was an armored fighting vehicle designed and first built by Hanomag. The largest, most common, and best armored of the wartime halftracks, the Sd.Kfz. 251 was designed to transport the panzergrenadiers of the German mechanized infantry corps. Widely known simply as "Hanomags" by both German and Allied forces, they were widely produced throughout the war, with over 15,252 vehicles and variants produced in total by various manufacturers.

Beginning in 1943, the Ausf. D version of the SPW 251 replaced the Ausf. C in production. The Ausf. D had simplified armor plates in order to speed production.

The Sd.Kfz. 251/1 - Schützenpanzerwagen is the standard personnel carrier.

Available beginning... September 1943 (Ausf. C), October 1943 (Ausf. D) Formations equipped... Armored Panzergrenadier battalions



■ SPW 251/2 (AUSF. C AND AUSF. D)

The Sd.Kfz. 251/2 - Schützenpanzerwagen (Granatwerfer) was a mortar vehicle assigned to Panzergrenadier heavy platoons.

Available beginning... September 1943 (Ausf. C), October 1943 (Ausf. D) Formations equipped... Armored Panzergrenadier battalions

Note: firing the mortar from within the halftrack is currently not allowed in CM:FI. You will have to dismount the mortar team before they can fire their mortar.



■ SPW 251/3 (AUSF. C AND AUSF. D)

The Sd.Kfz. 251/3 - Kommandopanzerwagen (Funkpanzerwagen) is a communications vehicle, fitted with extra radio equipment for command use.

Available beginning... September 1943 (Ausf. C), October 1943 (Ausf. D) Formations equipped... Armored Panzergrenadier battalions, Panzer Pioneer battalions



■ SPW 251/7 (AUSF. C AND AUSF. D)

The Sd.Kfz. 251/7-I - Pionierpanzerwagen is an assault engineer vehicle with fittings to carry assault bridge ramps on the sides.

Available beginning... September 1943 (Ausf. C), October 1943 (Ausf. D) Formations equipped... Panzer Pioneer battalions, HQ companies of various armored formations



■ SPW 251/9 (AUSF. C AND AUSF. D)

The Sd.Kfz. 251/9 - Schützenpanzerwagen (7.5 cm) is equipped with a 75 mm L/24 low velocity gun, The "Stummel" ("stump") provided organic mobile fire support to Panzergrenadier companies and battalions.

Available beginning... September 1943 (Ausf. C), October 1943 (Ausf. D) Formations equipped... Armored Panzergrenadier battalions, Panzer Aufklärung battalions



■ SPW 251/10 (AUSF. C AND AUSF. D)

The Sd.Kfz. 251/10 - Schützenpanzerwagen is equipped with a 37 mm PaK 36 anti-tank gun. As the PaK 36 quickly became obsolete for anti-tank use, the gun was mounted on a variety of vehicles, including the platoon commander's vehicle in many Panzergrenadier platoons, in order to boost firepower.

Available beginning... September 1943 (Ausf. C), October 1943 (Ausf. D) Formations equipped... Armored Panzergrenadier battalions, Panzer Pioneer battalions



■ SD.KFZ. 7/1

Also known as the 2 cm Flakvierling 38 auf Zugkraftwagen 8t, the Sd.Kfz. 7/1 was a halftrack prime mover converted into a self-propelled Flak gun. The back of the vehicle past the cab was converted into a flat AA platform with a 2 cm Flakvierling 38 gun mounted, and sides that could fold down to allow 360 degree traverse.

Available beginning... July 1943 Formations equipped... SP Flak batteries, Panzer battalions, mixed Panzerjäger battalions

Note: In CM:FI. halftrack AA guns cannot fire directly to the front of the vehicle, over the cab.



■ SD.KFZ. 7/2

Also known as the 3.7 cm Flak 36 auf Zugkraftwagen 8t, the Sd.Kfz. 7/2 was like the Sd.Kfz. 7/1, except that it had a 3.7 cm Flak 36 gun mounted instead of a Flakvierling.

Available beginning... July 1943 Formations equipped... SP Flak batteries

Note: In CM:FI. halftrack AA guns cannot fire directly to the front of the vehicle, over the cab.

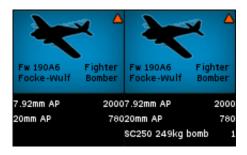


■ GERMAN AIR ASSETS

■ FOCKE-WULF 190A6

The Focke-Wulf Fw 190A6 was designed to better combat U.S. heavy bombers. A redesigned wing was incorporated that was lighter in weight and allowed more weapons. Firepower was increased to MG 17 machineguns and four 20 mm MG 151 cannons.

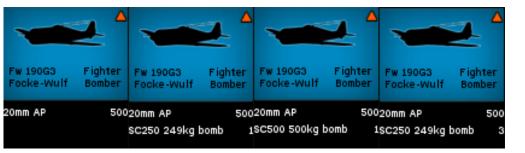
Available beginning... February 1944 Configurations ... Strafe, Light



■ FOCKE-WULF 190G3

The Focke-Wulf Fw 190G3 was a long-range ground attack variant. The Fw 190A6G3 used the Fw 190A6 as a basis, removing two MG 151 and replacing them with additional fuel tanks and bomb racks. This simultaneously increased the range and duration of the aircraft while allowing it to carry a heavier bomb load for attacking ground targets.

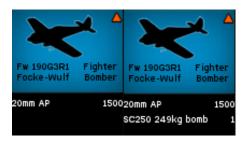
Available beginning... September 1943 Configurations ... Strafe, Light, Heavy, Maximum



■ FOCKE-WULF 190G3/R1

A "Rüstsätze" modification kit of the Fw 190G3, the Fw 190G3/R1 replaced the new bomb racks with MG 151 cannons, giving it a total of six, making the variant ideal for strafing runs.

Available beginning... September 1943 Configurations ... Strafe, Light



■ GERMAN WEAPONS

■ FG 42 (EARLY)



The Fallschirmjägergewehr 42, or FG 42, was a battle rifle fielded in small numbers by Germany. Specially designed for paratrooper use, the FG 42 was a highly advanced design that combined the hitting power of a full rifle cartridge with light weight, semi and fully automatic firing modes, a pistol grip, and an integrated bipod. The result was a highly versatile weapon that could fill the roles of a rifle, SMG, or LMG reasonably well.

The FG 42 was a relatively rare weapon on the battlefield, being issued only to Fallschirmjäger units in small numbers. The early production variant, sometimes unofficially referred to as the Model I, had a distinctive slanted pistol grip.

Cartridge 7.92x57mm Mauser

Effective range 500 m

Feed system 10 or 20-round detachable box magazine

Available beginning... September 1943

■ GEWEHR 43



The Gewehr 43 or Karabiner 43 (G43, K43, Gew 43, Kar 43) is a semi-automatic rifle. It was never mass produced and never saw general issue. Despite being a more effective combat rifle than slower bolt action rifles, the Gewehr 43 was never as reliable or as robust and simple as Allied rifles such as the American M1 Garand.

Cartridge 8x57mm IS Effective range 500 m

Feed system 10-round detachable box magazine

Available beginning... February 1944

■ GEWEHR 43 ZF/4



The G43/K43 was often used as a designated marksman/sniper weapon, fitted with the Zielfernrohr 43 (ZF 4) telescopic sight with 4x magnification.

Effective range 800 m Available beginning... February 1944

■ MP 738(I)



The MP 738(i) was an Italian Beretta Model 38 submachine gun in German service. The Beretta was an extremely popular submachine gun and some German forces such as the Fallschirmjäger used it widely on the Italian front.

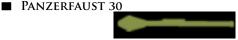
Cartridge......9x19mm Parabellum Feed system..20 round detachable box magazine Available beginning... July 1943



The Panzerfaust (literally "armor fist" or "tank fist") was an inexpensive, recoilless German anti-tank weapon. It consisted of a small, disposable preloaded launch tube firing a high explosive anti-tank warhead, operated by a single soldier.

The Panzerfaust 30 klein ("small") or Faustpatrone was the original version, first delivered in August 1943 with a total weight of 3.2 kilograms and overall length of 98.5 cm. The "30" was indicative of the nominal maximum range of 30 m. It had a 3.3 cm diameter tube containing 54 grams of black powder propellant launching a 10 cm warhead carrying 400 g of explosive. The projectile traveled at just 30 m per second and could penetrate 140 mm of armor.

le beginning... January 1944



An improved version appeared in August 1943, with a larger warhead for improved armor penetration, 200 mm, but the same range of 30 meters.

Note: rocket AT weapons like the Panzerfaust or Panzerschreck cannot be fired from within enclosed spaces (such as buildings or bunkers)!

■ GERMAN HEAVY WEAPONS

■ PANZERSCHRECK RPZB 54

Panzerschreck ("tank terror") was the popular name for the Raketenpanzerbüchse (abbreviated to RPzB), an 88 mm caliber reusable anti-tank rocket launcher. Another popular nickname was Ofenrohr ("stove pipe"). The Panzerschreck was designed as a lightweight infantry anti-tank weapon. The weapon was shoulder-launched and fired a rocket-propelled, fin-stabilized grenade with a shaped charge warhead that could penetrate over 200 mm of armor.

The Panzerschreck was conceived in response to the Soviet armor encountered on the eastern front, and after capturing examples of the U.S. M1 Bazooka. The Panzerschreck design was enlarged

compared to the Bazooka, greatly increasing penetration performance of the round but also resulting in a heavy and unwieldy weapon. The first Panzerschreck, the RPzB 43, required the operator to wear a poncho and gas mask in order to protect him from the effects of the backblast. In 1943 the RPzB 54 was designed with a blast shield to protect the operator.



■ KZGRW42 8 CM MORTAR

The kurzer ("short") 8 cm Granatwerfer 42, also called the "Stummelwerfer", was a modified version of the standard medium mortar, the 8 cm GrW 34. The Stummelwerfer was lightened with a shorter barrel, reducing its range and weight significantly. The Stummelwerfer was used by German Fallschirmjägers, replacing the unsuccessful 5 cm leGrW 36 light mortar at the platoon and company fire support levels.

Rate of fire 15-25 rpm Available beginning... July 1943

Formations equipped... Fallschirmjäger battalions (Luftwaffe only)



■ 7.5 CM LG 40

The 7.5 cm Leichtgeschütz was a recoilless gun developed and manufactured by Rheinmetall. The LG 40 was developed in order to provide Fallschirmjäger with a lighter fire support weapon that could be easily dropped by parachute and broken down into small loads. The LG 40 weighed 145 kg and had a range of up 6,800 m. It first saw combat during the battle of Crete.

Available beginning... July 1943

Formations equipped... Fallschirmjäger battalions, regimental cannon companies (Luftwaffe only)



■ 3.7 CM PAK 36

The PaK 36 was the primary German infantry anti-tank weapon until it was replaced by the 50 mm PaK 38 in 1942. Afterwards, the PaK 36 found use as a fire support gun mounted to halftracks. Fallschirmjäger continued to use the PaK 36 as a primary anti-tank weapon for some time, appreciating its light weight and lack of dependence on by then extremely rare squeeze bore tungsten projectiles that many other anti-tank weapons of its size relied on.

With the introduction in 1943 of the shaped charge Stielgranate 41 which was placed over the barrel and fired with a special blank cartridge, the PaK 36 was once again able to defeat modern enemy tanks, penetrating up to 180 mm of armor at an effective range of about 300 meters.

Available beginning... July 1943
Formations equipped... Fallschirmjäger regimental anti-tank companies (Luftwaffe only)



■ 8.8 CM PAK 43

The Panzerabwehrkanone 43 was a German 88 mm anti-tank gun developed by Krupp in competition to the Rheinmetall Flak 41 88 mm anti-aircraft gun. It was the most powerful anti-tank gun of the Wehrmacht to see service in significant numbers. The PaK 43 was an excellent weapon, able to penetrate the heaviest Allied tanks at combat ranges.

The main version of the PaK 43 was based on a highly efficient cruciform mount, which offered a full 360 degree traverse and a much lower profile than the anti-aircraft version of the 88 mm. However, the manufacture of this version was slow initially, and, to speed up production, some guns were mounted on a two-wheel, split-trail carriage from a conventional howitzer, resulting in a version known as the PaK 43/41.

Available beginning... January 1944 Formations equipped... Heavy anti-tank company (Heer only)



■ 8.8 CM PAK 43/41

The 8.8 cm PaK 43/41 was mounted on a single axle split-trail field gun carriage and produced as a stop-gap measure due to scarcity of materials.

Available beginning... January 1944 Formations equipped... Heavy anti-tank company (Heer only)



■ 2 CM FLAK 38

The 2 cm Flak 38 was the primary German light anti-aircraft gun of World War 2. The Flak 38 fired 20 mm armor piercing and high explosive rounds at 220 rounds per minute at a muzzle velocity of 900 m/s with an effective range of 2,200 meters. The mount had 360 degree traverse and a maximum gun depression of -12 degrees, allowing it to engage ground targets.

Available beginning... July 1943

Formations equipped... Flak batteries, Panzer division escort company



■ 2 CM FLAKVIERLING 38

A variant of the Flak 38, the Flakvierling featured quadruple 20 mm guns. Each gun had a 20 round magazine, limiting the rate of fire to about 800 rounds per minute.

Available beginning... July 1943

Formations equipped... Flak batteries, Panzer division escort company



■ 3.7 CM FLAK 36

The 3.7 cm Flak 36 was a common medium anti-aircraft gun in Wehrmacht service. The Flak 36 used 8 round clips, firing at about 150 rounds per minute out to an effective range of 4,800 meters (6,500 m for ground targets). The mount had full traverse and allowed firing at ground targets.

Available beginning... July 1943

Formations equipped... Flak batteries



■ FORTIFICATIONS

■ PANTHER TURRET BUNKER

Beginning in 1943, Panther turrets were fitted to buried bunkers to create an expedient strong point for defensive lines. The turret was usually a modified Ausf. A turret, with a flat hatch replacing the cupola and thickened turret armor, including additional armor welded to the turret top to further protect it against direct artillery hits. However, some expedient turret bunkers used a relatively unmodified Panther turret with a cupola and standard armor.

The turret was then mated to a ring mount attached to a box-like bunker made of prefabricated steel plates. The bunker was then buried in the ground, leaving only the turret vulnerable to fire. The bunker had a crew of three.

The Panther turret bunkers were first encountered by the Allies in Italy along the Hitler Line in May 1944, and thereafter became a feature of German defensive lines in Italy.

Available beginning... May 1944



■ COMMONWEALTH FORCES

THE SHERMAN TANK

The Commonwealth forces use several variants of the US M4 Sherman Medium Tank. During the war, the British received roughly 17,000 tanks (more than a third of all M4s produced), Some variants of the Sherman, notably the M4A4, were designed especially for export use. A noteworthy characteristic is that most Commonwealth Shermans did not have a .50 caliber machinegun in the commander's hatch.

In the British naming system, the M4 is called "Sherman I", the M4A1 "Sherman II", the M4A2 "Sherman III", and the M4A4 "Sherman V".

■ SHERMAN I

This is the M4 Sherman and has basically the same specifications as the US variant.

Available beginning... March 1944 (Britain, Poland only)
Formations equipped... Armoured regiments, tank battalions, armoured recce regiments



■ SHERMAN II (EARLY)

The Sherman II has the same specifications as the US M4A1 (Early).

Available beginning... July 1943 (Canada, Britain only)
Formations equipped... Armoured regiments, tank battalions, armoured recce regiments



■ SHERMAN II

This variant of the Sherman II changes to a wider M34A1 gun mount with better mantlet protection and a coaxial gunner sight.

Available beginning... July 1943 (Canada, Britain only)
Formations equipped... Armoured regiments, tank battalions, armoured recce regiments



■ SHERMAN III (EARLY)

Designated by the U.S. as the Sherman M4A2, this variant differs from the M4 in having diesel engines instead of gasoline engines.

Available beginning... July 1943 (Britain only)
Formations equipped... Armoured regiments, armoured recce regiments



■ SHERMAN III

This variant of the Sherman III changes to a wider M34A1 gun mount with better mantlet protection and a coaxial gunner sight.

Available beginning... July 1943 (Britain, New Zealand, Poland only) Formations equipped... Armoured regiments, armoured recce regiments



■ SHERMAN V (EARLY)

Designated by the U.S. as the Sherman M4A4. Because of engine shortages, this variant used a Chrysler WC Multibank engine, necessitating the lengthening rear hull to hold the new engine. Three-piece bolted nose.

Available beginning... July 1943 (Canada only)

Formations equipped... Armoured regiments, armoured recce regiments



■ SHERMAN V

This variant of the Sherman V changes to a wider M34A1 gun mount with better mantlet protection and a coaxial gunner sight.

Available beginning... July 1943 (Canada, Britain only) Formations equipped... Armoured regiments, armoured recee regiments



THE CHURCHILL TANK

The Churchill tank, a heavy British Infantry Tank in service between 1941 and 1952, was one of the heaviest allied tanks of the Second World War - 38.5 tons. The tank was manufactured by Vauxhall Motors and counting all types, 7,368 were produced between 1941 and 1945. It was designed for a 5 man crew and could reach 15 miles/hour.

History suggests that it was named after Winston Churchill, Prime Minister and Minister of Defence of the United Kingdom at the time, who had been involved with the development of the tank as a weapon during the First World War.

First designed in 1940, the first tanks began rolling off the production line in June, 1941. Many specialist vehicles were built on its chassis.

■ CHURCHILL I

The original production model from 1941. With a design shaped by World War One experiences, the A20 (as the pilot vehicle was called) was a "lozenge" shaped tank design capable of crossing trenches and other obstacles that would stop most tanks. With the evacuation of Dunkirk and the resulting loss of tanks, Vauxhall began production of the Churchill I with extreme haste to bolster home defence. The Churchill I first saw combat at Dieppe and later in Tunisia. The Churchill I was still in use in the Italian theater as late as mid-1944, filling the close support role for Churchill companies until the Churchill V arrived.

The Churchill I had heavy armor and a Bedford 350hp engine. Armament included a hull-mounted 3-inch howitzer and a 2-pounder gun with coaxial Besa machinegun in a cast turret.

Available beginning... April 1944 (Britain only) Formations equipped... Tank battalions



■ CHURCHILL III

The Churchill III was a major armament modification of the series starting in 1942. The 2-pounder cast turret was replaced with a welded turret armed with a 6-pounder gun. The hull-mounted howitzer was eliminated, replaced with a second Besa machinegun. The exposed tracks were covered.

Available beginning... April 1944 (Britain only) Formations equipped... Tank battalions



■ CHURCHILL IV

The most numerous Churchill produced, the Churchill IV returned to a cheaper and better protected cast turret. It was otherwise identical to the Churchill III.

Available beginning... April 1944 (Britain only) Formations equipped... Tank battalions



THE STUART TANK

The M3 Stuart, formally known as Light Tank M3, was an American tank named after the American Civil War Confederate General J.E.B. Stuart. In the British service, it also had the unofficial nickname of HONEY. These tanks were supplied to British and Commonwealth forces under the Lend Lease program prior to the entry of the U.S. into the war, and after that used by the U.S. and Allied forces

until the end of the war.

Commonwealth forces often removed the turrets from Stuarts in order to give them a lower profile and higher speed, advantageous traits for a reconnaissance vehicle. In place of the turret armament was usually a pintle-mounted .50 cal heavy machinegun. These modified Stuarts were known as Stuart Recces.

■ STUART III

This model had a power traverse turret, with a turret basket and no cupola. A vertical gun stabilizer was installed and the Sponson machine guns removed. Fast and reliable, weighing 14.5 tons, it was well suited for the reconnaissance role.

Available beginning... July 1943 (Canada, Britain, Poland only) Formations equipped... Armoured regiments, armoured recce regiments



■ STUART III (RECCE)

This is the Stuart III with the turret removed and a .50 caliber heavy machinegun mounted on the front hull.

Available beginning... July 1943 (Canada, Britain only) Formations equipped... Armoured regiments, armoured recce regiments



■ STUART V

This model had a welded hull and the position of the driver was moved forward and higher. The enlarged turret allowed more ammunition to be stored in the turret, freeing up space in the hull for additional fuel capacity.

Available beginning... January 1944 Formations equipped... Armoured regiments, armoured recce regiments



■ STUART V (RECCE)

This is the Stuart V with the turret removed and a .50 caliber heavy machinegun mounted on the front hull.

Available beginning... January 1944 (Canada, Britain, New Zealand only) Formations equipped... Armoured regiments, armoured rece regiments



SELF-PROPELLED GUNS

■ 3-INCH M10 SP GUN "WOLVERINE"

The Wolverine Tank Destroyer was a US M10 GMC Tank Destroyer, developed for British use. It had an open-top turret and a US 76mm anti-tank gun, which improved its armor penetration capability compared to the 75mm gun. It was produced by General Motors and Ford, and it was numerically the most important US Tank Destroyer used in World War II, combining a reasonably potent anti-tank weapon with a turreted platform. It was designed based on the chassis of the M4 Sherman, and remained in service until the end of the war.

Available beginning... February 1944 (Britain, Poland only) Formations equipped... Self-propelled anti-tank batteries



■ SEXTON II

The Sexton was a relatively simple design with an open-top superstructure mounted on the running gear of a RAM Tank (a medium tank produced in Canada). It was equipped with a 25pdr gun and a crew of 6, a driver and 5 gunners/loaders could fit inside. The Sexton served in the British Army from 1943 through to 1956.

Available beginning... September 1943 (Canada, Britain) Formations equipped... Self-propelled artillery batteries



■ AUTOCAR SP 75MM

The British name for the American-built M3 GMC, As US forces began equipping their tank destroyers forces with M10 GMCs after the North African Campaign, they handed their M3 GMC tank destroyers over to British forces. The Autocar was used in Italy until the end of the war, often serving in the heavy troops of armoured car squadrons.

Available beginning... September 1943 (Canada, Britain only) Formations equipped... Armoured car regiments



HALFTRACKS

■ M5 HALFTRACK

Externally almost identical to the M3 Halftrack, but with a 7,400 cc engine. The M5 is heavier than the M3, due in part to heavier armor. Its rear frame sides were manufactured in one piece, rather than bolted. The M5 was primarily manufactured for Lend-Lease.

Available beginning... July 1943



■ M5A1 HALFTRACK

This is the M5 with a M49 machine gun mount. It could fit one .50 caliber and two .30 caliber machine guns. The models produced by International Harvester Corporation (IHC) had a slightly lower top speed and lower range as well.

Available beginning... January 1944



■ M9A1 HALFTRACK

Same as the M5, but with stowage arranged as in the M2 halftrack, with access to radios from inside (as opposed to outside) and rear doors, plus a pedestal MG mount. It also has a ring mount and three MG pintles.

Available beginning... January 1944



CARRIERS

■ UNIVERSAL CARRIER

The Universal Carrier is a common name used to describe a family of light armored tracked vehicles built by Vickers-Armstrong. These vehicles were widely operated by British Commonwealth forces during World War II. They were usually used for transporting of personnel, equipment and support weapons as well as machine gun platforms. Originally designed for a 2 man crew, the Universal

GUSTAV LINE 3^o

weighed 3.7 tons and had an operational range of 241 kilometers, and a maximum speed of 48 kph.



■ UNIVERSAL CARRIER MMG

This version has a special mount at the rear for a Vickers Medium Machinegun.

Note: MMG teams dismounting from a Universal Carrier MMG are able to take the Vickers MMG with them.



■ UNIVERSAL CARRIER BREN

As the name states, it carries a Bren LMG. The gunner manning the Bren was sitting in front next to the driver. Bren Carriers were especially used for carrying ammunition, as infantry support weapons and for towing anti-tank guns and trailers.



■ LOYD CARRIER

The Loyd Carrier was one of a number of small tracked vehicles used by the British and Commonwealth forces in the Second World War to transport equipment and men about the battlefield. It was built upon the engine, gearbox and transmission of a Fordson 7V Truck, with mild steel bodywork to which armor plate was bolted depending on application. The upper hull of the Loyd Carrier was covered to the front and sides but was open to the rear and above.

The Loyd carrier is the typical tractor for the 6pdr anti-tank gun.



ARMOURED CARS

■ HUMBER MK IV

The Humber Armoured Car was one of the most widely produced British armoured cars of WW2. The vehicle entered service in late 1941 in the North African Campaign and remained in service several years after the end of the war.

This variant is fitted with a 37 mm gun as its main weapon.

Available beginning... July 1943 (Britain only) Formations equipped... Recce regiments



Daimler Mk II

The Daimler Armoured Car was a Birmingham Small Arms design. It is a larger version designed upon the same layout as the Dingo fitted with a turret similar to that of the Mark VII Light Tank and a more powerful engine. It features some advanced concepts for the time and is considered one of the best British armoured fighting vehicles of the Second World War.

It entered service in mid-1941, and more than two thousand vehicles were built by Daimler. Available beginning... September 1943 (Canada, Britain only)

Formations equipped... Recce regiments, armoured car regiments



■ Fox

The Fox Armoured Car was a Canadian vehicle based on the British Humber Armoured Car. The Fox has a crew of four and armament consisting of a .50 caliber heavy machinegun and a .303 caliber coaxial machinegun.

Available beginning... July 1943 (Canada only) Formations equipped... Recce regiments



■ STAGHOUND MK I

The T17E1 was an American armored car produced in WW2 that did not see service with frontline US forces, since they moved to the M8 Greyhound vehicle instead. It was, however, supplied to Commonwealth forces during the war and received the service name of "Staghound". Around four thousand units were produced. Poland, New Zealand, and later Canada made extensive use of the Staghound, equipping many armoured car units exclusively with it.

Available beginning... September 1943 Formations equipped... Recce regiments, armoured car regiments



■ STAGHOUND MK II

A field modification originally by New Zealand's divisional cavalry regiment, the Staghound Mk II replaced the 37mm gun with a Mk I 3-inch howitzer in order to provide better protection against enemy infantry and anti-tank guns.

Available beginning... November 1943 (New Zealand, Poland only) Formations equipped... Armoured car regiments



SCOUT CARS / RECON CARS

■ WHITE SCOUT CAR

The M3 Scout Car was an armored car also known as the White Scout Car. It was used in various roles including patrol, scouting, command vehicle, ambulance and gun tractor. Production of the vehicle started in 1940 and lasted until 1944, with more than two thousand units built. The M3 was supplied via lend-lease to Britain.



■ OTTER LIGHT RECONNAISSANCE CAR

The Otter was developed and produced by General Motors Canada as a replacement for the Humber LRC. Although 1761 units were produced from 1942 to 1945, fewer than 1,000 were delivered overseas. The Otter served with Canadian units in the Italian Campaign and Northwest Europe. It was also employed by some British units.



■ HUMBER MK III LIGHT RECONNAISSANCE CAR

The Humber Light Reconnaissance Car was produced by the Rootes Group. It was based on the 4x4 Humber Heavy Utility (Humber box) chassis. From 1940 to 1943 over 3600 units were built. It saw service in many Infantry Reconnaissance Regiments in Tunisia, Italy and Western Europe. After the war, some vehicles remained in service with the British units in India and in the Far East.

The Mk III vehicle introduced a 4x4 drive.



■ DAIMLER DINGO SCOUT CAR

The Daimler Dingo was a highly successful scout car built by Daimler beginning in 1939. Designed as a reconnaissance vehicle, the Dingo had four-wheel drive, a transmission with five speeds in both directions, run-flat tires, independent coil suspension, and a low silhouette. The 55 hp engine could reach speeds of up to 89 km/h with a range of 320 kilometers. The two man crew was well protected behind 30 mm of frontal armour.



■ LYNX SCOUT CAR

The Lynx scout car was the Canadian equivalent version of the Daimler Dingo. It was produced by Ford Canada. The engine in the Lynx was more powerful than the Dingo, but an inferior transmission layout resulted in the vehicle being slightly taller.



UNARMOURED VEHICLES

■ WILLYS MB JEEP

The Willys MB Jeep was manufactured in the US from 1941 to 1945. It was also used by allied forces and in this module by the Commonwealth forces. It has the same specifications as the US version from the base game.



■ CS8 MORRIS

The CS8 Morris was a 15 cwt (3/4 ton) general purpose truck. The CS8 Morris was a ubiquitous presence in British and allied militaries, with more than 21,000 built by 1941.



■ BEDFORD QLD GS

The Bedford QLD was the General Service cargo truck version of the QL series of trucks manufactured by Bedford Vehicles. It saw service with the British and Polish forces in World War II.

The Bedford QL was in production from 1941 to 1945. More than fifty thousand units were produced in total, the QLD being the most numerous version.

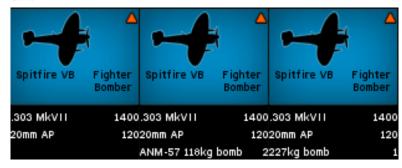


■ COMMONWEALTH AIR ASSETS

■ SPITFIRE MK VB

The Supermarine Spitfire was the main British fighter aircraft used by the Royal Air Force and other Allied forces in WW2. It was used in several roles such as interceptor, photo-reconnaissance, fighter-bomber, carrier-based fighter, and trainer.

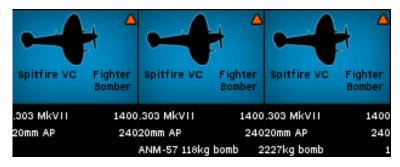
The Spitfire Mk Vb was the main production version of the Mk V. It was armed with two Hispano Mk II 20mm cannons, four Browning .303 machineguns, and an optional bomb load.



■ SPITFIRE MK VC

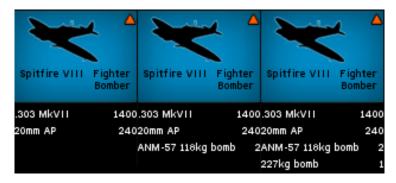
The Spitfire Mk Vc introduced a new "universal" wing that among other improvements allowed more ammunition for the Hispano cannons to be carried.

Configurations ... Strafe, Light, Heavy



■ SPITFIRE MK VIII

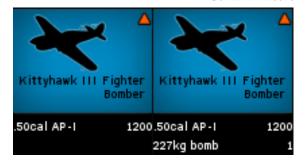
The Spitfire Mk VIII served almost exclusively in the Mediterranean theater. It was armed with two Hispano Mk II 20mm cannons, four Browning .303 machineguns, and up to 1,000 lbs in bombs. Configurations ... Strafe, Light, Heavy



■ KITTYHAWK MK III

The Kittyhawk Mk III was the British designation for the U.S.-built P-40K Warhawk, supplied to Commonwealth air forces. It was basically a P-40L Warhawk except with an Allison engine. The Kittyhawk Mk III was armed with six .50 caliber heavy machineguns and one optional bomb.

Configurations ... Strafe, Heavy



COMMONWEALTH ARTILLERY ASSETS

Note: the 2 inch mortar is explained under "Heavy Weapons"

■ 3 INCH MORTAR (81 MM)

The 3-inch mortar was UK's standard mortar used by the British Army during WW2. It is a conventional Stokes-type mortar, which is muzzle-loaded and drop-fired.

Rate of fire 8 rounds per minute



■ 4.2 INCH MORTAR (107 MM)

The Ordnance ML 4.2 inch Mortar was a heavy mortar used by the British, and entered service in 1942.



■ 75 MM PACK HOWITZER (M1A1)

The 75 mm Pack Howitzer M1 was designed in the United States in the 1920s to meet a need for an artillery piece that could be moved across difficult terrain. The gun and carriage were designed so that they could be broken down into several pieces and carried by pack animals or dropped by parachute.

Rate of fire 3-6 rounds per minute



■ 25 PDR HOWITZER (88 MM)

The 25-pounder entered service just before World War II started and was the major British field gun/howitzer. Probably the best field artillery piece of the war with high rates of fire and a reasonably lethal shell in a highly mobile base.

Rate of fire 1-5 rounds per minute



■ 3.7 INCH ANTI-AIRCRAFT GUN (94 MM)



■ 4.5 Inch Medium Gun (114 mm)

The BL 4.5 inch Medium Gun was a British gun used by field artillery units in WW2. It was designed as a replacement for the 60-pounder and equipped a significant proportion of medium artillery regiments, including half the Canadian formations.

Rate of fire intense - 2 rpm, normal 1 rpm, sustained 2/3 rpm



■ 5.5 INCH MEDIUM GUN (140 MM)

The BL 5.5 inch Gun was a British artillery gun that entered service in the middle of WW2. It also equipped Canadian, Australian, South African, Polish and Indian regiments, and was also used by New Zealand after the war. During the Second World War, the standard organization was a regiment of 16 guns organized into two batteries.

Rate of fire 2 rpm



■ 155 MM GUN (M1A1 LONG TOM)

The 155 mm Gun M1A1 was a towed gun used by the United States Army and supplied to the United Kingdom by Lend-Lease. Production of this heavy artillery piece was standardized in 1941.

Rate of fire burst: 2 rounds per minute sustained: 30 rounds per hour



■ 7.2 INCH HOWITZER MK I (183 MM)

The BL 7.2 inch Howitzer Mk.I was a series of heavy artillery guns designed by the UK at the beginning of WW2. The 7.2 inch (183 mm) was not a new design, but instead a re-lined version of the 8 inch (203 mm) howitzers dating from World War I. The carriage was a modernized version of that used on both the 8 inch howitzer and World War I, 6 inch gun.

Rate of fire 1/3 rpm



NAVAL GUNS

A number of heavy naval guns are available for support of the Commonwealth forces in the game, representing various ships close to the coast: 5 inch Destroyer and 6 inch Heavy Cruiser.



■ COMMONWEALTH WEAPONS

■ WEBLEY REVOLVER



The Webley was the standard issue service pistol for the armed forces of the Commonwealth for over 70 years. It is a top-break revolver with automatic extraction. That is, breaking the revolver open for reloading also operates the extractor. This removes the spent cartridges from the cylinder.

The .38/200 Webley Mk IV variant, used in WW2, is still in use as a police sidearm in a number of countries.

Cartridge 380" Revolver Mk IIz

Effective range 46 m

Feed system 6-round cylinder

■ LEE ENFIELD RIFLE NO. 1 MK III*

The Lee-Enfield is a bolt-action, magazine-fed rifle that was the main firearm used by the Commonwealth forces. It was in service for more than sixty years from 1895 onwards. It was the standard issue weapon to rifle companies of the Commonwealth nations in both WW1 and WW2.

Effective range 550 yd (503 m)

Feed system 10-round magazine with 5-round charger clips

■ LEE ENFIELD RIFLE NO. 1 MK III* W/ SCOPE



Standard No. 1 Mk III* rifles with telescopic sight mounts designed to accept a telescopic sight. Same specs as the standard No. 1 Mk III*, but with a much longer effective range.

■ LEE ENFIELD RIFLE NO. 4 MK 1

The No. 4 Mk 1 was officially adopted in 1941. Although it was lighter, stronger, and easier to produce than previous models, during the course of WW2 this model was even further simplified to help production. It was produced mainly in the UK but also in Canada and the US.

■ LEE ENFIELD RIFLE NO. 4 MK 1 W/ SCOPE

Standard No. 4 rifles with telescopic sight mounts designed to accept a telescopic sight. Same specs as the standard No 4 Mk 1, but with a much longer effective range.

■ M1A1 THOMPSON



The American Thompson submachine gun was the standard issue submachine gun of most Commonwealth forces in the Italian theater.

Effective range 50 meters (160 ft)

■ STEN MK II



The Sten gun was a family of British 9 mm submachine guns used by Commonwealth forces during World War II. Low cost and simple design made it also very efficient for use by resistance groups. It is a typical submachine gun, i.e. a fully-automatic firearm that fires pistol rounds.

The Mark II was the most common variant, with two million units produced. It has a very characteristic design with its metal loop for a stock.

Cartridge 9x19mm Parabellum

Effective range 100 m

Feed system 32-round detachable clip.

■ Bren Mk II Light Machinegun

The Bren was the primary infantry light machine gun (LMG) of the Commonwealth forces in WW2. It is a modified version of Czechoslovak-designed light machine guns, the ZB vz. 26 and its descendants. The name Bren is a mixture of the words Brno and Enfield. The former was the city where it was originally designed, and the latter the site of the Small Arms factory in the UK.

It was adopted by the British forces in the 1930s and saw service throughout the latter half of the 20th century up until the Gulf War in 1991. It is fitted with a bipod but can also be mounted on a tripod or vehicle-mounted.

Effective range 600 yd (550 m)

Feed system 30-round detachable box magazine

■ COMMONWEALTH HEAVY WEAPONS

■ VICKERS MACHINEGUN

The Vickers machine gun is a water-cooled machine gun that bears the name of its maker, Vickers Limited. It served from before the First World War until the 1960s. Its design was based on the successful Maxim gun of the late 19th century. It was used on a tripod or mounted on vehicles. The Vickers had a reputation for being extremely solid and reliable.

Effective range 2,187 yd (2,000 m)

Feed system 250-round canvas belt



PIAT

PIAT stands for "Projector, Infantry, Anti Tank". The PIAT was a British anti-tank weapon developed during the Second World War. The PIAT entered service in 1943 and remained in use with Commonwealth forces until the early 1950s. It was designed in 1942 to fulfill the UK's need for a better infantry anti-tank weapon.

The PIAT launches a 1.1 kg bomb using a powerful spring and a cartridge on the tail of the projectile. Because the PIAT uses a spring, it lacks the dangerous backblast created by other anti-tank weapons such as the Bazooka or Panzerschreck, allowing it to be fired safely indoors.



■ 6 PDR ANTI-TANK GUN MK 2

The "6 pounder" is the British 57 mm gun. This was the UK's main anti-tank gun during the middle of World War II.

The United States Army also adopted the 6 pdr as their primary anti-tank gun under the designation 57 mm Gun M1



■ 6 PDR ANTI-TANK GUN MK 4

The Mk 4 uses a longer barrel for increased muzzle velocity.



■ 6 PDR ANTI-TANK GUN (AIRBORNE)

This is the airborne variant of the weapon. It is the same gun but on a Mk3 carriage, with foldable arms and narrower wheelbase, for use by airborne troops. It also has some small differences in the shield.

■ 17 PDR ANTI-TANK GUN

The 17 pounder is a 76.2 mm gun developed by the UK during World War II. It was used as an anti-tank gun and also built into several British tanks.



■ 2 INCH MORTAR

The 2-inch mortar, officially known as "Ordnance SBML 2-inch mortar" is a British mortar that was used by the Commonwealth during WW2 and later.

One of the advantages of this kind of mortar is its light weight, so it does not need vehicles to be carried around the battlefield. Although small, it has a greater range and more firepower than rifle grenades.

Note: The full-size 2-inch mortar can be used like an on-map mortar, but for direct lay only (cannot be accessed by spotters for fire missions). The airborne 2-inch mortar (located only in the parachute rifle sections) can be used for direct fire only (i.e. cannot fire into defilade), similar to rifle grenades. However, the airborne mortar has only smoke shells.

Rate of fire 8 rounds per minute



■ NOTES

■ ICONS AND REFERENCE

CM:FI is making extensive use of various icons to allow the player to spot vital information in the game user interface at a glance. Below is a list of the most important icons used in the Gustav Line module (in addition to the ones from CMFI), and their description.

■ SPECIAL EQUIPMENT



PIAT



PIAT Projectile



Panzerschreck



Panzerschreck Rockets



Panzerfaust 30k



Panzerfaust 30

Airborne Infantry

Armoured

■ COMMONWEALTH BRANCHES



■ ERRATA AND MANUAL CHANGES

Below is a list of the game engine changes implemented for the Gustav Line module, as well as some corrections to the manual.

■ KEYBOARD AND MOUSE CONTROLS

Options (page 9): Added new toggle. Alt-M will toggle War Movie Mode.

Options (page 9): The toggle for Shaders (Alt-R) will now stick between sessions. If toggled off, it will remain off the next time a map is loaded.

■ BATTLES AND CAMPAIGNS

Victory Conditions (pages 15-16): Victory Levels: The following victory levels are possible, in descending order of magnitude:

Total Victory / Defeat Major Victory / Defeat Tactical Victory / Defeat Minor Victory / Defeat

In a campaign, the magnitude of your victory or defeat can influence the course of future battles. For information on how victory is calculated, see the Mission Editor section.

QUICK BATTLES

Victory Conditions (page 22): The Victory Points for terrain objectives and casualties in Quick Battles are adjusted dynamically based on the battle type (Assault, Attack, Probe, Meeting Engagement). A Meeting Engagement will offer more VP for inflicting casualties, and less VP for holding ground objectives. Assaults on the other hand will award far more VP for holding ground objectives and emphasize casualties much less. Attacks and Probes are somewhere between Meeting Engagement and Assault in emphasizing casualties over ground objectives.

■ SAVED GAMES

Saved Games (page 22): You can now delete saved games within the Save Game menu by selecting the save that you wish to delete and left-clicking the "Delete" button. You will be prompted to confirm your decision.

■ BASIC SCREEN LAYOUT

Game User Interface (GUI) (pages 28-30): Updated images for special equipment panel (12).





7. Chain of Command (page 29) - displays the parent formations of the selected unit. A green icon indicates that the HQ unit/formation is currently in contact with the next higher HQ unit/formation, while a red icon indicates lack of contact. In the previous example, if the icon beside the "1st Platoon" entry is red, then the 1st Plt is out of contact with A Company HQ, while - if the icon next to "A Company" is green - then Company A HQ is in contact with Battalion HQ.

Note: clicking on a unit jumps the player to that unit COMMANDS

Incapacitated Soldiers (pages 16, 31, 42, 56): Incapacitated soldiers are those soldiers who have a red base. Incapacitated soldiers are eligible for Buddy Aid and count towards the Condition force wide objective. Incapacitated soldiers may also be referred to as Seriously Wounded. In contrast, KIA soldiers have a dark brown base, and Wounded (also known as Lightly Wounded) soldiers have a yellow base.

Automatic Actions, Rout (page 58): The routing mechanic has been removed from the game. Soldiers will no longer Rout, instead they will Surrender (page 57). All references to Routed soldiers now apply to Surrendered soldiers.

Command & Control

Page 59: Note - Clicking on an entry in the Chain of Command area jumps to that unit.

■ ARTILLERY & AIR SUPPORT

Adjusting or Canceling Support (page 67): If the Spotter is incapacitated during a Support Mission, the Asset will usually be unavailable for other Support Missions for a length of time. Depending on the circumstances, the Support Mission may either be eventually cancelled or continue to completion.

■ THE EDITOR

Mission Editor (pages 73-78): Victory Calculations: Combat Mission calculates the victory level in the following manner (Warning: Math incoming!):

■ STEP 1: DETERMINE V.

V = (A + 10) / (B + 10)

where V = Victory Level, A = earned Victory Points of the side with the higher score, and B = Victory Points of the side with the lower score.

In other words, take the Victory Points score of each side, add ten, and then divide the higher score by the lower score. The result is V.

■ STEP 2: DETERMINE VICTORY LEVEL.

The ultimate Victory Level of the victor is determined by V and also by the percentage of potential Victory Points obtained.

Draw: V less than 1.25.

Minor Victory: V less than 1.75.

Tactical Victory: V less than 2.5 and 30% of potential VP earned.

Major Victory: V less than 4.0 and 55% of potential VP earned.

Total Victory: V equals 4.0 or more and 80% of potential VP earned.

The losing side will always receive the opposite Victory Level of the winning side. So if the winning side receives a Major Victory, the losing side will receive a Major Defeat.

Example: At the end of a mission, the US side receives 700 Victory Points out of 1,000 VP possible. The German side receives 150 VP out of 1,000 VP possible.

V = (A + 10) / (B + 10)

A = 700

B = 150

V = (700 + 10) / (150 + 10)

V = 710 / 160

V = 4.44

The US receives a Major Victory, and the Germans receive a Major Defeat. Although V was over

the 4.0 requirement for a Total Victory, the US only achieved 70% of the potential total VP, while a Total Victory requires at least 80% of potential VP be earned.

Units Editor - Section: Reinforcements (Page 88): Arrival Span: Can be set to be Exact (no deviation, i.e. the unit will always arrive exactly on the time set above) or a value between 5 and 30 minutes in 5 minute intervals. Specifying a time determines a range which is added to the Earliest Arrival Time.

■ CREATING QUICK BATTLES:

- Victory Conditions (page 103): Quick Battles consider only OCCUPY terrain objectives and unit casualties for determining victory conditions. All other objective types and parameters are ignored.
- All terrain objectives are converted to OCCUPY objectives automatically, and all Units are part of a force-wide UNIT objective.
- Quick Battle scores are determined differently than in Missions. The total point value is automatically set to 1,000 VP. Out of the 1,000 VP available, a portion will be allocated to the OCCUPY terrain objectives and the remainder of the VP will be assigned to the UNIT objective.
- The ratio of VP awarded for terrain objectives versus casualties will vary based on the type of battle, with Meeting Engagements awarding the least VP for terrain objectives and the most VP for unit casualties, and Assaults awarding the most VP for terrain objectives while de-emphasizing unit casualties.
- The relative VP values of the terrain objectives in a Quick Battle is determined by the relative VP values that the map designer assigns to each of the objectives. For example, if a designer creates three terrain objectives, and gives one of the objectives 500 VP while giving the other two 250 VP each, then in every Quick Battle on that map, the first terrain objective will be worth twice as much VP as either of the other two. The ratios of the VPs values are important, not the actual VP values themselves!

MODS

(PC, page 104) Replace all references to the location of the Mods folder inside the game's Data folder with references to the Mods folder located under {My Documents}\Battlefront\CM Fortress Italy\User Data. This is now the recommended location for user mods, and is treated like the game's standard Data folder for all intents and purposes.

CREDITS

Project Lead

Christopher Nelson

Game Design

Charles Moylan Stephen Grammont

The Battlefront Team

Charles Moylan Stephen Grammont Dan Olding Martin van Balkom Mike Duplessis Fernando J. Carrera Buil Phil Culliton Christopher Nelson

Programming

Charles Moylan Phil Culliton

Macintosh Port

Clav Fowler Phil Culliton

Lead Tech Support

Ian Greer

User Interface Artwork

Jean-Vincent Rov

3D Models

Dan Olding

Animations and Models

Cassio Lima

2D Art Dan Olding

Mike Duplessis Marco Bergman Florian Schroeder Fernando J. Carrera Buil Christopher Nelson Michael Andersson

Cover Art

Jean-Vincent Roy Cassio Lima

Daniel Sadowski Konstantin Savin Constantin Cat

Martin van Balkom

Quick Battles

Michael Andersson

Special thanks to Alan K. Davis for his contributions to the TO&E research.

Tutorial

Christopher Nelson Stephen Grammont

Campaign Designers

Max von Bargen Christopher Nelson

Scenario Designers

Michael Andersson Steven Burke Joe Callan Benjamin Donaldson Jon Martina Josh Peterson Kari Salo Jon Sowden Peter Wenman

Beta Testers

Pete Abrams Raymond Ardry Christian Audas Robert Bunting Jonathan Carruthers John Costello Alan K. Davis Thomas Daxner Andy Farley Martin "AAR Gladiator" Gregory Bil "AAR Gladiator" Hardenberger Jean-Charles Hare Mark Jarvis Scott Johns James Landsfeld George McEwan Ken McManamy Jon Mead Warren Miron

Johnnie Osborne

Douglas Peel

Philip Skelton

Thomas West

David Sluiter Jeff Smith Phil Stanbridge

Thomas Wilcox Phil Williamson Music

Game Manual

Christopher Nelson Stephen Grammont

■ TROUBLESHOOTING

While we're taking utmost care in preparation of this software to avoid bugs, today's myriad of available systems, software and hardware configurations makes it impossible to guarantee 100% compatibility. Below you will find a few known issues as well as a list of contacts available to helo out.

An up-to-date Troubleshooting Guide is also available at our webpage:

http://www.battlefront.com/helpdesk

■ MULTI-GPU

On certain systems with multiple video cards a known bug prevents players to select units occasionally. Turn off the additional video card(s) to solve this problem.

■ MULTIPLE VIDEO CARDS (SLI) VERY SLOW

If you are running multiple nVidia video cards running in SLI mode, download the latest Forceware drivers (169.21 at least).

■ UNITS DISAPPEAR WITH SHADOWS ON

This problem seems to affect people with certain combination of newer (8000 series) GeForce cards and various OS and video driver combinations. Until Nvidia releases a new set of Forceware drivers that specifically address this problem, simply play the game with shadows disabled (use Alt-W to toggle shadows on or off).

■ LEVEL OF DETAIL

CM:BN tries hard to keep up framerates and will automatically downsample textures, and adjust model quality, and level of detail calculations if it detects performance limits (VRAM used up etc.) This may lead to a subpar graphics quality during gameplay. Often it is a better idea to manually adjust the model and textures quality downward in the Game Options Menu, leading to better overall look and faster framerates.

■ INTRO VIDEO

If you would like to disable the intro video playing at game launch, hold down the "V" key at game startup. This is a toggle and remembered for future launches. If you want to bring the video back, simply keep "V" pressed again during the next launch.

■ TECH SUPPORT

■ BUGS

If you run into a bug, or have problems in running or installing the game, please visit our Tech Support forum at: http://www.battlefront.com/community

If you do not find a solution to your problem there, please post a support ticket at http://www.battlefront.com/helpdesk

PATCHES

Please also do not forget to check regularly for the latest patches to the game at: http://www.battlefront.com/patches

You can also do an auto-check to find out if your version of the game is up to date. In your Start>Program Group you will find a link within the game's sub-group called "Check for latest version". Clicking the link will automatically compare your currently installed version of the game with the latest version available for download, and the results will be displayed in your browser.

■ LICENSING

For problems with licensing or unlicensing the game, please refer first to the Knowledge Base at: http://www.battlefront.com/helpdesk

If you do not find a solution to your problem there, please "Submit a support ticket" there.

