08/28/03 Falcon 4.0/SP3 Training Mission Report #02

Objective:

The objective of today's flight is another in a sequence of familiarization flights intended to get a general overview of basic F-16 flight characteristics.

Planning/preflight:

We will be departing Seosan airbase as a 2-ship flight. The preflight mission briefing screens (too small here to read) are extremely detailed and give all the waypoints, times, altitudes, headings and airspeeds that are to be flown:



In a real life war the Air Tasking Order (ATO) or "FRAG" is the blueprint upon which the war is conducted. As such, the briefing is full of critical information that will put you in the right place at the right time. The ATO takes into consideration many variables such as tanking assets, mutual support (ie: you want a SEAD and CAP to accompany your bombing run), deconfliction of traffic (keeping packages from running into each other) etc... So knowing your plan and sticking to it is essential. I'm aware that the F-16 has some read-out on the HUD which will help you reach your waypoints on time; I will be learning those soon.

This flight is another "free-flight" allowing me to experiment a little with the aircraft and some features before getting into the intricacies.

For this flight we'll be carrying 4 AIM-120s, 2 AIM-9Ms, an ALQ-131 ECM pod and 2 370 gallon external tanks:



Debrief:

My wingman (instructor) and I taxi out for departure. I elected to start from the TAXI position this time as opposed to on the runway. Indeed you can even select RAMP and you get to go through the entire start-up procedure for the F-16. That is something I will likely tackle later once I've got my checklists printed out and am a bit more "switch cognizant".

I did finally learn how to turn my nose-wheel steering on and off, a very important skill when taxiing <g>.



The tower clears me for takeoff and I push the throttle into full afterburner:



The weight and drag of the full internal fuel tanks and external tanks makes a noticeable decrease in acceleration, an increased ground roll and definitely makes the aircraft more sluggish in performance compared to a clean aircraft. The gear retraction modeling is one of the prettiest I've ever seen in a sim:



Climbing out the flight computer automatically retracts the leading and trailing edge flaps as airspeed increases:



As I start making my way around the waypoints my wingman (instructor) slides into position and I experiment with some basic wingman commands and have him close-up the formation:





I order him into the trail formation and he sets up slightly above me although I doubt he would lose sight of me over his nose like this in real life:



At the bottom of my HUD the navigation waypoint diamond is superimposed on the terrain to help me visualize my waypoints:



Turning through the last waypoint on the short course around the countryside I spy the airport out the right side and start getting vectors for my arrival:





On the downwind:



On short final you can see that the airspeed required to maintain the proper glide-path and AOA are very much dependant on the weight of the aircraft. With a few thousand pounds of fuel and clean wings it only took about 140 knots to maintain this same sight picture, whereas with external tanks and many more thousands of pounds of fuel a higher "ref" speed is required (166 KIAS in this case):



Safely on the ground I pull up to some ground service vehicles. Unfortunately I don't know if this is an environmental cart, fuel, or simply lav services <g>:



Conclusions:

I know these are baby steps for most of you. I'm sorry to say that the big explosions and fiery ejections probably won't be coming for awhile guys. Though it may look tedious, simply learning the jet and its systems is much more fun when you are the one doing the flying. While cycling through the wingman command menus I can see that the choices and commands for wingman control are extremely thorough. I wonder if perhaps people map wingman commands to some sort of voice recognition software?

Navigation has been relatively easy thus far, although I do need to learn more about flying the correct speeds and altitudes and pulling up that data in the avionics. Also I need to learn how to switch TACAN channels and do various other basic navigation functions including instrument approaches.

BeachAV8R