

Battlefield V – Launch Notes



Welcome to the *Battlefield V* launch notes!

We hope this document will give you insight into what's been included and updated in *Battlefield V*, explain what the game is about, and be a detailed guide to most of its launch content.

What We Will Cover

Our goal with these launch notes is to provide transparency and give more insight into the multiplayer launch package of *Battlefield V* to those players that seek it. We'll cover all categories of the game and summarize launch features and content, give details for notable new features, outline design rationales, and of course include change lists for important changes (especially in relation to the *Battlefield V* Open Beta).

Note: this document does not include **everything** that has changed from Open Beta, or represent everything in *Battlefield V*. If there's something you want to know more about – don't hesitate to reach out and ask (see feedback section for contact details)! We'll do our best to answer.

Open Beta Wrap-Up

Open Beta was a great opportunity for the team. We learned many, many things, and got great insight into which core changes worked, which needed tuning and how sticky the game was at a smaller scale.

Through both telemetry data and feedback, we looked at what succeeded in the Open Beta. First and foremost, Gunplay was seen as a key positive (not without flaws of course), which was both expected and reassuring given the previous Alpha tests.

Secondly, the peaks and lulls of what we call “gameplay tempo” did have the impact we expected. It changed the way players play the game and what features are viable at what moment.

Of course, some things worked less well than others. Many players experienced problems with matchmaking and getting into a game with friends as a squad. Rest assured we’ve taken extensive steps to come to terms with these issues. Read more in the full change list.

Finally, we saw some great retention numbers. Players tend to play longer sessions than previous titles, by quite a margin. Very cool to see indeed!

Focus Areas From Open Beta

A Beta wouldn’t be a Beta unless we found things to improve. These were the top areas we prioritized based on player feedback and telemetry data (both positive and negative):

- **Weapon Progression (Specializations)**

In one of the larger negatives from Open Beta – Weapon Specializations were our top of the list to improve.

In the end we changed the system from solely upgrading, to include clearer negative consequences from all picks as well as positives. With the aim of making choices actually *specialize* the weapon – not just get better wholesale.

We’ve also added “starter weapons” that come pre-specialized, and unlocks re-specialization on reaching rank 4 with the weapons, for a more level playing field for new players.

- **Soldier Visibility**

We were very much aware of how important this area was based on internal testing – and knew this would be a focus area post Open Beta (mainly based on removing Active spotting from the game).

Soldier visibility is a continuous effort to improve threat recognition (see enemies) during clear conditions. It should never be a strain to figure out what to shoot at.

Many components tie into this area, but the key one is level lighting. In the Open Beta you saw an early, unfinished version of that (bugs and all), which has since been fully finalized. On top of that, we also improved ancillary systems like soldier rim lighting, weapon muzzle flash separation (enemy muzzle flashes are bigger than friendlies at a distance), teammate icons, and placement of the name tag widget, to name a few.

In the end, we think that we have struck a nice balance between allowing stealthy flanks

to happen – and an easy to read combat situation for Soldier Visibility.

- **Evolution of Fortifications**

In the Open Beta, Fortifications really started to come to its own. We had started to implement the new “mini fort” direction in combination with player-created chokepoints and lane shut-offs, and this approach was very successful, and appreciated by the players as well.

Given the learnings from here, we have gone over all maps and modes (again), to try and intensify the impact fortifications have on the game, and how useful they feel. For instance, in addition to the “mini forts” and the chokepoint creation, we also add a secondary layer of attack-fortifications around the mini forts, to allow players to “siege” and leapfrog their way towards and against a “mini fort” in use. All in all, we went all in on fortifications – and we hope you like it!

- **Death Experience**

The life-death loop in *Battlefield V* is a pretty big change from what we’ve previously done in the franchise. For starters, we now have a physical revive that takes dedicated reviver time, and relative safety to pull off, we have a new “parrot camera” view of your squad mates, a new gameplay tempo that needs breathing room and finally the much more lethal Time to Death (time it takes from first bullet to death, on average). All of these things (and more) impact how it *feels* to die and respawn in the game.

Open Beta showed us we were absolutely on the right track, and especially the tempo enforced by the combination of all these things were a success. There was still more to do here though, and we wanted to tighten up the experience (slightly faster flow, less waiting), and there were several areas we set out to give some extra attention, fixing bugs and making sure the intricacies of the systems are clearly communicated across the board.

- **War of Attrition**

We can’t mention the Open Beta without touching on possibly the most talked about single item in *Battlefield V*: Attrition. Love or hate it – it did stir emotions for sure!

For launch, we toned down the impact of both ammunition and health attrition some, both by giving all players a health pouch on spawn, and by increasing some weapon start and max magazine carry limits.

On top of this we also took a look at all maps and mode combinations, to replace all the supply stations, communicate where they can be built (if not built), and moved many to the unbuilt state from pre-built.

In the end, the balance between having attrition impact gameplay *just enough*, but not impact it negatively is what we strive for – and we think we’re in a very good spot both sides of the argument can appreciate.

- **Long Term Player Friction**

An ongoing effort internally is to improve, stamp out and outright remove what we call

long term player friction. In this category we place things like:

- Soldier collision, traversal, and getting stuck
- Bullet collision and penetration
- Netcode, input latency and server tick rate
- Accessibility and gameplay customization

Open Beta showed us just how much we needed to do in these areas. Some things need more work than others, like bullet penetration (which was hardly setup in Open Beta) and soldier traversal (map specific).

For launch, we've continuously kept testing, improving, and testing again in all these areas, resulting in a very solid launch product.

- **HUD**

Readability was a problem during the Alpha and Beta and it was something we expected at the time. Unfortunately, the solution we had in mind for the game didn't make it in time for the Beta – a post processing system that we call Adaptive Shadow System.

It looks at all the HUD elements and calculates if it needs to add a shadow if elements are placed on bright enough backgrounds. It won't affect UI elements on darker background, but it will help text/icons "pop" on bright backgrounds.

Another high-level goal for the HUD of *Battlefield V* is how to declutter the HUD. Here are some examples of the great progress in the area:

- HUD Award presentation: A hot potato during the Beta (remember the massive "V" across the top part of the screen?), this has been toned down and never covers the crosshair part of the screen.
- Awards are now queued and are now only shown once players are out of combat, helping pacing immensely.
- Enemy icons are only visible if spotted and in line of sight, never from distance locally.
- In-world icons are occluded by objects in the world and scales/fade with distance anchoring them to the world around you better.
- Names/kit icons on friendlies are only shown within a certain radius. Outside the radius players are represented with a blue dot to keep the amount of details down.

Battlefield V Multiplayer

Battlefield V's multiplayer is taking some pretty bold and big steps compared to previous titles. The goal and reason behind these changes are simple – we want to create a game (and live

service platform) using core gameplay models proven to work, that are expandable and that draws great play time from players.

To do that, we had to look at what has been working in the past, what has failed - build from there and plan for a future where expansion is constant in a service environment.

A key difference from for instance *Battlefield 1* is how we've doubled down on allowing a higher skill ceiling, a more readable and controllable game – but without necessarily scaring away newer players. Making sure there is more to the game than just straight up run and gun, and bring back some thinking to the *Battlefield* through systems like attrition, fortifications and a gameplay tempo to allow all these non-combat features to flourish as well.

Multiplayer Pillars

The multiplayer pillars of *Battlefield V* guides on what is important, and helps focus efforts around a common theme:

- **Squad play**

Squads are central to *Battlefield V*, everything you do is better with a squad. Systems are tuned to make squad play the most rewarding way to play. This puts a big focus on making our tools to squad up much better as well - as we expect everyone except players specifically opting out to play together with others.

- **Physical and kinetic**

Everything in *Battlefield V* is physical. Gone are things like magical auras, and automatic interactions. If you want something to happen, you reach out and touch it (be it pressing a button or blowing up a tank). This has been taken furthest in terms of the soldier, and how you interact with and are connected to the world. It also makes the game easier to read, as you can tell what is going on from what players are doing around you. Fewer things happen “behind the scenes” or local to the player.

- **War of attrition**

The best catalyst for rewarding experiences comes from a place of risk. To create a game where risk is inherently looming around the corner – we need powerful and impactful weaponry that hurt. To balance all that, we need to make sure there is a limit to what sort of impact any player can dish out – and here Attrition limiting health and ammunition really helps (resources for soldiers and vehicles both).

Attrition really is a lynchpin of this game's core loop, allowing much more rewarding gunplay, vehicle and infantry balance and fixing long standing issues like grenade spam to name a few. But perhaps most importantly, it aims to bring back some resource strategy to the franchise.

- **Variety and Flexibility**

The world around you in *Battlefield V* is the most dynamic one we've ever created. Weather, destruction, splash-fires, collapsing debris, terrain craters, fortifications, bullet penetration – the list is long, and it results in a better, more interesting sandbox that will stand the test of live service expansion and evolution without even breaking a sweat.

Combined with this is our extensive and franchise-first full soldier, weapon and vehicle visual customization and progression system through The Company, allowing for the first time all players to look the way they want to on the battlefield.

We hope this game will let you experience gameplay glimmers of past games at their best, combined with modernized and interesting fresh new features resulting in a game you want to return to and play over and over again! See you on the battlefield.

/David Sirland

Multiplayer Producer - *Battlefield V*

(Twitter: @tiggr_)

Launch Content

Weapons

We have made quite a few changes to our overall gunplay. During development, we had two big pillars:

- **Have clear distinction between weapons and weapon classes**

We wanted each weapon to feel unique and different from each other. Not only does this give each weapon more character, it also becomes easier to understand which weapon to use for different situations. We gave this treatment to weapons within a weapon class, but also between different weapon classes. After all, a lightweight SMG shouldn't handle and feel the same as a heavy MMG.

- **Have grounded and physical gunplay, which can be mastered and learned**

This was the big one. We've put a lot of time and effort into making our weapons for *Battlefield V* understandable and learnable. In short, we've done this by converting our spread (unpredictable) to recoil (predictable, and visual). We have given all our weapons different recoil variants, such as recoil speed, initial recoil, recoil direction to name just a few variables. This allowed us to have each weapon feel unique (pillar number 1) and also create different skill levels for different weapons.



Changes to weapon balance since Open Beta

- We've decreased the STG44 and Sturmgewehr 1-5 short range damage. Both Assault Rifles now require 5 shots to kill up until 50 meters (in the Open Beta, the STG44 required 4 shots to kill up until 12 meters).
- All Automatic Rifles now have a headshot multiplier of 2.
- SLRs now have a slower recoil reset after firing, making consecutive shots a little more demanding.
- SMGs max damage (4 shots) range has decreased to 9 meters instead of 12.

Changes to ammo attrition since Open Beta

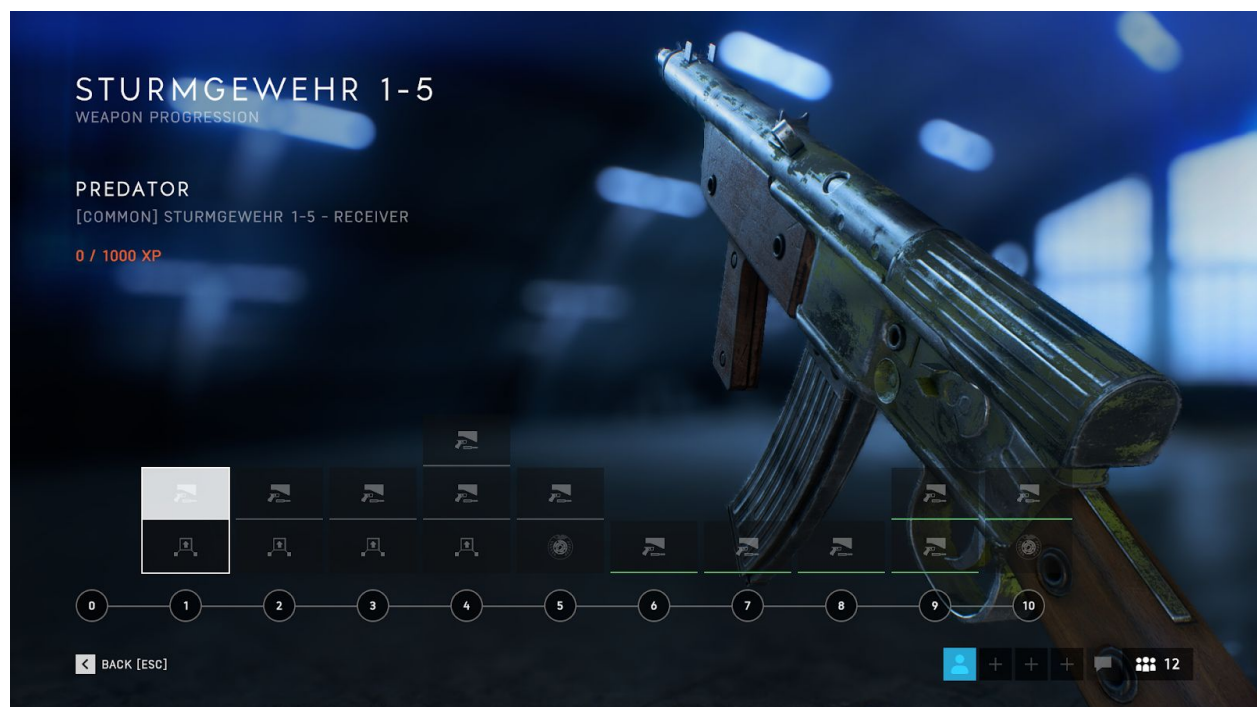
The changes we've made to the amounts of ammo per weapon class compared to the Open Beta are:

- Assault Rifles, SMGs, Semi Automatic Rifles and SLRs have received an additional magazine on spawn, and one extra after resupplying.

- All Support Weapon Classes (LMGs, MMGs and Shotguns) spawn with max carry amounts.
- Bolt Action Sniper Rifles haven't had any changes in terms of starting or max carry ammo.

Changes to the Weapon Specialization System

Since the Open Beta we have made extensive changes to the weapon progression systems. Based on player feedback, we have sought to make Weapon Specialization involve more interesting choices, where picking one Specialization excludes another. We have also reworked the trees to be less linear. You can now choose to dedicate their specializations to one side of the tree, or the other. Or you may choose to “cross over” at certain points in the tree enabling progression into some Specializations but excluding others. In doing so, perhaps with a bit of experimentation, you are able to configure your weapons to your preference, or to the needs of the tactical environment you expect to be fighting in.



Changes to Gadgets since Open Beta

- **Ammo and Health Pouches**
All players now spawn in with a Medical Pouch equipped.
- Self Healing has been changed from holding D-Pad Up/5 on Keyboard to press D-Pad Up/C on Keyboard.
- When playing as a Medic equipped with the Medical Pouch Gadget, we now show with an icon when:
 - A teammate has less than 100 HP and can be healed.
 - A teammate isn't carrying a Health Pouch and can be resupplied with one.
- When playing as a Support equipped with the Ammo Pouch Gadget, we now show with an icon when:
 - A teammate is carrying less than max ammo and can be resupplied.

- **Ammo Crate**

The Ammo Crate now resupplies all Gadgets with +1 amount per interaction (15s cool down between interacts).

- **Rifle Grenade Launchers**

We've removed the random inaccuracy from both the Frag Rifle Grenade Launcher and the Smoke Grenade Launcher, to make the aiming arcs more predictable.

- **Panzerfaust** (and other Anti-Tank launchers)

Our Anti-Tank Launchers can now be fired from the hip.

Launch Weapons

Medium Machine Guns (MMGs)

- The MMG is an all new weapon class in *Battlefield V*. It works differently from the light machine guns in that it has a lot more differentiation between deployed with bipod and not deployed.
- An MMG with bipod deployed becomes a very, very accurate weapon and effective at long range. Paired with high ammunition capacity and fire rate. When the bipod is not deployed it is on the other hand very inaccurate to the point of being useless at all ranges but the very close ones.

MG34

The MG34 was the first of a kind: a portable, air-cooled machine gun with a high rate of fire. Too complex to properly mass-produce, it was later supplanted by the MG42.



MG42

The Allies called the MG42 "Hitler's Buzzsaw". This machine gun was reliable, easy to use, and had an extreme rate of fire. After its introduction in 1942, it was used on all fronts.



Assault Rifles

StG 44

Considered by many to be the first real assault rifle. It combines a high rate of fire with good accuracy and stopping power.



Sturmgewehr 1-5

The selective-fire variant of the Gewehr 1-5 semi-automatic rifle.



M1907 SF

Similar to the M1 carbine, only heavier and more powerful.



Semi-Automatic Rifles

Selbstlader 1916

An early German semi-automatic rifle whose sensitivity to field conditions made it more popular with the German air force than its army. Only 1000 were ever made.



Gewehr 43 – A rifle so sturdy it can be used as a ladder rung if needed.



Gewehr 1-5

A semi-automatic rifle that used the same detachable magazine as the StG 44.



M1A1 Carbine

Very fast firing Semi Auto with a rather weak bullet. Best used within 50 meters.



Turner SMLE

Fires faster than the Gewehr 43 but has a weaker bullet at range.



Bolt-Action Rifles

Gewehr M95/30

This rifle's origins date back to the late 19th century and saw heavy use in World War 1 by the Austro-Hungarian Army.



Krag-Jørgensen

A rifle dating back to the late 19th century, with a special type of integral magazine which loaded from the side rather than the top



Lee-Enfield No. 4 Mk I

Very fast firing sniper rifle. Its bullet is significantly slower than that of the Kar98k, making it preferable for medium range.



Kar98k

The most common bolt-action rifle in the German army.



Self-Loading Rifles

Model 8

Created in 1900. US hunters and some police units would use it, but it was never formally adopted by the US Army.



ZH-29

A hard-hitting self-loading rifle that can kill with only two hits.



RSC

By repurposing parts from the Lebel rifle it was designed to replace, the RSC was cheaper to produce for the French army, though there were complaints that it was unwieldy in the trenches.



Submachine Guns

MP34

The MP34's design was based on the old MP18 submachine gun. Used primarily by the German army, it was an extremely well-made gun although the production costs were very high.



STEN

The easier to control twin of the MP40



Suomi KP/-31

Very hard to control, fast firing SMG. It starts off a bit weak, but benefits more than other SMGs from progression.



EMP

Developed in Germany, this submachine gun proved immensely popular across Europe and Asia.



MP40

The Allies called this popular submachine gun the "Schmeisser" although well-known weapon designer Hugo Schmeisser was not involved in its creation.



MP28

After World War 1, Hugo Schmeisser made many improvements to the MP18, such as replacing the drum magazine with a straight one. The resulting MP28 was sold to both China and Japan among others.



M1928A1

The Chicago gangsters made the "Tommy Gun" famous in the 1920s. The US Army adopted it in 1938 for its accuracy and high rate of fire, and Allied Commando and Ranger units used it extensively.



Light Machine Guns

KE7

Medium rate of fire LMG. Even though this light machine gun was designed in Switzerland, the Swiss army never used it.



Bren Gun

Based on a Czechoslovak design, with a top-mounted box magazine which gave it a distinct look.



FG-42

Very fast firing automatic rifle with a small magazine. Highest damage output weapon on the support kit.



Lewis Gun

Entered Allied service in 1914. In World War 2, the British again used it as an anti-aircraft gun. Its barrel shroud and top-mounted pan magazine made it easy to recognize.



Change List

- Fixed an issue where the sights on the ZH-29 could get misaligned.
- Fixed visibility of shell ejection when ejecting last shot from Lee Enfield No 4 (You no longer see two casings being ejected).
- Players can now re-spec their weapons in the pre-round phase.
- Players should now be able to deploy with all weapons / customization items that the player has unlocked and selected.
- Sten Gun is now able to equip standard sights.
- Suomi KP-31 is now able to equip standard sights.
- Kar 98K no longer has double crosshairs when using the long scope.
- Medium scope is now default for sniper rifles.
- Updated the FG42 to be open-bolt.
- Fixed an issue with medium scopes that could results in unintended blur.
- Added reload sounds for all cannons.
- Improvements to the finger posture of the left hands while holding an M1 carbine.
- Slightly improved LMG accuracy under sustained fire.
- Corrected the ZH-29 bullet placement in the chamber.
- Fixed various camera issues for the MP28.
- Upgraded the firing sounds for the Winchester 1907.
- Upgraded the firing sounds for the MP34.
- Added fire mode selection for Sten and MP34.

- Improved the firing sounds for the Browning A5 and Remington Model 8.
- Improved the audio for the Krag Jorgensen.
- Fixes and improvements to the hit indicator and knife kill sounds.
- The STEN V recoil has been tweaked for more consistent first shots and higher ease of use during longer bursts.
- Improved the modelling on the stationary machine guns and its individual parts.
- New much nicer looking tracers for weapons, includes different types for weapon types etc.
- Fixed flicker from the vignette effect turning on incorrectly when zooming in with medium scopes.
- Improved visibility of sniper scope glint.
- Shotgun tracers have been made subtler.
- Slowed down the Enfield's bolt action to be slower than the Kar98k.
- First bullet after releasing the trigger is now always tracer.
- Modified trace frequency for all fully automatic soldier weapons. Every third shot for MMGs, every other shot for the rest.
- Increase reflex sight opacity, glow strength. The reflex sight was hardly visible on desert/bright maps and foggy weather.
- Hipfire dispersion increase tweaked. LMGs, SARs and SLRs increase less, ARs increase slightly more.
- Removed snap-aim assist from controller inputs.

Vehicles

In *Battlefield V* we wanted to do the iconic vehicles of the era justice, infusing them with the character and feel of their real-life counterparts, while adapting the gameplay mechanics of them to work well with the rest of the game. Vehicles in *Battlefield* were always a catalyst for creating awesome moments, whether you were being attacked by one, or driving one, and this is especially true in this game, where vehicles are deadlier than ever, and take considerable effort to take out.



But fighting against and driving vehicles now also have deeper gameplay connected to them, through the new turret mechanics, deepened Systemic Damage systems, and revamped resource management. Fighting a tank is almost like fighting a dragon, where you need to go for the vulnerable bits first, in order to lower its defenses and sap its resources to be able to deliver the killing blow. Each beast has its pros and cons; a heavy tank is slower to react to small targets, but a lighter tank is more easily crippled.

Our goal has been to create distinct variety and character both between the different classes of vehicles, but also variation within the classes. This also means that our launching factions do not have completely symmetrical vehicle lineups. As you jump into the pilot or tank commander seats of these vehicles, each one will be slightly different in how you want to use it and specialize it, to get the most out of it on the battlefield. And knowing the strengths and weaknesses of each vehicle, will be key when you decide how to proceed in every engagement.

Vehicle Specializations

Company Vehicles (tanks and airplanes) are equipped from the start with a set of weapons and equipment, but through **specializations** the vehicle can be modified and upgraded to change the vehicle's gameplay role or playstyle.

Achieving score while using the vehicle earns progress towards ranks in that vehicle, and at each rank a new specialization can be chosen and equipped, at a max of 4. There are multiple specializations to choose from at each rank, organized in a tree structure – choosing some specializations limits access to others, and in this way there are pros and cons to each choice, even if the specialization itself is a direct upgrade.

Vehicle Attrition

In *Battlefield V*, vehicles carry a limited amount of ammo for weapons and equipment used by the driver. To remain effective, a vehicle operator must keep this resource in mind and plan ahead to avoid running out of ammo during a fight.

To restock ammunition in a vehicle, resupply stations are located throughout maps at HQs and contested capture points. While parked near a resupply station, the self-repair cycle is faster, and also restocks roughly 1/3 of the ammo of all weapons on the vehicle. Airplanes use their own resupply stations, which are typically placed on the outer edge of the map, near each team HQ. Flying near these stations will automatically restock ammunition without the need to use self-repair.

Similar to ammunition, self-repairing your vehicle also becomes less effective over time. Any damage that the vehicle sustains also deals **non-repairable damage**, reducing the vehicles maximum health. The amount of non-repairable damage is different depending on the type of weapon that dealt damage. Non-repairable damage can be repaired at Resupply Stations just like restocking ammo, and also by using the repair tool from the outside of the vehicle.

Systemic Damage

Some parts of vehicles can be damaged independently and cause changes to how the vehicle operates. Although tanks can be fearsome beasts that take teamwork to destroy, a single well-placed attack can cripple the vehicle. Explosive weapons like AT mines and dynamite work best at causing **systemic damage**, but traditional anti-tank weapons like tank shells can also disable these systems with a well-placed shot.

On ground vehicles, the areas that are vulnerable to systemic damage are wheels, tracks, engine and turrets. On airplanes, it's the wings, tail, and engine.

When wheels and tracks are disabled, steering effectiveness is reduced; making the vehicle more difficult to maneuver in small spaces. Engine Damage causes a reduction of overall speed. If the vehicle has a turret, weapons are slower to aim when it becomes damaged. On airplanes, a broken wing has reduced maneuverability, and engine damage lowers the max speed.

Tank Turrets and Aiming

An important factor that weighs in when balancing tanks is their ability to react. A heavy tank may require a team effort to defeat, but its movement is limited compared to lighter vehicles. Likewise, turret aim speeds are a characteristic that defines a vehicles role, strengths and weaknesses. Heavy vehicles are slow to aim, requiring more planning ; light tanks have faster turrets but are also more vulnerable.

A tank commander needs to balance effective use of weapons with situational awareness. To help achieve this, the chase camera view (3p) in tanks is freely controllable and can look around the vehicle, independently of the turret. While using freelook in chase view, the turret will automatically try to align with the camera view. You can freeze the turret in place and prevent it from moving by holding Zoom.

The crosshair in chase view has a special additional marker that helps show the relative position of the turret compared to where you are looking. However, this marker does not necessarily indicate where the weapon is pointing. Only when in turret view (1p) does the crosshair accurately reflect where the weapons are aiming.



Towing

Some stationary weapons can be hitched to your vehicle and moved freely around the map. Towing equipment allows you to create new defensive positions, or add an additional passenger and weapon to your vehicle. There are towable versions of Anti-Aircraft guns and Anti-Tank guns on maps, and all ground vehicles, both tanks and transports, have the capability to hitch them.

Launch Vehicles

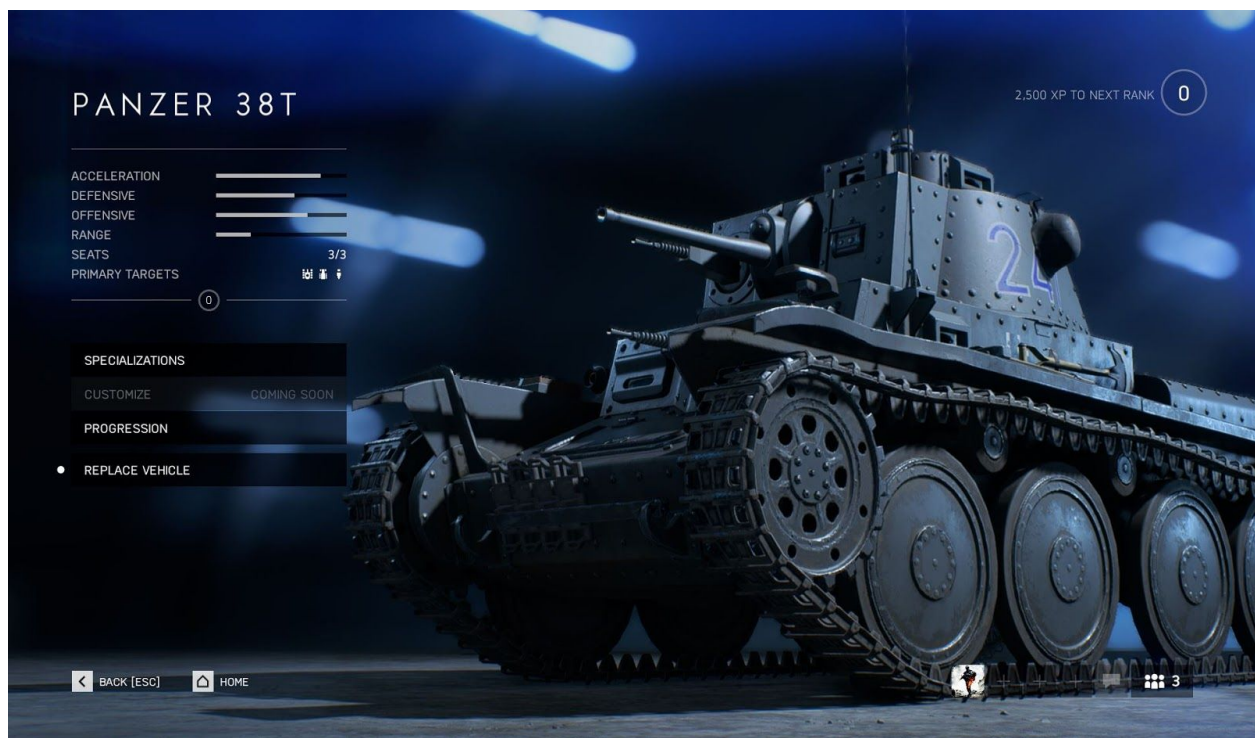
Axis Tanks

Panzer IV



A versatile medium tank with good armor and maneuverability, suited for close range combat. Specializations can either improve its effectiveness against other vehicles, or boost its defense versus infantry at close range.

Panzer 38(t)



A fast-moving light-armored tank that excels at hit-and-run tactics. Specializations can focus on offensive improvements vs either infantry or vehicles.

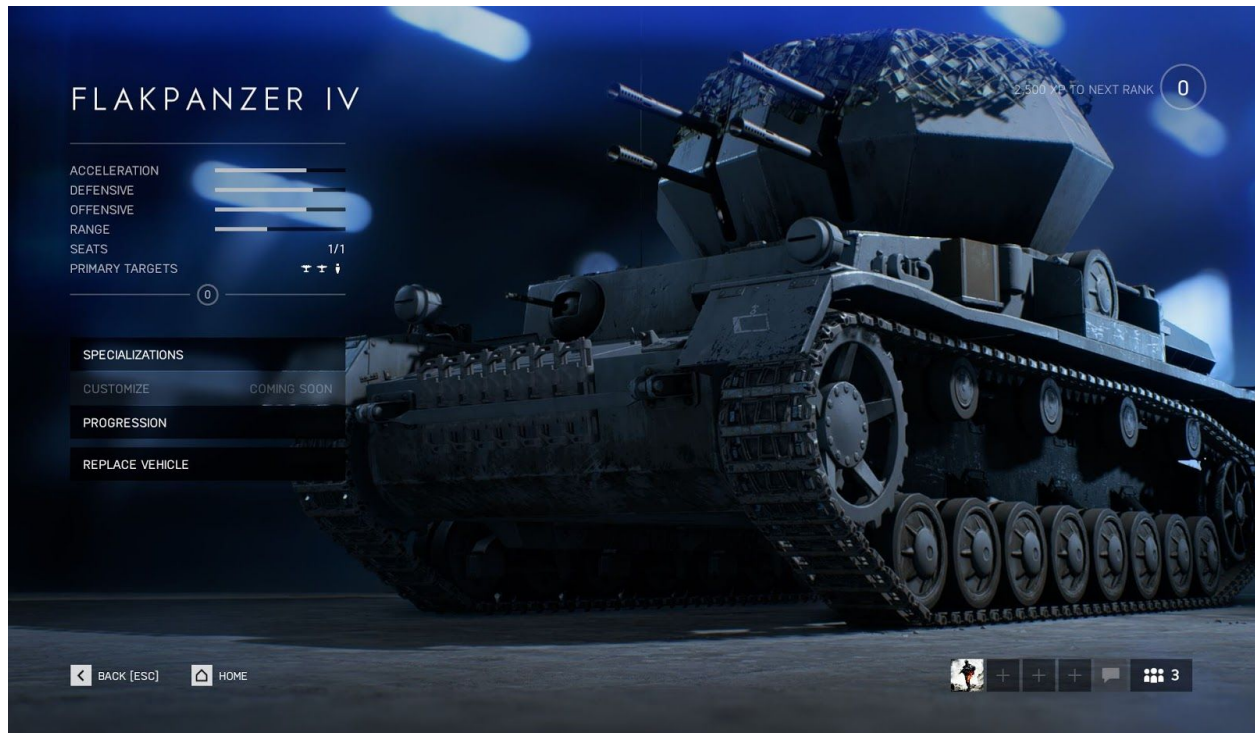
Tiger I



A heavy armored, slow moving tank that has excellent offense against other vehicles. Specializations can focus on either close- or long-range effectiveness.

Flakpanzer IV "Wirbelwind"

A medium tank with good maneuverability focused on using long-range weaponry against aircraft. Specializations can improve air defense, or hybridize into anti-infantry effectiveness.



Allied Tanks

Valentine Mk VIII

A medium tank with all-around effectiveness in close-ranges. Specializations can either improve its effectiveness against other vehicles or its anti-infantry capabilities.



Staghound T17E1



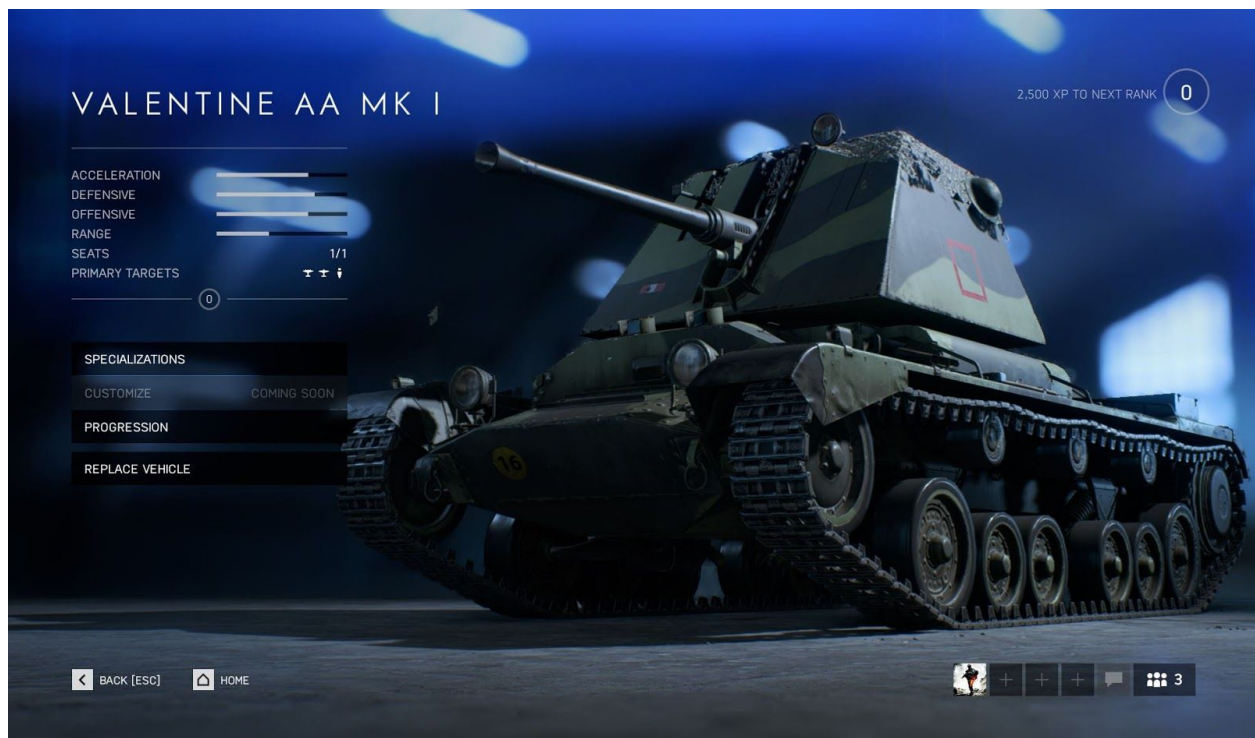
An armored car that can harass enemies but with limited defenses. Specializations can improve on its infantry combat or anti-vehicle effectiveness.

Churchill Mk VII



A heavy infantry tank with limited maneuverability and strong armor, effective at close ranges. Specializations can move the vehicle into either an anti-infantry or anti-vehicle role.

Valentine AA Mk I



An anti-aircraft turret mounted on a medium tank chassis. Specializations can give the tank more anti-infantry capabilities, or increase its effectiveness vs aircraft.

Churchill Gun Carrier



A massive cannon fit in a metal box on a heavy-armored tank chassis with no turret. Specializations can focus on long- or short-range effectiveness.

Airplanes

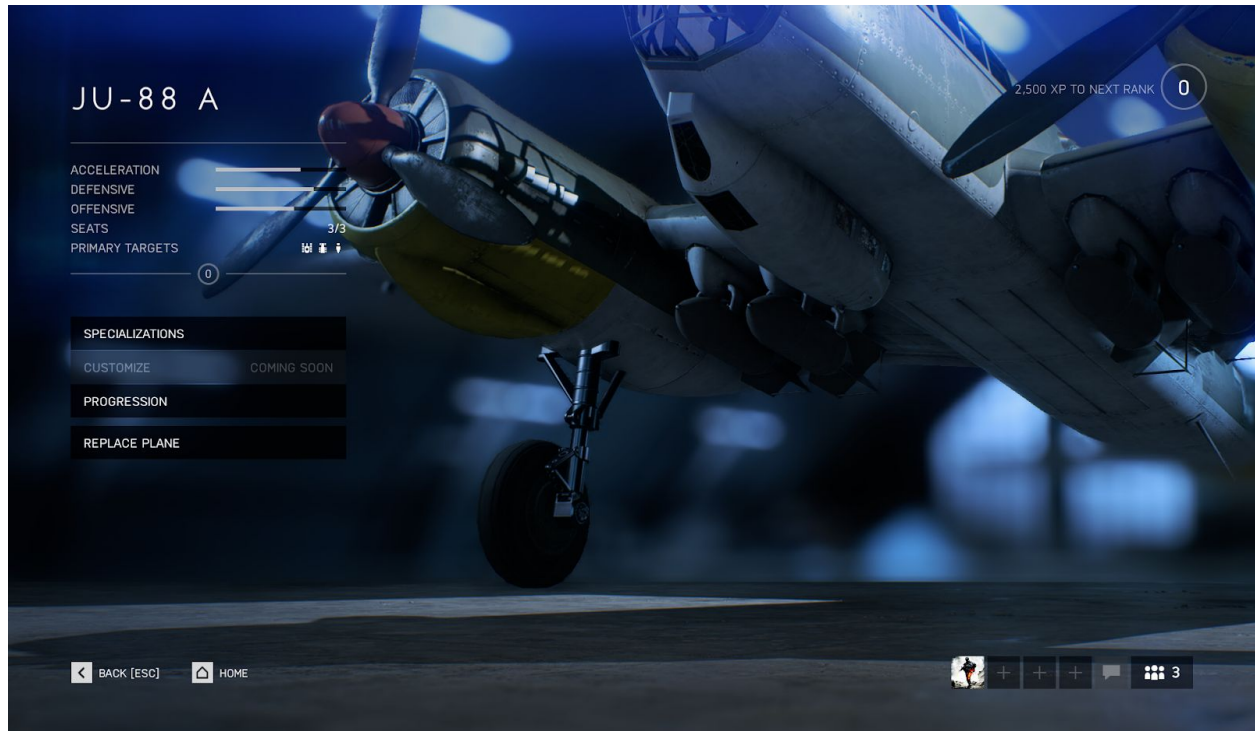
Axis Aircraft

Bf 109G-2



A light fighter plane that can specialize into either ground support or hunting down heavier aircraft. Fast and agile but low on defenses.

Ju 88A



A heavy, multi-passenger airplane with air-to-ground weaponry. Efficient at attacking large areas, but can specialize into dealing greater damage to specific targets instead.

"Stuka" Ju 87B-1



This infamous dive bomber can be configured as a heavier fighter by giving up some ground attack capabilities. Includes a tail gunner for extra defense against other aircraft.

Bf-109 G-6



A dedicated dogfighter with versatile weapon choices in multiple configurations. Specializations can focus on light weapons suited for attacking other fighters, or heavier caliber offenses that can be effective against less agile targets.

"Stuka" Ju 87B-2



This variant of the 2-seater attack aircraft can specialize into attacking armored ground targets, or become equipped with ground support functions.

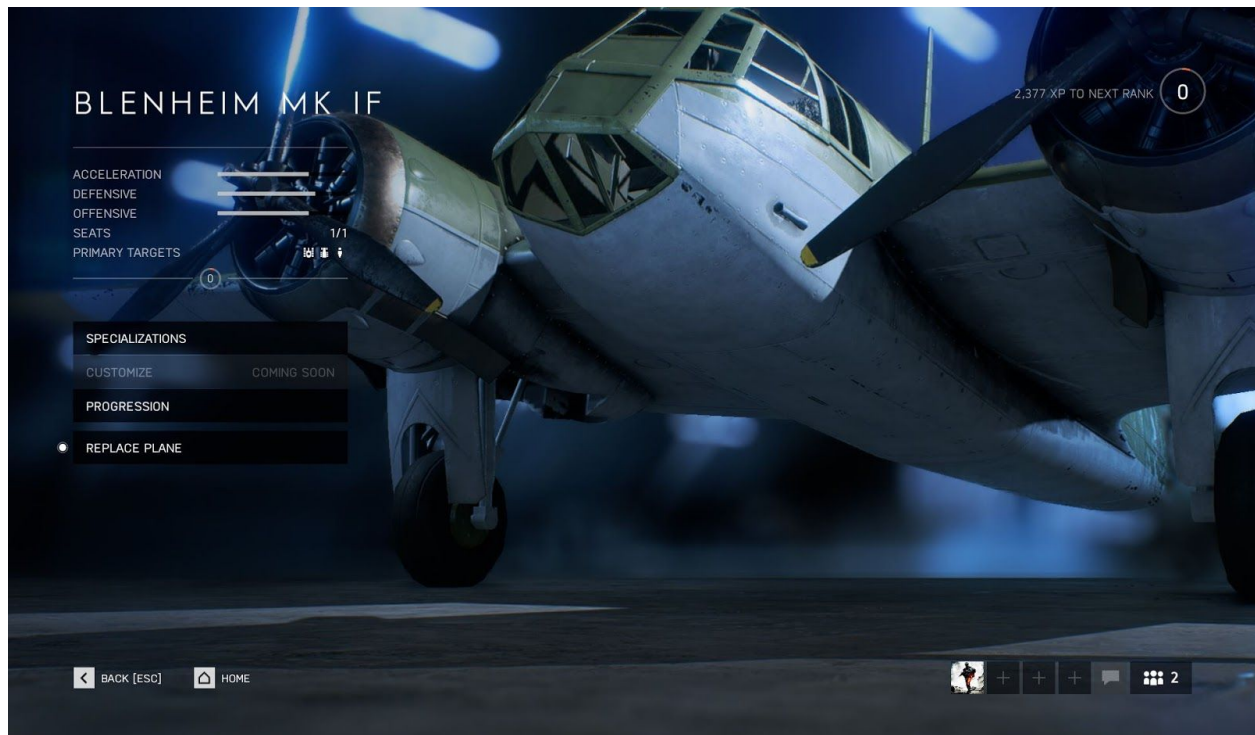
Allied Aircraft

Spitfire MkVA



A light fighter with low defense but good speed and maneuverability. Can specialize into ground support or fighting against other light aircraft.

Blenheim MkIF



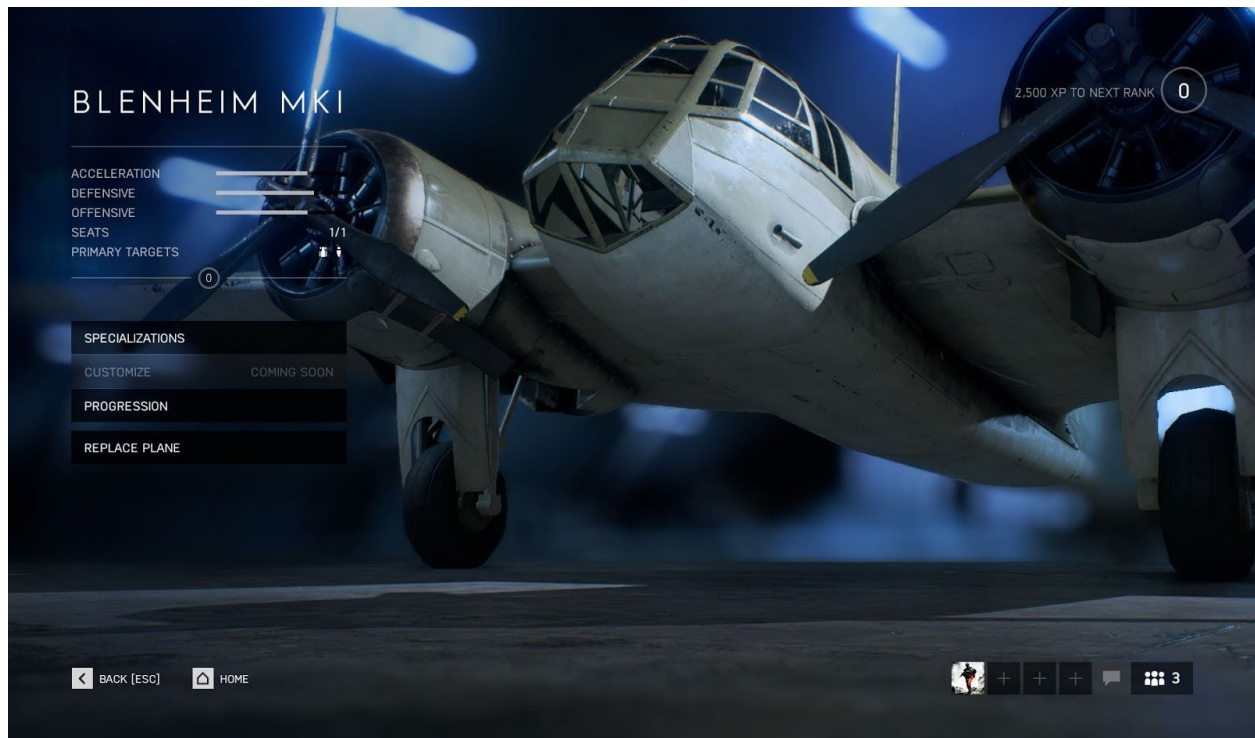
A heavy aircraft equipped with a rear defense passenger turret that can specialize to include an additional turret in the front. Focused on dealing heavy damage with bombs, or specializing into a defensive fighter.

Spitfire Mk VB



This variant of the light fighter can specialize its wing shape to become more agile. If not focused on heavy weapons, it can gain some scouting abilities.

Blenheim MkI



A multi-passenger support aircraft. Can specialize to paradrop supplies and teammates, or perform scouting operations.

Mosquito F Mk II



A single-seat versatile aircraft with limited defenses but an array of weaponry. Can specialize into air-to-air or air-to-ground offenses.

Free Vehicles

Halftracks

Axis - **Sd Kfz 251**; Allies - **M3**





Armored transports with multiple mounted machine guns. Impervious to small arms, and roughly as tough as a light tank.

Fast Transports

Axis - **Kubelwagen** car; Allies **Universal Carrier** tracked transport



Fast and agile light vehicles with one mounted machine gun and one passenger that can use their kit weapons. Driver and passengers are exposed and vulnerable.

Light Transport

Kettenkrad tractor



A two-seat fast tractor with room for one passenger using their kit weapons.

Stationary Weapons

Shielded Machinegun



A mounted MG with built-in cover.

Anti-Tank Gun

Axis - **Pak 40** ; Allied - **QF 6 pdr**



An emplaced anti-tank gun firing HE shells with a wide but limited traverse. Some versions can be hitched and towed by a vehicle.

Anti-Aircraft Station

Flak 38



A station with a freely rotating autocannon firing timed-explosive shells that detonate in the proximity of aircraft. Some versions can be hitched and towed by a vehicle.

Change List

- Reworked the specialization trees of all vehicles. Introduced armored locations that increases durability vs. systemic damage (wings, engines, tracks, turrets). Introduced turret speed specializations for improved turret traversal. Removed most of the specializations that unlocked additional vehicle positions. These positions are now available without the need to specialize the vehicle, to support team play in vehicles.
- Refactored vehicle Enter Interactions, to make the user experience more consistent, and get rid of some nasty bugs and animation artifacts. Vehicles now have explicit Enter Positions, that are indicated in the HUD.
- Changed default button mapping of hitching and unhitching towables to the "T" key, or B / Circle on consoles.
- Fixed the aiming of the top-gunner position on all tanks, so that the gunner position does not follow the rotation of the turret, making it much easier to aim as a top gunner.
- Fixed a problem that would make it look like vehicles stutter while driving in 3rd person camera mode.
- Tweaked the flight model of planes to lose less energy when turning.
- Tweaked the throttle control on all planes to allow players to change speed quicker.
- Aligned the BF-109 and Spitfire to be closer in terms of agility and handling.
- Increased speed and maneuverability of the Stuka, Blenheim and JU-88.
- Increased durability of aircraft wings across all planes.
- Introduced Engine systemic damage states on planes.

- Changed self-repair on planes to allow for more control when repairing.
- Fixed several bugs and tweaked the behavior of bombs so that they are dropped in a consistent manner.
- Changed bombs and rockets to be stance/slot based, to match other weapons. Launching these now require you to select the weapon and press fire to launch, instead of instantly deploying the weapon on selection.
- Increased the visibility range of spotted targets for occupants of planes.
- Restored landing gear functionality to all planes. Planes will now automatically extend their landing gear when going below a certain height and speed.
- Improved the suspension and handling of the Kettenkrad to make it easier to handle across rough ground, and to make it better at towing.
- Improved Medium tank handling to be able to turn, stop and start faster.
- Increased turret speed on Valentine and Panzer IV medium tanks.
- Tweaked all tank MGs to deal more damage and have higher muzzle velocity.
- Lowered the rate of fire on British tank mounted MGs, and increased their accuracy.
- Increased damage output on stationary MGs and top-gunner MGs on tanks, to make them more viable positions.
- Introduced Engine and Turret systemic damage states on tanks.
- Reworked repairable/irreparable damage. Most damage to tanks now deal a small amount of irreparable damage.
- Consolidated Emergency Repair to be consistent on all vehicles. Emergency repair will now heal the vehicle when used, even through irreparable damage. Emergency Repair now only has one use, before needing to re-supply.
- Consolidated multiple types of Systemic Damage repairs under Field Repairs. Field Repair now fixes all Systemic Damage states when used, while restoring a small amount of HP.
- Normalized tank re-supply rules. Tanks will now always fully re-supply in 3 cycles regardless of their maximum shell count.
- Increased initial shell count for lower caliber tank cannons.
- Balance pass on tank armor. Medium and heavy tanks now have much improved front armor, reducing incoming damage and making it more likely to have shells glance, when hit at sub-optimal angles. Armor on light tanks has been made weaker, increasing the amount of damage they take, and making glancing hits less likely.
- Balance pass on shell trajectory and velocities. Shells and cannons are further differentiated towards their intended roles. Long barreled cannons shooting armor piercing shells have faster muzzle velocity and a flatter trajectory. High explosive shells are fired at lower velocity, with shorter range and a more arching trajectory.
- Fixed several issues with the Panzerfaust, that caused it to deal more damage than intended.
- Fixed tank passenger and driver gun ports to be visually consistent within factions.
- Added more zoom scope graphics for increased British and German scope variety.
- Added track and engine systemic damage states to all Half-track variants.
- Added Self-repair as a feature to all Half-track variants.
- Increased durability of Half-tracks vs. most forms of damage.
- Fixed the incorrect textures on the Blenheim MK IF 250lb bombs.
- Decreased the brightness of the Valentine MK VIII tank headlights in the vehicle menu screens.
- Players can now re-spec their vehicles.

- Added the P38(t) and Staghound light tanks, as well as the Flakpanzer IV and Valentine Mk. I Anti-aircraft vehicles to the game, including specialization trees.
- Added the Universal Carrier as a free transport vehicle for the British faction.
- Improved the suspension and handling of the Kettenkrad to make it easier to handle across rough ground, and to make it better at towing.
- Improved Medium tank handling to be able to turn, stop and start faster.
- Added the 6pdr Static and Towable Anti-tank cannon for the British faction.
- Added the JU-88 bomber to the German faction.
- Added the Mosquito heavy fighter to the British faction.
- Aligned the BF-109 and Spitfire to be closer in terms of agility and handling.
- Increased speed and maneuverability of the Stuka, Blenheim and JU-88.
- Tweaked the flight model of planes to lose less energy when turning.
- Tweaked the throttle control on all planes to allow players to change speed quicker.
- Fixed several issues with the Panzerfaust, that caused it to deal more damage than intended.
- Tweaked all tank MGs to deal more damage and have higher muzzle velocity.
- Increased damage output on stationary MGs and top-gunner MGs on tanks.
- Increased turret speed on Valentine and Panzer IV medium tanks.
- Reworked repairable/irreparable damage. Most damage to tanks now deal a small amount of irreparable damage.
- Introduced Engine and Turret systemic damage states on tanks.
- Introduced Engine systemic damage states on planes.
- Reworked the specialization trees of all vehicles. Introduced armored locations that increases durability vs. systemic damage (wings, engines, tracks, turrets). Introduced turret speed specializations for improved turret traversal. Removed most of the specializations that unlocked additional vehicle positions. These positions are now available without the need to specialize the vehicle, to support team play in vehicles.
- Increased the visibility range of spotted targets for occupants of planes.
- Increased initial shell count for lower caliber tank cannons.
- Increased shell velocity on the Churchill Gun Carrier.
- Increased durability of aircraft wings.
- Fixed several bugs and tweaked the behavior of bombs so that they are dropped in a consistent manner.
- Balance pass on tank armor. Medium and heavy tanks now have much improved front armor, reducing incoming damage and making it more likely to have shells glance, when hit at sub-optimal angles. Armor on light tanks has been made weaker, increasing the amount of damage they take, and making glancing hits less likely.
- Fixed gun ports to be visually consistent within factions.
- Added more scope graphics for increased British and German scope variety.
- Added track and engine systemic damage states to all Half-track variants.
- Added Self-repair as a feature to all Half-track variants.
- Increased durability of Half-tracks vs. most forms of damage.
- Changed bombs and rockets to be stance/slot based, to match other weapons. Launching these now require you to select the weapon and press fire to launch, instead of instantly deploying the weapon on selection.
- Improved the suspension of towable vehicles.

Gadgets

For our Gadgets, we set out to make our gadget usage more around skill and strategy, and less about “fire and forget”, or “spam usage”. We’ve removed any type of grenade from the gadget slots and moved those to the Grenade slot. Most gadgets can be resupplied after spawning to receive an additional amount by using Supply Stations or Ammo Crates. Supply Stations resupply all equipped gadgets to max carry amount, and Ammo Crates give +1 amount for all equipped gadgets per activation.

Release Content

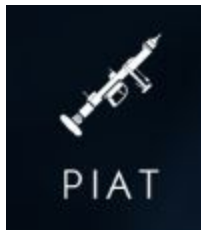
Panzerfaust 100

Disposable recoilless anti-tank grenade launcher. Fires a HEAT grenade that explodes on impact. Best used against vehicles.



PIAT

Spring loaded anti-tank grenade launcher. Fires a HEAT grenade that explodes on impact. Best used against vehicles.



Sticky Dynamite

Bundle of dynamite sticks that can be attached to objects and then detonated. The player can throw several out and then detonate all of them at once.



Frag Grenade Rifle

A rifle with a grenade launcher attachment attached at the barrel. It will throw a grenade farther than it can be thrown by hand. Effective against structures.



Anti-tank Mine

Anti vehicle mine that explodes when ran over by vehicles only. Can be shot at to initiate explosion.



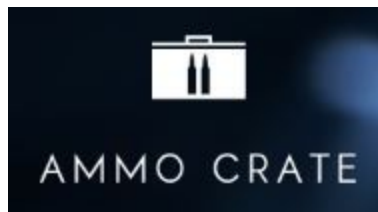
Ammo Pouch

The pouch thrown by a player will replenish primary and secondary weapon ammunition. The pouch found on the ground by dead enemies will replenish part of the primary and secondary weapon ammunition.



Ammo Crate

An ammo crate will replenish all ammunition in your inventory. And +1 ammunition per interact cycle for gadgets and grenades. It must be interacted with to receive ammunition.



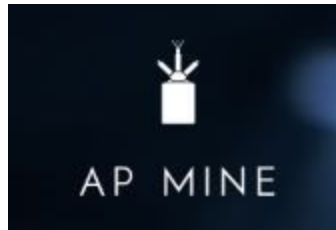
AT Grenade Pistol

Fires a smaller HEAT grenade that explodes on impact. Best used against vehicles.



AP Mine

Anti-personnel mine that explodes when a soldier steps on it.



Bandages

The bandages distributed by the Medics will give you a bandage for later use if you need one. The interaction will also patch up any wounds you currently have and bring your health to 100%. Every soldier can store one bandage pack for later use. Using the pouch will consume it and bring your health to 100%.



Medical Crate

In the medical crate there are bandages. Interacting with a crate will give you a bandages pack if you need it and will also patch up any wounds you currently have and bring your health to 100%.



Smoke Grenade Rifle

Like the SMLE rifle grenade but firing a smoke grenade instead of explosives. Best used to create cover for revives or flanks.



Spotting Scope

The spotting scope will spot enemies looked at that are in line of sight when you look through it. The spotted enemies become spotted for the whole team. Very useful if you want to give friendly aircraft something to shoot at on the ground.



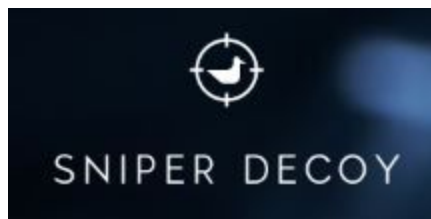
Flare Gun

Fired up into the sky it will deploy a flare from a little parachute that spots enemies on the ground for as long as it remains in the air. Fired into the ground it works too, but will not be as effective and have less range. Watch out for enemy flares, which emit red light and smoke, while friendly ones are white.



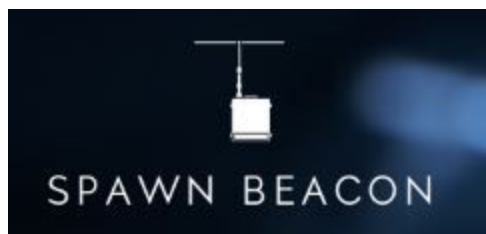
Sniper Decoy

Will deploy a human shaped doll that looks like a soldier. It will even give a 'scope glint' to fool enemies that it is a sniper indeed. If also contains a spotting flare that will be launched straight up if the doll is destroyed.



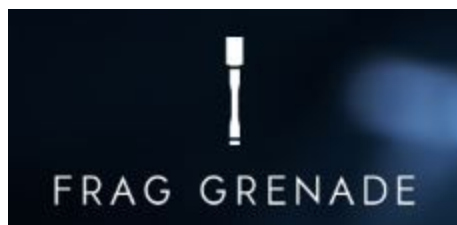
Spawn Beacon

Deployed it acts as an extra spawn point for your squad.



No.36 Frag grenade/Steil Hand Grenade

Timed explosive hand grenade.



No.76 Incendiary Grenade

Timed grenade that burns intensely for a short while damaging anyone close to it.



No.74 Sticky Grenade

A timed explosive grenade that sticks to objects when thrown.



No.69 Impact Grenade

A smaller grenade that explodes on impact instead of on a timer.



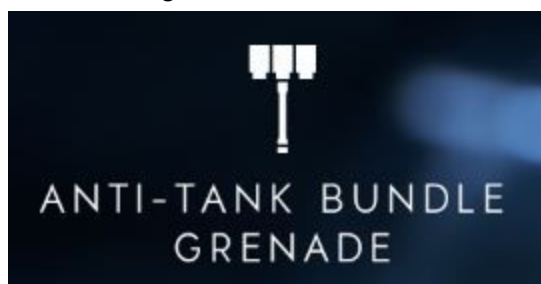
M18 Smoke Grenade

A grenade that emits a thick smoke cloud. Now it also blocks spotting.



AT Grenade

A bundle of grenades that has better effect on vehicles.



Throwing Knife

Kills enemies at close range if it hits in the head - silently.



Change List

- The throw animation now plays properly if players throw a pouch in first person.
- Improved visibility with the spotting scope.
- Improved the trails effects for various projectile launchers.
- Improved the dynamite attach angle to 180 degrees, making it easier to attach to surfaces.
- Various tweaks and improvements to the smoke grenade visual effects.
- Fixed the projectile amount number for PIAT, which is now similar to the Panzerfaust. Two on spawn, 3 after resupplying.
- Friendly anti-tank mines now have UI indicators on the mini-map and on the HUD.
- Smoke now properly follows the smoke rifle grenade should it hit an object mid-flight.
- Fixed an exploit which caused players to throw dynamite faster than intended.
- Polished the timings of the explosion when the Anti Personnel Mine explode.
- Fixed an issue where dynamite detonation was interrupted if players switched from dynamite to the primary too quickly.
- Ammo crates no longer resupply grenades and a cool down has been added for resupplying other explosives to prevent explosives spam.
- Sniper Decoy: Added meshes for all three stances.
- Flare Gun: Changed initial direction and initial speed to look better with the animation pose.
- Incendiary grenade: Fixed an issue where the effect of the fire could become disconnected from damage volume.
- Incendiary Grenade: The Incendiary Grenade damage over time effect is now applied when the grenade directly impacts the soldier.
- Incendiary Grenade: Lowered damage slightly.
- Vehicle Spotting: When spotting from an aircraft, in a pilot or gunner position you can see the target for up to 4X the default spotting distance.
- Anti-Personnel Mine: You can now destroy the mine by shooting it.
- Sturmpistole: Changed to a crosshair that disappears in ADS.
- Dynamite: Improved collision tests for surfaces to stick to.
- Mines: Added tooltip to press fire to deploy mines if walking around with it >3s.
- Panzerfaust: Fixed an issue where two hits could register on vehicles.
- Panzerfaust: Fixed an issue where jumping and firing would consume ammo without shooting a projectile.
- AT grenade: Added AT Grenade to Damage Asset Filters. AT Grenades will Medium Disable Tracks.
- Throwing Knife damage curves: from 0 to 13 meters: 100 damage, from 13 to 20: curve to 60 damage, beyond 20 meters: 60 damage (still allow a headshot kill).

- Smoke Grenade: Reduced the intensity of the light but double the particle color scale of the smoke grenade to make players less visible inside the smoke. Disabled sparks from smoke grenade effect.
- Flare Gun: Spotting radius reduced from 50 meters to 35 meters.
- Dynamite: Now can destroy sandbags as intended.
- Dynamite: ROF change to 72 instead of 60, fixes unresponsiveness with throw/detonation.
- Grenades general: Fixed that the in world grenade icon is shown for all grenades when multiple grenades are thrown at the same time.
- Grenades general: Improved collision physics to have grenades stop spinning wildly on the ground.
- AT Launchers: Disabled iron sights view and enabled hipfire. (So you could better see the path of the projectile.) Swapped crosshair to use the same as the rifle grenade. Pulled in zoom magnification slightly. Removed 'zeroing' concept and went for a straight drop.

Soldier

Combat Roles

We are launching the game with eight Combat Roles in total. Many of them have already been tweaked in how they operate thanks to a lot of valuable feedback from the community, and we will continue to tweak them as we go live. Below, you will see a short summary of where we are, and a few notes on the intended gameplay for the Combat Roles. We will be able to quickly adjust to balancing needs for the specific Combat Roles as we see how they play in live, and we will also be open to further feedback on tweaks and changes you would want to see in them.

Assault: Light Infantry (Default)

The Light Infantry is the default Assault Class Combat Role, meant to be accessible both for newcomers and veterans alike. This Combat Role regenerates more health than others, and also finds more ammo when scavenging fallen soldiers, making it the perfect fit for an offensive run-and-gun playstyle where you want to push a point.



LIGHT INFANTRY

EQUIPPED

Light Infantry soldiers are fearless battlefield scavengers and their peak physical condition makes them more resilient than other combat roles.

TRAITS



SCAVENGER TRAIT

You find more ammo on fallen soldiers.

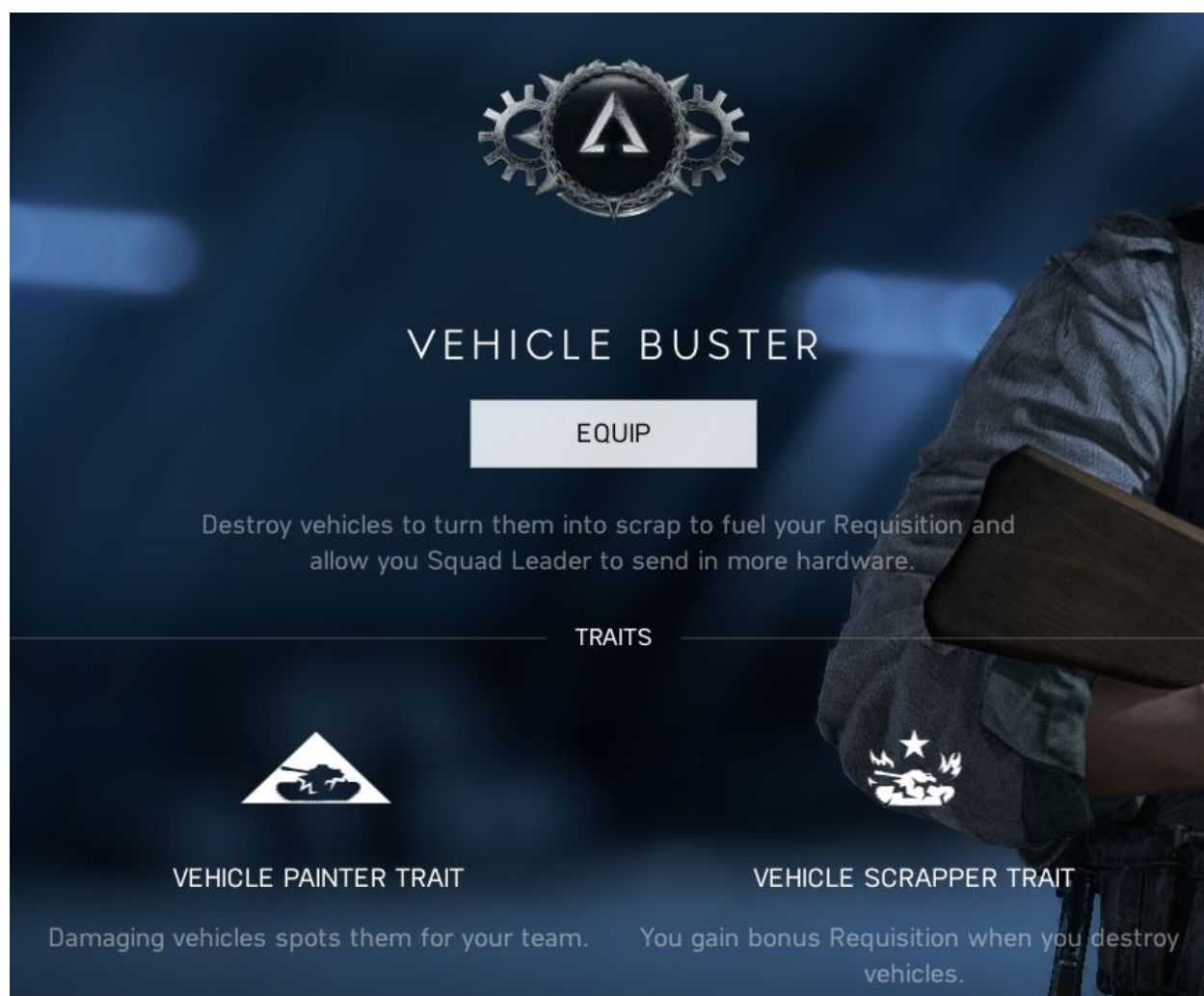


BATTLE HARDENED TRAIT

You regain more health than other combat roles.

Assault: Vehicle Buster (new since Open Beta)

This Combat Role has a number of traits making it more suited to combating incoming enemy vehicles: When damaging a vehicle, that vehicle automatically becomes spotted to make it an easier target for nearby friends. When destroying a vehicle, the Vehicle Buster earns a healthy dose of bonus Requisition points that the squad leader can use to call in reinforcements.



Support: Engineer (Default)

Both Support Class Combat Roles can repair vehicles and build stationary weapons and installations, but the Engineer does it much quicker. In addition to this, the Engineer's intimate knowledge of heavy machinery means that it can operate stationary weapons and auxiliary vehicle weapons with increased efficiency, which means that they overheat more slowly. This makes the Engineer the perfect builder of heavy defenses and the perfect buddy to bring along in your tank.



ENGINEER

EQUIPPED

Both an expert mechanic and skilled with auxiliary weapons, any Support role can quickly REPAIR VEHICLES and BUILD STATIC WEAPONS.

TRAITS



VEHICLE FIXER TRAIT

You repair vehicles and build fortifications faster than other Support Class combat roles.



HEAVY WEAPONS TRAIT

Static and auxiliary vehicle weapons take longer to overheat when you fire them.

Support: Machine Gunner (new since Open Beta)

The Machine Gunner Combat Role focuses on laying down suppressive fire using LMGs and MMGs. While the Engineer can also use these weapon classes, the Machine Gunner specializes in them and gains a higher rate of suppression output when using them. Also, when the Machine Gunner fully suppresses an enemy, that enemy becomes spotted to make it easier to follow up on it for yourself or for other team members.



MACHINE GUNNER

EQUIP

The Machine Gunner relies on suppressive fire to expose the enemy and keep them in check. All Support roles can REPAIR VEHICLES and BUILD STATIC WEAPONS.

TRAITS



BULLET STORM TRAIT

You cause more and receive less suppression.



FOCUSED FIRE TRAIT

Fully suppressed enemies are spotted for your team.

Medic: Field Medic (Default)

The Field Medic focuses on healing and reviving friends. To help that cause, the Field Medic sprints faster when calling out to a downed friend, and gains bonus Requisition when supplying bandages, either by throwing them to friends in need, or by placing a crate that friends grab bandages from as they need them.



FIELD MEDIC

EQUIPPED

You'll find the Field Medic in the thick of battle, aiding and reviving comrades in need. All Medic roles can REVIVE FRIENDS with the Syringe.

TRAITS



HEALER TRAIT

You gain additional Requisition for your squad by providing them bandages.



SWIFT EFFORT TRAIT

You sprint faster when calling out to a downed friend in need of a medic.

Medic: Combat Medic (new since Open Beta)

The Combat Medic is more offensively inclined than the Field Medic, and has expertise in melee combat. As part of our feedback sessions with the community prior to launch, the Combat Medic's melee trait now gives an extended reach, and the Combat Medic also performs melee takedowns faster overall. This means that after a successful takedown with the Combat Medic, you will be able to fire your weapon again quicker than other Combat Roles.



COMBAT MEDIC

EQUIP

The Combat Medic is equally skilled at fighting the enemy and helping allies in need. All Medic roles can REVIVE FRIENDS with the Syringe.

TRAITS



MELEE EXPERT TRAIT

You have longer reach with melee weapons.

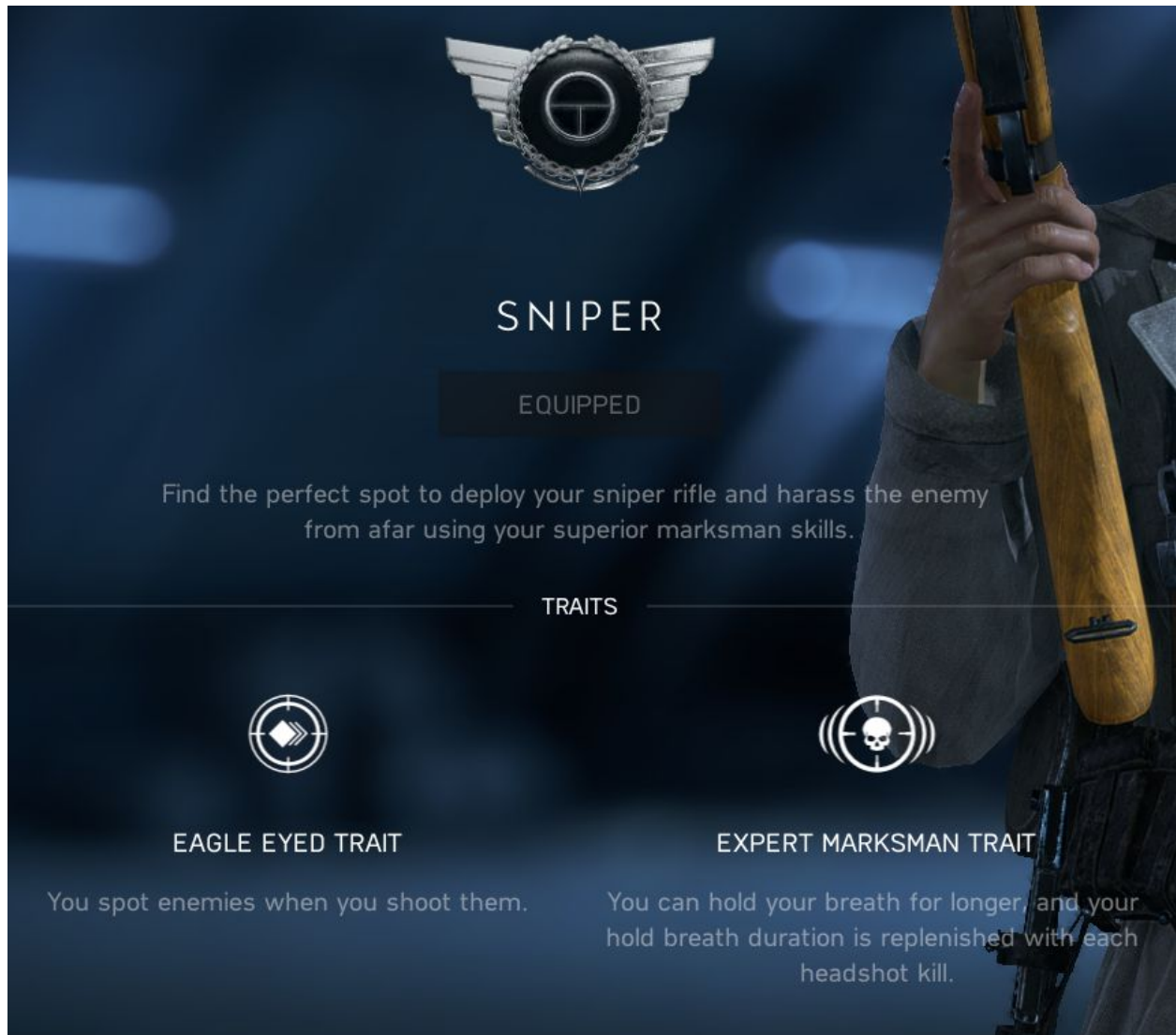


EMERGENCY RETREAT TRAIT

You sprint faster when at critical health.

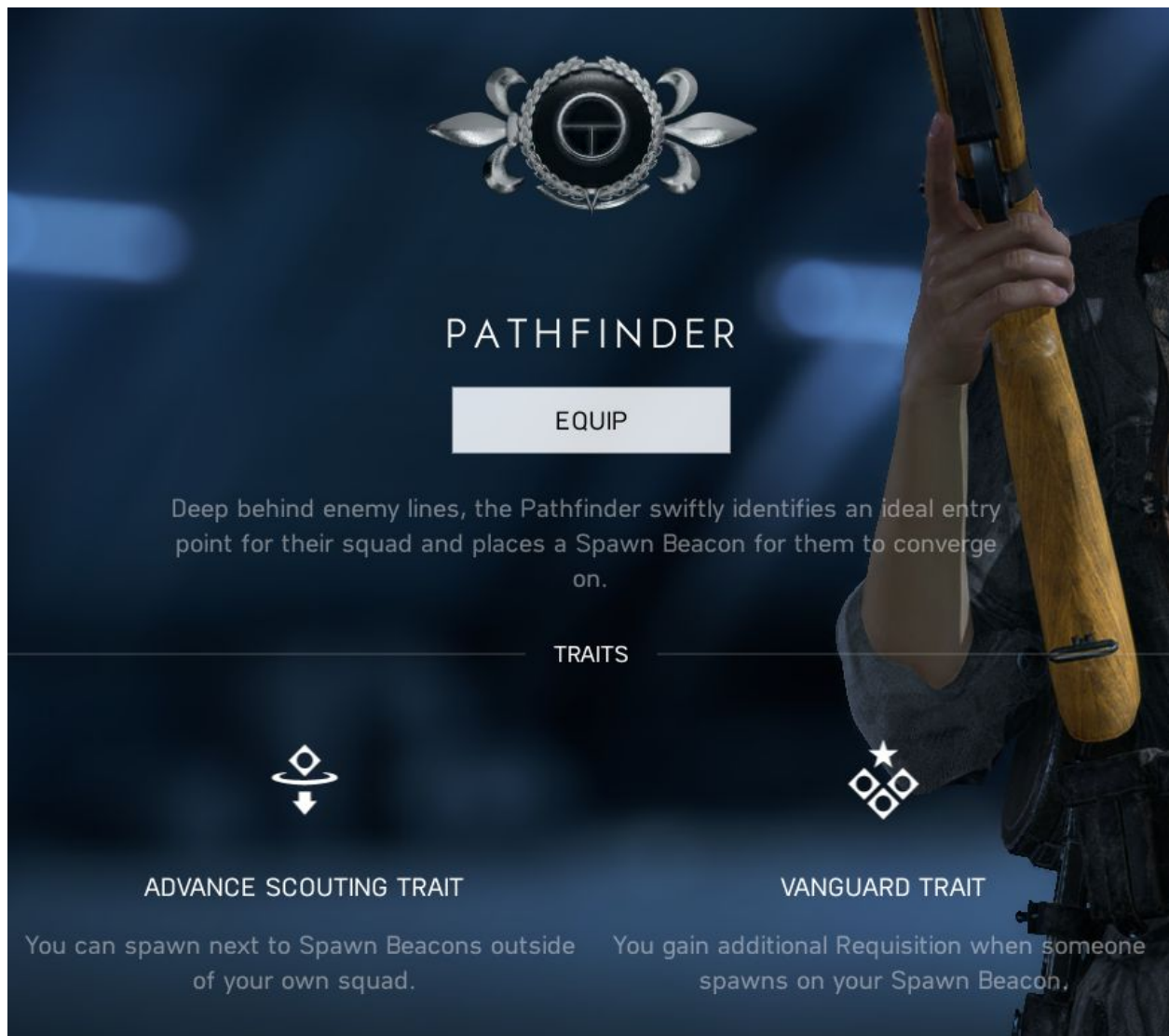
Recon: Sniper (Default)

The Sniper Combat Role is the quintessential marksman, harassing enemies from medium to long range. To help players fulfill that role, the Sniper can steady scopes for longer (thus eliminating scope sway), while also able to automatically spot enemies that they shoot. This means that even if you are not experienced at consistently placing headshots, you will play an important part in pointing out enemy positions simply by damaging them. The spotting also helps you follow up on your targets, or helps your teammates to do so.



Recon: Pathfinder (new since Open Beta)

The Pathfinder was another Combat Role that saw some tweaks to its traits thanks to valuable feedback from the community. Its defining trait now lets the Pathfinder spawn on Spawn Beacons placed by players from other squads than its own, thus allowing for great mobility and flexibility in where to tackle the battle next. Initially, our intent was for this trait to also allow the Pathfinder to spawn on Squad Leaders from other squads, but we dialed back on that thanks to some insightful feedback on map balance and flow.



Controls

We really wanted to emphasize additional player customization and ease of use over previous titles. We hope you enjoy the richer customization options and find it empowering as you play and compete in *Battlefield V*.

Change List

- Changed the default key binding for the bandage pouch to “C” instead of “5”. This control can also be reassigned freely now.
- Vehicle decoupling option description had On/Off switched, switched them so the hint is correct.
- Fixed an issue where if the user logs out and disconnects the controller in a rapid manner, there was an issue where the pad stays locked to the now logged out user.
- A friendly warning message now appears if players attempt to customize their button layout and attempt to bind several actions to the same button.
- Fixed an issue that could result in the users being stuck in a black screen when you disconnect a controller.
- Fixed various issues related to the controller setup screen.

- Fixed an issue where PC button prompts were displayed when a keyboard is connected to the console.
- Upped the Right Stick Center Deadzone from 10 to 13, as it was previously a bit too small.

Button mappings

- Implemented custom button mappings for each control scheme on Xbox and PS4. Simply set the scheme to “custom” and select it to enter an edit screen in the Control Schemes options menu. Making this more intuitive compared to older Battlefields.
- Players can now reset individual custom button mappings for specific control schemes.
- Game actions which could not be remapped on PC at the time of the beta (like Use Bandages, Bayonet Charge, etc.) are now accessible in the key bindings screen.
- Selecting inverted Vertical Look and Vertical Flight in the Base Control Options, also now properly swaps the corresponding action captions in the custom mappings screens.
- Polish pass on the order and captions of the input actions in the key bindings (PC) and the control schemes/custom button mapping (Xbox/PS4) screens.
- Added available custom mappable “Zoom Minimap (Toggle) / Full Map (Hold)” action combo. Useful for those playing with controller and want the functionality on a single button.
- Can now assign the ability to “Toggle HUD Visibility” action to a single button, so the players who want to quickly toggle the HUD, don’t have to navigate to the option in the menus every time.
- There is a separate Gunner control scheme for the gunner positions (both vehicle and stationary turrets).
- Players now can scroll through the entire inventory by the mouse wheel (or via button navigation), similar to *Battlefield 4*, by using the available “Switch Inventory Up/Down” custom actions.
- Players can now map individual vehicle seats to separate buttons, for quicker seat switching capabilities, on Xbox and PlayStation 4 (Was available to PC players only in the previous games).
- PC: The player now can use the mouse wheel to switch between weapons in tank driver or pilot seats. In previous games, this was possible for soldier controls only and for vehicles they could bind one of the directions of the mouse wheel only.
- PC: Improved the prompt message to be more specific to the input control device, instead of displaying a generic “press a key” message.
- PC: In the key bindings screen if a player tries to change a grayed-out gamepad action, they are prompted with a message that they have to switch the gamepad control scheme to custom one first. In *Battlefield 1* there was no hint message and players had to discover on their own how to custom map gamepad buttons.
- PC: Full navigation in the key bindings screens with keyboard and gamepad. Players needed to use the mouse in the past.
- Removed the spectator custom bindings for gamepad/joystick – remapping these is not currently allowed in *Battlefield V* Spectator Mode.

Aiming

- Implemented adjustable dead zones functionality for the Left/Right Triggers (Xbox), L2/R2 (PS4). As requested from our community.
- Default controller sticks center deadzone on PC set to 22% and 13% on Xbox/PS4, sticks axial deadzone to 15%. The player of course can still custom set it to their preference.

Options screens

- PC: The items in the root options screen now can be navigated with the controller bumpers (Xbox), L1/L2 (PS4) too.
- Moved all controller hardware tuning options to a separate Controller Tuning tab in the Control Options screen.
- Reorganized/regrouped other control options by themes so they are easier to find.

Bug fixes

- Fixed an issue where the mouse wheel was not registering consistently at different tick rates.
- Fixed the Uniform Soldier Aiming functionality for controllers (Xbox and PS4 controllers, PC gamepad/joystick).
- Fixed some incorrect button mappings for various Southpaw/Alternate preset control scheme combos.
- Fixed some incorrect input mappings of various input actions in all control schemes
- Fixed an issue where the “Invert Vertical Flight” option was reversed.
- Fixed some issues with the selected control scheme layout not showing in the UI if the player moves the mouse cursor away, in the Control Schemes options menu on PC.
- The root in-game menu now can be closed by pressing the Menu (Xbox) / OPTIONS (PS4) button on the controller.
- Fixed the issue in the key bindings screen where sometimes it was not showing a warning message when mapping a button to action, while it is already mapped to another action, on PC.
- Aim-assist rotation has been removed from the game (all platforms, using controller). Aim assist slow down/magnetism remains and has had a tuning pass across all types of weapons to suit the new approach better.

Soldier Experience and Locomotion

Battlefield V includes multiple big improvements for traversal and moving around as a soldier. The explicit goal is to create a core soldier gameplay that makes it fun and responsive to “just run around” in the world.

Vaulting

- Improved detection of low height obstacles. Those multiple small changes aim to solve issue where players had to directly look at some of the objects to vault over or up.
- Improved detection of thin vaultable obstacles such as barriers.

- Improved how fast the player gets released out of vault, this will allow players to keep their momentum when vaulting over low to medium height obstacles.
- Fixed some issues where reload animations would be playing while vaulting on low and medium height obstacles but the reload would be aborted.

Sliding

- Fixed a bug where players would not be seen sliding from other players perspective at times.
- Changed the default behavior of sliding for crouch-toggle controls. Players will now be returned to standing after triggering a slide from a crouch double-tap (just like for crouch-hold controls).

Base movements

- Changed the prone behavior to move the players on their back when they prone next to a wall instead of pushing them forward due to lack of space. This will still push players forward if they move afterwards but will not push them initially, note that more changes are going to be done on that system to potentially completely get rid of the push.
- Improved the crouch to stand and stand to crouch transitions animations.
- Fixed an issue where crouch and stand could be mismatched from different players perspective due to a broken transition.
- Increased the height required for a fall to trigger a camera bob. This prevents random scope sway from happening when stumbling from a small height.
- Reduced camera sway amplitude when landing from a jump on flat ground.
- Increased fall damage start height from 6m to 6.5m.
- Fall damage curve in the medium heights (around 8 to 10m) is now more forgiving.
- Increased height for guaranteed death from fall damage from 12 to 13m.
- Scaled back the fall landing animations to start from slightly higher heights.
- Fall landing animation now triggers on height instead of velocity, this reduces occurrences where a landing animation could trigger from a lower height than intended.
- Reduced the dust effect coming from footsteps while running.
- Fixed an exploit that allowed players to climb ladders faster than intended.

Other

- Added new bullet penetration on soldiers. This means situations where bullets first hitting a limb then continuing towards the head will now count as a headshot appropriately. Resulting in much more consistent bullet behavior.
- Added hands and feet hitboxes to soldiers.
- Changed the behavior of hit reactions when the soldier gets hit in 3rd person. Body hits and headshots will keep soldiers more stable now and movements will only be a translation in Z axis based on the hit angle.
- Changed the parachute deploy minimum height requirement to avoid players using parachute to ignore most of the fall damage.
- Audio: Added new local impact sound to bullet hits on enemies.
- Increased muzzle size at range for enemies for increased visibility.
- Fixed an issue where soldiers could get culled out too early over distances.

Maps

Release Content and Features

Narvik

Narvik is a classic *Battlefield* map set in Norway where the two sides battle over the harbor where all the iron ore from Sweden's northern mines is up for grabs. Blocks of typical Norwegian wooden houses are broken up by the destruction caused by the hammering artillery and the presence of the industrial ore operation in the docks.



Homely houses – both pristine and on-fire litter the landscape, offering plenty of hard corners, verticality and ambush opportunities. Fight along the railway to the end station and then back onto the big loading bridge that overlooks the entire map. Engage in intense firefights along the bridge or use the height advantage to control and fight in long range sniper battles - or just bunker down and use Fortifications to turn a house into a fortress.

Weather support

- Base weather
- Fog
- Snow
- Night (special for Airborne)



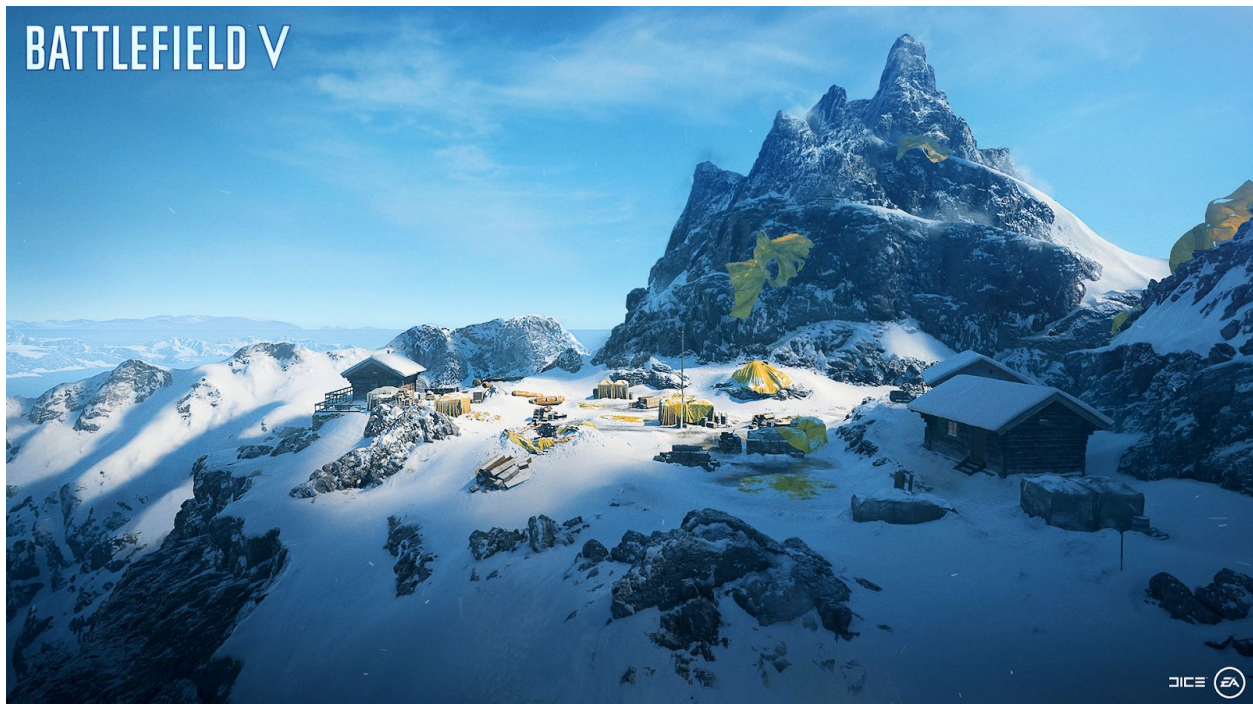
Narvik Conquest Layout



Narvik Conquest Mini-Map

Fjell 652

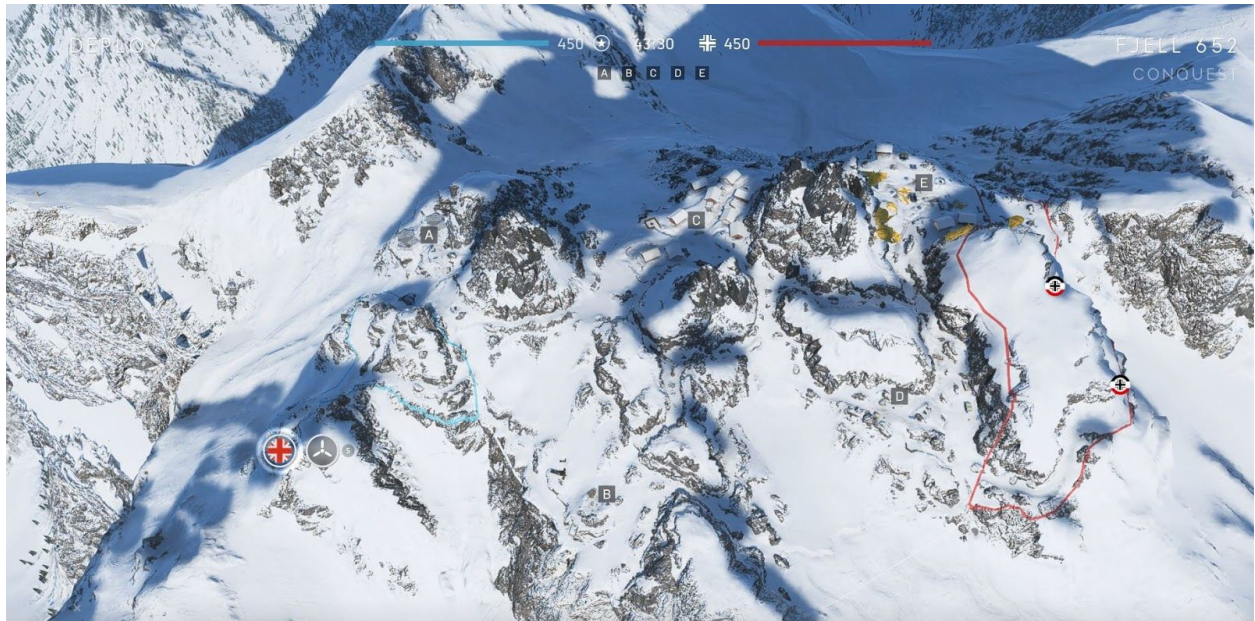
Fjell 652 is a map set in the cold and rugged Norwegian mountains, just above the strategic port of Narvik. It blends fierce infantry combat with bold aerial duels. Troops must brave deadly chokepoints and treacherous cliffs in their fight for territory. Above and next to them, daring pilots bank and weave around the peaks and crags to shake pursuers and avoid anti-aircraft fire.



In this chilling high-altitude battle for dominance, blinding snow storms can occur at any moment and deadly drops surround the battlefield in all directions. A decisive strike by the enemy can push a team off the mountain completely, a scenario from which recovery is all but likely.

Weather support

- Base weather
- Snowstorm



Fjell 625 Conquest Layout



Fjell 625 Conquest Mini-Map

Twisted Steel

Twisted Steel is the second largest map in the base game package – it features several different areas including a massive 400+ meter steel bridge, roadblocks, fields, a swamp, and several vegetation-dense flooded environments. Its southern region is host to a string of farms and built up areas – built to support the more linear and tactical modes like Frontlines and Breakthrough.



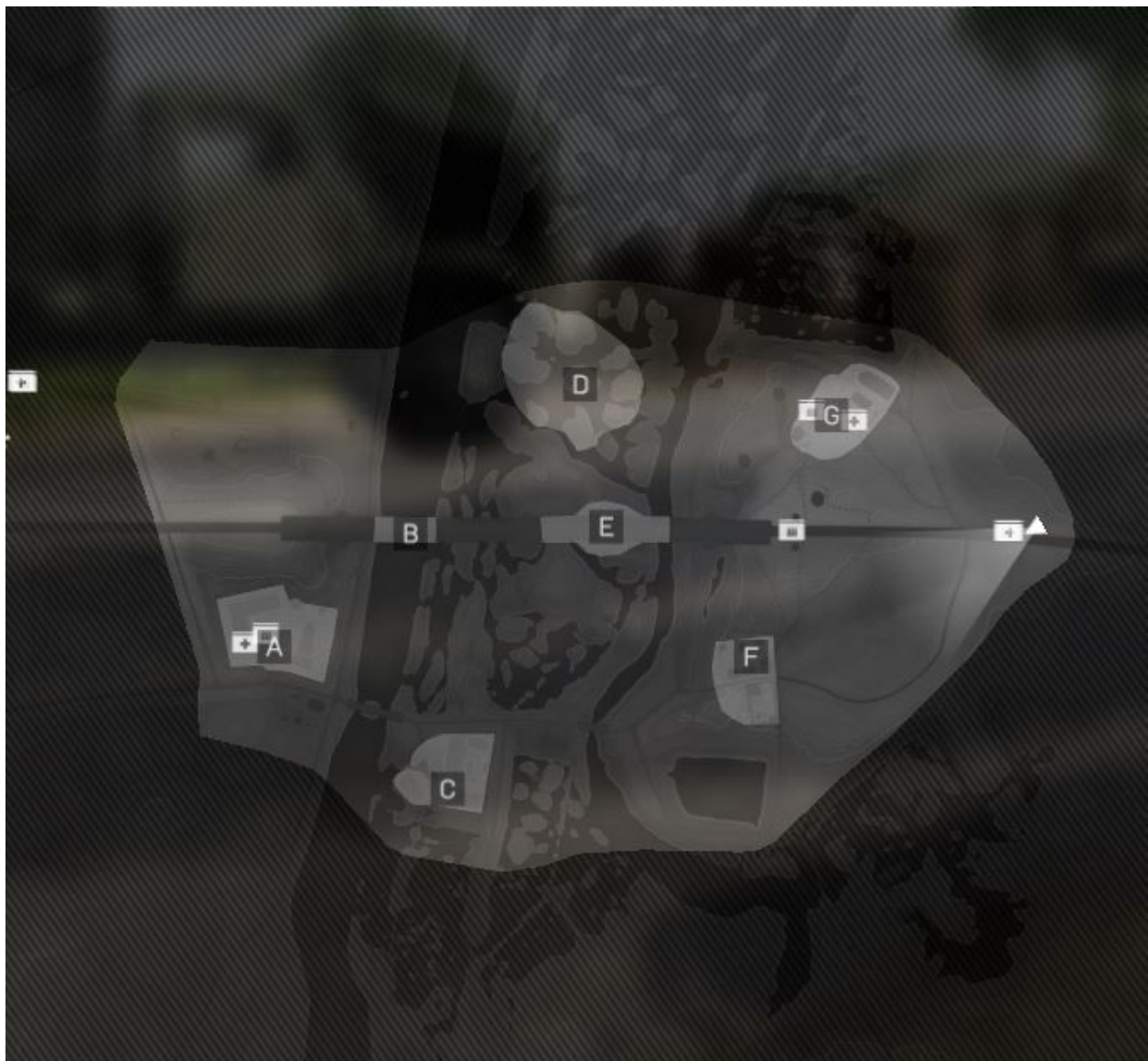
Vegetation, wetness, vehicles and vegetation – Twisted Steel is built to be a veritable playground where every part of the *Battlefield* experience is available. Bring your shotgun to fight in close-quarters through the destroyed tank convoy on the bridge or hide in the bushes and fire your Panzerfaust into the back of a tank as it drives through the swamp – all of it in the same map.

Weather support

- Base weather
- Storm
- Misty rain



Twisted Steel Conquest Layout



Twisted Steel Conquest Mini-Map

Arras

Set in France, the battles near Arras were crucial in halting the German advance to allow the British Expeditionary Force to retreat at Dunkirk. Arras mixes large open fields together with houses and a dense village – you can expect a good mix of infantry combat as well as epic tank battles across the yellow fields.

Make your way to center to fight over the ever-contested village and climb up the tower of the church to get a good overview of the action. Or jump in your tank and drive across the fields and take control over the eastern open areas. If you find yourselves in the middle of the canola fields, just crouch down among the flowers and disappear from enemy view. Arras features both tanks and planes as well as jeeps and bikes.



Weather support

- Base weather
- Smoke and fire/wind



Arras - Conquest Layout



Arras - Conquest Mini-Map

Rotterdam

Welcome to Rotterdam – one of the most modern cities in Europe lies open. Apartment buildings, streets, canals, bridges, and courtyards make up this dense city map. Fight to lock down the different lanes as you fight for control over the elevated railroad or dive under the water to flank the enemies holed up in the Witte Huis.



Use Fortifications to construct roadblocks to control the enemy teams advance – destroy or rebuild bridges to allow your tanks to move forward while keeping theirs out. Rotterdam has a lot of verticality – from swimming in the canals, to running on the streets, to climbing the three-story buildings and going on the elevated railway – this map is a dynamic powerhouse.

Weather support

- Base weather
- Light rain
- Fog
- Heavy fog (special for Airborne)



Rotterdam - Conquest Layout



Rotterdam - Conquest Mini-Map

Devastation

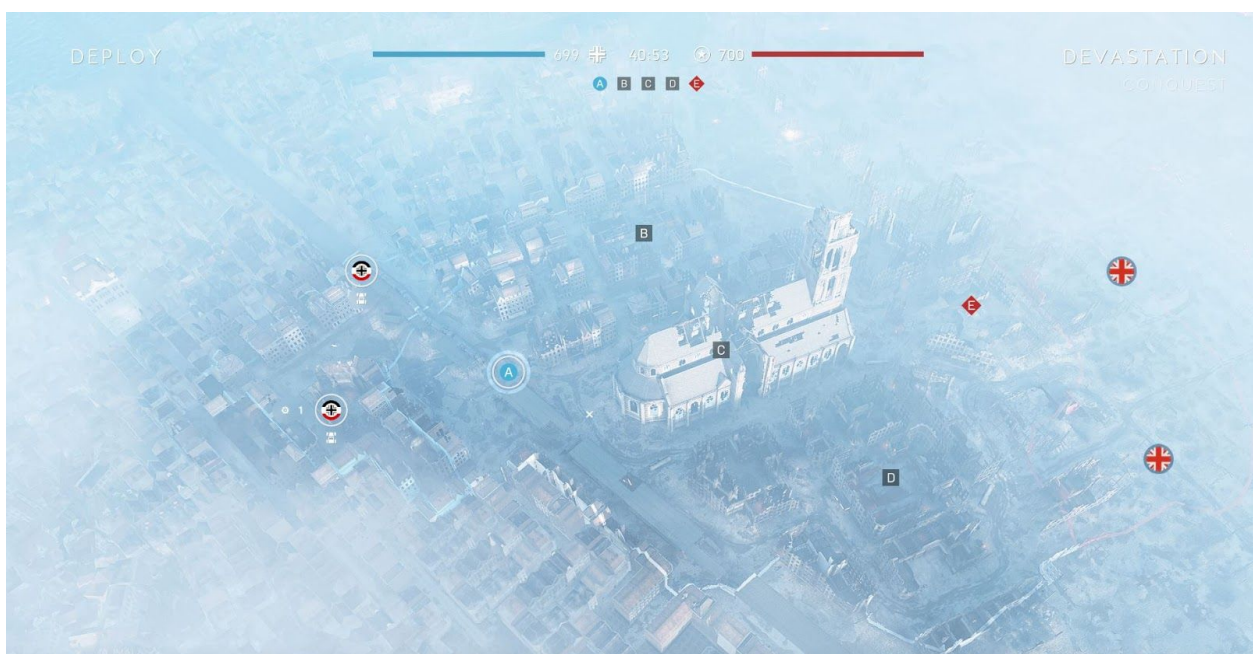
Devastation is taking place in the aftermath of the bombing of Rotterdam. What once was a beautiful city is now a devastated landscape of ruins, metal skeletons and dusty streets. Iconic and once thriving places like the Library, Cathedral, Cinema and Mall are now scenery of frantic close quarter fighting while tanks are patrolling the scared streets.



Finding your way secretly through the ruins and making use of verticality is key for flanking the enemy. Especially since each point can be heavily fortified and locked down by just one squad. Controlling the Cathedral might be the key to victory, but don't forget the other capture points. The enemy can always find a way around.

Weather support

- Base weather
- Bombing run (pre bombs)
- Aftermath (post bombing run, used for Final Stand)



Devastation - Conquest Layout



Devastation - Conquest Mini-map

Hamada

Hamada, the largest map in *Battlefield V*, is a massive desert behemoth, spanning 1,500 meters end to end. Dragon's teeth, outposts, tank wrecks, and palm trees – Hamada has a varied and breathtaking landscape, giving space for great tank gameplay, daring aerial dives under the massive stone bridge, and intense infantry combat alike. Enjoy close-quarters combat in the trenches of the artillery positions or take off from the ground on the landing strip.



Bring your squad and fight to take control of the temple-like ruins on the clifftop and give your team the advantage of both additional planes and the ever-important high-ground. *Breakthrough* on Hamada is an in-house favorite amongst the DICE Level Designers, make sure to give it a shot!

Weather support

- Base weather
- Storm
- Low Fog (in canyons)
- Dense Fog (special for Airborne)



Hamada - Conquest Layout



Hamada - Mini-Map

Aerodrome

Aerodrome is an airfield set in the outskirts of Tobruk, Libya. Surrounded by hills is a battle arena dominated by a large concrete hangar next to the wreckage strewn airstrip. You can use the dried-up river to cross through the center of the medium sized map; or you can directly rush the Aerodrome with a squad and use fortification to engage in medium to long combat ranges. You can also settle your sniper rifle in the windows of the Radar and Control tower to counter snipe the enemies on the plateaus. Tanks and vehicles can quickly turn the flow of the map so make sure one of your squad mates bring some dynamite.



Weather support

- Base weather
- Rain (in desert)



Aerodrome – Conquest Layout



Aerodrome – Conquest Mini-Map

Change List

General changes

- Weather
 - Extreme weather states setup for Final Stand.
 - Attacker-friendly weather state for Airborne.
 - Premiering base weather state for Conquest.
 - Added decreasing fog volumes for air combat.
- General fixes for some effects that were too bright on levels that are generally bright.
- Fortifications have been updated based on learnings from Open Beta and onwards. Creating mini-forts and attack defenses pointing towards them, as well as chokepoint creation through complete denial of access is the name of the game for all our maps.
- Our Soldier traversal testing have been complemented by overnight bot-testing. Giving us a very good idea of what areas of the map needs more work to get good, and where you get stuck or snag on meshes.

- Attrition: All our maps have had their supply stations tuned based on learnings from open beta. They are now always separated (not the combined one that existed prior), and they are normally near objectives in each mode. Stations are also only pre-built when adjacent to the HQ spawn in most modes, meaning players will have to build the others in the field now.
- Visibility: We have worked through all maps to make sure that player visibility is good. Part of this has been adjusting the visual environments of each maps and their interiors, but also by adding a system that, depending on the lighting of any particular environment, dynamically adds character rim-lighting to make them stand out.

Rotterdam

- Fixed an issue where players could get stuck between a boat and a wall in the canals.
- Removed a ground smoke effects that was obscuring the view around Flag D on Conquest.
- Fixed multiple deploy and spawn issues on Rotterdam.
- Added level-specific pre-round airplane camera.
- Fixed a crash that could be caused by shooting at a certain window on Rotterdam.
- Improved and fixed doors and gates that players can interact with on Rotterdam.
- Added a proper underwater shader to the rivers. Meaning the vision is blurred slightly when diving.
- Lowered Conquest ticket count to 650 (was 800).
- Chairs are now physicalized and shouldn't block the player anymore.
- Adjusted the supply station distribution.
- Improved traversal all over the map.
- Blocked off areas the player should not be able to get to.
- White House Fortifications added.
- Fixed issue where a player was able to capture objective A of the second sector from an unintended area.
- Updated Airborne Objective layout and airplane paths based on playtests.
- Vegetation performance optimization.
- Fixed various visual issues with Z-fighting, loding, etc.
- Team Deathmatch: updated supply stations to fit new combat area and friend zones.
- Fixed big backdrop smoke plume not blending with the fog.
- Audio: destruction on buildings was hard to hear, but is now re-tuned.
- Fixed an issue where a sunshade stopped vaulting.
- Conquest: user is able to climb to the rooftops of the buildings near Point A.
- Fixed an issue where a player, while swimming, was unable to interact with two ladders near point E unless submerged.
- Tweaked fog and removed lights from gameplay layer.
- Did a final pass on Fortifications.
- Bullets now properly pass through the wooden catwalk at the destroyed house located in area of point D.

Narvik

- The snowman on Narvik can now be rebuilt, if destroyed. (Who destroys an innocent snowman anyway?)
- Fixed a few bushes on Narvik that were bulletproof.

- Increased the plane combat area by the German plane resupply area, which gives the players more space to turn the plane.
- Added ammo stations to the artillery hill and train depot on Narvik when playing the airborne mode.
- Removed invisible collision on Narvik which could result in airplanes crashing into them.
- Added pre-round spawns for Narvik on Conquest.
- Adjusted the sparkles on the snow, this will make the snow appear less shiny and more realistic.
- Changed the color and textures for the soldiers' parachutes on Narvik.
- Updated and improved the lighting on Narvik.
- Optimization to the weather logic when it switches to storm on Narvik.
- Added more snow effects on various objects on Narvik.
- Added window Fortifications on Narvik houses.
- Fixed an issue on Narvik where the Flak 38 tip was clipping with the snow around it.
- Tweaked all of the Conquest spawns based upon Open Beta telemetry data and player input. This will improve the overall experience on Narvik.
- Fixed an issue on Narvik where players could get stuck in the terrain while trying to crouch and walk near the pile of wood close to flag E.
- Added window vaulting on a few windows that previously were not properly setup.
- Added more realistic clouds on Narvik.
- Removed an object on Narvik that caused players to fall through the map near E flag.
- Added level specific pre-round airplane camera.
- Decreased the impact of players colliding with trees on Narvik for increased realism.
- Adjusted the supply station distribution to match new attrition direction.
- The map received a Fortification pass based on feedback and telemetry from the Beta.
- Fixed an issue where players could get stuck in the terrain while trying to crouch and walk near the pile of wood close to flag E.
- Artillery cannon now has proper collision with the player.
- When you stop halfway on the sloped train track you slide down.
- Snowing VFX is no longer present inside the attic of a house on Objective F.
- Frontlines: added reinforcement vehicle spawners to team two.
- Airborne: defenders are able to spawn camp attackers by going forward too much.

Modes

Standalone Modes

- **Conquest**
The classic *Battlefield* mode, all out warfare to control key locations. 64 players.
- **Breakthrough**
64 players battle for sectors to control as attackers try to claim vital ground.
- **Team Deathmatch**
High-intensity, infantry-only mode about inflicting as many casualties on the enemy as possible. 32 players.

- **Frontlines**
Tug-of-war battle across the map where key locations are contested one at a time. 32 players.
- **Domination**
Fast-paced, infantry-only combat in close quarters about controlling strategic objectives. 32 players.

Modes available only in Grand Operations

- **Airborne**
Parachute into a Grand Operation to prepare the invasion of defend and fortify defensive positions
- **Final Stand**
The optional (day 3 draw induced) conclusion of a Grand Operation where the battles take place in a shrinking combat area and no respawns are allowed.

Grand Operations

A vast multiplayer experience taking you across several fictional in-game "days", where each day is represented by one round on a combination of map and game mode. All Grand Operations are large, 64-player battles with a strong narrative and expected playtime of about 45-60 minutes each.

The outcome of each day carries over into the next such through one of the following bonuses:

- Attackers receiving more ammunition.
- Pre-built defensive Fortifications.
- Extra requisition points (used by squad leaders).
- Additional initial respawn points.
- Reduced vehicle respawn time.

In order to reach Day 4, Day 3 must end in a draw. The definition of draw is as follows, depending on game mode:

- Breakthrough: the attack ends in any sector apart from the first or the last.
- Frontlines: teams destroy an equal number of objectives.
- Conquest: timer runs out with no team reaching zero respawn points (being wiped out).

Launch Operations Breakdown

Here follows a breakdown of the Grand Operations and modes used at launch.

Fall of Norway

Day 1: Airborne, Narvik.

Day 2: Breakthrough, Narvik.

Day 3: Conquest Assault*, Fjell 652.

Day 4: Final Stand, Fjell 652 (in the event of a tie).



Raid on Rotterdam

Day 1: Airborne, Rotterdam.

Day 2: Breakthrough, Rotterdam.

Day 3: Frontlines**, Devastation.

Day 4: Final Stand, Devastation (in the event of a tie).



Battle for France

Day 1: Airborne, Twisted Steel.

Day 2: Breakthrough, Twisted Steel.

Day 3: Frontlines**, Arras.

Day 4: Final Stand, Arras (in the event of a tie).



Operation Battle Axe

Day 1: Airborne, Hamada.

Day 2: Conquest Assault*, Hamada.

Day 3: Breakthrough, Aerodrome.

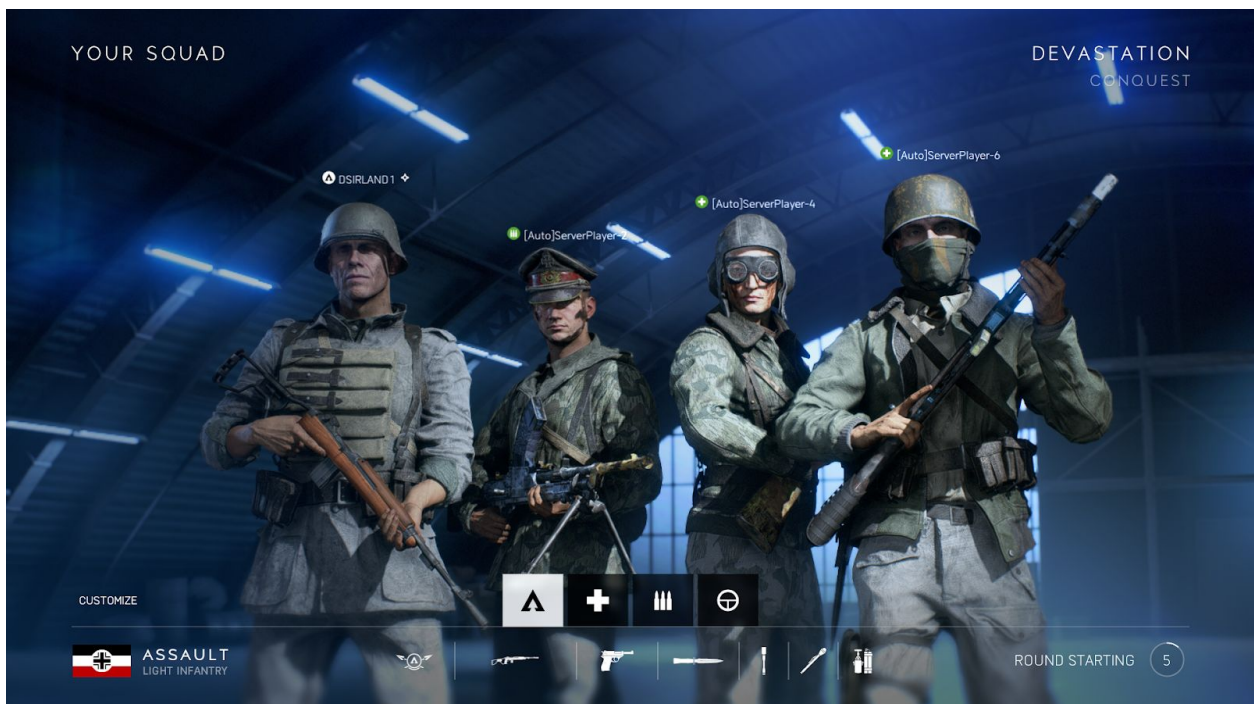
Day 4: Final Stand, Aerodrome (in the event of a tie).



- * - defending team owns all or a subset of the flags at the start of the round.
- ** - Final Stand supports 64 players with even larger capture areas for objectives.

Pre-round: Lobby

At the start of every new round, you will be placed together with your squad in the pre-round lobby for 45 seconds. This is your chance to equip new gear earned in the last round, review any rewards you earned, and change your loadouts around to fit the coming map and mode.



Pre-round: First Deploy

In *Battlefield V*, the first deploy (or spawn) is special. Each start of a new round includes a special spawn setup designed to introduce (or remind) players of how to play the game mode that is about to begin.

This pre-round first deploy is 15 seconds long and follows directly after the pre-round lobby phase. During this secondary phase you can still:

- Swap class and quick customize (but hurry, after time is up it will spawn you).
- Choose vehicle spawns.
- Early spawn (into a “freeze-time” state) or just wait for the auto deploy timer to run out.



This first spawn wave for all players on each team uses a unique set of spawns, designed to create a clear direction, a nice collected team (you are within viewing distance of the full team most of the time) and it to facilitate a much more controlled start to games.

It is also a way for us to lead new players to what is important:

- Where are we?
- Where are we going?
- What mode am I playing?

Since the deploy uses a more narrowly zoomed-in overhead view, a limited deploy screen, and a set amount of time before the first firefight happens, this is the perfect time to reiterate how the game mode works, what the objectives are, and where they are.

We hope this system implemented on all game modes will help make for more epic first engagements in games, but also make new players have an easier time to get into the game and focus on what's really important.

Change List

All Grand Operations

- Setup narrative and voice over for all outcomes of the gameplay days.
- Added subtitles for narrative sections.
- Saving progress on client between days.
- Added support for requisition points as a carry over bonus. Added support for adjusting the carry over multipliers based on major win, win, and minor win.
- Pre-round cameras have been added for all game modes.
- Added various mode specific hints to make it easier for new players.
- Carry over screens with type and explanation going into the next day.
- Add Grand Operations name to first day and remove it from all other days.

Final Stand

- Better visibility for "wall of death" effect in Final Stand.
- Players are informed about being close to going out of combat when the area contracts.
- Added a little bit more ammo on spawning.
- Added interpolation to shrinking combat area for smoother transition.
- Quitting Final Stand now tells the player that it results in the loss of match bonus score.

Frontlines

- Added a timer to prevent defenders from camping a spawned bomb area.
- Fixed an issue where the HUD would show incorrect messages when playing Frontlines.
- Cleanup added between Flag and HQ phases, similar to Breakthrough.
- Fixed round timer to pause during cooldown between objectives.
- Added circle progress bar to display unspawn timer for carrier, explaining the time left until bomb explodes.
- Fixed so defenders interacting with all objective types do trigger artillery strikes.
- Fixed so squads can set squad order on locked flags.
- Added objective introduction when locked flag is enabled (but not yet capturable).
- Improved bomb snapping to player position handling when in vehicles.
- Added message when attacking team run out of respawns points.
- Added HUD message when new bomb is spawned.

Airborne

- The first bomb spawn is now placed as the first player spawns, instead of round start.
- Added reminder to bomb carriers to move toward objectives.
- Vehicle health visible in UI for plane passengers.
- Added UI hints about how artillery works and goals with it.
- Made tweaks and fixes to sounds inside planes.
- Changed round outcomes so it cannot end in a draw.
- Moved bomb icon rendering to code in order to support line of sight icon visibility for enemy team.
- Fixed intro camera not working as intended when joining late.

Breakthrough

- Added more spawns for Breakthrough on Hamada.

- Added new Breakthrough game mode widget design implementation, including clearer message on which sector is active and how many have been played/remain.
- Fixed issue where the Retreat Successful and Retreater Killed stat events never triggered giving score for retreating or killing retreaters.
- Fixed the “stinger” music effect when taking a sector.
- Cleanup: in-world icons showing remaining attackers are now activated at the same time as minimap spotting.

Conquest

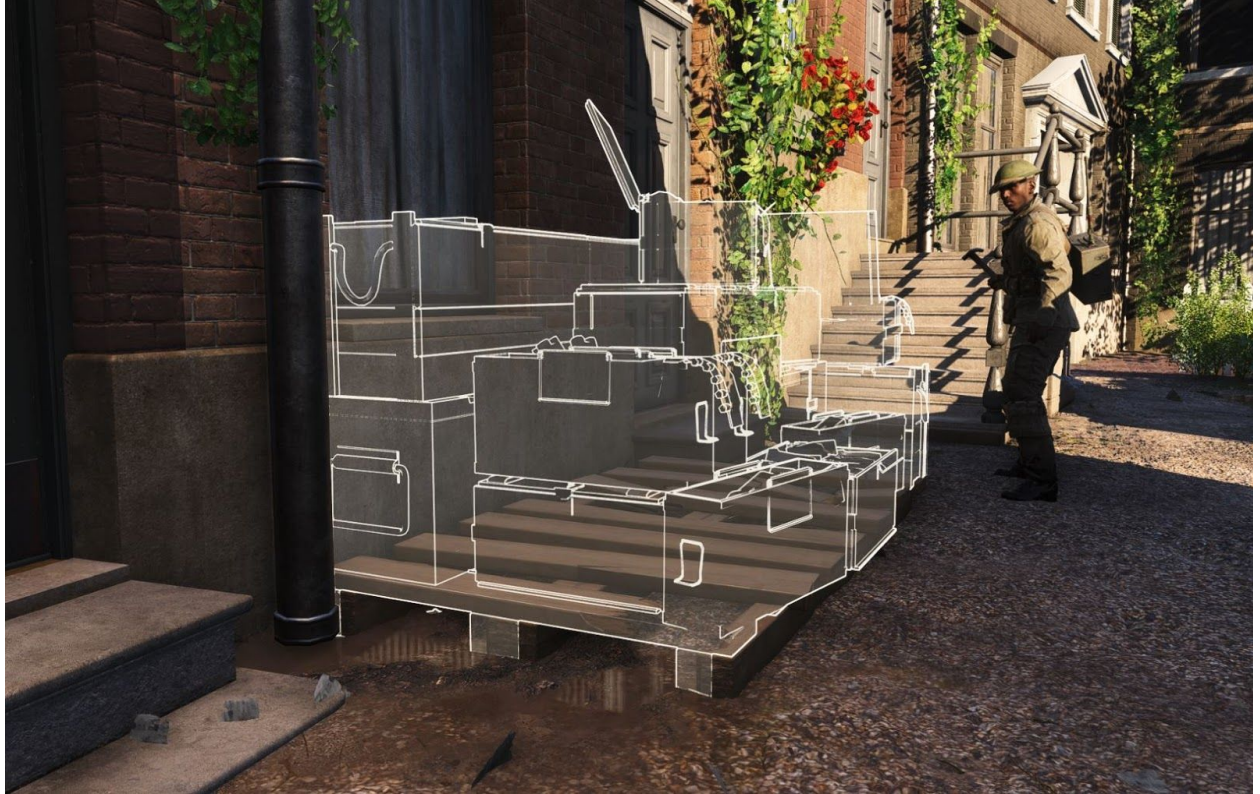
- Fixed so respawn point reduction due to death show skull icon in game mode widget (was flag in OB).
- Bleed only represented with a flag, never a skull in the game mode widget.
- Added halfway message with VO informing about the state of the game.
- Adjusted when game is triggering VO+HUD messages to tell when round is almost over.

Misc. Game Modes

- Added support to allow re-deploying during MP pre-round without killing the player first.
- Allowed multiple settings to be read from the back end rather than local client.
- Changed so all game modes have an "automatic deployment" message showing to all players 15 seconds before round starts.
- Made ammo stations prebuilt in Domination and Team Deathmatch.
- Bomb modes: Adding support for Squad orders on armed objectives.

War of Attrition

The War of Attrition was introduced to *Battlefield V* to create a deeper and more tactical experience, with a focus on rewarding teamplay and a more mindful and dynamic playstyle.





Change List

- Throwing a Medical Pouch on a teammate now both starts health regeneration and resupplies the player with a medical pouch.
- The tanker and pilot class now also get a Medical Pouch like other classes.
- Added vehicle-only collision to protect vehicle supply station from exploding upon touch.
- Multiple fixes and improvements to vehicle supply station icons and icon behavior.
- Multiple fixes and improvements to vehicle supply HUD behavior.
- Added distance icons to resupply stations when player is within distance.
- Lowered health of the supply stations.
- Fixed issue with unlimited resupply of pouches when fully stocked.
- Support can throw infinite pouches to other players.
- Removing supply station icon background, adding background gradient.
- Decrease icon alpha when supply station is in cooldown.
- Reverse cooldown progress to tick up instead of down.
- Automatic heal should give back health up to 30 pts.
- Improved readability of health pouch HUD element.
- Interaction with Health Resupply Stations when healing over time now permitted.
- Added unlimited icon to Bandages for the Medic Class.
- Both Ammo and Health Crates are now destructible.
- Added feature when looking at valid target, we show an icon if they need ammo/health.
- Ammo and health resupply icons stick around the edge of the screen when out of FoV.
- Tuned the commorose "throw at target" radius with commorose icon, 18m.
- Upped the angle for pouches to be thrown by five degrees.
- Ammo Crate resupplies only one of each gadget.
- Fixed an issue where Medics were not always outlined in blue.

- Made the resupply/heal radius smaller for the pouches, as they were resupplying multiple targets if they were very close to each other.
- Added supply icons for unbuilt supply stations when toolbox is equipped (minimap).
- Added an option to resupply on press when not looking at a valid target.
- Fixed Medical Crate and Ammo Crate voice over not playing correctly.

Death Experience

During the Open Beta, we've received a lot of feedback about the different pieces of the death experience and we've been working towards addressing the biggest player concerns. This goes from respawn timers that were seen as too long or unfair when holding-on to life or things like spawn protection that did not work as intended all the way to various smaller bugs that negatively impacted the experience.





While we are still working on improving that experience even further, we've looked at multiple improvements on pretty much all the features (and there are a lot!) that are part of the Death Experience. Most of those changes can be found in the change list below.

Change List

- Fixed an issue where the spawn protection would remain active for a lot longer than intended.
- Tweaked spawn protection timing to only protect the player during the camera transition while spawning and not yet visible.
- Fixed an issue where players could get stuck on the deploy screen after getting revived.
- Fixed an issue which could result in players being unable to select "Return to deploy".
- Added a call out showing you what teammate revived you.
- Added the ability to cancel an on-going buddy revive by pressing the interaction button once more.
- The respawn timer now starts during the man down state instead of when the player is killed, which means that there is no time advantage in revive skipping.
- Fixed an issue with squad spawning where the player could get stuck in the deploy camera.
- Fixed an issue where players could get stuck on the deploy screen while watching a squad mate.
- General improvements to ragdoll behaviors.
- Improved ragdoll settle. This allows players to revive friendlies almost as soon as they died.
- If the player is in the customization screen and their squads gets wiped out the player is no longer forced out of the customization screen.

- Improved the parrot camera rotation for smoother camera movement when observing squad members.
- Players can no longer end up in a downed state while they are in deep water.
- Made the timing of the squad spawn button availability to correspond to when you actually can click. Was previously a bit out of sync causing players to spam the button when it looked like spawning was possible but the timer was not actually completed.
- Fixed an issue where players would not be revivable if killed by an anti-tank mine.
- Added self-collision between the upper arms and the torso on ragdolls to prevent clipping with body parts.
- First Person objective markers no longer linger when a player gets killed and goes to the deploy screen.
- Duration of the kill screen changed to four seconds from three seconds.
- Visual adjustments to the various elements in the killscreen.
- Fixed an issue that would cause players to reload or pick up a weapon on the ground while attempting to revive a teammate on console.
- Reintroduced a five-second post-rotate timer. If the player gets killed again during that time, he will now skip downed state and not be revivable again.
- Fixed an issue where the player would not be able to move his camera while man down if previously killed while in the air.
- Fixed an issue where the soldier's ragdoll would get another impulse when reviver gets killed or if the revive is aborted.
- Added a short delay before allowing the player to abort a revive to avoid unintended revive aborts when spamming the interaction key.
- Made changes to the respawn timers (it's generally faster now). Bleeding out no longer gives an advantage that allows players to respawn faster over not bleeding out. Calling for help or not bleeding out will not add an extra delay before the player is able to respawn.
- Swapped the position of "Bleeding Out" and "Calling for Help".
- Fixed a rare issue where the death camera sequence would point at the wrong direction (not towards the killer).
- Changed messaging of "Critical Death" to "Fatal Injury" to better reflect this "catch-all" no-more-revives state. This still means if you see this term, you won't be able to get revived and get pushed straight to the deploy flow.
- Squad members no longer become unrevivable for other team members if the squad gets completely wiped.
- Updated the parrot camera squad mate selection widget to allow direct clicks (on PC).
- Fixed an issue where nearby teammates would not be audible if calling for help when in man down.
- Fixed an issue where downed soldiers would sometimes hang above ground.
- Various tweaks to "In Combat" state, fixing situations where the player is not able to spawn although there is no clear reason why spawn would not be possible.
- Players dying outside the combat area are no longer revivable.

Squad Reinforcements

Battlefield V puts further emphasis on the squad and the squad leaders by introducing the Squad Reinforcement system. As the round progresses, players contribute Requisition Points to

their squad by playing well together. Squad leaders may spend those points on powerful and useful Reinforcements, including air dropped Supply Canisters, Half-tracks, big hulking tanks, and the ultimate weapons of terror: the V-1 and JB-2 Flying Bombs!

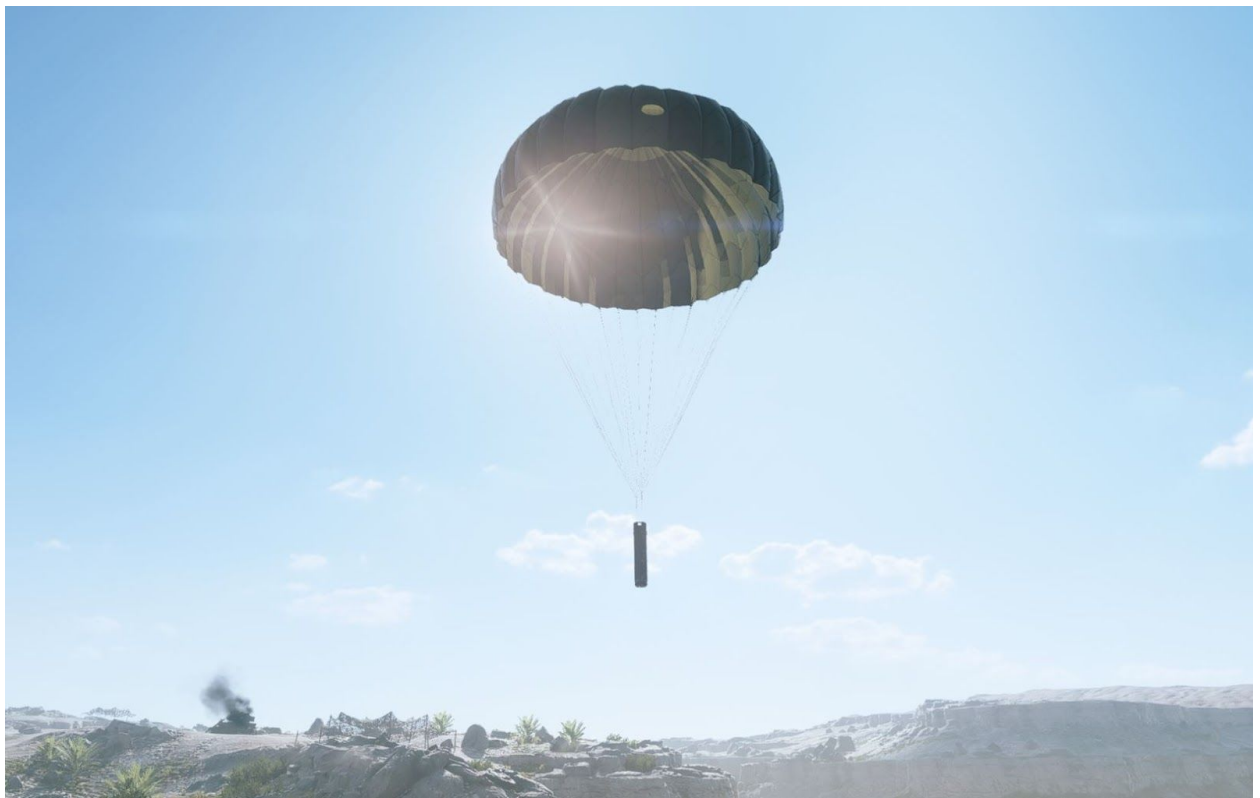
We want Squad Reinforcements to provide an additional layer of escalation to the *Battlefield* match, as well as tangible rewards for squads to work towards, in the round. We also want the vehicles and assets that can be purchased through the Reinforcement system to provide new tactical options and emphasize team play. As we go live, we will be growing the list of available Reinforcements, with new fun, tactical and team play oriented vehicles and call-ins based on community requests.

Launch Content

Supply Canister Drop

A supply canister that is airdropped onto the battlefield, containing ammunition and medical supplies, allowing your squad to re-supply in the field and keep pushing the objective.







Tank Destroyer Half-tracks

The Sdkfz. 251 Pakwagen and T48 GMC tank destroyer half-tracks are highly mobile, but vulnerable vehicles, featuring potent cannons for dealing with enemy tanks and armor. In order to remain effective, they should be operated by at least two soldiers.





Churchill Crocodile Heavy Tank

The Churchill Crocodile is a tough and versatile British heavy tank, that works well in densely built up areas. The distinct fuel tank towed by the Crocodile supplies the hull mounted Flame Projector excels at flushing out enemy infantry, and the 75mm turret mounted cannon can deal with soft and armored targets equally well.



Sturmtiger Heavy Tank

The Sturmtiger is a mobile assault gun armed with a massive 380mm rocket mortar. The giant projectile is extremely powerful but is limited by the mortar being mounted in the front hull, a slow rate of fire and limited ammunition capacity. The Sturmtiger has two forward-facing machine gun ports and one top mounted grenade launcher position for proximity defence.



V-1 and JB-2 Flying Bombs

The droning engine noise of the V-1 and JB-2 Flying Bombs strike instant fear into the hearts of the enemy. But even more terrifying is the momentary silence when the engine stops and the bomb starts dropping on its final trajectory. A weapon so terrible that it alone can turn the tide of battle.



Change List

- Added Sdkfz. 251 Pakwagen and T48 Anti-tank Half-tracks as new Squad Reinforcement assets.
- Added a German variant of the Supply Canister as a Reinforcement.
- Offensive Reinforcement call-ins now reward all members of the squad with assist score, if the call-in successfully kills enemies.
- Squad members are now rewarded when any squad member deploys in a Reinforcement vehicle that has been bought by their squad leader.
- All squad members are now rewarded when their squad leader successfully purchases a Reinforcement Vehicle or Reinforcement call-in. This also fixes an issue where players were rewarded for simply selecting a call-in in the menu.
- Significantly reduced the Requisition Point cost of the Supply Canister call-ins.
- Implemented a new 3D UI call-in target effect for the binoculars.
- Fixed bugs that caused V-1 and JB-2 Flying Bombs to sometimes get culled and not fly to their target destination.
- Fixed a bug that would cause V-1 and JB-2 Flying Bombs to sometimes get a wrong target position.
- Fixed an input issue that would cause the Reinforcement menu to close when the user was trying to sprint at the same time. Bringing up the menu will now prevent sprinting.
- Reduced the projectile speed and the rate of fire of the Sturmtyger's 380mm main weapon.
- Increased the projectile speed of the Sturmtyger's flare launcher to make the flare more effective.
- Added voice overs for calling in Reinforcements as a female German soldier.
- The vehicles on the Reinforcements menu now show the correct vehicle names.

Squad Play

Grounded in experience of *Battlefield 1*, the new squad system in *Battlefield V* makes both playing together with your friends and playing with new-found friends easier than ever. From the Open Beta significant changes have been made to how groups of players are managed across rounds and when matchmaking. We've also continued to improve the squad VOIP and how a squad can leave a game together (a so called "Quit with Squad").

Feature highlights

- *Battlefield V* features a new squad system, making it easier than ever to play with your friends or new-found acquaintances as a squad and on the same team.
- As Squad Leader you can ask your squad members if they want to leave your current game with you to play something else ("Quit with Squad").
- The Danger Ping Marker is an in-world squad communication tool designed for planning attacks. Placing the ping marker is now more reliable and accessible than Open Beta. Placing it on an enemy will render the marker red, otherwise orange for probable danger areas.

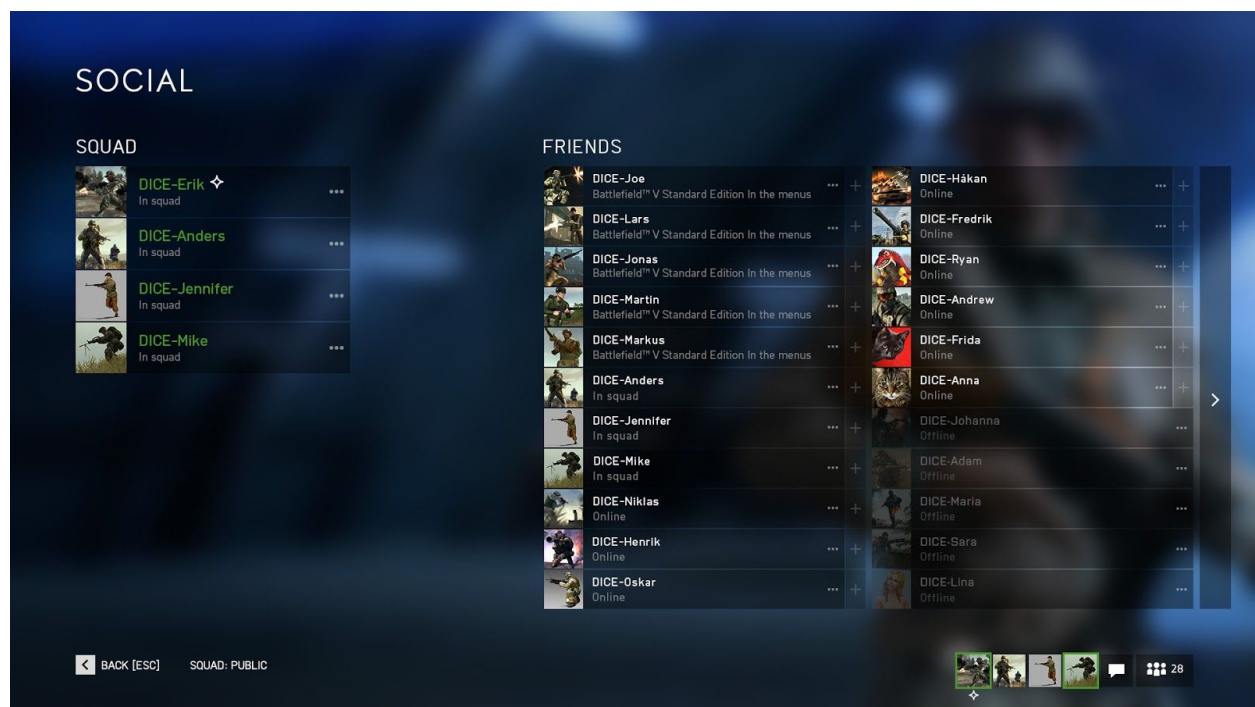


- Spotting is a team wide system, designed to help players inform the entire team about the presence and movement of the enemies. You can now spot using intel gadgets like Spotting Scope, Sniper Decoy, and Flare Gun. The Spotting Flare Projectile has now a smaller radius and lifetime.

Matchmaking

Acting on what we observed during Open Beta (thanks for all the feedback!) together with applying our final tuning to the system, the game's release content has been vastly improved, not to mention the specific squad play issues we saw during Open Beta.

- Overhauled underlying technology for matchmaking as a squad to fix several issues and improve experience.
- Fixed several issues where matchmaking would fail prematurely.
- Tuned matchmaker's minimum player requirements to improve game server allocation by region. You can now spawn into a server with a full squad for any mode if you wait for a couple of minutes (expect this time to shorten as well).
- Improved loading transitions and animations for a smoother UI experience as we get you into the game.
- Updated game finder widget design.



Change List

- Fixed several issues where players in squad would get split up before or during loading into a game.
- Added confirmation prompts when switching squads in the Social screen to make it clearer if you are to change game server or just game team.
- "Quit with Squad" design has been updated and several issues fixed.
- Added stats and scoring events for spawning on spawn beacon.
- Squad VOIP: Added ducking (reduce game volume) when a squad member is talking over the Squad VOIP channel. This will make it much easier to hear your squad mates over the fighting in your headphones. (PC specific)
- Squad VOIP: Push-to-talk button now works as intended. (PC specific)
- Squad VOIP: Players can now mute another squad member from the squads menu.

- Added an error message when users try to join a game session through an invite that they have already joined.
- Fixed an issue where the squad leader would stay in the frontend, while the rest of the party would matchmaking into a server.
- Fixed an edge case where if a squad was put into the server queue, and then a player from the squad left, and rejoined the squad they were not able to get back into the queue.
- Squad leader mutiny now works after squad leader change.
- Fixed issue where regular squad leaders were not able to give orders.
- Added button to “leave and create a new squad” from the Social screen while playing.
- Fixed an issue which would trigger the Squad Wipe event before the entire squad was dead.
- Improving the scoring events displayed for Squad Wipe based on squad size.
- ScoreLog/KillFeed: Now shows the right number in squad when it is wiped.
- Players are now able to add a Danger Ping through solid glass objects that are breakable.
- Changed the Danger Ping location to the soldiers’ feet when contextually hitting with the danger ping.
- Improved the animation on creation of the Danger Ping Marker.
- The Danger Ping Marker now has consistent opacity when created and when placed on in-level objects.
- Improved squad spawn in transition to gameplay to have no game input delays; spawning in is now ultra smooth. The player has more available controls in transition.
- The player is now able to spawn on a squad member who’s in a stationary weapon.
- Updated limits to squad spawning in the Squad Spawn Component for “EnemyProximity” and “CombatCooldownTime” values with new values (this is what blocks spawns, putting squadmates in combat when hit):
 - Enemies near the player will now trigger in combat state if <10 meters (was 15 meters).
 - Cooldown for checking line of sight lowered to 3 seconds from 5 seconds. This means we’ll check more often if enemies are “seen” from the squad mate position, improving some of the edge cases where players previously could spawn as the squad mate died.
 - In Combat cooldown lowered to 4 seconds from 5 seconds. In combat now lasts for a shorter amount of time, allowing slightly faster recovery and spawns on squad mates.
- Improved visibility on the Best Squad presentation at end of round animated sequence.
- When a squad gets a new squad leader, we now clear out any previous Squad Order requests that we were storing to check for mutiny.
- When removing a player from a squad, we now demote them from squad leader position if they were one at removal.
- We fixed the issue where a squad could have multiple squad leaders at the same time.
- Invite to squad is now fully functional also for the cases when the sender and receiver are on the same server.

Spectator Mode

First off, we'd like to thank our community for the feedback we've received on Spectator Mode. This is a community driven feature, and we appreciate all your support!

We're excited to present our latest iteration in *Battlefield V*, building on the foundation from *Battlefield 1*, prioritizing readability and usability improvements. Starting with a new controller layout and streamlining the UI.



Some requests are going to require a bit more time, but rest assured they're on our backlog and we're looking into them. We're eager to see all the new screenshots, movies, and cast matches created with the newly improved Spectator Mode!

Change List

- Fixed an issue where terrain textures could look corrupt from a top down view in Spectator Mode.
- Fixed an issue which causes a graphical glitch when spectating soldiers in third person that were using Reinforcements.
- Exchanged Camera Options tab bar icon with a camera icon.
- World icons now won't render if a player is behind an object, when viewing via Free Cam.
- Hide the Depth of Field Bokeh Shapes option for console and PC when post-process option isn't set to Ultra.
- Reduced the camera sensitivity values for better control of movement and speed.

- Reduced the default zoom length for soldiers, when the Director Camera is reset for Spectator Mode.
- Added a default state for the Bomber icon.
- Refined the keyboard input keys for Camera Roll and Camera Up/Down movement.
- Increased the text size of “Waiting for Redeploy” when waiting on a player to respawn.
- Reduced the border selection to just the black borders to better match art direction of the game.
- Removed color picker option to better match art direction of the game.
- Screenshot icon disappears from the button mapping when a controller is enabled, since it is a PC only feature.
- Moved the Tabletop camera slightly closer to the map.
- Moved the modifier button mapping to the shoulder buttons and returned elevation controls back to the triggers to allow for more precision.
- Improved nametag visibility by increasing the scaling distance to 350 meters.
- Players are now outlined when highlighted, as they were in *Battlefield 1* Spectator Mode.
- Replaced the tabletop crosshairs with the same one used on deploy.
- Reduced the time it takes for the UI to disappear when taking a screenshot from Spectator Mode.
- Improved the speed at which objects and characters are rendered while spectating.
- Increased the scale and distance of world icons for spectators.
- Fixed an issue with brightness, contrast, and saturation ranges when viewing from Spectator Mode.
- Fixed an issue where the Player Selection wasn’t displayed in the Squad List when in Freecam.
- Fixed an issue where players couldn’t switch view modes when the UI was hidden.
- Fixed an issue with rebinding a Spectator option that would default to a mouse button keybind.
- Fixed an issue on the Panzer IV where the first-person zoom visual environment would sometimes display while spectating drivers in third-person.
- Fixed an issue where the JU-88 and Blenheim crosshairs were appearing on the gunner seat when viewing in third-person.
- Fixed an issue where the JU-88A was incorrectly named in the player card text.
- Fixed an issue where the first-person camera would not stay attached to certain gunner seats due to inactive animations.
- Fixed an issue where the camera shake and audio for dying would play when switching to a soldier in the first-person after they had been revived.
- Fixed an issue where hit reactions would replay every time Spectators would switch back to players.
- Fixed an issue where dead players could be selected using the 3D selection tool.
- Fixed an issue where lens flares would seemingly display randomly during gameplay when viewing the Table Top.
- Fixed an issue where players could occasionally create a sixth dropcam.
- Fixed an issue where the bottom bar and Options/Help screen would not disappear in time for a screenshot.
- Fixed some graphical issues that could be caused by setting the Spectator Bloom Intensity to a negative value.
- Fixed an issue with the backwards chase camera that would occasionally display in front of an airplane when spectating.

- Fixed an issue where the camera would fade in/out of black while a previously spectated player enters/exits a vehicle.
- Fixed an issue on PC where snow would stop rendering when spectators moved the camera.
- Fixed an issue where drop cameras in Arctic Fjord would sometimes not work.
- Fixed an issue where audio was occasionally not playing when viewing a player in third-person.
- Fixed an issue where additional blur bars were visible in the Squad List.
- Fixed an issue where a loading bar didn't display after swapping weather conditions on a map, in Spectator Mode.
- Fixed an issue where the Follow Projectile Camera would remain active after the projectile was destroyed.
- Fixed an issue where the first-person camera would break when spectating a player on the top gunner spot on Churchill Gun Carrier.
- Fixed an issue where Staghound crosshairs displayed incorrectly in third-person.
- Fixed an issue where the Spectator camera would display under the map after spectated player would die in the match.
- Fixed an issue where the default camera position for the Director Camera was not always behind their subject.
- Fixed an issue where the map appeared gray if the contrast open was set to zero.
- Fixed an issue where adjusting chromatic aberration and aspect ratio values by 1 point would take several key/button presses.
- Fixed an issue where Spectators were unable to scroll down the Squad/Player lists.
- Fixed an issue where crosshairs and hit markers would occasionally not display for first-person spectators.
- Fixed an issue where visual environments would override Spectator's exposure settings.
- Fixed some issues where text was cut off or overlapped each other in button prompts and button guide screens.
- Fixed an issue where resetting the Field of View only reset the value and not the camera.
- Fixed an issue where the spectator could not reset tilt/roll on the drop cameras.
- Fixed an issue where bomb icons would minimize when changing spectator view.
- Fixed an issue that prevented players from rebinding keybinds for Spectator controls on the mouse and keyboard.
- Fixed an issue where Axis players were inadvertently highlighted blue upon selection, when no squad was selected.
- Fixed an issue where the Staghound T17E2 was incorrectly named in the Spectator player tab.
- Fixed a typo in the first-person HUD description in the Player View.
- Fixed an issue where spectators could not select players from the tab screen.
- Fixed an issue where the Player List would briefly delay appearing after the spectator chooses to expand a squad in the Squad Selection List.
- Fixed an issue where the wrong descriptions were displayed for "rotate camera up/down" and "rotate camera left/right" in the Button Guide screen.
- Fixed an issue where the "Bleeding Out" text was overlapped by Spectator UI.
- Fixed various header and text scaling issues in Spectator Options.
- Fixed screen layout issues when the Spectator menu bar is displayed.

- Fixed an issue where the follow camera would not remain on a player while using the parachute.
- Fixed an issue where the Camera Roll UI would reset to zero when switching between view options, by removing the roll property reset function.
- Fixed an issue where the wrong perspective was shown when switching from third-person to first-person while viewing the gunner seat of vehicles.
- Fixed inconsistency issues between third-person and first-person versions of the World Icons.
- Fixed an issue where spectators occasionally experienced shaking cameras when viewing players in first-person.
- Fixed an issue where the mouse cursor (PC players) was hidden in Spectator Mode when the Origin overlay was active.
- Fixed an issue where rotating the camera with a mouse would unintentionally update the roll value in the options.
- Fixed an issue where updating the roll value in the UI would be delayed and occasionally not save correctly.
- Fixed an issue where resetting the Director Camera would not update the roll values and zoom values correctly.
- Fixed an issue where the first-person camera would occasionally detach from the subject when switching between the driver and passenger of a vehicle.
- Fixed an issue where objects would pop in while spectating a player in the death experience.
- Fixed an issue where modified filters and resolution scale would apply to the frontend after exiting a server as a spectator.
- Fixed an issue where the incorrect button prompt was displayed for zooming out in Spectator Mode.
- Fixed inconsistency issues with the bombsite world icons and minimap icons for the Airborne game mode when spectating.
- Fixed an issue where Spectator Mode key bindings would not work when switching between mouse and keyboard and controller on PC.
- Fixed an issue where the spectator would see an incorrect revive icon when the viewed player was in a downed state.
- Fixed an issue where interactable icons were displaying as solid circled to the spectator.

Dynamic World

Dynamic world is the all-encompassing name for the interaction between the player and the world. It consists of the areas destruction and debris damage, Fortifications, interactive content such as doors, resupply stations, placed fires, and oil, terrain deformation and material interaction, window vaulting; weather and bullet penetration. The area is what happens outside of the core loop of weapons, gadgets, and vehicles.

Release Features

Bullet penetration

- Full pass on assets and bullet types for correct material behavior.
- Reduced penetration relations for sniper rifles.

- Added MG penetration to barricades.
- Allowed higher penetration for window fortifications from more weapons.
- Added thin metal material for damage and bullet penetration.
- Did a detail pass on all building materials for correct foundation penetration (split into wood, brick/concrete and corroded metal buildings).
- Fixed doors for consequent penetration from all weapons.
- Did a vegetation penetration pass.
- Did a visual pass on bullet decals and effects from penetrating or stopped bullets (will be tweaked further in upcoming patches).
- Did a specific pass to get accurate penetration for all railings in the game.
- Set up throwing knife to not pass through a multitude of materials.
- Fixed wrong material on wooden barricades (created new damage material specifically for wooden barricades).
- Fixed M30 Drilling penetration issues (The damage was too low per bullet. It will now go through doors).

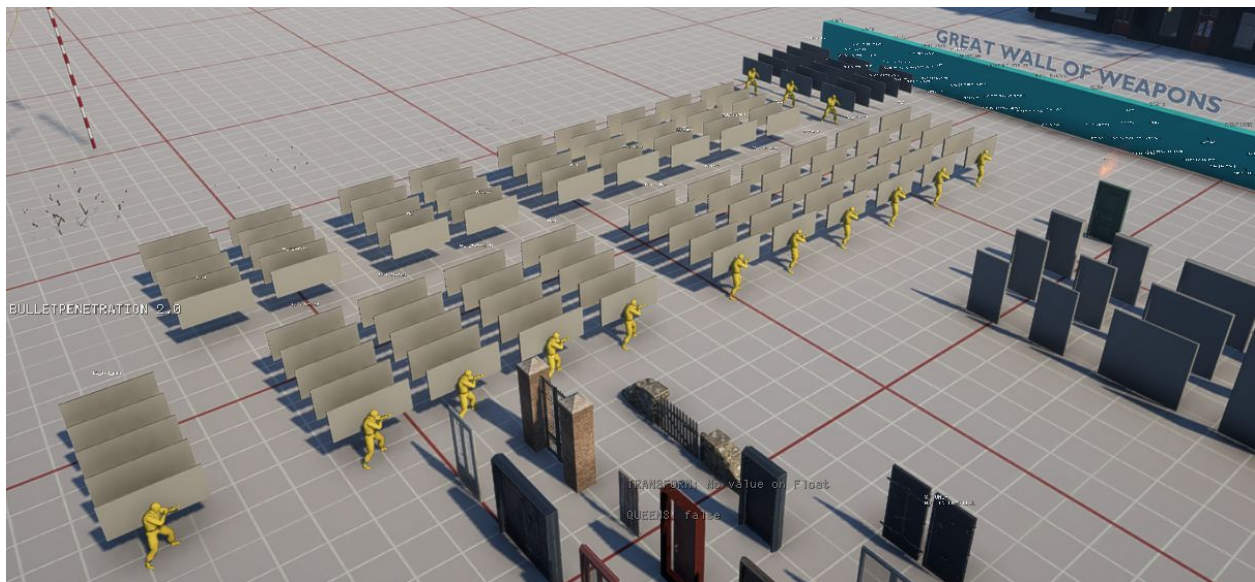
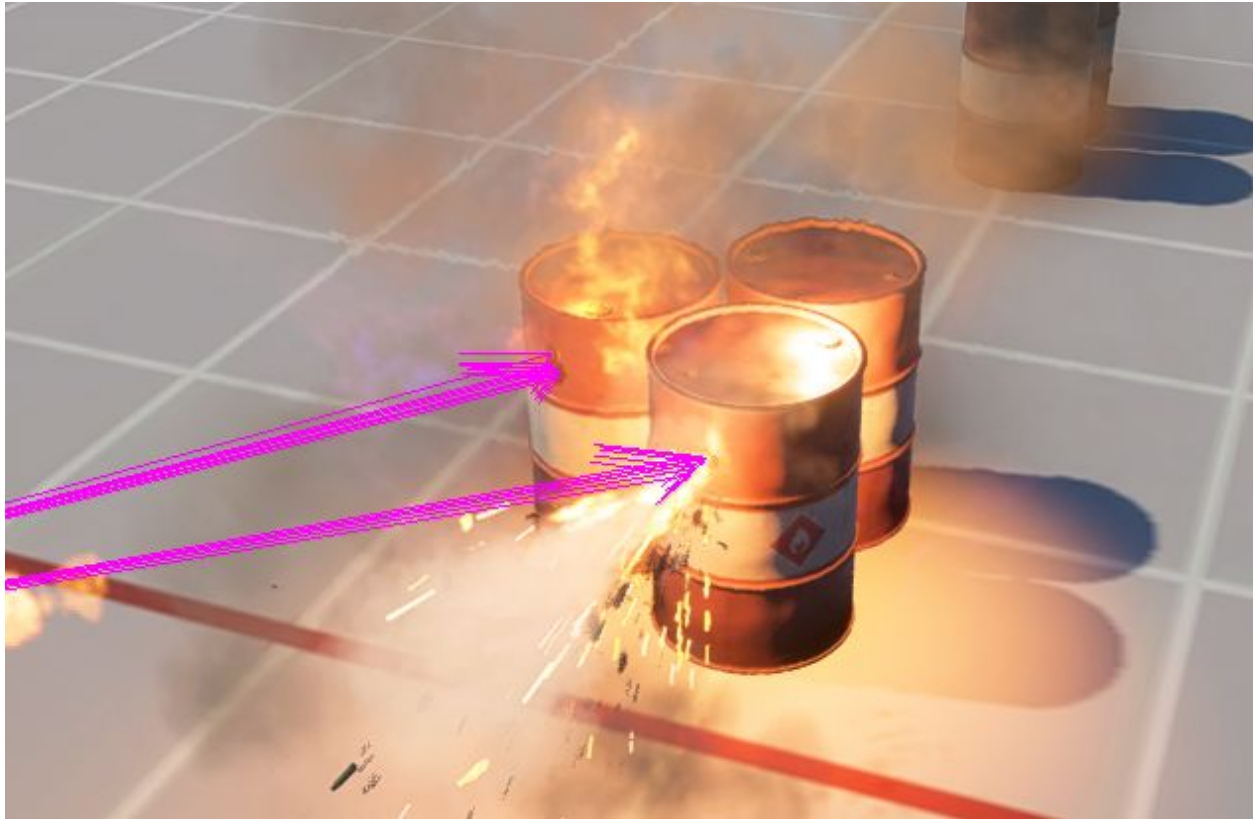


Image: Bullet Penetration 2.0 test range.

Destruction and Assets

- Added destruction on static vehicles (trucks and civilian cars now has a crush/explode functionality).
- Did a general optimization and Level of Detail (LOD) pass on assets to improve performance.
- Allow barricades to break down from heavy MG bullets (wood breaks down from infantry, sandbags break down from vehicle weapons).
- Added damage from debris.
- Did a window vaulting and destruction pass on all levels.
- Setup and adjusted barbwire functionality (damage is only dealt inside barbwire volumes, not from fences. We also made sure barb wire bundles are un-vaultable.)
- Tweaked full damage distance for explosive barrels to accommodate for more “domino effect” gameplay.

- Gave lower health to barb wire poles to break them down more easily with vehicles and explosives (not frag).
- Players are now awarded kills that are achieved through level destruction.
- The Impact Grenades now deal destruction to objects such as planks and wooden crates.



Fuel asset hit FX and destruction countdown.



Domino effect and new ground fire splash fire VFX.

Terrain

- Did a crater size and behavior pass for all terrain materials.
- Added feature for better creation of craters in slopes and crater on craters (to avoid getting stuck in craters that are too deep).
- Added “up only” crater feature to allow more craters in asset-heavy areas.



Full range of craters for the Mid-European biome.



Craters adjusted for cover heights, squad size, and soldier stances.

Fire

- Fire explosives and flamethrowers now remove grass and similar underbrush.
- Reduced fire damage from regular and intense fires in the world, and from splash fires (future patch will also deal with multiple fire sources exploit).
- Terrain fires and fire explosions got a visual upgrade.
- Fuel barrel hit VFX and explosion got a visual overhaul.
- The statue on Rotterdam can no longer be destroyed by only fire damage.
- Blocked flame projectiles to reach underwater surfaces.
- Added support for continuous damage over time with gradual increase when the target stays within an Area of Effect (Fire) radius.
- Made first-person fire damage sounds for new fire damage system.
- Removed damage direction indicator from fire and gas sources.
- Tweaked stance affectors for fire:
 - There are three fire “classes”: Smoldering (less than boot high), Regular (knee to waist), Inferno (chest to head), in addition to projectile flame damage and explosion fire damage.
 - Players can now only take damage from smoldering fire when prone or crouched.
 - Players receive less damage when sprinting through all kinds of fire.
 - Players receive even less damage when jumping through all kinds of fire.
 - Players receive extremely high damage when prone inside intense fire.

Doors

- Fixed server/client state mismatch from Open Beta.
- Added support for hatches on Twisted Steel map.
- Door interaction is now disabled from occluding objects.
- Overhaul of door system to allow more assets in level.
- Fixed disappearing door UI bug for consoles.

Weather

- Reduced time of presence for Sandstorm on Halfaya to 100-240 (max 180 for long modes) seconds before autoswitching.
- General pass on reduced time to transition for extreme weather states.
- Packaged specific weather states for Airborne and Final Stand game modes.
- Higher likelihood for base weather and lighting for long Conquest and Breakthrough matches.

Fortifications

- Visibility pass on supply stations after open beta.
- Added “unbuilt” foundation asset to all supply stations.
- Added new two-tiered fortification; players can now build sandbags on certain sandbags previously built by other players (to create “gun ports” and MG nests).
- Changed class requirement for “who can build what” and setup different points award per class.

Class	Fortification	Type	Tool/Animation	Season
Barbwire	Barbwire bundles	GENERIC	HAMMER	Release
Barricades	Sandbag walls	GENERIC	SANDBAG	Release
	Tank trap Girders	GENERIC	SHOVEL	Release
	Tank blockers	GENERIC	TROWEL	Release
	Debris barrier	GENERIC	HAMMER	Release
	Boarded Windows	GENERIC	HAMMER	Release
Supply	Ammo Supply Station	GENERIC	HAMMER	Release
	Health Supply Station	GENERIC	HAMMER	Release
	Vehicle Supply Station	GENERIC	HAMMER	Release
Terrain	Trenches	GENERIC	SHOVEL	Release
	Foxholes	GENERIC	SHOVEL	Release
	Piles	GENERIC	SHOVEL	Release
Traversal	Bridges	GENERIC	HAMMER	Release
	Walkways	GENERIC	HAMMER	Release
	Ladders	GENERIC	HAMMER	Release
Weapon	Stationary AT	SPECIALIZED	WRENCH	Release
	Stationary AA	SPECIALIZED	WRENCH	Release
	Stationary MG	SPECIALIZED	WRENCH	Release
Other	Easter Eggs	Individual	Special	
<i>Repair</i>	Vehicles	SPECIALIZED / DRIVER	BLOWTORCH	Release

Fortification classes and tool type used for interaction.

Role	Ability	Default tool
Assault	GENERIC	HAMMER
Scout	GENERIC	HAMMER
Medic	GENERIC	HAMMER
Engineer	GENERIC SPECIALIZED	HAMMER
Driver/Pilot	GENERIC DRIVER	BLOWTORCH

Class fortification toolbox.

Audio

Audio direction in *Battlefield V* is to make it sound more real than before, and since we're dealing with sounds that span from a leaf falling to V-1 Rocket explosions, we need to make as much as possible with the fairly small dynamics at hand, namely a pair of speakers or headphones.

We have therefore pulled the dynamics apart as much as possible, making the quiet sounds much quieter and the loud sounds loud. This will emulate the real world to a higher degree than ever before.

We have also recorded everything possible to get closer to the real thing. From ambiences to explosions, via weapons, bullets, vehicles, foley, you name it.

So, crank it up and you will experience a frightening, impactful experience of war!

3D Headphones

In *Battlefield V*, we have added a new way of simulating positional audio that is much more efficient. We highly recommend using the “3D Headphones” setting to better distinguish what spatial direction sounds originate from, for example enemy footsteps, windows breaking on the second floor back window of the house in front of you, etc.

Change List

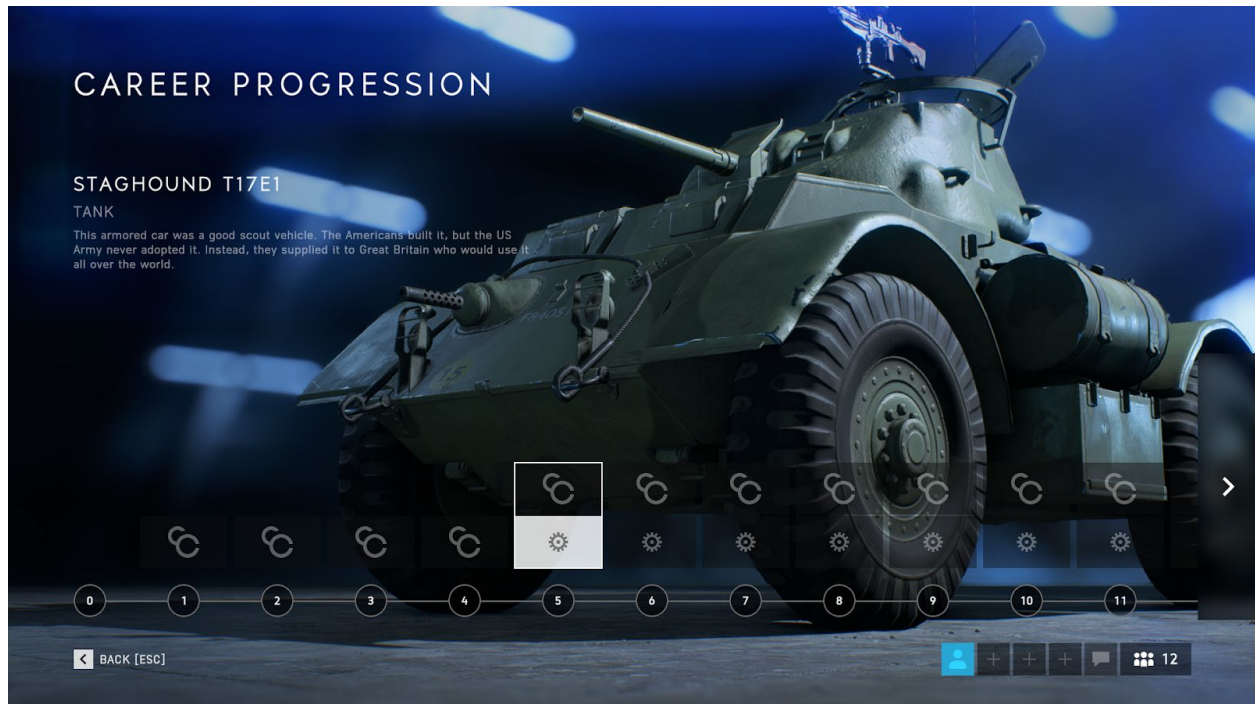
- Improvements have been made to make combat more audible around you.
- Added binaural headphone mix that simulates two ears on a head. This gives a much better directional sense of the sounds playing in the game.
- Fixed a memory leak in the sound manager.
- Updated Flag Captured sound.
- Updated Flag Interact In and Out sound.
- Updated Losing Flag tick sound.
- Tweaked Vehicle MGs firing sound balance, fixed bug where passengers wouldn't hear each others' weapons.
- Added First Person Footstep Bass Presence sound to give more consistent weight to first person footsteps regardless of ground material.
- Added the classic *Battlefield* theme to the main menu.
- Added additional sounds and variations for explosions.
- Added a little bit of delay to audio events to avoid voice over player over each other when they are triggered in a quick succession.
- Fixed an audio issue that would play the wrong voice over near end of round on Airborne.
- Fixed an issue where the first death voiceover would incorrectly play.
- Various fixes for voice overs on Frontlines when doing mission objectives.
- Added reinforcement UI sounds.
- Decreased occlusion and obstruction on vehicle explosions and anti-vehicle explosions.
- Added duplicate spawn strategy to explosion scope to prevent crazy stacking of explosion sounds.

- Fixed an issue for audio where vehicle damage events were overwritten by soldier damage events when killing soldiers inside an exploding vehicle.
- Added logic for auto detecting output configuration.
- Fixed an issue where third person footstep sounds didn't have a DefaultStartEvent and DefaultEnterScopeEvent, which sometimes caused silent footsteps in certain situations.
 - Doubled the amount of potential footstep sounds from 4 to 8 closest origins.
 - Updated the footstep vs material mix to make them more audible.
- Fixed an issue where female soldiers used male voice over when calling for help in downed state.
- Fixed an issue where voice over had too many active triggers resulting in the next active triggers to be ignored, and a very silent *Battlefield*.
- 3D headphones: Quad channel audio sent to object output is no longer folded down to a single mono emitter when using binaural processing. Using the multiband processing in this situation also, for better end quality of 3D audio.
- Adjusted kill score and killed by headshot sounds to better sit in the mix with certain louder weapons.
- Adjusted Front End music levels.
- Tweaked Hit Indicator Impacts for better audibility.
- Tweaked Soldier Death Screams attenuation and filtering.
- Added panning bias for bullet flyby sounds towards the shooter so that the player cannot get a hard left panned flyby from a shooter standing to the right.
- Added kill count voice over for sniper headshots.
- Mixed land vehicles to have a non HDR radius for vehicles that are close to a player, making them more audible in a loud environment.
- Added unique player hit sounds for limbs, torso, and head.
- Adjusted the Night mode and War Tapes to compress the dynamic range in order to work when listening on lower levels.
- Fixed engine ignition sound issue before enter animation is done.
- Added screaming for help voice over when in man down state.
- Added foley to man down state.
- Added logic for squad order sounds to tell you in Morse what objective to attack or defend.
- Updated pad rumble for vehicles.
- Fix for panic breathing not triggering if grenade had a collision before reaching the trigger radius.
- Fixed incorrect death type sound to trigger when hit by explosive shells.
- Fixed vehicle repair sounds being inaudible for anyone not in the vehicle.
- Added rarity sounds to reveals in the armory.
- Added specific damage sounds to all different vehicle parts that can be damaged.

Your Company and Assignments

We have made several improvements since the Open Beta to how you manage your company and Special Assignments, and these are some of the highlighted changes.

One key addition is the ability to view each items progression journey straight from the Company screen. Click the “progression” button to see that item’s individual progression journey.



Change List

- Items should now appear more sorted in lists, making it easier for you to manage each inventory.
- You can now double-click inventory items on PC to equip them.
- Improved the button layout for footer buttons on console.
- Improved the UI for the Specialization tree to better indicate which paths you can choose, when you can reset your Specializations, and the cost of each item.
- Changed button prompt for rotating camera in customization screen (you can rotate things now!)
- When assignments are activated they now visually appear in the slot that the user selected.
- Assignments are now easier to track in-game, with updated visuals for their progress.

Main Menu

We've made several improvements to enhance the experience of browsing the main menu. These are some highlights:

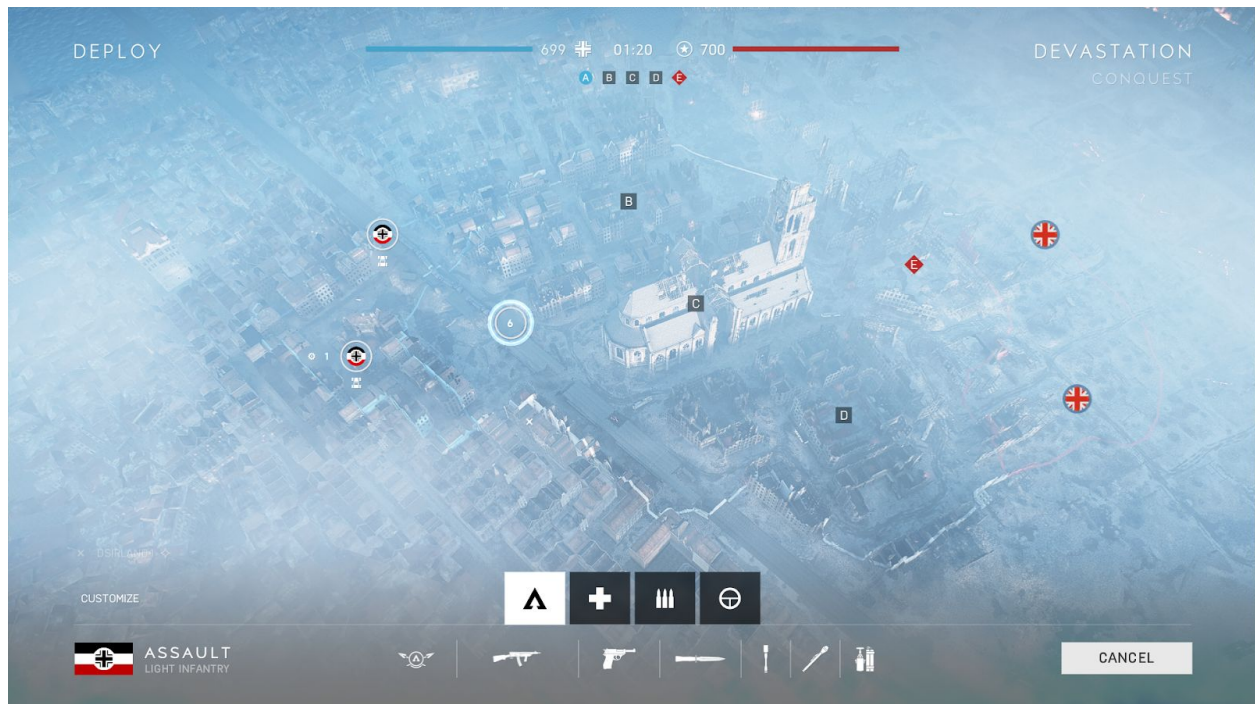
- On console, the navigation should now properly remember your previous selected states when moving back in screen navigation.
- PC players can now access the "quit" button without opening the *Battlefield* menu.

UI/HUD

UI and HUD has seen a lot of iteration, addition and changes since the Open Beta. Below are some of the key areas we've been focusing on.

Deploy Screen

- Previously a squad mate could be marked for deploy even though deployment wasn't available. This has now been solved and the marker will only be present when a squad mate is available (not in combat etc.) to deploy on.
- The deploy button in the Deploy screen has been polished and no longer looks disabled when it's not. It now looks active when it's possible to deploy.
- The "random deploy" selection in the Deploy screen didn't scale correctly with different resolutions, leaving it off center at times. This has been fixed and the icon will now center properly.
- The combat area lines are more prominent and visible on the map in the deploy screen.
- The red "alert" header (shown in the Deploy screen as well as the Squad Camera screen) didn't scale properly with ultra wide screens and different resolutions.
- Fixed an issue where the mutual border line between the Axis forces base and the combat area had the combat area color instead of the base border color.
- Players are now able to replace vehicles in the deploy screen.
- Deselects base vehicle spawn points when no vehicle is available.
- Vehicle seat information has been added to spawnable vehicles in the deploy screen. X/Y represent occupied seats out of Y available. This is so that players will understand why they sometimes end up outside of a vehicle when spawning – it's due to all the seats being currently taken.
- Added a countdown timer in the Deploy screen.
- Players won't be able to spawn until the persistence data is downloaded.



Health bar

- The health bar now shows both the regular health as well as the regenerated health in two different colors. This, we believe, will help players understand how much they can regenerate and what they can expect from different choices/actions in game.

- Next to the health bar the player's own Medic Pouch is visible. This lets the player know when self-healing is possible and not. If a Medic Pouch is available it will have a number next to it and if not, the icon will be faded with the number 0.



Health bar in the HUD.

HUD

- The in-world objective animations have gotten a polish pass.
- The “pick-up” icon radius has been reduced in an attempt to reduce HUD clutter when not necessary.
- The “interaction” icon has been improved when it comes to distance scaling. It should be clear to players which icon is the closest one to interact with.
- Some tooltips have been rewritten and iterated on to make them both easier to understand and faster (shortened) to read. For example, the tooltip for how Ammo Crates work is now much clearer.
- During the Beta we had an issue where Medics were shown hints specific to the Support class. This has now been fixed and each class will see their respective hints.
- The possibility to show the weapon name in the Kill Log have now been added as an option. Players can choose to see:
 1. Weapon icon
 2. Weapon name
 3. Weapon name + Icon
- We’ve decreased the time it takes until the Dog Tag shows after the player manages to do a melee takedown. This was previously queued and shown when the player was “out of combat”. But, since performing a melee takedown is considered being in combat, this state is now ignored and the Dog Tag award will show much faster.

- The “award” moment in the HUD was a huge topic after the Beta and this has now been toned down quite a lot. The award moment is now much smaller and will never surpass the crosshair. There are also different animations depending on the reward type. A medal has a much grander visual representation than a ribbon, for example.
- Enemy icons have been removed unless they’re spotted. Previously the spotted enemy icon has been visible through smoke as well, but this has now been fixed. Enemy icons are no longer visible when obstructed by smoke.
- When a player manages to take out the last member in a squad and gets a squad wipe, the number of squad members in that specific squad shows in the score log (represented with a number of crosses - 2, 3, or 4).
- Updated how critical messages are handled in queues for objective introductions to never lose any information during busy periods.
- Kill feed bug fixed; skulls now stack horizontally.
- Score log: added a small delay for the majors so we can queue multi-kills slightly. Also added a short fade to better handle multi-kills.
- Score log icons and major/minor events got a slight polish pass.
- Tooltips with text now have a darker backplate for added readability.
- Polish for the squad list and the timers showing the squad members’ health and bleeding out status.



Kill Card

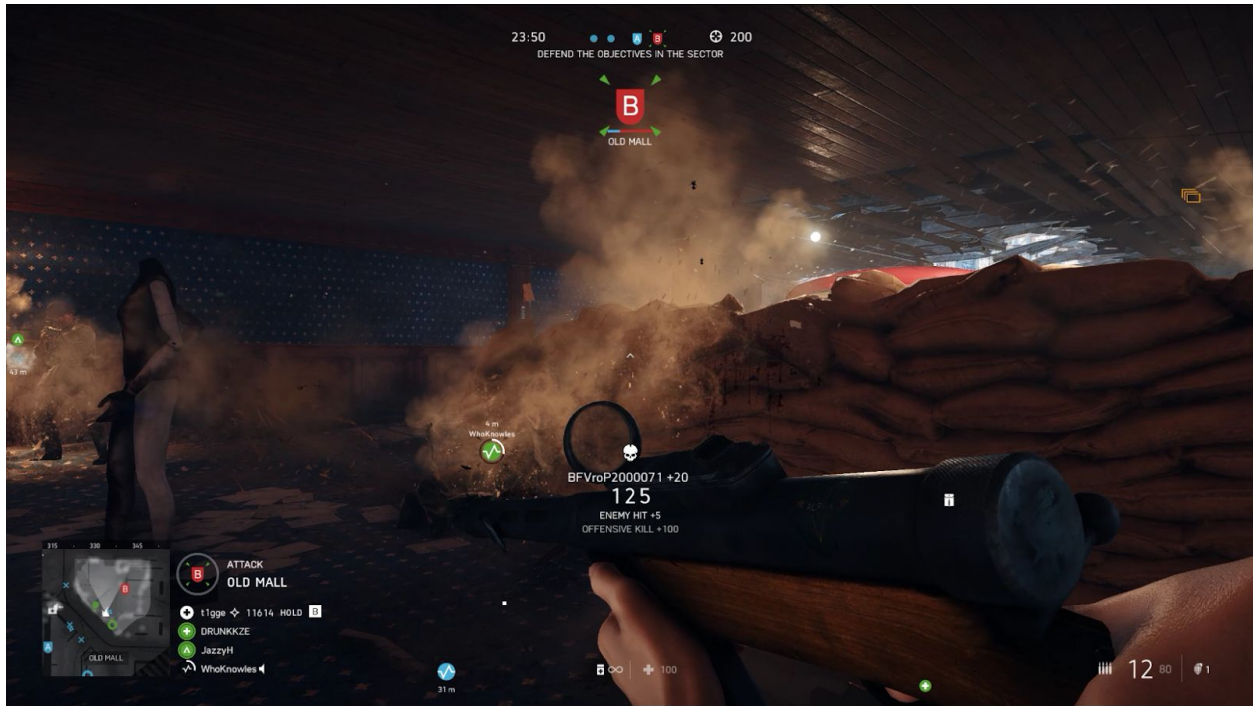
- The Kill Card now shows soldier rank, class rank, and weapon rank.
- If you got killed by a headshot or through a wall, a respective icon representing this will be shown.

Options

- Updated the HSL for our color indicators to match the RGB. Default options changed include - Armor Hit, Headshot Hit, Hit, Colorblind Neutral, and Crosshair.
- Chat visibility default set to "When active".
- "HUD Motion": Option to turn off HUD motion.
- "HUD Shakes": Option to turn off HUD shakes.
- "Kill Log Weapon": The possibility to show the weapon name in the Kill Log have now been added as an option.
- "Score Log Weapon Name": Show the name of the weapon you just killed someone with.
- "Overlay Shadow Strength": The amount of shadow on UI elements/text when on top of a bright background. Set to 40% as default.

Revive

- The revive icon has been improved since the Beta. Revive icons now have three states:
 1. Normal size – No actions taken.
 2. Larger size/Pulsating – Calling for help.
 3. Smaller size/Faded – Skipping revive.
- If a player calls for help while in being downed, nearby revivers will also get voice over callouts. As a reviver (squad mate or Medic) you can spot/tag a downed player and they'll be notified in the man down screen. Revivers "accepting" a revive will be listed under "INCOMING".
- Downed players outside a radius of 50 meters will not be visible in the HUD since a reviver won't have time to reach them before bleeding out.
- The button prompts have been switched around in the man down screen (calling for help LMB and skipping RMB on PC). This change is because we want the initial reaction (muscle memory normally defaults to LMB) to be the positive one – calling for help rather than skip the revive opportunity.



Scoreboard

- The scoreboard has been optimized and is now faster to open. In previous titles there has been lagging a few frames leaving it feeling sluggish. This is now fixed and opening the scoreboard is now a smooth experience.
- Downed players are now easy to recognize and separate from dead players. Squad list on Deploy, HUD, Squad Camera, Man Down, and the Scoreboard are represented with an ECG icon.

UNITED KINGDOM
FOX

22:18 164

DEFEND THE OBJECTIVES IN THE SECTOR

DEVASTATION
BREAKTHROUGH

DEFENDING FORCES

CLASS K D SCORE LATENCY

4	2	13	WhoKnows	✦ 12	3	4,454	24
3	21	ScullyK	✦ 15	7	3,739	26	
4	33	tlgge	✦ 8	4	3,404	34	
5		BFVroP2000052	✦ 7	7	3,425	25	
6	15	oscarjohansson	✦ 8	5	3,215	27	
7	13	Parsley	✦ 6	4	3,187	22	
8	7	alorentzen	✦ 10	3	3,015	22	
9	4	BFVplay0249	✦ 13	2	2,764	26	
10		BFVroP2000050	✦ 9	7	2,573	25	
11	10	JazzyH	✦ 4	3	2,558	22	
12	3	BFVplay0455	✦ 9	3	2,172	26	
13		BFVplay0468	✦ 5	5	1,933	25	
14		BFVplay0270	✦ 7	5	1,897	22	
15	4	BFVroP2000040	✦ 4	6	1,807	36	
16	4	BFVroP2000033	✦ 5	7	1,798	37	
17	3	BFVroP2000063	✦ 1	7	1,354	36	
18	3	BFVroP2000045	✦ 4	8	1,292	36	
19	3	BFVroP2000077	✦ 0	8	1,263	36	
20	2	BFVroP2000060	✦ 3	6	1,233	36	
21	5	BFVplay0229	✦ 3	5	1,039	23	
22	3	BFVroP2000031	✦ 3	4	988	36	
23	4	BFVroP2000069	✦ 4	6	965	37	
24	5	BFVroP2000039	✦ 2	7	960	36	
25	6	BFVroP2000044	✦ 3	4	949	36	
26	9	DDixon	✦ 3	5	855	21	
27	4	BFVroP2000038	✦ 1	0	795	36	

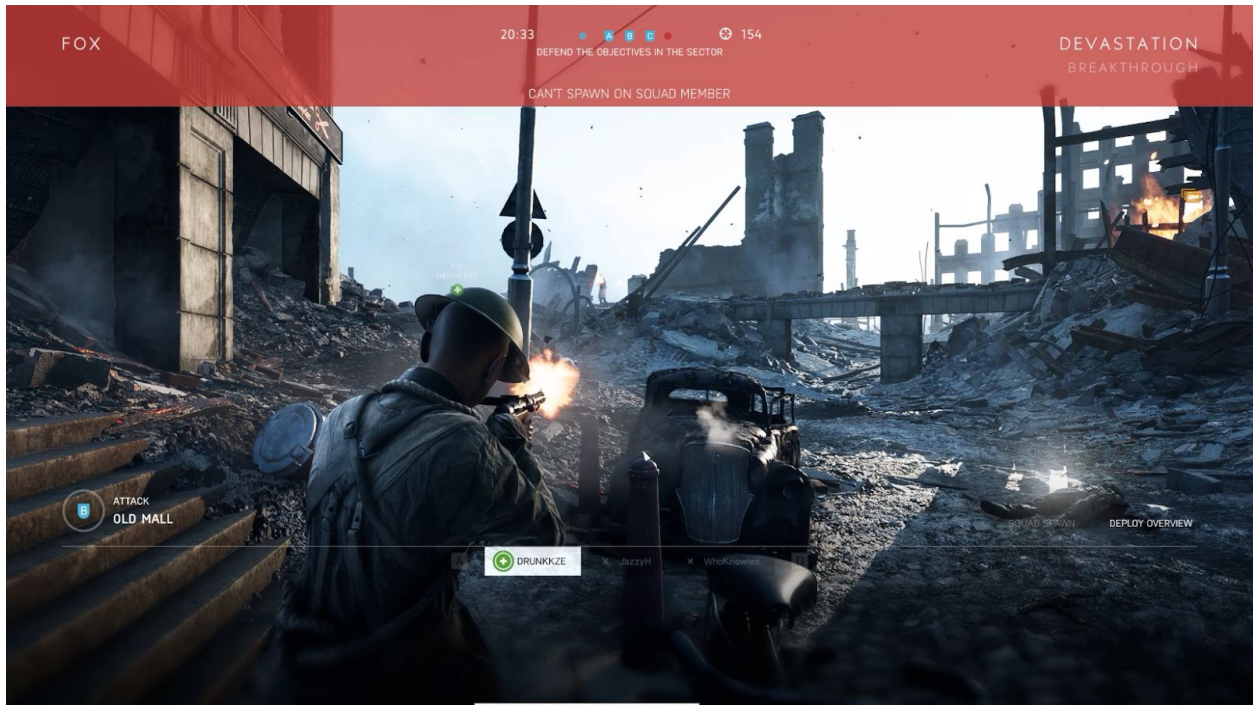
ATTACKING FORCES

CLASS K D SCORE LATENCY

1	1	dg334	✦ 17	5	5,359	23
2	26	SourMolk5	✦ 11	4	4,452	23
3		BFVplay0261	✦ 17	9	4,104	21
4	1	BFVplay0452	✦ 20	4	4,079	27
5	17	BillyBattlefield	✦ 13	5	4,077	22
6	1	BFVroP2000070	✦ 15	9	3,932	36
7	7	BFVroP2000083	✦ 6	6	3,644	37
8	5	BFVplay0238	✦ 7	8	3,180	26
9		BFVplay0494	✦ 8	5	2,797	23
10	3	BFVroP2000035	✦ 8	6	2,745	36
11	1	BFVroP2000081	✦ 4	7	2,216	46
12	7	BFVroP2000046	✦ 4	2	2,132	36
13		BFVroP2000041	✦ 8	9	2,052	36
14	21	Hook	✦ 4	2	2,011	23
15	7	BFVroP2000048	✦ 2	4	1,750	36
16	1	BFVroP2000034	✦ 5	6	1,709	36
17	14	Rektorn	✦ 6	7	1,571	24
18		jeam	✦ 3	5	1,458	25
19	7	BFVplay0345	✦ 4	6	1,312	24
20	1	BFVroP2000023	✦ 4	0	1,276	37
21		BFVroP2000059	✦ 1	3	499	38
22	1	BFVplay0378	✦ 8	4	1,176	25
23	3	BFVroP2000013	✦ 1	2	797	36
24	1	BFVroP2000076	✦ 3	0	712	36
25		BFVroP2000049	✦ 1	3	499	38
26	1	BFVroP2000071	✦ 1	4	415	36
27	1	Kenitane	✦ 1	1	333	22
28		BFVroP2000062	✦ 0	0	60	37

Squad Camera / Parrot Cam

- Added logic to hide top game mode info if kill log is enabled.
- Fixed an issue where the squad cam overview UI overlapped squad names in certain screen aspect ratios.
- Squad member names are listed next to each other and shows the kit and health of the player. The player can now be spawned on by double clicking the name and they can be stepped through by using A/D on PC.



White on White Readability

One big issue we've had with the UI was the readability of white text on bright backgrounds. This was a problem both in the Alpha and Beta. This has, however, been solved for launch with something we call "Adaptive Shadow System". This means that whenever the background is white enough, a drop shadow is added to this specific area and UI to make the elements stand out a little bit against the background, making it readable. This is a post processing effect. That means that this solution will work on all the elements in the HUD.

The amount of shadow is a player options, set to 40% as default. This means that players can chose the amount themselves and find a number that suit them.

Long term Player Friction

An ongoing long term effort internally is to improve, stamp out and outright remove what we call *long term player friction*. In this category we place things like:

- Soldier collision, traversal, and getting stuck.
- Bullet collision and bullet penetration.
- Netcode, input latency, and server tick rate.

- Accessibility and gameplay customization.

All these things have a few things in common: they are notoriously hard (or impossible) to completely remove the impacts of. Once you reach a good level, you need to continuously maintain that to not deteriorate over time with the addition of content, features and optimizations.

Soldier collision, traversal, and general movement have taken several massive steps in *Battlefield V*, and we are committed to continue to improve on this, and when we add in new features in this area we'll make sure they always improve the soldier experience as a whole, as well as make the feature solid, responsive, readable, and fluid.



Bullet penetration has been added systematically in *Battlefield V*. This means that if you expect to shoot through something, you probably can. We've worked hard to make sure this rings true, and that the effects and sounds inform players of what's happening (when bullets are penetrating, and when they're not).

In cahoots with bullet penetration comes general bullet collision. In maps as big as *Battlefield* maps, this has always been an issue. We've taken extensive steps to scrub through all our playable spaces, and the objects within to reach consistency and clarity well above what we've ever shipped for *Battlefield*.



Debug lines showing bullet penetration trajectory paths.

When it comes to Netcode, our goal for launch is to be on par with *Battlefield 1* in its current state. And that's just the start, we are always looking to improve and up the quality of our networked gameplay.

Server tick rate is another super important, top priority item for us. At launch our PC servers will run at 60hz, and our console servers at 30hz. Going forwards, long term we'll spend time and effort investing in making these values adaptive, allowing us to tune tick-rate based on parameters like max players on server, allow for bigger max player counts, allow much higher

base tick-rates at smaller sizes (120hz for <16 players on PC is already possible) etc. Expect more information on this subject in the future!

Lastly, we are introducing a lot of new features with *Battlefield V* and with that we also want to make sure we are correctly covering accessibility and allowing players to have a great level of customization over those features. We will continuously add more control and gameplay options (for new features like sliding, crouch-sprinting for instance) but also expand on some of the basic or more advanced options for both console and PC.

Change List

- Improved hit indicator behavior and removed any fade-in that could be seen as a delay, this makes hit indicators fully visible 33ms earlier.
- Performance optimizations to fortifications system.
- Performance optimizations to fog volumes.
- Improved how doors behave in the case that a player should suddenly suffer from packet loss.
- Improved movement for airplanes, should no longer stutter during networked flight.
- Optimizations for the lens flares.
- Easy on the eye: Made so certain screen effects are not played when lens distortion option is off. Also tweaked the camera screen effects.
- Toned down 1P muzzle flashes a bit to not blind players in dark areas.
- Improved door interaction packet loss handling. This should work much better now.
- Optimized low level client-side networking performance.
- Fixed a crash related to networked "ghosts".
- Optimized the bandwidth used for networking all active unlocks to all players.
- Fixed a server and networking performance issue that occurred when a player left a match.
- Fixed so that the correct server instance ID is displayed under the network performance graph.
- Fixed an issue where vehicle parameters weren't networked properly (like turrets aiming etc.).
- Tweaked cull screen area setting to limit invisible soldier parts in game (for cosmetics).
- Fixed issue where the health of a physics object could go out of sync (destruction).
- Added support for correctly networking 3P slides.
- General server performance pass to allow 60hz server tickrate and beyond.
- Fixed an issue where soldier collisions could end up out of synced with the animations causing all kinds of havoc (especially bad for revives).
- Added logging for player ping site and latency when logging in to online.
- Fix for client-sided projectiles generating hit reactions when hitting the player without dealing damage.
- Improved the networking of 3P prone soldiers.
- Fixed an issue where projectiles could end up being culled (visually) when firing happened off screen.

PC Specific Improvements

The PC platform has several unique traits, and it requires us to double down on stability and customizability of your experience, while still staying bleeding edge technically.

Battlefield V is continuing the DICE legacy of great PC experiences, and here are the most important fixes since Open Beta.

Change List

- Video options are now locked if the user selects any "AUTO" preset.
- The V-Sync option has been let free, and can now be adjusted individually when selecting graphical presets except when using the "Max fidelity" and "Min Latency" presets.
- AUTO Min Latency and AUTO Max Fidelity now properly set Motion Blur and update other video option slider values correctly.
- Fixed an issue with the Future Frame Rendering advanced video option (causing it to not apply correctly).
- Implemented a fix for LogitechLED implementation causing an issue.
- Fixed a DX11 Out of Memory crash happening on level unload.
- Fixed an issue where going fullscreen on novel screen layouts would cause a failure.
- Added AUTO preset support for nVidia's 2070, 2080, and 2080 Ti GPUs.
- Fixed an issue which could result in the player losing keyboard and mouse control when pressing the windows key while the Origin in-game overlay was active.
- Optimizations to our Ray Tracing implementation which reduces the GPU memory allocation by around 500mb when playing at 1080P.
- Multitude of various PC specific performance and stability improvements.

Other noteworthy changes

General improvements without a clear home, but important enough to get mentioned!

- General stability improvements to both the client and the server.
- The scoring event for Fortifications is now based upon the Fortification's health and ranges from 5 to 100. Was previously set at a static 25 points.
- Decreased the score for enemy suppression from 50 to 10.
- Melee kill bonus has been decreased from 25 to 20.
- HDR settings are now saved and no longer reset if the player reboots the game.
- Restricted the minimap option scaling from 200% to 150%.
- Improved snow impacts VFX across the board.
- Lowered the max minimap scaling option from 200% to 150%.
- Removed the ban for "Pineapple on Pizza". Pizza freedom is something we take seriously, if you enjoy it you should probably keep doing it! (Even though it is questionable).

Anti-Cheat and Toxicity

For *Battlefield V* we are continuing our long-standing partnership with FairFight.

During the beta, the Anti-Cheat teams here at DICE and EA were busy monitoring the live game environment for any security vulnerabilities, specifically from cheats or in-game exploits. We

took several key takeaways from the beta that we are now driving in partnership with FairFight. Primary being to solidify our detection effectiveness going into launch.

Along with planned improvements to our communications flow to the *Battlefield* community, we will continue to work hard over the launch period and beyond to ensure we create a fair and safe environment for all our players throughout the life of *Battlefield V*.

Updates to the Chat profanity filter

EA and DICE are committed to combat player toxicity in all its forms. In this release we've addressed some of the feedback we've received about the profanity filter being too sensitive and even wrong in what words it filters.

It's important to remember that this is an iterative process, so keep sending us feedback and let's keep the dialog open. Let us also underline that EA and DICE are completely committed to free speech and an open debate in our games but will never condone toxic player behavior or hate speech.

Planned Features

In the Open beta patch notes, we discussed a few planned features, currently in development - here's an update on where we stand with these!

Console Aim Assist Revamp

Removed Snap-To (rotation) functionality completely and polish remaining Aim Assist systems and curves to quality.

Status: Implemented for launch.

Limb Penetration Damage Model

We have implemented a solution that will allow limb bullet penetration which solved situations where a soldier's arm is in the trajectory of a bullet that was intended to hit a head. In those cases, damage will no longer count as a limb shot but as headshot instead.

Status: Implemented for launch.

New Ground-Based Airplane Resupply Station – the Sky hook

To resupply, Airplanes will now have to fly very near or through a “sky hook” gate on the ground – two masts with a hanging cable connecting them. They are usually found around the edges of the map and will show up in the HUD with the ‘supply’ icon when in an airplane.

Status: Implemented for launch.

Gunner Crouch Support

Allow tank top gunners to crouch (as in *Battlefield 2*) in tanks as well as stationary weapons.

Status: Tank top gunners targeted for Chapter 1, stationary vehicles variant still in development.

Body Dragging

This is a feature that we are still working on, we want to get it just right before introducing it to our players, and as such it won't be available in the release of the game

Status: In development, look for updates soon™!

Tactical Deploy: Combine Deploy with Squad Camera and Add Strategic Info

After Open Beta feedback we've decided to make an effort to combine these screens and deepen some information needed by certain roles (squad leaders for instance).

We'll keep the Squad Camera as it is and works today, but it'll be moved out from the death loop and will instead be part of the Deploy screen as a tab option. Players will be able to step between the two screens to be able to make the most tactical choice possible.

Status: In development.

Debris Kill Recognition

Debris kill recognition: killing enemies with falling debris will properly reward the player causing it to fall.

Status: Post Launch.

Kill Card 2.0

Today the Kill Card is a very simple affair. We see a huge opportunity of improvement in this area and we have a plan going forward. We want this screen to better show off the killer in question – who the killer is, where the killer is, what the killer looks like, and the skills the killer have.

Status: Post Launch.

Known Issues

Sometimes, issues will be missed - they're simply found too late to be able to fix in time for release. This section lists the notable issues, and if possible their intended fix release window:

- **Frontlines bomb(s) issue (Devastation only)**

One of the bombs may be hard/impossible to pick up for one of the teams. Worst outcome is that the match will continue in "HQ Attack" mode until the timer runs out.

Status: Fix targeted for Chapter 1 patch.

- **Medic self-healing representation issue**

When self-healing as a Medic, and recently looting a fallen enemy's ammo pouch, the self heal animation sometimes uses the incorrect pouch (ammo instead of health).

Healing still occurs as it should though.

Status: Fix targeted for Chapter 1 patch.

- **Spawning into top turret (tanks) issue**

When squad spawning into a tank, ending up in the top turret position, sometimes you'll end up with an incorrect representation of your weapon and arms (they don't follow your aim). Shooting still works fine, but visually it looks off.

Player feedback

As always, we value your input, and we want you to reach out to us with feedback!

For general feedback, please use our *Battlefield V* section on the *Battlefield* forums which you can find by following this URL:

<https://forums.battlefield.com/en-us/categories/battlefield-v-general-discussion>

Should you encounter any issues or bugs we recommend that you report them on our *Battlefield V* – Answers HQ forum which you can find here:

<https://answers.ea.com>

You can also reach out to our *Battlefield* multiplayer producer David Sirland and *Battlefield LIVE* producer Jaqub Ajmal on Twitter if you have any further topics that you would like us to write about in future blog posts.

You can reach them on Twitter [@tiggr_](#) and [@jaqubajmal](#)

Also, you can reach Jaqub on Weibo: [@jaqub](#)

As always, we hope to see you on the battlefield and we look forward to the journey that *Battlefield V* will take us on through the Tides of War!

David Sirland and Jaqub Ajmal, on behalf of the teams at EA and DICE.