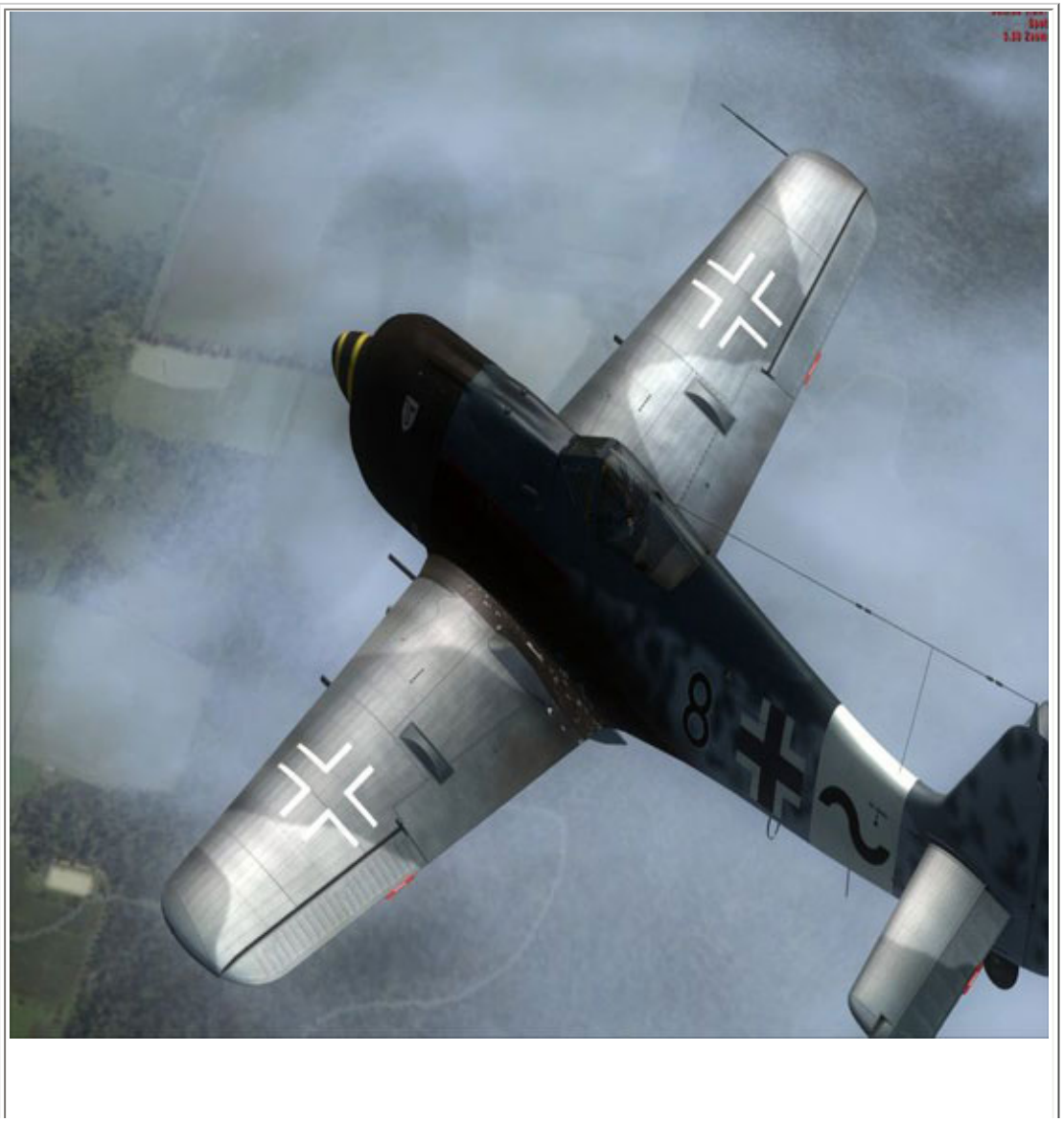
AVSIM Commercial FSX Aircraft Review

Focke Wulf Fw 190 A: The Late Variants



Product Information		
Publishers: Classics Hangar		
Description: World War II-era prop fighter.		
Download Size: 307 MB	**Format:** Download	**Simulation Type:** FSX
Reviewed by: David Wilson-Okamura AVSIM Senior Staff Reviewer - January 19, 2010		

Introduction

The Focke Wulf Fw 190, a.k.a. Shrike or Butcher Bird, was the Luftwaffe's second fighter, after the Messerschmitt Me 109. It never quite managed to replace the 109 as an interceptor: the 109 made more kills and was manufactured in much higher numbers.

The Shrike, however, was easier to fly than the 109 and also easier to land (because its main gear had a wider, more stable stance). Despite having more automation, the 190 was probably more durable than the 109 and also easier to maintain: because it was fitted together out of large, easy-to-replace modules; and because there was no liquid cooling system, its engine could be holed in combat and still keep running.

I've said more about the Shrike's history in my review of Classics Hangar's "Focke Wulf Fw 190 A: The Early Variants," which I covered here last spring. That product was a series of nine models, describing the evolution of the "Anton" series, beginning with the A-1 (introduced in 1941) and ending with the A-4 (which was manufactured through the spring of 1943).

The latest product from Classics Hangar, which I am reviewing now, is "Focke Wulf Fw 190 A: The Late Variants." Using ten models, it tells the rest of "Anton's" story, from the A-5, which debuted in 1942 (when the defeat of Germany was still uncertain), to the A-8 and the A-9, both of which were still being manufactured during the last week of the war in Europe.

The normal turnaround time for AVSIM reviewers is about one month. I have been flying this product for about two months. I was not a beta tester, but I was invited to fly several of the pre-release builds, ask questions, and make suggestions. I'm not sure any of my suggestions made it into the final product, but I learned some things from talking with the developers.

Since October, I have exchanged about sixty emails with the visual modeler, Mathias Pommerien, and during that time I have been impressed by his enthusiasm for the product and by his technical knowledge of 1940s-era fighter planes and especially 1940s-era gauges.

Of course, enthusiasm and knowledge are not the same as actual skill. Fortunately, Mr. Pommerien has all three. Whether or not the Fw 190 was the best fighter of World War II, this model of it is a Gold Star package. Despite the recession, 2009 has turned out to be a spectacular year for Flight Simulator add-ons, and "Late Variants" is one of the best products I have reviewed this year.

Installation and Documentation

The installer does almost everything. To make textures display properly, you do need to edit one line in one file (the TEXTURE_MAX_LOAD setting in FSX.cfg). It would be nice if this could be automated too, but since FSX resets the variable in question when you change any of its display settings, the only thing a developer can do is to explain the procedure clearly (which it does in the Pilot's Handbook) and point the user to a freeware utility (which it didn't create and cannot guarantee).

I didn't have any trouble. If, at some point, your textures look fuzzy -- the first thing you'll notice will probably be the gauges -- it means you need to exit the sim, fix the one line again, and restart the sim. It's also possible, though the manual doesn't say this, to save all of your settings, including the TEXTURE_MAX_LOAD variable, and load them from the settings page without restarting.

The Pilot's Handbook is 43 pages long and written in English. (A German version is on the way.) It comes with the package, but it's available on the Classics Hangar website as a free download. So is the manual for "Early Variants."

Clearly written and well illustrated, the Pilot's Handbook describes the nature and history of each variant in the package (including the different cockpits),

Test System

Core2Quad Q6600 @ 2.4 GHz
4 gigabytes RAM
Nvidia 8800 GT (512 mb)
Samsung 20" widescreen LCD (1680 x 1050)
Windows 7 (64-bit)
TrackIR 3 with Vector Expansion
CH pedals, yoke
Saitek X45 throttle
Sidewinder Precision Pro joystick
Sound Blaster X-Fi XtremeGamer sound card
Logitech X-540 5.1 speaker system

Flying Time:
20 hours

explains how to operate the engine and fuel systems, specifies what is and is not simulated (e.g., which circuit breakers), and shows how to interpret each of the gauges. Spiced with historical slang -- e.g., Luftwaffe-Anklopf-Geraet “Luftwaffe knock-on-the-door-apparatus,” for a notoriously weak machine gun -- it’s also funny, and reminds us that the men who flew and serviced these machines were not machines themselves.

External Model

The modeling on this product is exquisite. One distinction between the early variants (reproduced in the previous package) and the late variants (reproduced here) is that the late Antons, beginning with A-5, had the engine moved forward about five inches. That sounds like a small difference, but it changes the profile.

Other changes were more subtle: new wheels, new antennas, more guns, heavier guns, new bulges (to accommodate the heavier guns), and thicker armor. All of these changes are reflected faithfully, in the visual model and in the flight model.

What else is notable? I can think of four things that stand out. First is the precision: there’s nothing blocky or impressionistic. Second is the subtlety: rivets are bump-mapped, most noticeably on the wings, but the effect is not overdone. Even matte finishes reflect some light, but they shouldn’t look glossy, and these ones strike the right balance. Third is animation: in addition to the standard control surfaces, the radiator gills are also animated, along with the pilot. When the cockpit slides back, the aerial that is strung between it and the tail slides back smoothly too. If you need to bail out, it’s even possible to blow off the canopy with a small explosive charge. Or, for a less dramatic effect, you can just alter the payload, by choosing to carry nothing, a bomb, or a drop tank. If you choose nothing, you can also remove the pylons and fly with a smooth underbelly.

The fourth notable feature is one we have already alluded to: variety. There are ten different models, including one version, the A-8/R2, that was modified with extra armor for so-called “Rammjaeger” missions. Actually, there are two

versions of the “Rammjaeger” model: one with Sheuklappen (“horse blinkers”) on the window canopy, and one without.

In addition, there are sixteen historical liveries, each one based on a particular plane, flown by a particular pilot, and wearing the markings of his particular rank and unit. Nose art and other decals are rendered at a higher resolution than the rest of the fuselage, so they look sharp even in close-ups. For the sake of realism, all paints have been weathered and stained; and for customers who want more liveries -- “The Early Variants” came with 34 -- a paint kit is included.

What’s missing, as you can see from my screenshots, are the “political markings” on the tailfin. Legally, these can’t be displayed in Germany, where this product originates, but if anyone wants them, a small download is available at http://www.italianwings.it that puts them back.

Virtual Cockpit

Each of the ten models in this package comes with its own virtual cockpit (VC). Most variations are minor -- one model has a different gunsight, another has a different ammo counter or turn indicator -- but all of the models have an artificial horizon gauge (something that Allied planes got earlier) and the very latest Antons include a vertical speed indicator (something, again, which today we take for granted but which most German fighters did not get until late in the war).

Also new to the Late Variants, both real and simulated, are nav radios and the AFN-2 radio beacon indicator. The latter gauge resembles an ILS, but its horizontal needle -- instead of tracking a glidescope -- indicates Nähe “nearness” to the beacon transmitter; think of it as an analogue DME gauge. The vertical needle functions like a modern VOR gauge, and is used in the same way.


AFN-2 radio beacon indicator

As the manual explains, the real nav radios were pre-tuned on the ground, so there was no tuning equipment in the cockpit. That wouldn’t work in the sim, so in the Classics Hangar version you tune the radios using click spots and Tool Tips. This gives you the function of nav radios, without introducing any visual anachronisms. It works. But if you use TrackIR, as I do, it can be a little tough keeping the Tool Tips visible while you dial in the new frequency with your mouse. (That’s how the sim platform is built, not the model.) Fortunately, you can also pull up the default radio stack as a 2D popup.

Like most payware models that I have reviewed in the last two years, this one is intended to be flown exclusively from the VC. There is no 2D cockpit, and you don’t need one. Actually, you don’t want one. I have been writing monthly reviews for more than three years now, and the VCs in this package are the best-looking I have seen so far.

Let’s start with the gauges. In my last review, of the FSD and SkyUnlimited P-38 Lightnings, I said that 3D gauges are the new standard for steam-powered payware. They look better, they move more smoothly, and they’re easier on frame rates. Not everyone is going to agree with me, but here it is, another premium aircraft, and it has 3D gauges. Now, what sets these 3D gauges apart from other 3D gauges? That’s a somewhat rarefied question, I realize. But look at the screenshots. Do you know of any other gauges where the model number is stamped into, not painted over, the metal surface of the background plate? I don’t.

unctionally, of course, this makes absolutely no difference. But aesthetically it sets a new benchmark. It's pointless, but pleasurable all the same, just to spin the model in slew mode (use the 1 key on the number pad) and watch the shadows play across the 3D surfaces. This is a German fighter so labels, of course, are in German and units are metric. Don't worry, though: if you don't read German, or if your brain works in feet instead of meters, hold your mouse over the gauge for a moment and a Tool Tip will appear with the English equivalent: "Altitude (3128 feet)."

We saw the same, high standard of gauge artwork in "Early Variants." What's new here is the subtlety of textures around the cockpit. In my mind, there are two successful styles of cockpit artwork: the precisely sculpted look of RealAir products and the richly textured look of A2A (formerly Shockwave) products. With this package, Pommerien seems to have combined the two styles in one product. In particular, he's done more with light, so that it reflects differently from different materials; he's also weathered the metal, to give it a scratched look around the canopy.

Sound

The engine, flaps motor, canopy, and landing gear sounds are carried over from "Early Variants." Based on a freeware package that Steve "Lawdog" Buchanan developed in 2005 and 2006, they are rich and nuanced. There is something unhurried about the sound of a radial engine, compared with the angry roar of a liquid-cooled Merlin or Spitfire. What's new in this package are the recordings that Pommerien has made for dials, switches, and levers in the cockpit.

My favorite of these is the drop tank release, which is a deep, satisfying "clunk" sequence. These are handled by a custom sound module, similar to the ASC module in Aerosoft's Catalina and F-16 products. There's also a deep, menacing sound when you push the engine too hard and it conks out.

Flight Model

If you've read my reviews, you know how this section is going to start: I'm not a real-life pilot. I read about the planes I review and I study the accounts of men who flew them. But research and experience are two different things.

This is why, when I reviewed "Early Variants," I was surprised at how organic the flight model felt. The product description makes a big deal about how the airplane physics were derived from data, rather than pilot memoirs (i.e., research instead of experience). I wrote about this in my earlier review, so here I'll just repeat my conclusion: "The flight model for this aircraft, even though it was calculated on the basis of the aircraft's weight and dimensions, feels as rich, responsive, and 'analogue' as any I have owned. In principle, I am still skeptical; on the other hand, one of the things that chaos theory seems to have demonstrated is that relatively simple formulae can approximate complex systems (such as eye movement). It's difficult, after flying this model for about a month, not to think of it as something that has been regrown, like the dinosaurs in Jurassic Park; that the memory of the pilot's experience is preserved in -- and is still accessible through -- the measurements of his machine. If that's not true, it's a powerful illusion."

That was eight months ago, describing “Early Variants”; the flight models in “Late Variants” are different, but were generated using the same process. One improvement is that prop speeds are now governed by a custom gauge, which responds proportionally to input from the throttle. If you’ve ever flown with a constant speed propeller (where you had to adjust the prop lever separately from the throttle), this is probably different from what you are used to. But in the real Fw 190, prop speed and prop pitch were automatically coordinated with manifold pressure by an analogue computer. That’s not how it works in the default sim, but with a custom gauge this system can now be simulated.

Since I first wrote about the Shrike’s flight model, I’ve spent a lot of time flying both the early and late versions. What have I noticed in that time? Two things. First, the Fw 190 is less stable in the roll access than I am accustomed to in other models, including other fighters. This mainly shows up in turbulence -- I always fly with ActiveSky -- but since the developer was inviting me to pose questions, I thought I would ask about it. He forwarded my query to Gregory Pierson, of AvHistory.org, who crafted the flight dynamics for each variant. Pierson’s response was extremely technical.

I took physics in college, but not enough to follow his argument. The non-technical claim was this: Microsoft made its default planes unrealistically stable; and we have all grown used to that, with the result that, when a realistic model comes along, it feels wrong, when in fact it’s right. I wish I were a real pilot so that I could evaluate that.

The second thing I’ve noticed since writing about “Early Variants” is that, sometimes, you can learn history from a sim. Anyone who’s read about the air war in Europe has probably asked, “If, as most people think, the Fw 190 was a superior design, why did Germany keep producing the Me 109, and why did all three of Germany’s high-scoring fighter pilots fly 109s?” There were several reasons, but flying the “Rammjaeger” variants one can begin to get a picture.

The “ram-fighter” squadrons were deployed late in the war to stop Allied bombers. The striking weapon was a Fw 190 A-8, specially modified with extra armor, so that it could absorb the bomber’s defensive gunnery and still keep flying. The tactic was to close with the bomber and unload your cannon at short range. (Actual ramming, a last resort, was apparently quite rare.) The problem with all that extra armor was that it added weight, making the Shrikes vulnerable to the bombers’ escort fighters. This is where the Me 109s proved their continuing usefulness: fast, agile, and fast, their job was to protect the 190s from Allied fighters, the way linemen screen a quarterback. And it worked, too, until Allied pilots learned to ignore the screen of 109s and go straight for the 190s.

A-8 (regular)	A-8 (Sturmjaeger)

Now, it is one thing to read about all of this (which I have done, in several books). It is another thing to experience it in the sim: the extra weight in the air, the incipient stall at take-off and landing. The whole endeavor seems braver -- or just more desperate.

Engine modeling for this product is on par with the Acceleration P-51 Mustang or the RealAir Spitfire: you can burn up the engine if you push it too hard, but the state of your engine -- its health or lack of same -- is not preserved from flight to flight (as it is, for example, with A2A's Accu-Sim products). That being said, engine handling in the real Shrike was mostly automated. The main things that real pilots had to monitor were oil temperature and fuel levels -- and that is what the model requires as well. Or, if you prefer, you can choose a "Just Fly" option and not worry about fuel pumps or engine temps at all.

Is there anything that could be improved? If I could borrow one feature from another product, it would be the stall buffet from the RealAir Spitfire or the Lotus L-39. With the RealAir and Lotus products, you not only hear the shaking -- as you do here -- you also see it in the VC. Or maybe the real Spitfire shakes more than the real Fw 190; I don't have a good way of knowing.

Performance

This is one of the best-looking models in my hangar, and also one of the best-performing, with frame rates on par with the default planes and the RealAir single-engines. Why does this matter? If the motion isn't smooth, I end up not flying it. This isn't usually a conscious decision, and it doesn't happen overnight. Over time, though, the models that I keep flying are ones that please the eyes, and also don't strain them. This product gets top marks in both departments.

Conclusion

"Focke Wulf Fw 190 A: The Late Variants" sells for 23 Euros plus VAT (if that applies to you), or 16 Euros if you purchased "Early Variants" before December 4, 2009. "Early Variants" is now 23 Euros plus VAT; or, for 42 Euros plus VAT, you can purchase both products in a bundle.


How good are they? As a reviewer, I get to try out a lot of add-ons. Most of them are good, and almost all are good for something or someone. With so many good products, how do you keep them in perspective? How does a reviewer sort the good from the very good, and the very good from the truly great?

To help with this, I have a few products that I use as reference standards. These are the models that I take up when I have been flying a new product for several weeks and need to recalibrate my internal sense of what a great -- not just very good -- product feels like. Occasionally, the new product is so good that it becomes a reference standard in its own right. That doesn't happen very often, maybe once a year. But this is one of those times, and one of those products.

What I Like About The FW190A: Late Variants

- High frame rates
- A digital, numbers-based flight model with analogue feel
- Exquisite bump mapping and high-resolution textures
- Smooth, three-dimensional gauges
- Great variety: 10 visual models and 16 historical liveries
- Well-illustrated manual

What I Don't Like About The FW190A: Late Variants

- I could list features that it would be nice to have -- animated raindrops, for example -- but I'm hard-pressed to find anything that I actively dislike.

Printing

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FW190A: The Late Variants

(adobe acrobat required)

Comments?

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