AVSIM Commercial Aircraft Review

AlphaSim Gloster Javelin

Product Information		
Publisher: AlphaSim		
Description: Aircraft add-on of the Gloster Javelin V1.1.		
Download Size: 43 MB	**Format:** Download executable	**Simulation Type:** FS2004 and FSX
Reviewed by: Brian Fletcher AVSIM Senior Staff Reviewer - December 14, 2006		

Introduction

When it comes time to build up your military aircraft and scenery in Flight Simulator you might consider AlphaSim, the preferred supplier of economically priced military add-ons to many simmers, and today's review may help to explain why. One of AlphaSim's newest releases is the V1.1 update to the Gloster Javelin, which adds the FAW.5 and FAW.9R variants to the existing FAW.9 variants included in the original package. In this review I am going to be taking a look at the complete package with the V1.1 update to determine the suitability of this aircraft for my virtual skies.

The Gloster Javelin was an interceptor aircraft used by Britain's Royal Air Force in the late 1950's through the latter half of the 1960's. The Javelin was the result of the Air Ministries search for a high performance fighter capable of nighttime and foul weather operations, and was ultimately chosen over the de Havilland DH.110 as it was less costly to construct and projected to be ready for manufacturing sooner. The Javelin, which first flew on November 26th 1951, as the Mk.1, did not meet the full requirements of the Air Ministry until production of the FAW.7 variant, which took flight in 1956. Soon after, the FAW.8 model entered production, but in the end, the FAW.9's proved to be what the British

were really looking for, which resulted in previous models being converted to the FAW.9 and FAW.9R resulting in a total of 427 aircraft produced.

FAW.9 (HX903) at Gloucestershire Airport, England. This Javelin served from 1959-1965

The Javelin was operated by a crew of two, including the pilot and a radar operator. It was powered by 2 Armstrong Siddeley Sapphire 7 and 7R turbojets among others in earlier production, and had a top-end speed of 1,140km/h (710 mph), and a range of 1,530 km (954 miles) for the FAW.9, and an indefinite range with the in-flight refueling capabilities of the FAW.9R. It could cruise at altitudes up to nearly 53,000 feet, and carried 2 X 30mm ADEN cannons and up to four Fairey Firestreak AAMs.

By the end of 1968, the constant improvement in aerospace technology had dated the Javelin and forced its removal from active service, with the exception of one which remained at Boscombe Down until January of 1975. Throughout its life span the Gloster Javelin never saw much in the way of combat, but it did serve as an effective deterrent from September of 1963 through August of 1966 in the Malaysian conflict with Indonesia, and it also ran combat patrols in 1967 based out of Kai Tak, Hong Kong in 1967 during the unease of China's Cultural Revolution.

And now, thanks to the folks at AlphaSim, you can relive (virtually speaking) the experience of piloting one of the Royal Air Forces unique Gloster Javelins for the payware price of $38.00 NZD (approx. $25.00 USD) in FS9 and FSX. How much of a cost-value does this offering provide? Can it meet the demands of the novice and expert simmer alike? To find out, let's get this bird installed so we can take a closer look.

Installation and Documentation

Those of you who already own V1.0 will only need to acquire the 5.6 MB V1.1 update; the rest of you will be downloading a 43 MB file which includes the original aircraft with the update built in. You may also wish to download the 4.85 MB texture templates if you're interested in repainting the Javelin. Once you have the file downloaded, you can then choose to either install the aircraft by extracting the zip folder to your FS9 root folder, or if you like the warm and cozy feeling of placing the folders in their appropriate location, you can do that as well. In that case, you will just need to move the folder titled "ALPHA Gloster Javelin" to the FS9 "Aircraft" folder, and place the gauges and effects in theire respective folders as well.

The documentation is limited, but helpful nonetheless. In the aircraft folder you will find a read-me file and a check file titled "fw9_check". The first document contains useful bits of information regarding key commands and discusses some of the operational procedures. The checklist is very informative, and has earned my recommendation for necessary reading, especially if you are unfamiliar with flying this type of aircraft. In this file you will discover the limits of the Javelin and learn the proper operation from takeoff to landing. As I will discuss later in this review, failure to adhere to the checklist can lead to a less than impressive flight.

Exterior Models

AlphaSim's Gloster Javelin package includes 5 aircraft representing the FAW.5, FAW.9, and FAW.9R, all of which are the same T-tailed delta wing design. I would describe the exterior model of all the aircraft as having a smooth profile, and of course the delta wing gives it a unique style as opposed to conventional wing designs. You will notice a difference between the exhaust on the FAW.5 and FAW.9 models, the addition of a fuel probe on the FAW.9R model, and a difference in the under-wing payload amongst the aircraft. Using the screenshots provided, you should also be able to make out a few other differences in the aircraft aside from the aforementioned.

All of the standard animations are present, authentic, and seem to rotate on axis properly. These animations include the landing gear and gear bay doors, rolling wheels, ailerons, 3 stages of flaps, spoilers, elevators, rudder, and canopy. There is an additional animation that can be seen by use of the water rudder key command ("shift + w" by default) that will display or hide the aircrew. There are some original effects that go along with this aircraft as well, including a subtle black engine smoke, and a decent flame effect for when the afterburners are reheated.

Here's two of the included models.....

Hopefully the screenshots provided can help you to determine the quality of the modeling for yourself. In my opinion, I think that AlphaSim has done a great job of recreating the Javelin as closely as possible, and I am pleased that they took the time to actually alter the different models more in-depth than simply adding a fuel probe and other more obvious variations.

As for the texturing, well, once again I will leave the quality of work for you to decide, but I happen to like what I see. The aircraft do not have a very worn look to them, but on the other hand they do not look like they just rolled out of the paint shop either. I got the impression that AlphaSim was going for the look of an aircraft with some hours on it, but not exactly aged just yet. The liveries, all of which are taken from real-world aircraft, include the following:

...and the other three

-XA699, 5 Sqn, Laarbruch 1961 (FAW.5 model)
-XH770/K, 11 Sqn, Geilenkirchen (Germany) 1964 (FAW.9 model)
-XH898, 228 OCU, Leuchars (FAW.9 model)
-XH897, A&AEE, Boscombe Down (FAW.9 model)
-XH887, 64 Sqn, Tengah (Singapore) 1966 (FAW.9R model)

The fourth livery in this list is perhaps one of the most unique with its brilliant red and white scheme, and one of the FAW.9 models has a flat grey base. The others have a green and grey camouflage design, which to the best of my knowledge is close to the actual aircraft, just as the other identifiable markings are on all of the aircraft. There is not quite as much fine detail in the paint work as some may hope for, and in my opinion, some of the lines used in certain areas are just a touch too broad for my taste. However, I think many simmers will appreciate the quality and authenticity of the texturing.

Virtual Cockpit

If you prefer flying from the Javelin's virtual cockpit you should be pleased with the convenience of having both of the side consoles within easy reach, and a panel that is fairly clear and legible. The default viewpoint is entirely too close to the panel, which leaves virtually none of the instruments in sight, however, by zooming out to 0.31 or thereabouts, you should find that the gauges remain legible, and you will need to pan only slightly to either side to access the consoles.

The console to the lower left is partially functional, yet it does contain a few switches that are just for

looks. Most of the controls on this console are those that would normally be used with a HOTAS, such as the throttles, flaps, and airbrakes. The console on the opposite side of the cockpit is a little more functional. Here you can access the switches for the starters, fuel pumps, battery, generators, avionics, pitot heat, and all of the lights.

The left and right consoles

The panel is a near mirror image of what you will find in the "cockpit" view, which will be discussed in the next section. But until then, let's address a few of the highs and lows of the VC. On the plus side, the virtual cockpit is very frame rate friendly, at least I found it to be on my system. The view is virtually unobstructed with the exception of the framework around the windshield, and as I said above, it is easy to access every switch that you will need. On the other hand, there are quite a few non-functional switches that I feel should have been utilized, and I could do without the red ambient lighting as I feel that the backlit gauges in the "cockpit" makes the gauges more legible than in the VC.

The rest of the virtual cockpit

The texturing throughout the virtual cockpit looks pretty good to me, of course outside of the panel, consoles, and seat, there is not much room for anything else. Most of the VC is dark grey and black, which fits the era of the aircraft very well. The modeling is also very good, especially when you look at the window framework that can be difficult to round off properly. I did not find any notable texture or modeling errors inside the virtual cockpit. My only complaint is that it can be difficult to read the labels on the side consoles without having to zoom in, but then again, that is not uncommon given the limitations of Flight Sim.

Panel

The Javelin's panel has a decent 3D appearance, a fairly uninhibited view outside, and is definitely user-friendly. Though it does lack some functionality that I know many simmers would like to have, that is unless you don't mind using the sub panels. The lower half of the panel is where nearly all of the gauges are located, including a G-meter, the elevator and rudder trim indicators, altimeter, airspeed indicator, tachometers, oil pressure indicators, VSI, EGT indicator, turn coordinator, ADF, DME, AOA, RMI, and the fuel volume indicator among others.

The upper left portion of the panel is where you can access the sub panels, auto pilot, NAV1 radio, NAV/GPS switch, airbrakes, and the switches used to reheat the afterburners. The upper right section of the panel contains mostly annunciators, but also includes a clock, alt. pressure indicator, and a switch for the panel lights. This section of the panel is angled slightly, as is the lower left and lower right areas,

which help to give it a more 3D look. The lighting in the panel view consists primarily of white backlighting on all of the gauges, which is a notable difference from the red ambient lighting in the virtual cockpit.

| The panel in daylight... | at night... | and compared to the VC at night |

As long as you stick with a screen resolution of 1024 X 768 or above, the panel texturing looks very good, at least in my opinion, and the instruments are clear, legible, and flow very smoothly. I did lower my resolution for the screenshots in this review to 800 X 600, which tends to blur the textures just a bit, and the JPEGS don't really do it justice either. But for the most part, I think that you should be able to get a good idea of the level of quality in the panel for better or worse...you decide.

The Sub Panels

There are six sub panels accessible by use of the "shift + number" keys or from the sim icons next to the NAV1 radio. These panels include the autopilot, radio stack, default Garmin 295 GPS, an enlarged RMI, and a switch panel. The autopilot is small, yet legible, easy to use, and can be placed in the upper center of the panel without getting in the way. Personally, I'm not overly excited about having this particular autopilot, nor am I particularly interested in the presence of the default GPS, but they do help to invite all levels of simmers to use this aircraft.

| Here are the sub panels open on the panel... | and by themselves |

The radio stack contains an ADF, COM-NAV radio, audio selector, transponder, ADF indicator, and a VOR1 indicator. These instruments are stuck together in one sub panel and cannot be placed individually on the panel as I would have liked, but some simple gauge work can fix that. The switch panel is the largest of them all and gives you access to toggles for the aircraft lights, battery, avionics, NAV-GPS selector, fuel pumps, generators, starters, fuel cocks, de-icing, and the pitot heat.

Sounds

From the long whining startup, through the thunderous roar at full throttle, and to the hum of shut down, the Gloster Javelin sound set is not for those with sensitive hearing. The Javelin's sound set is made up of 42 original .wav files that combine to form a very powerful, and what I believe to be authentic, indication of the Javelin's deafening roar. From the spot view you will hear a high pitched scream that becomes deeper as the engines throttle up. Inside the aircraft, the pitch is much lower and is replaced with more of a groan and rumble than the whistling from outside.

Test System
Compaq Presario SR1232
AMD Athlon 2.2 GHz
2 GB Ram
NVIDIA Ge Force FX5500
StarLogic 21" Flat Panel
Monitor @ 1024 X 768
CH USB Flight Yoke
CH USB Rudder Pedals
Saitek X52 Flight Control
System
FTP 290 Throttle Quadrant
Bose 5:1 Surround Sound

Laptop

Toshiba Satellite
1.6 GHz Intel Celeron M
512 MB DDR2 SD Ram
Intel Graphics Media
Accelerator 900

Flying Time:
44 hours |

Airfile

I believe that the flight dynamics in this package have been given special attention, and though I have struggled to master the art of landing this bird, I am more than satisfied that AlphaSim has provided an authentic airfile, or at least as close as FS9 and FSX will allow. The Javelin is certainly not a STOL aircraft, but it gets up to speed quick enough that 5,000 feet of runway should be enough. Once airborne you can easily reach 550 KIAS or better, and at times I was able to make it up to 610 KIAS, which is about 10 KIAS short of its max speed. In a dive you can easily tack on another 50 KIAS or so. I have yet to cross 5 G's thus far, but according to the checklist it can reach 5.5 G's with empty ventral tanks, which gives me something to work on.

While the Javelin is fairly maneuverable, it is not as responsive to control surface commands as I had expected. As I will explain later, the slower response caused me a few problems while trying to land, but once you learn and understand how the aircraft reacts, it is a dream to fly. Speaking of landing, I have my suspicions that the novice simmer may encounter some frustration trying to master the perfect touchdown. The delta wing causes the aircraft to float longer than other comparable aircraft, which is in direct opposition to the sinking feeling that I got while trying to keep my airspeed down for landing.

One unique feature of the Javelin's airfile is the manner in which the aircraft responds to reheating the afterburners. Like the real deal, the Javelin did not take off with afterburners, and doing so would actually cause a loss of performance. The afterburners are used at high altitudes and high cruise speeds, and should not be reheated below mach 0.6. When trying to slow down a little you will find that the airbrakes are very effective and must be used with caution as the aircraft will descend very quickly.

The recommended cruising altitude is somewhere around FL360 at an airspeed near mach 0.80. This formula should give you the best economy of 5500 to 5700 lbs of fuel burned per hour. However, if you are looking for more of a rush you might try climbing up to FL400 and lighting the burners. This should get you that 600+ KIAS that I was talking about earlier, but make sure there is an airport nearby because your fuel won't last long.

Performance (FS9)

The frame rates were never a problem for me, in any view, in any of my review test systems. I have locked the FPS on my laptop at 30, and with rare exception, it never dropped more than two or three frames. My review system is locked at 40 FPS, and the frames never dropped by more than a couple of frames. My home cockpit is set to unlimited frame rates, and I had no problem staying in the mid 50's. Of course the virtual cockpit was the most resource demanding view, and that's what the numbers above represent. The "cockpit" view never made my screen flicker in the slightest, and the spot view fell somewhere in between the other two.

For my personal simming use I always leave the scenery settings at high, and this aircraft gave me no reason to have to alter them in any way. Just for fun I did try the Javelin with all of my sliders maxed out, but my laptop and review system did not fare as well, as the FPS frequently found its way into 20's, which still seems respectable. My whole point of this section – I think that just about any modest system should be able to handle this aircraft with ease.

The Javelin in FSX

As I mentioned earlier, the Gloster Javelin is compatible with FSX, but unfortunately, my review system is not quite ready to take on the challenge of reviewing aircraft in the new Sim. However, for the benefit of those who would like this aircraft for FSX, I gave it a shot anyway. The aircraft looked great, the panel was clear, and the details were noticeably more evident than in FS9. The only problem I had was that using any view other than the "cockpit" was performance suicide. I could get 25 FPS or so from the panel, but as soon as I brought up the spot view, or virtual cockpit, the frame rates took a dive to 12-14, which is not very smooth on my system. Here's a few shots of how the Gloster Javelin looks in FSX:

The exterior model in FSX

The panel and VC in FSX

Since I am aware that many simmers suffer from the same affliction I do with FSX (poor performance), I would advise you to approach this package with caution unless you are willing to keep it isolated in your FS9 world for awhile. On the other hand, if you don't mind flying solely from the "cockpit" view, then you should have no problems. Personally, I happen to prefer the virtual cockpit in the Javelin for that extra bit of authenticity.

Test Flight

After spending numerous hours evaluating this aircraft, which included nearly 50 test flights, I still struggle trying to land without the aircraft bouncing off the runway. So for today's virtual flight, I have decided to walk you through a flight following the procedures as closely as possible in an effort to get it right at least once before I complete this review. Hopefully I can have a smooth landing, but if not than perhaps one of our astute readers may be able to pick up on what I am doing wrong. To help me focus more on operating the aircraft and less on navigation I have chosen to fly a route that I am very familiar with, which takes us from the Jacksonville Naval Air Station in Jacksonville, Florida to Randolph Air Force Base in San Antonio, Texas.

My flight begins parked on the main ramp at NAS Jax facing the St. Johns River with downtown Jacksonville in the distance. After a brief external inspection I hopped into the cockpit and followed the engine startup instructions as per the checklist. The parking brake is set, throttle at idle, electrical equipment off, master battery switch on, fuel supply at 95%, and the fuel cock is on. Then I flipped up the switches for the fuel pumps and started the engines with the engine start switch. After checking out my oil pressure and temperature, I turned on the generator and avionics switches, and according to the checklist, the start up procedure is now complete.

Departing NAS Jax

I taxied out to the runway and glanced over the takeoff procedures. My fuel is adequate to get me where I'm going, the flaps are up, and the elevator trim is neutral. That means it's time to apply full power and get ready to go. The checklist tells me to rotate at about 115 KIAS for a smooth lift off at 140 KIAS, which was fairly close to my actual results. Once I felt that I had a sustained positive rate of climb I pulled up the gear, continued on a 1,500 FPM climb until I reached 195 KIAS, and then reduced the throttle to climb at 350 KIAS until I reached 20,000 feet. At FL200, I reheated the afterburners and continued my climb to 31,000 feet before leveling off and reducing my throttle to cruise at nearly 500 KIAS.

At FL 200

After getting out over the Gulf of Mexico, I decided to take advantage of the autopilot and review the descent and landing procedures. I can see that there is not a whole lot to remember for a smooth descent; just relax the throttle and apply the airbrakes as necessary, and that is exactly what I did from the eastern border of Texas until I hit 3,000 feet on the downwind leg at Randolph Air Force base. I entered the leg at about 230 KIAS and reduced my speed to 210 KIAS before lowering the landing gear. Once I reached 170 KIAS I extended the flaps one stage, and to the second stage near 160 KIAS once on the base leg. Turning onto final, I lowered the third and final stage of flaps and maintained 150 KIAS. By the time I reached the end of the runway, I was just over 135 KIAS and slowing, but the Javelin did not sink, instead it seemed to float just as the checklist said it would.

I flared slightly somewhere between 75 and 100 feet above the runway and let the aircraft slowly sink until I sensed the main gear making contact. Unlike every other attempt I made at landing this aircraft, this time the wheels stayed on the ground and the nose slowly began to come down. And though I can not explain what made this landing nearly perfect as compared to the other attempts, I am happy to have finally gotten it right.
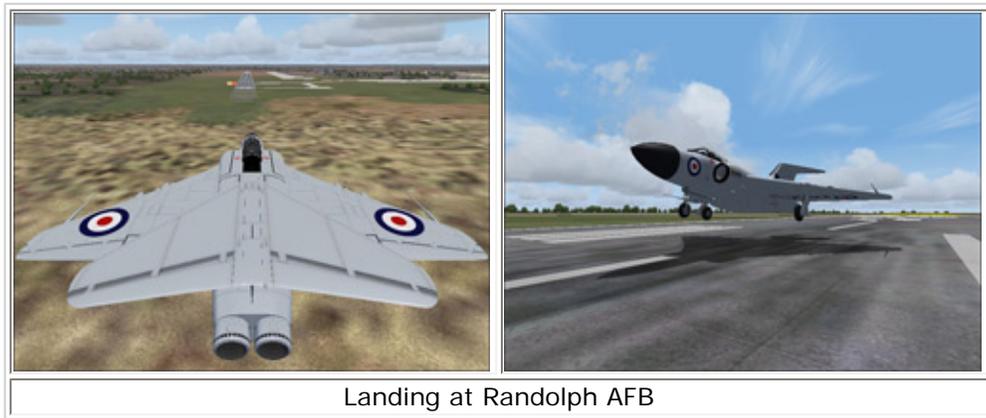
Landing at Randolph AFB

Conclusion

There are many factors that are involved in determining the quality, functionality, and overall authenticity of an add-on aircraft, and with the continuously improving technological advancements in Flight Sim add-ons, I am wary about placing my seal of approval on an aircraft that may not cut the mustard a few months down the road. But in this case, I think that AlphaSim has provided an aircraft that should continue to remain worthy of my virtual world for a long time to come, though each simmers experience may vary from my own.

I'm not sure how well simmers will respond to the $38.00 NZD (approx $25.00 USD) price tag, but from my experience with payware products, I think that some might find it a touch on the high side. Again, this all comes down to a matter of opinion, and there are many contributing factors to both sides of the argument. To be honest, most of my add-ons from AlphaSim have been purchased after they have been available for awhile, but I still find them very suitable for my virtual world. I can also see this aircraft remaining on par with others in my collection in both my FS9 and FSX worlds for quite a while. And while I am not quite ready for FSX, it's nice to know that this aircraft is.

I like AlphaSim's rendition of the Gloster Javelin, others will agree, some will not. I think that the screenshots in this review are a fair display of what you will get visually, but unfortunately, there is no way for me to capture the flight dynamics and sound set, which leaves a few important aspects as a matter of my word. If you have an interest in this package than I would highly consider asking your fellow simmers in the Avsim forum for their take on things. Don't forget to also check out the screenshots and specs on AlphaSim's website.

What I Like About AlphaSim's Gloster Javelin V1.1

- The flight dynamics seem very authentic to me
- No complaints about the exterior or interior modeling
- The sound set fits the aircraft well
- FSX compatibility for when I'm ready
- I like having the FAW.5 model to compliment the FAW.9 and FAW.9R
- All of the liveries are accurate compared to their real-world counterpart
- Great performance in FS9

What I Don't Like About AlphaSim's Gloster Javelin V1.1

- I do not care for the difference in panel lighting between the VC and "cockpit" view
- I would have liked more documentation relating to the virtual cockpit
- Some of the VC switches are just for looks

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"

Javelin

(adobe acrobat required)

Comments?

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 to provide you with background information on the reviewer and any connections that may exist between him/her and the contributing party.

Tell A Friend About this Review!