

# Prepar3D v5 Review

Last updated Thu, 23 Jul 2020 21:32:01 GMT  
Originally posted on Thu, 23 Jul 2020 21:17:26 GMT

You could perhaps be forgiven for missing the release of Prepar3D v5 given it was released right in the middle of the coronavirus pandemic and with around a week's notice to the general public. On the other hand, those who did grab the latest release from the Lockheed Martin team have perhaps used a portion of the lockdown to hone their flight simulation skills all the more.

Regardless of what has, and will, happen in the real world, through Prepar3D v5, you can, temporarily at least, escape to the virtual skies where, according to Lockheed Martin's video trailer, "simulation and training is redefined". And we should perhaps note that Lockheed Martin's programs are often used for professional aviation training, so we might expect the new release to be dripping in realism.



So, is it worth your hard-earned money? Let's take a look.

You may find the jump links below helpful to navigate to relevant sections of the review (as it's quite lengthy);

- [Official Trailer Video](#)
- [All-New Platform of Flight Simulation](#)
- [A Significant Improvement?](#)
- [Realism](#)
- [Room for Improvements](#)
- [Performance](#)
- [Player and Multiplayer](#)
- [Default Aircraft & Vehicles](#)
- [Hotfixes, fixes, and bugfixes](#)

- [Software Development Kit \(SDK\)](#)
- [Should you buy it?](#)
- [Rushed Release \(FS2020\)?](#)
- [P3D Is A Gamechanger](#)
- [Freeware & Payware Add-ons](#)
- [Your Thoughts](#)

## Trailer Video

Before we dive into the depths of our review, we're sure you're interested in watching the official trailer released by Lockheed Martin. This trailer (below) was originally released in 4K @ 30FPS. We took the video they provided to media partners and then upscaled the video using special AI software to 8K @ 60FPS. This is not a simple resolution changes, our AI number crunchers worked several days on this to provide an amazing and smooth trailer video that looks stunning at 8K (if your system and Internet connection can handle it).

Watch the trailer here:

[https://www.youtube.com/watch?reload=9&time\\_continue=6&v=91gxfrn7zEU&feature=emb\\_logo](https://www.youtube.com/watch?reload=9&time_continue=6&v=91gxfrn7zEU&feature=emb_logo)

## The “First Step” To An “All-New Platform” Of Flight Simulation

OK, first of all, just what are Lockheed Martin promising? Well, according to their trailer, not only are they "redefining simulation and training" with this latest release, they are taking “the first step in the development of an all-new platform built for the next generation” of flight simulation and training, which will be “the cornerstone for continuous development and evolution”. And they claim to achieve this using a new threaded DirectX-12 Rendering Engine.



The release promises “unparalleled performance” using the most up to date graphic technology and an “array of new vehicles” (we will examine these vehicles shortly). On top of this, the user can expect “groundbreaking weather visuals” leading to the skies, clouds, and general atmosphere boasting an overall more realistic appearance. Furthermore, the program uses a brand-new water system that presents authentic-looking waves and movement of the water and so “brings the seas to life”.

The entire globe has also been brought completely up to date, something the airports and general geography below will attest to. Indeed, the land, shorelines, and coastal areas are all authentic and accurate, which very much brings the simulation to life all the more. As will the sloped runways which you can create, land, and take off from, with full AI support.



There are also over 20,000 updated airfields that are accurate in the extreme to the same airfields in the real world. And whichever one of these airfields or airports you decide to land or take off from, you will experience “real-world airport conditions with terrain-conforming airfield capabilities”.

So, then, we might ask, does the promise live up the real thing?

## A Significant Improvement All-Around?

Well, first of all, installing the new version of P3D perhaps presents the first indicators that a significant overhaul has indeed taken place. The installation itself should run smoothly and be self-explanatory but will soon serve up a brand-new logo and splash page, each of which gives P3D v5 a completely new and exciting look.

Once installed, this overhaul continues with a brand-new, new-look interface. Not only does the new-look interface screen have a new color scheme, but its cleaner appearance makes it a little more user friendly. This overhaul approach continues on the setting screen and maintains the refreshing and easy-use look.



Upon entering your chosen aircraft, you will be immediately in awe at the intense detail that awaits you, as well as how sharp that detail is. What’s more, you can easily pan around the

cockpit simply by moving your mouse left to right, while moving the wheel of the mouse allows you to zoom into the dashboard.

As you begin down the runway in preparation for take-off, which themselves have had a texture overhaul adding more realism, you will also notice how smooth the simulation is, with whatever details around the runway remaining sharp and focused. Indeed, as you leave the runway, not only do the details on the ground appear life-like but the textures of the skies are also authentic and bordering on serene. It is to the virtual skies we will turn our attention to next.

## Realism In Abundance Right From The Off

Once you take to the skies, either in any of the default aircraft or in one of the eventual optional add-ons, you are very likely to be impressed with the detail expressed. Most virtual pilots are surely bound to agree that the details in the scenery, landscapes, and weather conditions all contribute to an overall more realistic view from your respective cockpit. You are likely to notice, for example, how much sharper the resolution is, which really succeeds in bringing the outside environment to life. Even the clouds appear more textured and realistic.



In general, the atmospheric improvements really are quite stunning. From accurate shadow placement depending on the time of day to the way cities light up below like sparkling metropolises when flying at night, to the awe-inspiring look of the skies at sunset, the realism is highly detailed. Indeed, taking in the scenery on your way through the virtual skies is as much a part of the enjoyment of Prepar3D v5 as the actual flying itself.

There is also, of course, the option to view your plane from the outside, or the external view. And while overall the smoothness remains, there are hints at stuttering and a slight decline in clarity and sharpness when doing so. You may also experience a decrease in frame rate – approximately from around 50 to around 20-25. Again, this may depend on the power of your machine itself.

Overall, though, the intricate detail of both the vehicle and the terrain below maintains its highly realistic look. Indeed, as you navigate around your chosen vehicle to view it from the front, side, or back, the breakup of the fields below and the roads that intersect remain true and undisturbed. Even the shadows from the clouds are accurately displayed below.



## Better But Room For Further Improvements

There have also been significant improvements to the buildings themselves, with several iconic landmarks across the planet now included. What's more, the lighting and signs of the many airports on offer are also much improved in detail and sharpness which, in turn, drastically improves visibility.

In fact, perhaps the only textures of the surrounding environment that might come in for a little criticism is the water, but even then, this slight drop in detail is only minor and limited.



For example, there might be some “fuzziness” to parts of the water graphics when viewed from the air or when approaching a coastline. However, when close-up, you will notice immediately how the water acts in differing weather conditions and times of the day. This perhaps makes up for the small glitch. For example, if you choose to touch down on the water (with an appropriate plane, of course) during a storm, you will notice that your plane moves up and down in sympathy with the waves and movement of the water. Even some of the waves appear so realistic that you might expect them to crash into the cockpit.

## Overall General Performance Is Good – But There Are A Few Drawbacks

If there is one thing that previous versions of P3D has been criticized for, it is the stuck, “lagging” nature, on occasion, of its performance. This appears to be something that has been addressed leading to a much smoother and uninterrupted experience. There is also an in-built prompt to notify you if the GPU memory has run out, offering the option to revert graphic settings. Generally speaking, the program runs very well, with solid frame rates and an extremely sharp overall picture.

Users may find, though, depending on the machine they are using as well as their own personal preferences, that they may wish to play around with the settings when becoming familiar with the new setup.

Of course, the better performance of your PC, in general, the better experience you will have once in the P3D virtual skies.

One thing that stands out as a slight drawback is the VR options – or possible lack thereof. Although Lockheed Martin state that VR will be fully supported in version 5, elaborating that there

have been improvements made to VR performance “due to the performance improvements made in the DX12 rendering engine overhaul” many users are finding that the issues they had in v4.5 are still very much the same. Patches have been released but it appears this might be one area of the simulator that leaves a little to be desired.

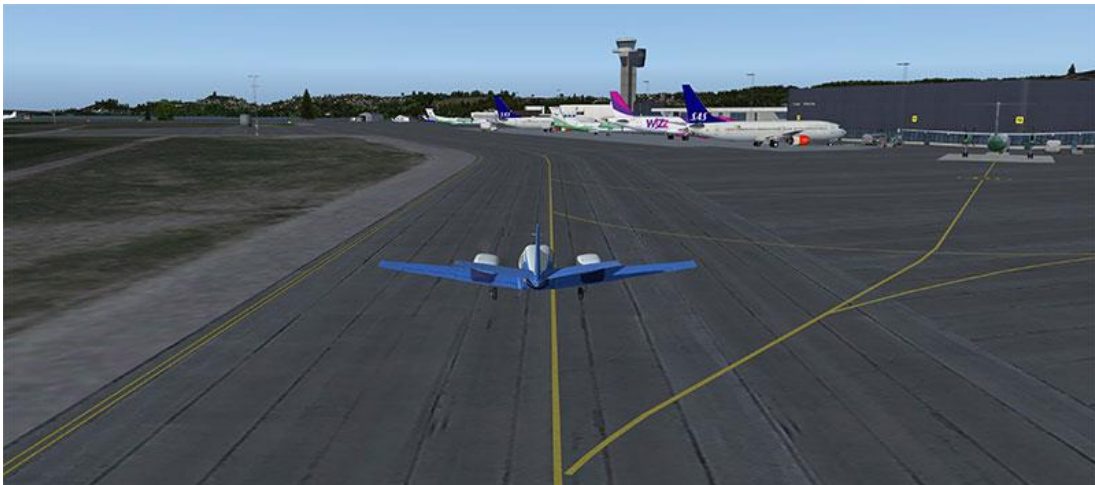
Perhaps one issue users might want to keep in mind is that further updates, add-ons, and fixes will become available over the coming weeks which will require downloads and updating, however, even these will be only a minor inconvenience. And given the statement made from Lockheed Martin on the VR potential of the simulation, it is perhaps a safe bet that any issues will be addressed sooner rather than later.

## Several “Player” Improvements

There have also been a lot of improvements and attention paid to the player and multiplayer options.

For example, the map screen is now available during flights, which is a big plus. Furthermore, the updated default controls for joysticks, controllers, and the mouse also make flight and navigation a little easier and user-friendly. There is even a controllable flashlight for use in the cockpit.

Also, both clients and hosts in the multiplayer format can choose any starting location they desire to set off on their missions from, and can even switch vehicles in multiplayer (although this is something that host would have to enable).



Furthermore, if it is training that is your main reason for taking to the virtual skies, then you can create a virtual instructor that will aid in making this training more comprehensive and, in theory, much faster.

You can also, should you choose, create unique rehearsal exercises so that you can hone your skills even further adding yet another dynamic to the latest Lockheed Martin flight simulation package.

## Default Vehicles – Just What Is On Offer?

As promised above, Prepar3D v5 comes with quite a proud boasting of default vehicles in which to take to the skies – or in the case of the submarines on offer – delve below the surface of the

planet's oceans. Each of these is authentic and accurate in their design and serve as realistic replications of their respective versions in the real world.

So, what do you get right out of the box?

### **Default Vehicles included in Prepar3D v5**

- AC11 Commander 114
- Civilian Utility Aircraft Single Engine
- Deep-Sea Submarine
- Extra 300s
- Lockheed C-69 Constellation
- Lockheed Electra 10A
- Lockheed L049 Constellation
- Lockheed P-38 Lightning
- Lockheed Martin AC-130H
- Lockheed Martin C-130H
- Lockheed Martin C-130J
- Lockheed Martin C-130J-30
- Lockheed Martin F-16A
- Lockheed Martin F-16AM
- Lockheed Martin F-16C
- Lockheed Martin F-22 Raptor
- Lockheed Martin F-35A Lightning II
- Lockheed Martin F-35B Lightning II
- Lockheed Martin F-35C Lightning II
- Lockheed Martin Fury 1500
- Lockheed Martin HC-130H
- Lockheed Martin Indago UAS
- Lockheed Martin KC-130H
- Maule Orion
- Maule Orion on Skis
- Mooney Acclaim

- Mooney Bravo
- Piper J-3 Cub
- Pusher Drone
- Robinson R-22
- Sikorsky CH-53E Super Stallion
- Sikorsky MH-60K Black Hawk
- Sikorsky MH-60R Seahawk
- Sikorsky MH-605 Seahawk
- Sikorsky S-70A Black Hawk
- Sikorsky UH-60A Black Hawk
- Sikorsky UH-60L Black Hawk
- Sikorsky UH-60M Black Hawk
- Sikorsky UH-60Q Black Hawk
- Submarine Ohio Class
- Turboprop Trainer Aircraft

As we can see, then, there is a whole range of new default vehicles to become familiar with the latest release from Lockheed Martin in. Whether you wish to jump in a small single-engine plane or speed through the skies in some of the most technological aviation marvels of recent times, there is plenty to choose from. And all will offer a unique view of the virtual world.

## **Many Significant Fixes Have Been Actioned And Issues Addressed**

Perhaps at this point, it is worth noting some of the fixes and general improvements to Prepar3D v5 from previous versions. We have mentioned the improvements in VR (although many users are not fully convinced). There, however, many other discreet enhancements that have been undertaken.

For example, simple but effective things such as improved vehicle list caching, which dramatically speeds up vehicle selection times, as well as multiplayer loading. There are also new keyboard shortcuts allowing you to open the settings UI screens.

Other improvements include the ability to drag items from the Scenery Library to different locations, as well as the option to group vehicles by category in the Vehicle Select screen. You can also now launch SimDirector straight from the Startup screen. Sound is now the default setting in slew mode, although the user can disable this if they wish simply by going into the Sound Setting UI. You will also now find the Time and Season and the Time Preview screens have been combined for further ease of use.



In older versions, if the user was to cancel out of the Failures screen, it would revert the values back to 0 – this will no longer happen. And what's more, opening the Failures screen will no longer pause the simulation automatically.

There are further fixes to some of the graphic issues of previous versions. The visible borderlines in the water between the United States and Mexico, for example, no longer appear. The issue that would cause longer bridges to intersect the water has also been remedied, as has the issue of bridge segments “clipping” into each other.

Furthermore, some of the hangar buildings that appeared much too large in previous versions of Prepar3D have also been addressed. And even the boat terminals have been dealt with, no longer allowing large boats to dock too close to the coast. Users should also no longer see traffic disappearing on the roads below them, as happened from time to time previously, and will also notice much-improved bridge and overpass handling for traffic below.

## **Fixes And Improvement To The Software Development Kit (SDK)**

It is further worth our time examining in a little more detail the new features, fixes, and improvements to the Software Development Kit (SDK). Perhaps one of the best new features is the ability for airports to be created with sloping runways, with Distance Remaining signs can also now be generated for all runways.

There are enhanced engine extensibility features for SimObjects, as well as new intensity values in lumens to PBR light effects. Furthermore, there is also now the option to flatten backgrounds at airports in order to control altitude transition with the surrounding terrain.

Previous versions would, on occasion, exclude scenery when using the `excludeAllObjects` setting – this has also been addressed and will not occur on Prepar3D v5. The `ImageTool` should also now upload all DDS textures, while the issue of other tools in SDK writing out generated data to the incorrect location has now been looked at and fixed.

There was also the issue in previous editions of tail numbers for helicopters created with the `SimConnect_AICreateNonATCAircraft` function not being set as they should – this should also no longer be a problem. Perhaps one of the most frustrating issues of previous versions was 3dsMax freezing – sometimes for several minutes – while autosaving. Again, users of Prepar3D v5 should not experience this.

## **So, Should You Buy It? A Few Things To Consider...**

So, with all of those improvements and fixes, and with the highly detailed and accurate improvements to scenery, atmospheric conditions, and aircraft, should you go and purchase Prepar3D v5?

Well, before we address that we might wish to turn our attention back to the time of release. And while we are not here to make comparisons to the upcoming, and eagerly anticipated Microsoft Flight Simulation 2020, it is perhaps that anticipated release that just might make some virtual flyers hold off, at least for now.



As glowing as the promises sound, and indeed are upon sampling Prepar3D v5, there is perhaps a view among the flight simulation community that FS2020 will simply offer more – both in content and realism. Whether that proves to be the case or whether such things are simply down to perspective remains to be seen.

If we take FS2020 out of the equation for just a moment, Prepar3D v5 is most definitely an improvement on previous versions. And it certainly can boast a real sense of realism which is crucial to all virtual pilots.

It is also possible, though, as we will turn our attention to next, the reason for the sudden, out-of-the-blue release of the latest Lockheed Martin flight simulation package was the looming release of the competition.

## Has Competition Forced A Rushed Release?

One other thing to consider when deciding whether to purchase Prepar3D v5 is whether or not it might be worth waiting just a little longer until the release of FS2020. If you are already happy with Microsoft Flight Simulator, then the chances are you will not be disappointed come mid-August when the long-awaited new version is unleashed into the public domain. Indeed, while this is a review of Prepar3D v5, it is hard not to mention FS2020 in relation to it as to whether holding off until that impending release or not appears to be one of the main considerations of potential buyers.



With that said, though, there will be plenty of virtual flyers out there that like to test their skills across a variety of platforms. And for them, the purchase of P3D v5 will be a no-brainer - and most definitely worth it.

There is perhaps one drawback that should be noted, though.

Indeed, as several online users have stated, at least in their opinion, the release of P3D appears to be a little bit “rushed”, perhaps in an attempt to have it available before the release of FS2020. And that insinuation is perhaps backed up further by the sheer number of fixes within the weeks of the release. And while it might be expected that issues require a certain amount of ironing out upon first going live, **fixes were still be issued** by late June.

We should also note, in the interests of fairness, that many who have sampled the recent release have stated their belief that all that is being offered is simply more of the same, with the “same old” textures and assets. While this perhaps will come down to personal perspective and taste, it is something that potential buyers may wish to consider.

If you're interested in reading more about Microsoft's new Flight Simulator set for release in 2020, [check out our article \(long read\) here](#).

## Still A Gamechanger For Flight Simulation?

At the end of the day, it will be a personal choice as to whether or not the issue of fixes would be a problem or if it is something that you are more than prepared to tolerate. And while some users feel the look and realism is not up to the standard of Microsoft Flight Simulator, the Prepar3D v5 package still more than holds its own.

Overall, the upgrades and improvements will almost certainly make your purchase worth it, especially if you are seeking realism in flight simulation – which almost all virtual pilots are. Whether it is a simulator that people will stick with for the long haul or whether many of those people will make the jump back to Microsoft once FS2020 is released perhaps remains to be seen. Prepar3D v5, however, is very much worth checking out.



If there is one area that Prepar3D v5 appears to stand out, it is the significant improvements, as we have documented above, to the weather and atmospheric conditions – something which perhaps adds more to the overall realism than we might think. In this respect, an argument could be made that this aspect of the latest Lockheed Martin release is slightly ahead of its competitors.

As many who have already taken the plunge and taken to the skies in Prepar3D v5 have stated, the improvements, generally speaking, outweigh some of the issues – so much so that its release is no bad thing for the flight simulation community overall, with some user even labeling the latest release from Lockheed Martin as a “game-changer”. It will certainly keep P3D in the top echelons of flight simulation for the foreseeable future, of that there is little doubt.

Of course, any upgrades, fixes, or add-ons that become available for the recent release will be displayed here.

## Freeware & Payware Add-ons

From the tests we have done so far, if the add-ons work in P3Dv4 then it's most likely (almost certain) to work in the latest P3Dv5 as covered in this review. Not much has changed in terms of SDK compatibility when it comes to aircraft and scenery.

We also note that if it's an aircraft compatible with FSX SP2 then it's also likely to be compatible with P3Dv5. This is providing it's a native FSX model and not a port-over from FS9 (FS2004).

If you're after payware and have a wallet handy, you can check out our payware Prepar3D v5 releases over at SimShack - [aircraft here](#), the [scenery here](#).

<https://flyawaysimulation.com/news/4960/>