

Flight Simulation for the HP Victor

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Not until the 1990's did I get into some form of flight simulation, which resulted in my company being formed. On one of the internet sites I spotted an HP Victor by **Alpha Simulations** and set about putting together my own panels and systems to go with its model in FS98. This progressed onto FS2002 where under a little pressure from me I pushed Alpha for a more accurate Victor – which we developed into the current version. Through the internet sites I have been able to acquire various Victor memorabilia and now have quite a collection. This ranges from early advertisements, photographs, videos and even actual instrumentation, which will eventually be put into a working analogue cockpit for the Victor.

It was through the internet that I was able to get in touch with the owner of XL-231, Andre



Tempest and the most qualified Victor engineer, Roger Brooks. It was only through their generosity that my latest version of the Victor has become such an accurate simulation in panel, gauge and flight characteristics. It is the only aircraft I fly in FS2002. It simply demands that much and gives so much in return. Even though we are currently up to FSX I still keep the Victor on FS2002 for a couple of reasons: - the tanking utility and various scenery add-ons that are superb like LXGB Gibraltar.

For those that share the same passion for this aircraft I am

willing to show, share and assist with my files and data to allow others to enjoy this aircraft as much as I do. This will be an on-going process and if you are in touch with me via email, then I will send updates as they are completed.

This is what you will currently end up with:

External images of the latest **Alpha Simulations Victor K2 and B1:**



XL-231 Hemp Livery (owned by Andre Tempest)



**XL-512 in Camo livery
(Favorite aircraft of Roger Brooks)**



I must thank Alpha Simulations for their superb work and providing a K2 Victor at my request. All external models are extremely accurate. Some of the texturing on XL-231 e.g. nose art, comes from digital images provided via myself from my collection of this aircraft. I also provided the high resolution panel images.

The K2 external model features:

- Full set of tanking lights, and correct landing light movement.
- Full and variable speed brake
- Correct pitch trim setup over elevator movement
- Extending and retracting AAPP and RAT scoops
- Correct detailed design of the inboard flaps
- Gold tinted main cockpit windows and accurate nose art
- Opening and closing crew hatch
- Accurately modeled gear mechanics
- Sorry streaming the chute is not yet possible.

Panel images:



My current setup covers three separate screens; the centre and right is run from my main simulation computer with two graphics outputs and the left panel is run on a laptop using a USB network cable and Max Vista software.



My current **centre screen** is the main "AA" (First Pilot's) panel. This has been upgraded to the Military Flight System ADI in the center. The Beam Compass is underneath and other flight instruments are accurately replicated visually and in performance. The digital ground speed/airspeed gauge is non-standard and aids in keeping taxi speeds to within correct limits. Four panels can be displayed over the main panel in this image. All can be displayed independently, or alternatively, they can be undocked and moved over multiple screens as I have done as shown in the first of the panel images. Max Vista is a piece of very good software to achieve this. Use the USB option as it is 4 times faster than normal networks.



The **left screen** is run on a laptop using Max Vista and a USB network cable (very efficient).

Top left is the AW/AZ panel. It contains the powered flying control switches, heater and pitot switches, and the gear indicator. The fire warnings will be added shortly.

Bottom left is the Bottom left is the AC lighting panel.

Bottom right: Radar gauge - commonly used in flight simulation. It shows AI aircraft in three scan modes and four ranges up to 40nm (FS restriction). This is necessary if you are using a high percentage AI traffic setting. Around the gauge is an actual image I added of the H2S radar panel from XL231.

The **right screen** (below) is run off my main video card dual output.

Top right is Panel CAG i.e. the main navigator's panel which is directly behind the pilots on the rear cabin bulkhead. It contains various instruments for complete navigation. This panel is used 90% of the time en-route. It was taken from an actual image in XL231. The frequency setting panel is non-standard and a steal from fs websites.

Top left is the Carousel INS gauge for INS navigation. A simple click on the panel brings it to the fore-front. This is an extremely accurate replication of the INS system. It even caters for radio updating. It is simply a must and it is free-ware.

Bottom left is the MK10 Autopilot. The heading selector knob is not in the correct place but a minor deviation for such a fine replication of this system by PSS. Once you have mastered it, it's a joy to use. The MFS and MK10 autopilot need considerable time to understand and master. However it is an amazing system and fun to use.

Warning: you continually work this system – no more engage and forget.

Bottom right is Panel A. The main engine panel, with gear and flap controls. All gauges are operational on this panel along with the park brake indicator lamp and low oil pressure lamps, which are correctly calibrated. This panel is also taken from an actual image from XL231.

Engine #1 gauges are also on the main panel which enables a careful eye to be kept on the RPM settings without bringing in the A panel.



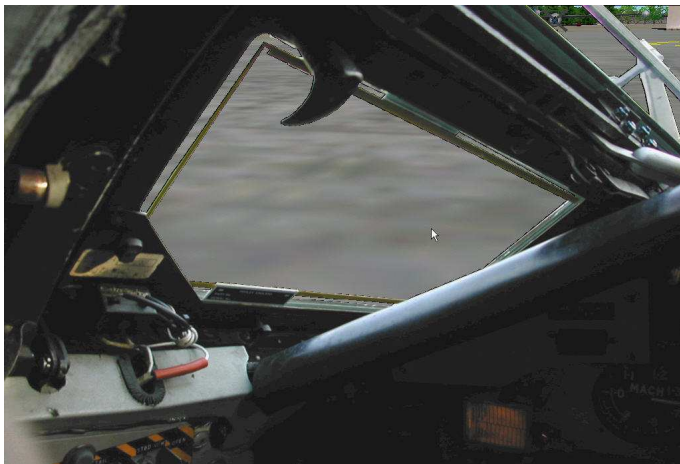
(Note panels are complete when the task bar automatically hides.)



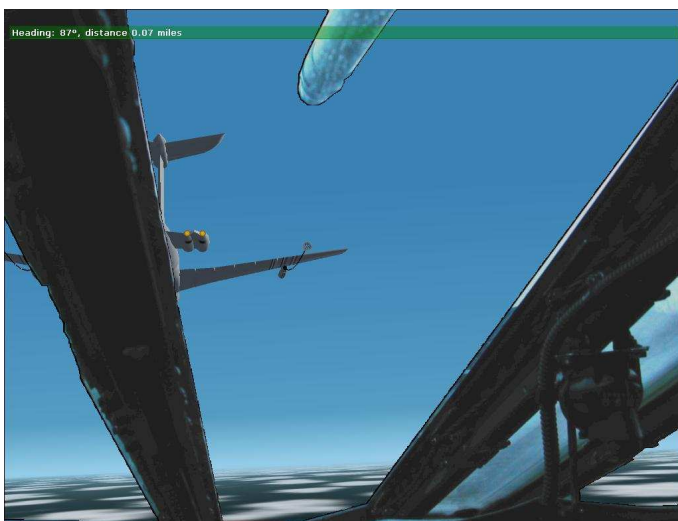
I am not a fan of Virtual cockpits especially when much of the instrumentation was laid out in a 2D flow diagram. This is my right front view taken from an actual image from XL231. The view is set accurately in pitch and direction.

We currently have a complete set of views from one side of the aircraft to the other. These will gradually be added to.

I disable the see_self setting in FS2002.cfg i.e see_self=0



Front left view – very necessary for following the taxi center line when turning left. Taken from an actual image from XL231.



The tanking probe taken from an actual photograph of XL231. The panel is used when close in to the tankers of the Lago Tornado add-on. It allows tanking to be performed with K10 or VC10 tankers.

Panels to be added:

Full electrical panel "BF" with its systems;

Engine start panel "AL" or perhaps some hardware for this one (currently under development).
A 2nd Pilot panel to utilize functions such as the EGT controller and Mach Trimmer. This will be the same as the front right view with gauges inserted in the appropriate places.

Fuel Panel AT (I do have a real one from XL191)

Sound files: My current sound files come from a basic Rolls Royce Conway engine. This has been supplemented by recordings from Victor videos and then put together and extensively re-worked with FS Sound Studio. The start procedure has to be adhered to. This allows for accurate replication of the start sequence, in-flight sounds, ambient sound and shutdown sequence. The sound levels have been adjusted from video of the Victor in flight and on the ground and provide accurate levels in respect to location of the engines to the crew.

IF YOU ARE STILL INTERESTED

What you need first:

You will need to **purchase** some of the listed products below. The reason is that rather than re-invent the wheel, I have "borrowed" various gauges from other aircraft or purchased add-ons directly. (Note: I do not re-sell any of the add-ons in part or in their entirety as mentioned in

this document.) Some smaller gauges and challenges I create myself with gauge and panel software.

Flight model:

My original flight model was from Alpha Simulations.

<http://www.alphasimulation.co.uk>

It took me ages to convince them I needed a new Gmax model of the Victor K2. Recently I received a most welcome email to say they would do it and they asked if I would contribute and test it.

What you now see and can purchase is about three months hard work and has resulted in a highly accurate model of the HP Victor K2 in both the hemp livery and the camo livery. Following with be a Victor K1 in the white titanium anti-flash livery of the Cold War era.

Some features are:

Distinctive gold tinted main cockpit windows.

Extending Artouste AAPP (APU) inlet and extending RAT (Ram Air Turbine) scoops.

Opening/closing crew door.

Accurate air brake which can be set up (as I do) to become proportional.

Correct flap settings and very accurate replication of the inboard flap structure.

Correct trim setup of the elevator trim over the elevator surface.

A full set of tanking lights with correct tanking markings. (Sorry no moving HDU).

Correct navigation and beacon lighting.

Correct retracting/extending landing lights.

Realistic dynamic shine on the fuselage.

Alpha Simulation has provided an extensive Virtual Cockpit from my images of XL231.

Accurate nose art and logos as is on XL-231 in the hemp version.

Accurate camo version.

Gauges:

PSS Vulcan (Pay-ware). <http://www.phoenix-simulation.co.uk>

This site is where I found their Vulcan with its Military Flight System, Beam Compass and MK10 autopilot. PSS did such a brilliant job on this that it was plain crazy to attempt it myself. By purchasing the PSS Vulcan, part of the cost is donated to getting Vulcan XH558 back in the air so it's a very worth-while purchase in its own right. I also belong to the 558 club.

Delco Carousel INS System (Free ware) <http://www.simufly.com/ins/>

This is a brilliant and accurate replication of the INS system as used in the Victors during the Falklands War.

Absolute fun to prepare and fly with.

Recommended for the ultimate flight experience but not necessary:

Air File Pro from Lago (Pay-ware) <http://www.lagoonline.com/>

This program reads the weather you are using in FS and applies correct forces to the aircraft in the way turbulence really does. No more flying through so called turbulence and watching gauges shake around.

Tornado by Lago (Pay-ware) <http://www.lagoonline.com/>

This product has an Air-to-Air tanking module which I had a little input into.

The tanking section gives options to connect to either VC10 or KC10 tankers with options for drogue or boom. This will keep you busy for hours on end. It's a real challenge and totally rewarding when you achieve that first transfer of fuel. I had Andre take an image of the refueling probe which I have used as the upper forward view – just for tanking. The Victor was described in a video I have of being particularly difficult to tank as a receiver.

FS Navigator from FS Navigator (Pay-ware) <http://www.fsnavigator.com>

One of the most popular Navigation and mapping programs to run as a module of FS. When not using the INS system this is a nice add on for situation awareness.

FOC2003 – (Pay-ware) <http://www.danur.com/main.htm>

This is an extensive flight planner from Danur Flight Simulation. I will share my aircraft performance files to provide an accurate flight plan for the Victor and very suitable for INS navigation. It's a world wide flight planner with online access to world weather data. I would consider it to be one of the most accurate and professional I have encountered.

Copy of the real Victor Pilot Manual (Payware) <http://www.flight-manuals-on-cd.com>

I actually found this in New Zealand. This has extensive detail on how to fly the Victor. My airfile and configuration files have been tested by RAF pilots who flew the type. Their comments and approvals have been incorporated into these files. It's not easy to operate the Victor correctly per the book- it's a real challenge. I have also copies of the Military Flight System and MK 10 autopilot instructions. They are both a challenge but very rewarding systems to use once you can handle them.

I can then offer the following:

1. Accurate air and aircraft.cfg files for the Victor K2.
2. Panel.cfg file with photographic panel bitmaps and all gauges associated with my version.
3. My sound and effects files.
4. Some copies of the real flight sheets to calculate from.
5. Copy of my check lists in MS Word format.
6. Details of changes to my FS2002.cfg files.
7. Details of other key mapping I use for views, variable speed brake etc.
8. Regular updates as other panels and systems are created and updates of any current panels and systems.
9. Every assistance on how to install and fly this Victor in FS2002 – per the book.....
10. Cost? Just the cost of postage, cost one CD-rom and cost of any photo-copying requested.
11. What I provide is not to be used in any commercial product without my permission.

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