

AVSIM Commercial Aircraft Review

Wings of Power: WWII

Heavy Bombers and Jets





Rating Guide		
Publisher: Shockwave Productions		
Description: Add-on aircraft for FS2004		
Download Size: 60 Mb	Format: Executable file	Simulation Type: FS 2004 Add-on
Reviewed by: David Swindle AVSIM Staff Reviewer		
The AVSIM Commercial Rating System: 1 Star to 5 Stars (with 5 stars being exceptional) <i>Please see details of our review rating policy here.</i>		

Introduction

Multi-aircraft packages have traditionally been the black sheep of the FS payware community. Usually, the aircraft models were third rate, the panels were hodgepodes of default gauges thrown onto a crude background, and the flight dynamics were abominable. Shockwave Productions has made an attempt to produce one of the very few high quality Fs multi-aircraft packs with Wings of Power: WWII Heavy Bombers and Jets.

Installation and Documentation

The WOP package is available on a CD for about \$25. Installing the package is a simple matter of putting the CD in the drive and then following the prompts and inputting the very long serial number (although mine was only letters) to install the package. After installing the package, I highly advise you read the manuals.

When I opened the box for WOP, I was totally blown away by a simple piece of paper, or rather a bit over 190 of them. The reason I was so impressed was that this package actually has paper manuals instead of the quarter sheet of liner notes that passes for instructions now. The biggest manual is the 158 page Pilot's Flight Manual, which gives you all of the information you will ever need to use this product.

The manual gives a description of the package and then proceeds to describe each aircraft's background, give flying tips and checklists, and even some scans from the original POH for the airplanes. The smaller 30 page "liner notes" gives shorter versions of the information in the pilot's manual. I found it's checklists to be more practical than those of its bigger brethren since they contain less text and more of the data in the abbreviated form that is usually associated with a checklist.

Both manuals are exceptionally well written and actually make for a very interesting read. In addition to the paper manuals, there are also checklists on the FS kneeboard that seem to have been taken straight from the paper manuals.

The Program

Test System
Win XP Home 2.2GHZ P4 110GB HDD 512MB ram Nvidia FX5900 MS Sidewinder 2 & CH Pro Pedals
Flying Time: 30 hours

Visually WOP is quite impressive, but there are some errors present.

WOP comes with a B-17F, B-17G, B-29, B-24J, B-24D, PB4Y (the naval version of the B-24), two versions of the Lancaster, an AR-234, Ta-183 and He-162. Most of the bombers have more than one texture set, and the Ar-234 has three visual models, so there is an enormous amount of content on the CD.



AR234



B24-D



B24-J

The Shockwave team has done an admirable job on the external models, and all of the models are very well shaped and generally look very realistic. All of the usual parts are animated, and all of the heavy bombers have bomb bay animations as well as pitching propellers and some goodies like pop-out waist guns on the B-24 and an animated drag chute on the Ar-234.



B29



B17-G



HE-162

Although the visual models are quite good overall, there are some flaws present. The biggest bug is that all of the aircraft appear to be crewed by midgets. This comes from the fact that the crew figures used throughout the package are too small and the end result is that you have B-29's and B-17's being flown by four-foot tall crews. The crew size is the biggest bug, but there are also quite a few little ones present. The smaller bugs mostly concern parts that aren't attached quite correctly (such as the Lancaster's wheels which have a noticeable wobble to them) or generally odd things, like some reversed writing on the textures and the B-24's propellers becoming opaque disks at some times of day.



Lancaster



PB4Y



Ta183

Overall however, given the sheer number of planes included in this package, the overall quality is still quite high.

Textures

The textures in WOP are as varied as the aircraft themselves. Each aircraft has either one or two textures to it and in the case of aircraft with two textures, they are usually very different. All of the textures are of uniformly high quality and are free from big mismatches or seams being present.

Weathering is present on the textures and is just enough to make the aircraft look like they fly instead of being museum pieces. The only bug with the textures are that some of the aircraft feature writing that is reversed when it should be on both sides of a part.

All of the models and textures included the package are extremely easy on the hardware, and WOP delivers framerates comparable to the default aircraft.

Panels and VC

The 2d panels in WOP are about on par with the visual models in that they have a few issues, but for the most part, they are high quality.

Each aircraft in WOP gets it's own panel, although different versions of an aircraft (i.e. the B-17F&G) share a common panel, which is not totally accurate, but works well for the package. The panel bitmaps are of average quality and are well done except for a few jagged edges here and there.



B17 2D gauges



B17 virtual cockpit



B24 2D Gauges



B24 virtual cockpit

The gauges seem to be a mix of default and custom (mostly custom), and all of the gauges work as they should. The panel layouts are interesting since developers had to strike a compromise between showing enough gauges to be useful for things like instrument approaches but still look real enough to be convincing. I think that for the most part, the developers got the balance right as the panels are all very usable and look convincingly accurate. All of the panels are supplemented by numerous sub-panels that give access to the radios, trim, fuel system, throttles and other essential controls. Some non-period gauges are present in the package such as the default GPS, radio stack, and a prop pitch gauge on the B-17, but they add enough functionality to the sim that they detract almost nothing from the overall experience. All of the panels work well with no gauges that are either dead or function improperly. The panels are also very framerate friendly and I saw no drop whatsoever in my framerates.

Just as there is an incredible variety in the aircraft and panels, so too is there a big variety of VC's. The VC's range from the spartan, boxlike cockpits of the B-17 and B-24 to the open, greenhouse like cockpits of the B-29 and Ar-234.



B29 2D Gauges



B29 virtual cockpit



Lancaster 2D Gauges



Lancaster virtual cockpit

For the most part the VC's are well modeled, but there are some instances where you can see the ground or sky through a seam between parts. The VC's have interactivity, but it appears to be limited to the major controls (throttles, mixture lights....) and some secondary functions like switches on the autopilot can only be accessed from the 2d panel or via keystrokes. The VC's are all well textured, although the textures aren't exactly pretty since most everything is either colored olive drab or black.

All the usual animations are included for the controls and switches, but there are some bugs like the B-24 having several levers that operate backwards in the sim. Flying from the VC's is a bit of a challenge since important gauges tend to be placed out of the pilot's line of sight, and a lot of the aircraft have very poor visibility below and to the sides thanks to small windows. Just like everything else in WOP, framerates in the VC's are high and are actually better than some of the default VC's.



HE162 virtual cockpit



AR234 2D Gauges



PB4Y 2D Gauges



Ta183 2D Gauges

Sound

Sounds are an integral aspect of making an immersive package, and in that department, WOP falls a bit short. Although there are flyable examples of many of the aircraft in the package, the sounds appear to have been mixed from some other source.

A prime example of this is the idle sound on the Lancaster. A real Merlin has a harsh, growling idle, but for some reason the WOP Lancaster sounds exactly like the default Cessna 182 at idle which leads me to believe that the sounds might have been borrowed from CFS3's unimpressive sound suite.

The sounds for the other aircraft are equally unimpressive, especially given the fact that there are some very good freeware sound sets available out there, many of which I used in place of the sounds shipped with the package. The interior sounds are somewhat better but are still very lackluster.

Flight Model

Flying a World War two bomber was no easy task. Bombers often took off in horrible weather at maximum overload weight and then proceeded to fly hundreds of miles over enemy territory while being shot at by flak and fighters alike. Many times a pilot would have to bring back an aircraft full of bullet holes and with engines and controls that were either in dubious shape or were shot off altogether.

Overall, the Shockwave team did an excellent job in the flight dynamics department. The flight models range from stable and lumbering in the B-17, to finicky and difficult in the case of the Ar-234. Takeoff in the taildraggers is quite interesting as there is almost no view of the runway and it takes a while for enough speed to build up so you can raise the tail and get a view of where you are actually going. When lightly loaded, most of the bombers have reasonable takeoff runs, but when loaded to max overload, they lumber down the runway and strain to get airborne.

Takeoff in the jets is also interesting since the WOP team has modeled the fact that early jets had horrible acceleration on takeoff and the Ar-234 can use more runway than a B-24 to get airborne at high weights. Climb and cruise don't happen very fast except in the jets, and you will spend a lot of time adjusting power and RPM settings to keep within the best climb speed and power. One of the more impressive feats the WOP team pulled off is that all of the aircraft (except the Ta-183) fly exactly by the book and the power settings, speeds and fuel flow in the sim are all very close to the real world values published in the manual. It is worth mentioning that to get the most realism from WOP, FS should have auto mixture turned on to simulate the fact that these aircraft did actually have auto mixture systems and trying to manually adjust the mixture in FS is basically an exercise in futility thanks to the weird way MS modeled the fuel air mixture.

Since these aircraft were mostly long-range bombers, they can stay up for a very long time, and the PB4Y has a range of over 3000 miles and an endurance of about 24 hours. Thanks to turbo superchargers, all of the bombers except the PB4Y can comfortably cruise at over 20,000 feet, so you can get a nice boost from high altitude winds to help get where you are going a bit faster.

Where the flight models get really interesting is when you fail an engine. For the most part, all that is needed is some rudder input, but once you try to slow down for landing, many of the aircraft become a handful to fly and you will gain a newfound respect for the crews who brought back bombers on two engines with large holes blown in the aircraft. One of the more interesting aspects of the flight dynamics is that WOP allows for belly landings complete with copious amounts of sparks and smoke (accompanied by a very expensive scraping noise), so it is possible to re-enact the famous belly landing scene from Twelve O' Clock High.



B17 with an engine out

B17 coming in with all 4 out

Belly landing with sparks flying

Added Features

WOP also includes a large number of flights for almost all of the aircraft. The flights range from a set of flights mimicking the route that a B-17 would fly for an airshow season to a set of marathon flights for the B-29, some of which are well over ten hours in duration.

Some of the more interesting flights are the ones that mimic famous bombing raids accomplished during World War Two by the aircraft included in the package.

Technical Support

Support for WOP has been a bit of a mixed bag in terms of quality. Technical support is fairly good and most issues seem to be resolved quickly, but support of patches is a different story. As there are quite a few large bugs in WOP, it seemed reasonable that there would be a patch to fix them.

Recently however, Shockwave has said that they are "too busy" to do a patch for WOP. Seeing as WOP came out well before the WOP P-51 (which got a patch) , I fail to see why Shockwave has never patched this product.

Summary

Overall, I think that Shockwave has done a commendable job of producing a high quality multi-aircraft package. While individual the aircraft might not quite be up to the standards of modern payware on their own, the fact that there are ten of them more than makes up for it and the overall package is an impressive piece of work.

I think that most simmers would enjoy this product as it has enough details for people who like realism, but it isn't so hard to understand that those new to FS would be lost.

What I Like About Heavy Bombers and Jets

- Good variety of models and textures
- Interesting flights
- Overall quality is high
- Excellent paper manuals
- Can be flown "by the book"
- Good value for the money

What I Don't Like About Heavy Bombers and Jets

- Lackluster sounds
- VC's have several bugs
- Midget crews
- Textures have some mirroring effects
- Still no patch

Printing

If you wish to print this review or read it offline at your leisure, right click on the link below, and select "save as"

[Wings of Power: WWII Heavy Bombers and Jets](#)

[\(adobe acrobat required\)](#)

[Tell A Friend About this Review!](#)

***Click below to add your
comments!***

FeedBack!

Standard Disclaimer

The review above is a subjective assessment of the product by the author. There is no connection between the producer and the reviewer, and we feel this review is unbiased and truly reflects the performance of the product in the simming environment. This disclaimer is posted here in order provide you with background information on the reviewer and connections that may exist between him/her and the contributing party.

**© 2005 - AVSIM Online
All Rights Reserved**