# COMBAT MISSION

# RED THUNDER

## FIRE and RUBBLE

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# ■ INSTALLATION & LICENSING

## ■ Installation from Disk

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

(PC) Combat Mission's installer comes in a compressed RAR format. Before installing the game, extract (or "unzip") the files to a single, empty folder. Run the setup.exe file within this folder and follow the onscreen instructions.

(Mac) For the Mac version, simply open the disc icon and copy the game application into a place on your hard drive (for example, the Applications folder).

## ■ Installation for Download Version

After you have successfully downloaded the Combat Mission: Red Thunder - Fire and Rubble setup file, extract (or "unzip") the files to a single, empty folder. Run the setup.exe file within this folder and follow the onscreen instructions.

## ■ License Overview

Combat Mission: Red Thunder - Fire and Rubble is protected by an online activation system that helps us restrict the illegal distribution of the software with minimal annoyance and intrusion for the legitimate customer.

Note: only the Battlefront.com version uses our online activation system. If you have purchased your game elsewhere (e.g. in another storefront such as Steam), then you probably have a retail version of the game, which does NOT use our online activation system.

## ■ How to Find Your License Key

If you purchased Combat Mission through the Battlefront storefront, you will find your license key in your online account at www.battlefront.com. After logging in, click on the "My Orders" link for a summary of all orders you have made through Battlefront.com. Click on the Order Number to show the details of the order, including the license key. If you forgot your login, click on Forgot Password on the login screen. Enter your User Name and email address and a temporary password will be emailed to you. It is recommended that once you've logged back into your account you immediately change the password.

## ■ Activation / Licensing

When you first run Combat Mission: Red Thunder - Fire and Rubble, you will be prompted to activate your copy after the initial install. In most cases all you need to do is:

a) Make sure the computer on which you have installed the game has an active connection to the internet.

b) Choose Online Activation from the dialog window.

c) Enter your license key into the correct field.

d) 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". Off-line licensing is also a good workaround for online computers which experience problems with firewall, router or proxy settings which interfere with establishing an internet connection to the activation servers

(PC/Mac) Use the Activate New Products utility on your desktop:

a) Click on the Manual Activation button.

b) Enter your license key. Write down the authorization request code presented to you.

c) Copy the authorization request code presented to you.

d) On a computer with an internet connection, go to https://battlefront.mojohelpdesk.com/ and open a Help Desk ticket and send the license key, authorization code and game title that you are activating.

e) A new code will be sent to you. Enter this code in the final field to complete the activation.

## ■ Additional Activations

Our End User License Agreement allows you to have the game activated on two PCs. 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 on the new PC.

## 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 previously described four activations, you can add one additional activation to your key every 365 days. To do this, visit http://www.battlefront.com.mojohelpdesk.com. Click on "+ new ticket" and open a Help Desk ticket to request an additional activation. Include your license key in the request.

If your key is eligible for an additional activation (i.e. if you have not previously requested an additional activation within the past 365 days), then you'll be notified of your new activation and it will be automatically added to your key, so you can use it immediately.

Should you ever need an additional activation more than once during a 365 day period, you can always contact our License Activation Support staff for help (see below).

## ■ License Activation Support

Battlefront.com prides itself on customer service, and the implementation of our online licensing system is a part of this. Please check out our Knowledgebase section for more detailed information on how our online activation system works:

> https://battlefront.mojohelpdesk.com/

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.

## ■ Help Desk Link

https://battlefront.mojohelpdesk.com/

# ■ ENCYCLOPEDIA

The following section is a quick reference for the vehicles and weapon systems introduced in Red Thunder - Fire and Rubble. For equipment not listed here, please refer to the base game manual for Red Thunder, found in your game's installation directory or via shortcut.

## ■ Soviet Army

### ■ Soviet Tanks

#### ■ T-34-85 (M1944 latest)

In the closing months of the war, the Soviet Army engaged in extended urban combat within the crowded cities and towns of Germany; this environment made Panzerfausts a deadly threat to Soviet tanks. In response, some tanks were fitted with standoff steel mesh panels, popularly nicknamed "bedspring" armor. This was a form of early spaced armor that had the goal of detonating the HEAT projectile further from tank exterior, reducing penetration. Tanks were also painted with a white stripe around the turret for friend-or-foe identification.

*Available beginning............ April 1945*

*Formations equipped........ Tank regiments/battalions, recon battalions*



#### ■ OT-34-85

The OT-34-85 was a flamethrower variant of the T-34-85. Like the OT-34, the hull machinegun was replaced with an ATO-42 flamethrower, with a maximum range of 120 meters.

*Formations equipped........ Flamethrower companies*

## ■ Valentine

The British Valentine tank was Lend-Leased to the Soviet Union in large numbers beginning in 1941. Over 3,000 Valentines of British and Canadian construction were delivered. The Valentine was quickly considered to be under-gunned and under-powered on the Eastern Front, relegating it to secondary duties.

The Valentine was repeatedly upgraded during its service, and spawned a large number of specialized variants. The model depicted in this module is the Valentine IX. The IX had a diesel engine and new transmission. In order to increase firepower, the tank's 2 pounder gun was replaced with a 6 pounder (57 mm).

*Available until..................... January 1945*

*Formations equipped........ Tank regiments/battalions, recon battalions*



## ■ M4A2 Sherman

The M4A2 was a diesel-powered variant of the Sherman used mainly for Lend-Lease. The Soviet Union received over 4,000 of these tanks during the war, where it equipped entire units and developed a good reputation among Soviet tankers.

*Formations equipped........ Tank regiments/battalions, recon battalions*

### ■ M4A2(76)W Sherman

Half of the M4A2 Shermans shipped to the Soviet Union were the 76 mm model.

*Available beginning............ August 1944*

*Formations equipped........ Tank regiments/battalions, recon battalions*



## ■ Soviet Tank Destroyers

### ■ SU-57

Known as the T48 57 mm Gun Motor Carriage to the United States, the SU-57 was an M3 half track equipped with an M1 57 mm antitank gun. The vehicle was further modified with a gun shield for crew protection, with a maximum thickness of 16 mm of face-hardened steel. The internal arrangement of the halftrack was modified for storage racks, containing 99 rounds of AP ammunition.

The vehicle was originally intended for Lend-Lease to the British for use in North Africa, but arrived too late to take part in the fighting, and with the introduction of the M10 Tank Destroyer they had become outdated. Of the 962 halftracks produced, 650 were sent to the Soviet Union through Lend-Lease. The SU-57 arrived on the eastern front in time for Operation Bagration in 1944.

*Formations equipped........ Recon battalions, light assault gun regiment*

## ■ SU-85M

The SU-85M differed from its early counterpart in that it was fitted with the casemate of the SU-100, and used the T-34-85 commander's cupola. These upgrades provided the vehicle with better protection and improved combat awareness.

*Available beginning............ October 1944*

*Formations equipped........ Medium assault gun regiments*



## ■ SU-100

The SU-100 was a Soviet tank destroyer first used in large numbers beginning in March 1945. The SU-100 was developed in response to the SU-85's decreasing relevance after the introduction of the T-34-85, which was armed with the same 85 mm gun. The new tank destroyer's primary upgrade was a powerful 100 mm gun, which was capable of penetrating up to 125 mm of armor at ranges up to 2,000 m. Front armor thickness was increased by 30 mm for better protection. The commander's station was significantly improved to include a sponson and the cupola from the T-34-85.

*Available beginning............ December 1944*

*Formations equipped........ Medium assault gun regiments*

### ■ M10

The M10 was a United States tank destroyer based on the M4 Sherman tank chassis. Just over 50 M10 Tank Destroyers were Lend-Leased to the Soviet Union. These M10s were formed into two self-propelled artillery regiments and saw service in 1944.

*Formations equipped........ Light assault gun regiments*



## ■ Soviet Carriers

## ■ Universal Carrier

The Universal Carrier was 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, and almost 3,000 were Lend-Leased to the Soviet Union beginning in 1941. Universal Carriers were usually used for transporting of personnel, equipment and support weapons as well as machine gun platforms.

## ■ Soviet Anti-Aircraft Vehicles

### ■ M15A1 MGMC

The M15 CGMC (Combination Gun Motor Carriage) was an M3 Halftrack modified to mount antiaircraft guns. The vehicle featured an M1A3 37 mm autocannon flanked by two .50 cal M2HB heavy machine guns. The gun mount and crew were protected by an armored superstructure. The Soviet Union received 100 M15s through the Lend-Lease program.

*Formations equipped........ Anti-Aircraft Platoons (self-propelled)*



### ■ M17 MGMC

The M17 was an antiaircraft halftrack based on the M5 Halftrack, and essentially the same vehicle as the M16 MGMC (Multi Gun Motor Carriage). The M17 MGMC carried a Maxson M45F quad-mount, bristling with four .50 caliber M2TTHB heavy machine guns. Over 1,000 M17s were Lend-Leased to the Union, where they formed a significant portion of the Red Army's tactical antiaircraft defenses.

*Formations equipped........ Anti-Aircraft Platoons (self-propelled)*

## ■ Soviet Halftracks

### ■ M5

The M5 halftrack was a Lend-Leased halftrack manufactured by International Harvester. The M5 was externally almost identical to the M3 halftrack, but heavier and had a different engine.



### ■ M5A1

The M5A1 was an M5 halftrack with an M49 machine gun mount.



### ■ M9A1

The M9A1 was an M5 with an M2's stowage arrangement, ring mount, and three pintle mounts.

## ■ Soviet Scout Cars

### ■ M3A1

The M3A1 Scout Car was also known as the White Scout Car. Over 3,000 scout cars were sent to the Soviet Union through Lend-Lease.



## ■ Soviet Unarmored Vehicles

### ■ Jeep and 2.5 Ton Truck

The United States shipped massive amounts of cargo trucks and jeeps (over 400,000) to the Soviet Union via Lend-Lease.

## ■ Soviet Small Arms

### ■ Mosin-Nagant M44

The Model 1944 was a late-war carbine variant of the Mosin-Nagant, intended for use by support troops and heavy weapons crews who did not need a full-sized rifle. A further development of the M38 carbine, the M44 had a permanently fixed bayonet that folded into a groove on the right side of the stock.

*Cartridge ................................................. 7.62x54 mm R*
*Feed system ........................................... 5 round integral magazine*
*Rate of fire ............................................... Bolt-Action*

## ■ Soviet Heavy Weapons

### ■ M1943 (OB-25) Infantry Gun

The OB-25, or 76 mm regimental gun M1943, was an infantry gun in Soviet service beginning in 1943. The gun used the M1927's barrel on a split trail M1942 45 mm antitank gun carriage.

*Rate of fire.............10-12 rds/min*
*Effective range...............4,200 m*

### ■ M1944 (BS-3) Field Gun

The 100 mm M1944, or BS-3, entered service in 1944. The BS-3 equipped some light artillery brigades, where it saw use as a mobile light field gun and as a very capable antitank gun. The BS-3's powerful 100 mm AP shell was capable of defeating the frontal armor of the Tiger II at ranges of up to 1,500 meters.

*Rate of fire.............8-10 rds/min*
*Effective range...............20 km (as field gun)*

# ■ German Forces

## ■ German Tanks

### ■ Panzer IIIG

The Panzerkampfwagen III, commonly known as the Panzer III, began service in 1939 after a 1935 order was placed for a 15-ton medium tank. The Panzer III was the primary battle tank of the German Panzer forces in the early years of World War II. The Panzer III was an excellent tank for its time, easily able to defeat Polish and most French tanks. However, the tank was found to be woefully inadequate against heavier Russian tanks such as the T-34 and KV in 1941, prompting significant upgrades.

After the battle of Kursk in 1943, Panzer III models were sent back to Germany for conversion or to be used at training schools. However, severe tank shortages post-Bagration saw ad-hoc *Alarmeinheiten* (Alarm) units, some equipped with the Panzer III, formed from these training depot formations.

*Available beginning........... January 1945 (Germany region only)*

*Formations equipped........ Panzer company (ad hoc)*



### ■ Panzer IIIM (late)

Later Panzer III variants were equipped with longer-barreled KwK39 L/60s, added up to 57 mm of armor to the turret and spaced armor on the superstructure front and gun mantlet.

*Available beginning............January 1945 (Germany region only)*

*Formations equipped........ Panzer company (ad hoc)*

## ■ Panzer IIIM (flame)

The Flammpanzer version of the Panzer IIIM replaced the main 50 mm gun with a vehicle flamethrower, disguised by a long dummy barrel. About 100 vehicles of this type were built.

*Available beginning............January 1945*

*Formations equipped........ Flammpanzer company*



## ■ Panzer IIIN (late)

The Ausf. N was the final variant of the Panzer III tank line. The 50 mm cannon was replaced with a KwK L/24 75mm short-barreled gun, and the spaced armor on the mantlet was shed to accommodate the larger gun.

*Available beginning............January 1945 (Germany region only)*

*Formations equipped........ Panzer company (ad hoc)*

## ■ Panzer VG Panther (mid)

This production variant featured a more reliable drive-train and armored ammunition bins, and a heating system for the fighting compartment were also introduced. A limited number of these vehicles were also manufactured mounting Tiger steel road wheels.

*Available beginning............October 1944*

*Formations equipped........ Panzer battalion, panzer company (ad hoc)*



## ■ Panzer VG Panther (late)

Beginning in late 1944, Panther VG tanks were fitted with a new gun mantlet that removed the under curve, eliminating a shot trap that could deflect impacting rounds downwards into top hull armor. New exhaust mufflers were also introduced.

*Available beginning............October 1944*

*Formations equipped........ Panzer battalion, panzer company (ad hoc)*

## ■ Panzer VIE Tiger (latest)

The (latest) Tiger variant has a higher main gun ammunition capacity: 108 rounds instead of 92.

*Available beginning............October 1944*
*Formations equipped........ Heavy panzer battalion*



## ■ German Tank Destroyers

## ■ Jagdpanzer 38(t) (late)

Late production versions of the Hetzer were equipped with a new exhaust system.

*Available beginning............July 1944*
*Formations equipped........ Panzerjäger battalion*

## ■ Jagdpanzer IV/70(V)

Produced by Vomag, the IV/70(V) was an up-gunned version of the Jagdpanzer IV (late), being armed with a more powerful PaK 42 L/70 cannon.

*Available beginning............ September 1944*

*Formations equipped........ Panzerjäger battalion (armored + heavy), panzer battalion (mixed + panzer brigade), panzer company (ad hoc)*



## ■ Jagdpanzer IV/70(V) (late)

Later versions of the IV/70(V) were based on the Panzer IVJ chassis, reducing the number of return rollers to three. The first two wheels were also steel rimmed to combat the heavier front weight from the heavier cannon and frontal armor.

*Available beginning............ September 1944*

*Formations equipped........ Panzerjäger battalion (armored + heavy), panzer battalion (mixed + panzer brigade), panzer company (ad hoc)*

## ■ Jagdpanzer IV/70(A)

The Jagdpanzer IV/70(A) was an interim variant of the longer and more potent PaK 42 L/70-equipped Jpz IV. The "A" stood for "Alkett", the manufacturer of the vehicle. The chassis was not changed from the Panzer IV, and it had a different superstructure compared to the "(V)" version, giving it a higher profile.

*Available beginning............ September 1944*

*Formations equipped........ Panzerjäger battalion (armored + heavy), panzer battalion (mixed + panzer brigade), panzer company (ad hoc), sturmartillerie brigade, sturmgeschütz brigade*



## ■ Jagdpanther

The Jagdpanther was a tank destroyer built during World War II, based on the chassis of the Panther tank. Production started in January 1944, and it entered service in the same year, both on the Eastern and Western fronts. The Jagdpanther combined the very powerful 88 mm PaK 43/3 cannon with the excellent armor of the Panther chassis.

*Available beginning............ January 1945*

*Formations equipped........ Heavy panzerjäger battalion, panzer battalion (mixed), panzer company (ad hoc)*

## ■ 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.

*Available beginning............ October 1944*

*Formations equipped........ Heavy panzerjäger company (elefant)*



## ■ German Assault Guns

## ■ StuG IIIG (latest)

The latest production models added the Nahverteidigungswaffe close defense system and returned to a redesigned curved Saukopf gun mantlet that fitted a coaxial machine gun.

*Available beginning............ October 1944*

*Formations equipped........ Sturmgeschütz battalion, sturmgeschütz brigade, panzerjäger battalion, sturmartillerie brigade, panzer battalion (mixed)*

## ■ StuG IIIG (latest) (concrete)

In a desperate measure to improve the outdated StuG III's protection against antitank weapons, some units made field modifications to their vehicles. In one such version, concrete was poured over the casemate to form a new layer of armor.

*Available beginning............ October 1944*

*Formations equipped........ Sturmgeschütz battalion, sturmgeschütz brigade, panzerjäger battalion, sturmartillerie brigade, panzer battalion (mixed)*



## ■ StuG IV (early)

The StuG IV had the same role and basic design as the StuG III, the primary difference being that it was based on a Pz IV chassis. In contrast, the StuG III was based on the Pz III chassis.

*Formations equipped........ Sturmgeschütz battalion, sturmgeschütz brigade, panzerjäger battalion, panzerjäger battalion (armored), sturmartillerie brigade*

## ■ StuG IV (late)

Later builds of the StuG IV added the Nahverteidigungswaffe close defense system.

*Available beginning............ August 1944*

*Formations equipped........ Sturmgeschütz battalion, sturmgeschütz brigade, panzerjäger battalion, panzerjäger battalion (armored), sturmartillerie brigade*



## ■ Sturmpanzer IV (mid)

The Sturmpanzer IV, often referred to as the Brummbär, was a heavy assault gun first used for close infantry support. The Sturmpanzer IV was a Panzer IV chassis with a casemate-style armored superstructure added, which had up to 100 mm of armor. The vehicle carried a 150 mm StuH 43 L/12 gun. The (mid) variant represents the second series production line based on the Ausf. H, with the driver periscope replacing the sliding-shutter visor.

*Formations equipped... Sturmpanzer battalion*

## ■  Sturmpanzer IV (late)

The (late) variant of the Sturmpanzer IV represents the third series of the vehicle that began
service in mid 1944. The superstructure was modified to contain a commander's cupola and
a ball-mounted machine gun mount on the upper front.

*Formations equipped... Sturmpanzer battalion*



# ■  German Self-Propelled Artillery

## ■  Hummel

The Sd.Kfz. 165 self-propelled howitzer, nicknamed the "Hummel" (Bumblebee), was designed
to provide German Panzer divisions with mobile artillery support. Designed in 1942, the
Hummel first saw major action at the Battle of Kursk in July 1943. The Hummel used the
same III/IV chassis as the Nashorn, combining parts from the Panzer III and IV. On top of
this chassis an open-topped lightly armored superstructure housed a 150 mm sFH 18 L/30
howitzer and a crew of six.

*Formations equipped........ Self-propelled howitzer battery (heavy)*

## ■ German Anti-Aircraft Vehicles

### ■ Ostwind

The Flakpanzer IV, also known as the Ostwind, was a self-propelled antiaircraft gun. Similarly to the Möbelwagen and Wirbelwind, the Ostwind was a mobile armored platform based on the Panzer IV tank chassis. The turret was replaced with a lightly armored open-topped superstructure. Housed in this new turret was a 37 mm FlaK 43 anti-aircraft gun, giving the Ostwind superior range and power over previous similar vehicles. Only 44 vehicles were completed before the war ended.

*Available beginning............ January 1945*

*Formations equipped........ Antiaircraft platoon (armored branch)*



## ■ German Halftracks

### ■ SPW 251/21 Ausf. D (early)

The SPW 251/21 was an anti-aircraft / fire support variant of the Sd.Kfz. 251, and was equipped with triple-mount 15 mm MG151 autocannons, weapons normally found only on aircraft.

*Available beginning............ September 1944*

*Formations equipped........ Panzergrenadier battalion B (panzer brigade)*

## ■ SPW 251/21 Ausf. D (late)

Later versions of the SPW 251/21 replaced the 15 mm autocannons with an updated 20 mm version of the MG151.

*Available beginning............ December 1944*

*Formations equipped........ Panzergrenadier battalion B (panzer brigade)*



## ■ SPW 251/22 Ausf. D

The SPW 251/22 was a late war support variant that was found in cannon platoons alongside the SPW 251/9 "Stummel". The 251/22 was armed with a 75 mm PaK 40 antitank gun.

*Available beginning............ January 1945*

*Formations equipped......PzG battalion (armored + panzer brigade), panzer aufklärung battalion*

## ■ German Armored Cars

### ■ PSW 234/4

The PSW 234/4 was armed with a 75 mm PaK 40 L/46 antitank gun, meant to provide armored car formations with much needed firepower.

*Available beginning............ January 1945*
*Formations equipped........ Panzer+motorized aufklärung battalion, panzer company (ad hoc)*



## ■ German Unarmored Vehicles

### ■ Schwimmwagen

The Type 166 Schwimmwagen ("Swimming Car") was a light amphibious vehicle born of the experience of the early campaigns in western Europe. A light, general-purpose vehicle that could easily ford rivers was desired for the upcoming eastern front offensive. The Kübelwagen served as a base for the Schwimmwagen's design, but the final product only shared the engine. The Schwimmwagen had a seamless boat-like hull and no doors, making more of a boat on wheels than an amphibious car. A retractable propeller moved the vehicle up to 1.6 km/h in the water.

*Formations equipped........ Aufklärung battalion (motorized)*

## ■ Kfz.70 "Krupp-Protze"

The "Krupp-Protze" was a German truck of advanced design. The truck was widely used during the war in a variety of roles, but its primary uses were as an artillery tractor and to carry motorized infantry. 7,000 trucks were built between 1933 and 1941.

*Formations equipped........ Fallschirmjäger formations*



## ■ German Small Arms

### ■ G612R

The M1985 Nagant revolver was the standard issue sidearm in the Soviet Union for the military and various agencies. The Nagant was unusual in that it had a gas-seal system which moved the chamber forward when the revolver was cocked, which closed the space between the cylinder and the barrel. This closed gap forced more gas through the barrel, increasing muzzle velocity to 327 meters per second.

G612R is the German designation for captured pistols that were pressed into German service for rear echelon units and the Volkssturm militias.

*Cartridge .................................................. 7.62x38 mm R*
*Feed system ........................................... 7 round cylinder*
*Rate of fire .............................................. Revolver*
*Effective range ........................................ 50 m*

### ■ G615R

More officially labeled as the TT-30 or TT-33, the Tokarev was a Soviet service pistol used alongside the M1985 Nagant. The Tokarev was a semi-automatic pistol popular for its reliability and is still used today by several armed forces.

G615R is the German designation for captured pistols that were pressed into German service for rear echelon units and the Volkssturm militias.

*Cartridge .................................................. 7.62x25 mm Tokarev*
*Feed system ........................................... 8 round box magazine*
*Rate of fire .............................................. Semi-automatic*
*Effective range ........................................ 50 m*

## ■ G671I

The Beretta M1934 was a semi-automatic pistol that began service with the Royal Italian Army starting in 1934. The weapon is simple, reliable, and chambered for a 9mm Corto round (also known as .380 ACP).

G671I is the German designation for Italian pistols that were pressed into German service for rear echelon units and the Volkssturm militias.

Cartridge ...................................................9 mm Corto
Feed system..............................................8 round box magazine
Rate of fire...............................................Semi-automatic
Effective range ........................................50 m

## ■ G209I

The M1891 rifle, popularly known as the Carcano, was the primary combat rifle of the Royal Italian Army since before World War I. When Germany disarmed much of the Italian armed forces in late 1943, large numbers of Carcano rifles fell into their hands. These rifles were rebored to fire 7.92 mm Mauser ammunition and used by rear echelon forces, especially the Volkssturm.

Cartridge ...................................................7.92x57 mm Mauser
Feed system..............................................6 round integral magazine
Rate of fire...............................................Bolt-action
Effective range ........................................600 m

## ■ G256R

The Mosin-Nagant, or the Model 1891 as it was named officially, was a bolt action rifle and the standard issue rifle for the Soviet Army in World War II. The rifle was adopted by the Russian Military in 1891, and it was modernized into the Model 1891/30 (or M30) after the Russian Civil War. The Mosin-Nagant was, and still is, known for reliability and accuracy.

Considering the length and ferocity of the war on the eastern front, it was inevitable that large amounts of Mosin-Nagant would fall into German hands. These rifles were used by some rear echelon forces and Volkssturm militia.

Cartridge ...................................................7.62x54 mm R
Feed system..............................................5 round integral magazine
Rate of fire...............................................Bolt-Action
Effective range ........................................500 m (w/ iron sights, 800 m (w/ optics)

## ■ G281E

G281E is the German designation for captured Lee Enfield No. 1 Mk III* rifles that were pressed into German service for the Volkssturm militias.

Cartridge ...................................................303 Mk VII SAA Ball
Feed system..............................................10 round box magazine
Rate of fire...............................................Bolt-action
Effective range ........................................500 m

## ■ Gewehr 33/40(t)

After the German occupation of Czechoslovakia, the production of many Czech vehicles and equipment was continued for German use. The vz. 33 rifle became the Gewehr 33/40(t) carbine under German service, and was used primarily by mountain troops due to their much shorter length compared to the Kar 98k.
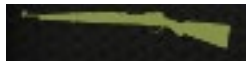
Cartridge ................................................ 7.92x57 mm Mauser
Action .................................................... Bolt action
Feed system .......................................... 5-round internal magazine

## ■ FG42 (late)

The late production variant of the FG 42 incorporated numerous improvements based on battlefield experience, including adjusting the pistol grip to a more conventional vertical angle, relocating the bipod attachment forward to the muzzle for increased stability, and changing the stock from metal to wood.

Cartridge ................................................ 7.92x57 mm Mauser
Action .................................................... Gas-operated, rotating bolt
Feed system .......................................... 10 or 20-round detachable box magazine
Rate of fire ............................................. 750 rounds/minute
Effective range ....................................... 500 meters

## ■ MP3008

Also known as the Gerät Neumünster, the MP3008 was one of several German emergency small arms designs made in the closing months of the war. With manufacturing unable to produce the MP40 in sufficient numbers due to the loss of industry, the MP3008 was designed to fill the required role. The weapon was based heavily on the British Sten Mk II, a submachine gun that was notable for being much simpler to produce in great numbers.

The MP3008 used the MP 40's magazine which fed into the bottom, unlike the Sten's side-mounted magazine. Being typically made in small, scattered machine shops, the MP3008 demonstrated great variety in the details of its construction. Three such variants of the weapon, each with a different buttstock construction, are represented in the game. Approximately 10,000 guns were manufactured before the end of the war.

Cartridge ................................................ 9x19 mm Parabellum
Feed system .......................................... 32 round box magazine
Rate of fire ............................................. 450 rounds/min
Effective range ....................................... 100 m

## ■ MP507

The MP507, or Gustloff Volkssturmgewehr ("People's Assault
  Rifle"), was another stopgap small arms design intended as a
  last-ditch effort to arm German resistance in the face of
industrial collapse. The rifle was primitive but simple to produce, consisting of only 39 parts,
most of which could be stamped. The rifle used the same 7.92 mm Kurz ammunition and
box magazine as the StG44 assault rifle.

About 10,000 MP507s were made, with the intention that they equip the Volkssturm being raised
  across Germany for homeland defense.

*Cartridge ................................................7.92x33 mm Kurz*
*Feed system...........................................30 round box magazine*
*Rate of fire..............................................Semi-automatic*
*Effective range ................ ......................300 meters*

## ■ MG15

The MG15 was a German machine gun that was first fielded in the
  1930s, and was intended for use as a defensive machine gun
  on airplanes. Beginning in 1940, it was replaced by newer
  models on aircraft, but found new life as a ground machine gun for units that could not field
  a full complement of MG34s and MG42s.

*Cartridge ................................................7.92x57 mm Mauser*
*Feed system...........................................75 round double-drum magazine*
*Rate of fire..............................................1,000 rounds/minute*
*Effective range .......................................1,000 m*

## ■ Panzerfaust 100

The Panzerfaust 100 was produced beginning in November 1944.
  The warhead, which was launched at 60 m per second, could
  penetrate up to 200 mm of armor.

*Effective range ................ ......................100 meters*

## ■ German Heavy Weapons

## ■ 128 mm PaK 44

The PaK 44 was Germany's largest antitank
  gun of World War 2. Too cumbersome
  for realistic use as a towed antitank
  weapon, the gun saw combat as the
  main armament of the Jagdtiger. The
  gun was also the proposed main weapon
  of the prototype Maus and E-100 super-
  heavy tanks. Approximately 50 PaK 44s
  were produced on a variety of carriages.

*Rate of fire...................8 rounds per minute*

## ■  75 mm leIG 37

The 75 mm leichtes Infanteriegeschütz 37 (7.5 cm le.IG 137) was an infantry support gun. The leIG 37 used carriages from the 37 mm PaK 36 and the Soviet M1930, mated to a new gun design by Krupp. The leIG 37 had a somewhat semi-automatic breech, where upon firing the breech block would open and eject the spent shell casing, allowing for a faster rate of fire.



## ■  75 mm LG 40

The 75 mm 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 meters. It first saw combat during the battle of Crete.



*Rate of fire ............................................. 8 rounds per minute*

## ■  81 mm kzGrW 42

The kurzer ("short") 81 mm Granatwerfer 42, also called the "Stummelwerfer", was a modified version of the standard medium mortar, the 81 mm 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*

## ■ German Naval Support

The Kriegsmarine retreated to Germany's Baltic Sea ports after Operation Overlord. With the Soviet fleet electing to remain in port at Leningrad, Kriegsmarine surface ships were able to provide shore support and supply lines to coastal battles on the eastern front.

Available German naval support includes the Hipper-class cruiser Prinz Eugen, light cruisers Emden and Leipzip, and three destroyer models: the Type 1936A, 1936B, and 1936C.

*Available beginning............ August 1944*



## ■ German Air Support

### ■ Focke-Wulf 190A6

The Focke-Wulf 190A6 updated the 190 series to be more effective at attacking US bombers. The primary change was a redesigned wing and increased firepower: two MG 17 machine guns were added to the fuselage, and the wing-mounted 20 mm MG 151/20E were increased from two to four.

*Loadouts Available...................................Strafe, Light*

### ■ Focke-Wulf 190G3

The Focke-Wulf 190G3 was based on the 190A6 model, and like other G-series aircraft it featured less machine guns but could carry more bombs. All machine guns were removed, other than two 20 mm MG 151/20Es on either wing, and new hardpoints for bombs and fuel tanks were added.

*Loadouts Available..................................Strafe, Light, Heavy, Maximum*

### ■ Focke-Wulf 190G3R1

The 190G3R1 replaced the new bomb tracks with Waffen-Behälter WB 151/20 cannon pods, each housing a pair of MG 151/20 autocannons.

*Loadouts Available...................................Strafe, Light*

## ■ German Fortifications

## ■ Panther Turret Bunker (early)

Beginning in 1943, Ausf. A Panther turrets were fitted to buried bunkers to create an expedient
strong point for defensive lines. The turret was 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.

Some turret bunkers (designated in this game as the early variant) used a relatively unmodified
Panther turret with a cupola and standard armor.

*Note: Panther turret bunkers are found within formations in the Infantry
and Armored Infantry branches for all German services, as opposed to
the Fortifications branch for normal bunkers.*



## ■ Panther Turret Bunker

Purpose-built Panther turret bunkers featured more extensive modifications to suit their new
role. A flat hatch replaced the cupola, since the additional situational awareness a cupola
granted  was mostly lost on an unmoving structure, and the removed cupola reduced the
chances of a shell hitting a vulnerable location. The turret armor was also thickened,
including additional armor welded to the turret top to further protect the bunker against direct
artillery hits. A Nahverteidigungswaffe close defense system was also added.
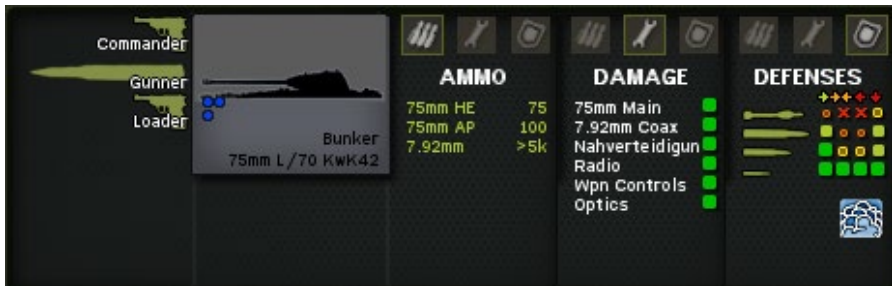
## ■ Antitank Gun Bunker

A staple of some German fortified lines and networks, bunkers armed with anti-tank guns could pose a formidable challenge when properly tied into a defensive line with machine guns and mortars or artillery.

Note: AT Gun bunkers are found within formations in the Infantry and Armored Infantry branches for all German services, as opposed to the Fortifications branch for normal bunkers.

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