

Review

Strike on P'anmun Depot

A Combined Review and Mission Report for **FreeFalcon 3**

by **Chris "BeachAV8R" Frishmuth**

With the recent release of FreeFalcon 3 (FF3) the Falcon 4 (F4) community has witnessed another amazing leap forward in the evolution of this one of a kind simulation. I tend to leave the politics and strife of the F4 community out of the "big picture" and instead focus on having fun and flying exciting missions with the wealth of user created add-ons and improvements that make F4 arguably the best combat flight simulation available. With the release of FF3, F4 has become probably as approachable to the new-comer as it has ever been before. FF3 is a mixture of stunning flight models, graphics, and the most impressive dynamic campaign ever seen in a flight simulator. To top it all off the FF3 team has bundled it all together into a seamless and easy (did he say EASY?) installer that makes flying a highly modified Falcon 4.0 more hassle free than it has ever been before.

I won't go into the detailed history of the evolution of F4 or FF3; it's all there for the reading for those who wish to dig it up on many of the community forums. Let's just get on with the flying!

As many of you know, I've been flying F4 and doing my "mission reports" for almost a year now. I've owned the original 3-ring binder of F4 since the day it came out, but it wasn't until last year that I entered the fascinating (and often crazy!) world of F4. What I found, once I sorted through all the offerings, was a rich simulation, more immersive than any other I'd ever flown, with a rabid fan base consisting of some of the most talented programmers and "modders" I've ever seen. After learning the ropes of F4 I started a campaign in September 2003 and have written reports for all of my missions to date (52 missions!). As I flew and reported on my campaign progress F4 continued to evolve. Since many of the improvements to F4 do not allow me to migrate my campaign into new installs, I have been stuck using the same install I started with, which has been incredibly rock solid (BMS .99 & FreeFalcon 2). Over the past year since the beginning of my campaign there have been several new releases that further improve the F4 experience including: BMS 1.03, BMS 2.0, SP4 and SP4 Hotfixes. It has been agony seeing the beautiful screen shots from these latest offerings, but after investing so much time in my campaign I've set my mind to completing the campaign before upgrading to a new install.

So with that said, you can understand why I was so excited to get to try out FF3, if only for a little while, to see just what it is I have been missing!

The first thing you need to know is how to get FF3. Unfortunately there is no easy answer to this question other than to say you might have to search a bit for exactly HOW to get it. It was originally distributed via BitTorrent to save server bandwidths.

The FF3 package weighs in at a hefty 214MB, but when you see what it has to offer you will agree that it is worth every minute (or hour) of download time. Take the time to visit the FF3 web site (www.FreeFalcon.com) to read up on the latest issues and download the FF3 manual. There is already a Hotfix that has been released so head over to the web-site and read all about it.

Once you have the FF3 installer, all you need is your original Falcon 4 CD and you are ready! Simply install F4 from you CD then double click on the FF3 installer and it takes you step-by-step through a painless install procedure. Be aware that FF3 replaces and modifies a ton of files automatically so you will have to be patient while your computer churns through all the data. I timed my install on my P4 2.0 Ghz computer at about 30 minutes from the time I installed the original CD to the time I was ready to start flying. Next install the Hotfix, a very painless once click operation, and then you are ready to configure how you want YOUR install to be specialized. The installation will place an icon on your desktop called FF3-BMS Config Editor. Open this and start selecting whatever extra or different items you are interested in, or don't and just start with the default settings.

For the purposes of this review/mission report, I decided that I was just going to go with a plain vanilla original F4 + FF3 install, focusing on what it would be like for a newbie to get into F4. So this report will not feature skin packages, add-on cockpits or terrain tiles.

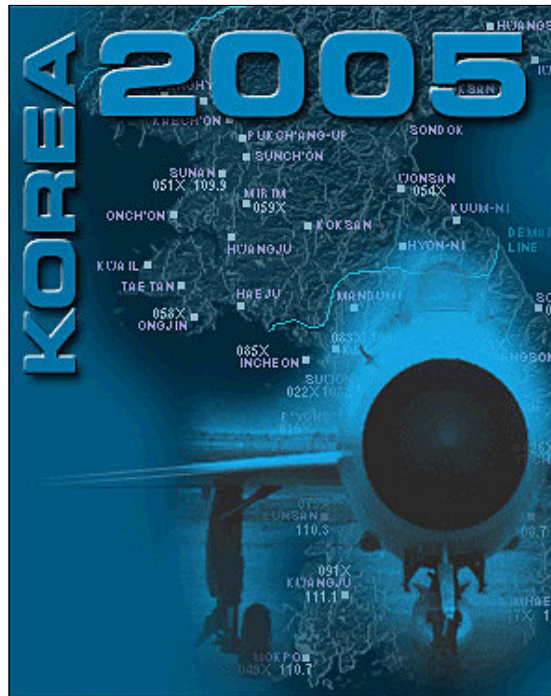
After a quick browse through the FF3-BMS Config Editor, I'm ready to fly!

My System Specs:

- Toshiba 5205-S703 Laptop
- Pentium 4 - 2.0 GHz / 512MB RAM
- 64 MB GeForce 4-460Go Mobility graphics chip
- Laptop ported to a 19" Samsung 955DF monitor
- Saitek X45 HOTAS

Note - Although I approached my FF3 install from the perspective of a new user I am, admittedly, a bit experienced with F4 (some would argue that assertion..haha..) so new users should absolutely learn to fly F4 by taking baby-steps and asking questions. F4 is not a "light" sim at all, and I'm pretty sure that the current highly modified F4 doesn't play very well with "easy avionics" selected (your results may vary!). The bottom line, read the original manual as well as the many excellent supplemental manuals out there (RP5, SP3, FF2 & FF3) and don't expect to jump into this sim and fly it like you would Crimson Skies. While the install may only take 30 minutes, learning to fly a highly realistic representation of the F-16 takes an investment of time and practice!

After firing up your newly installed F4/FF3 sim take the time to go through the options menus checking off and on things you may want. The graphics and sounds pages have changed a bit from the earliest version of F4 and you'll want to tailor your selections to your own preferences and hardware. Personally I fly at 97% realism with the only concession being enhanced padlock. I also fly at 1600 x 1200 / 32-bit resolution with no FSAA enabled. With my meager 64 MB graphics card I find the cost/benefit of FSAA not worth the frame rate hit and at such a high resolution the FSAA is a negligible feature anyway.



FF3 ships with a couple extra campaigns in addition to the original Korea campaign. Since I'm already pretty familiar with the original campaign I elected to fly the Korea 2005 campaign, which updates the order of battle significantly and adds a slew of new units and weapons.

After selecting a campaign I elect to fly with a squadron of F-16CG variants out of Kunsan air base. Within a few seconds the campaign engine is generating the Air Tasking Order (the frag) and the war is off and running! As one would expect with a mass invasion south by DPRK forces, stemming the enemy advance south is the first priority. Having lived in Seoul, Korea for 2-years as a military brat, I can tell you from first-hand experience that the DMZ is only a stones throw away from downtown Seoul! As such, the frag order is heavy on anti-bridge missions in the initial phase of the campaign. This can be problematic in

that once destroyed the bridges not only halt the advance of enemy troops, they also hinder any counter-offensive that US/ROK forces may wish to pursue should the opportunity arise. I am not aware how the FF3 campaign engine deals with things like structure repairs/times but adjusting the “infrastructure” slider during the initial campaign mission type selection menu may be prudent.

The campaign engine is phenomenal in F4 (I'll only use F4 from here on out with the implied understanding the F4 means F4+FF3) with a great degree of mutual support being vetted out by the ATO. It isn't uncommon to see a group of F-16CGs being escorted into their target area by a SEAD escort of F-16CJs from a totally different airbase. U.S. Navy F-14s prowl the skies on CAP flights while ROK F-5s pound enemy positions near the DMZ.

BRIEFINGPRINT

MISSION: Strike P'anmun Depot
YOUR TASK: Strike
Time on Target: 09:40:01

SITUATION:
Be advised: Intelligence reports a large enemy offensive is in progress, probably with the intent to take Seoul.

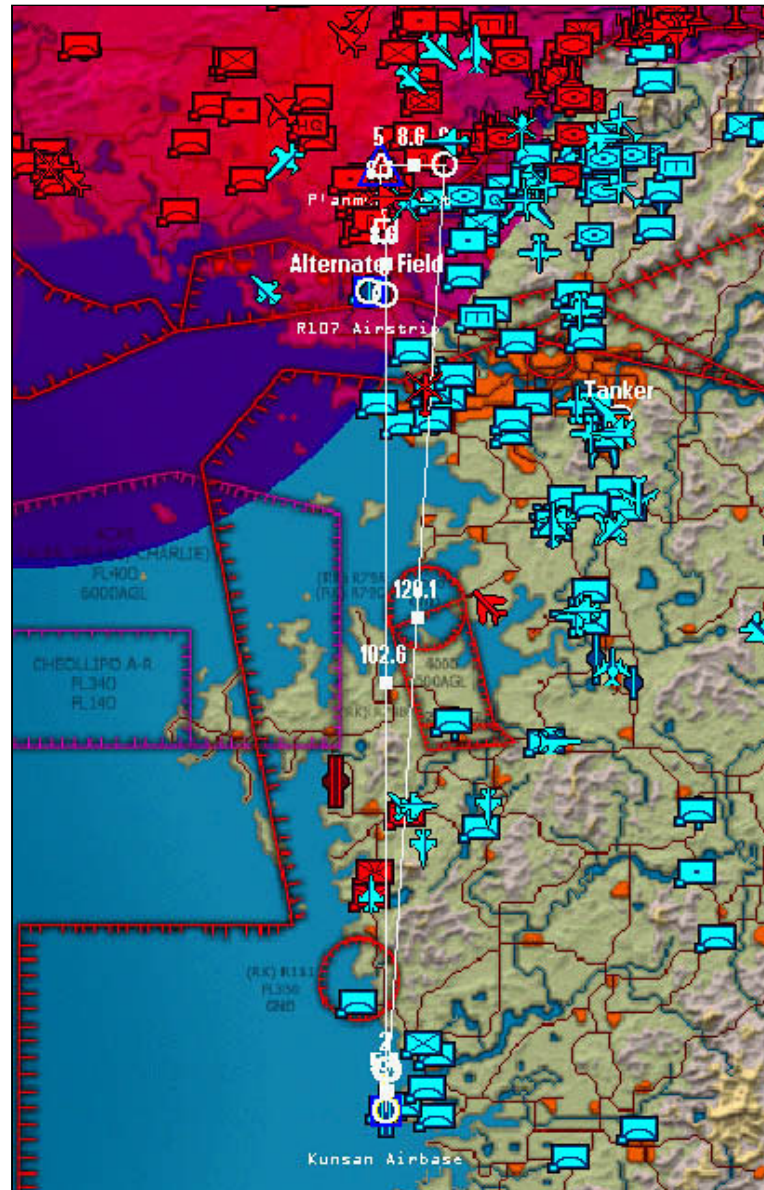
In an effort to obtain air superiority, air command has initiated an Offensive Counter Air operation targeted at the area around Kaesong. If everything goes as planned, earlier SEAD, fighter sweep and OCA strike packages will have cleared the region of air defenses, allowing us to strike key production and infrastructure targets, including your target, P'anmun Depot.
Intelligence reports the highest impact targets are:
Depot

PACKAGE ELEMENTS:
Troll2 (Strike) 2 F-16CG Destroy Depot at target site

THREAT ANALYSIS:
Enemy CAP aircraft are likely to be operating within operation area.
Known or suspected enemy air defenses along your flight path include:
S-60 anti-aircraft guns 1 nm south of P'anmun
S-60 anti-aircraft guns 3 nm west of Chungsan-dong
S-60 anti-aircraft guns 1 nm southwest of Chungsan-dong
S-60 anti-aircraft guns 4 nm east of Chungsan-dong
SA-14 missile launchers 1 nm west of Josil

Within minutes a mission pops up that catches my eye and I immediately place myself as the flight lead. The mission is a 2-ship strike against the P'anmun Depot. The depot looks to be somewhat like a “motor-pool” consisting of two enormous buildings with dozens of vehicles parked outside. This type of structure/target appears to be one of the many new additions that the FF3 has added to the campaign.

Our two-ship flight will depart Kunsan and fly north to strike the depot under the cover of a heavy CAP presence. Red threat circles dot the map just to the north-west of our target area and we will be on the fringes of their threat radius so care must be taken to remain south and east of the target area to mitigate the long range SAM threat. Again I'll have to plead ignorance and can only guess that the FF3 team has used modernized threats in the Korea 2005 theater so there may be threats more potent than the typical SA-5s and SA-2s of the default Korea theater.



The intel screen gives us an excellent view of our target and includes an intel assessment of the target operational capacity, currently rated at 100%.

TARGET LIST		
TARGET	CONDITION	VALUE
P'anmun Depot Depot Depot	100% Operational No damage No damage	Medium Medium



I have tried to modify the load-out for this mission to give us the most “bang for the buck”. Included in our arsenal will be two GBU-24 “Paveway” 2000 pound laser-guided bombs, four CBU-87/103 combined effects cluster bombs for targets of opportunity, and four AMRAAMs of the type B and C variety.



With our plan of attack in hand and our weapons loaded I click the FLY button and wait for our take-off time to roll around. Though F4 offers both ramp-start and taxi options, I prefer to have my jet running and awaiting immediate take-off when I fly. Since I fly for a living I spend enough time programming my FMS in real life to account for the time I skip in F4. 😊

Soon our flight (Troll 1-1 and 1-2) is sitting on the runway and we are cleared by the tower for take-off. Pushing my HOTAS forward I light the afterburner and my F-16 slowly lumbers down the runway straining against the weight and drag of a full load of fuel and ordnance. As you can see, FF3 fixed the graphics glitch that only showed a single CBU canister instead of the proper dual load-out per pylon.



After a significant ground-run my plane finally breaks free of terra firma and starts accelerating for a the cruise climb.



Almost immediately two stand-out features of FF3 reveal themselves. I have never played F4 with anything above BMS 1.03, which I used briefly to make a Falcon movie. Though I was aware of the great graphics improvements with BMS 2.0, I never actually saw it in action. Since FF3 uses the BMS 2.0 “engine” the new effects are in there. The first effect that is readily apparent is what I believe is called “specular highlights”. As your view of the 3D objects rotates in space, a reflective “sheen” moves across the surface of the objects. It is very hard to describe, and even more difficult to translate with a screen shot, but suffice it to say that when you see these 3D models flying in the sim and you pan around them the effect is jaw dropping!

The second readily apparent effect is the very subtle motion of the orbit camera in space, giving a more “fluid” feeling during the external view. A great job has been done implementing that effect. Ever since I saw the LOMAC “jitter-cam” I’ve wanted something similar in F4 and this is a pretty good approximation.

As we climb out away from our base I take a minute to look around the cockpit. Gone is the rough looking 2D cockpit of previous F4 versions. Paul Wilson did an outstanding job of giving FF3 users a free 1600 x 1200 cockpit to use, and according to the FF3 manual, there are 5 other cockpits for use with the other F-16 variants (Block 40/42C, 50/52C, 40/42D, 50/52D, MLU, and 60). I assume these cockpits change automatically when you select different types of F-16s, but I would suggest reading the manual to make sure that is correct and to familiarize yourself with the differences in the different cockpits.

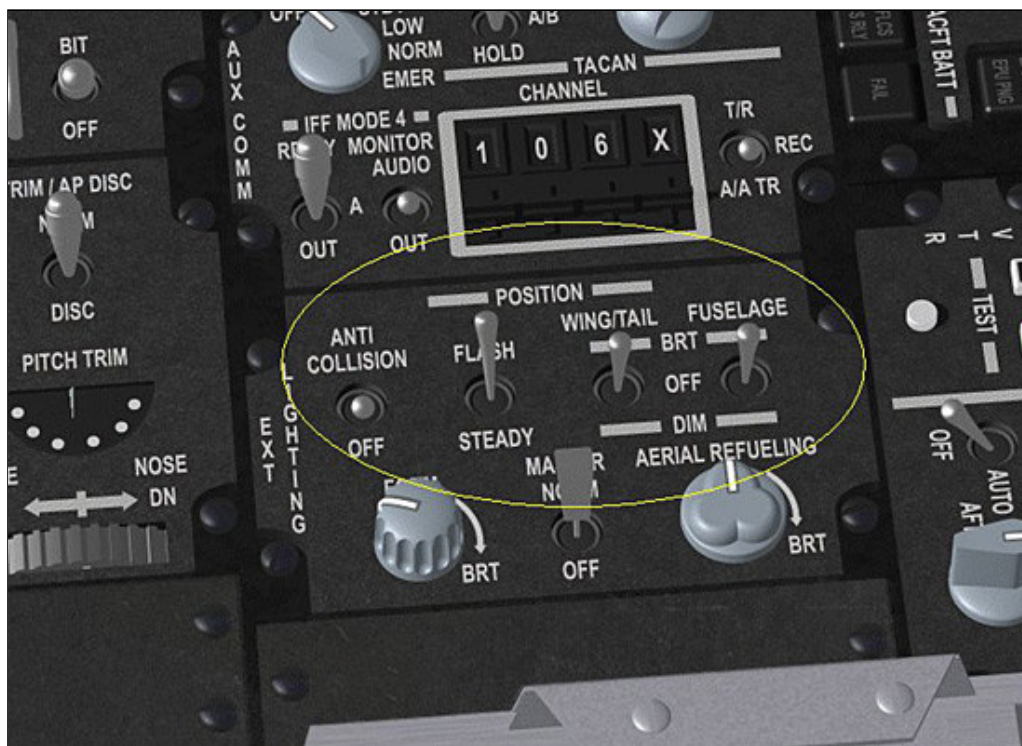
With our aircraft in navigation mode I have the A2A radar in the left MFD and the HSD in the right, showing my steerpoints and strike area.



Reaching over to the left sub-panel I select PRGM 3 on the counter-measures panel to give me a mix of chaff and flares upon pushing the counter-measures button on my HOTAS.



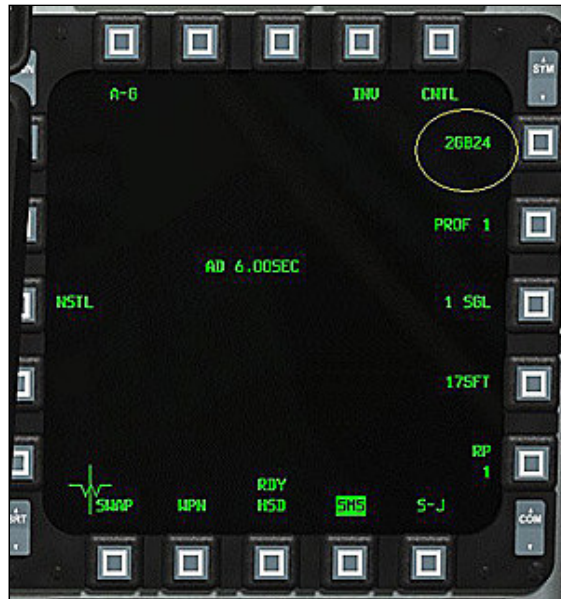
Out of habit I also reach over to the left side panel and turn off my anti-collision and position lights. I seem to recall reading somewhere that there is a “visibility” penalty for leaving these on. I don’t know if that is an urban myth or not, but you would certainly not want to draw any extra attention to yourself north of the DMZ.



While cruising north toward the strike area I take a minute to scan the theater around me to see what is going on. F4 is unique in that other fragged missions that are part of the ATO are actually THERE, they aren’t “simulated missions”, rather they are living and breathing missions mingling with your own sim experience. This ROK F-4 looks to be on a serious CAP mission, bristling with Sparrows and Sidewinders.



Turning back to my own mission I pull up the A2G mode to assure my weapons are ready for delivery. I assure that the GBU-24 is selected and decide to release my weapons as singles in case I miss on the first pass.



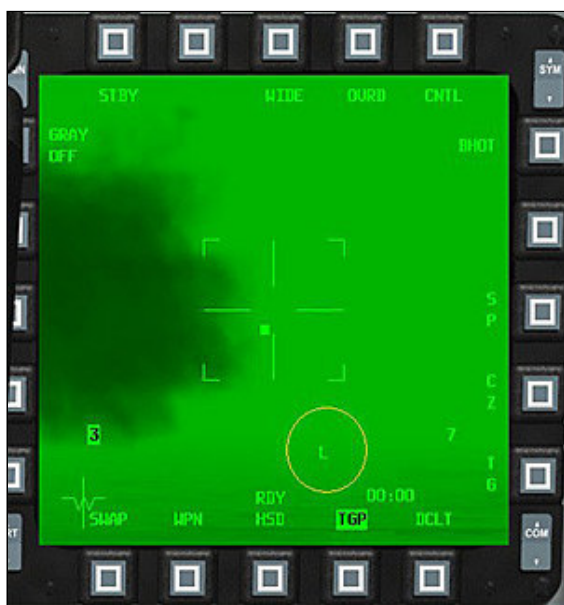
I also assure my A2G radar is in STP mode (steerpoint) which automatically slaves the center of the ground radar to the selected steerpoint. This will make finding the target area very simple since selection of the strike steerpoint will settle the cursors directly over the known target location.



I also turn my laser designator to the ARM position so that it will automatically fire as my LGB falls toward the target. Failure to set this switch will result in an errant bomb with no guidance. The SP3 manual has an excellent LGB tutorial that will help new F4 users get acquainted with the art of dropping precision guided munitions. Just below the laser ARM switch is the Master ARM switch which I also move up into the ARM position. In prior F4 installs the master ARM switch was always in the default ON position, I'm happy to see that in FF3 it defaults to the OFF position upon entry into the cockpit.



With the laser in ARM I switch the right MFD to the TGP (targeting pod) to verify that I have both an aiming picture and an illuminated “L” at the bottom telling me that the laser is ready to function. It is also a good idea to check and make sure the pylon you wish to release a weapon from is highlighted, in this case pylon #3. I don’t know exactly how it happens (I suspect exiting A2G mode to A2A mode a couple of times), but I have gone over a target and realized at bomb release that I didn’t have a weapon selected leading to a “dry run” to allow the ground gunners to get another shot at me.



With the addition of the Korea 2005 campaign the threat warning receiver is broadcasting all kinds of new symbols. In this case I’ve been alerted to the presence of a MiG-31 spike. Maybe the J-11 isn’t at the top of the food chain any longer?



Looking out of the right side of the cockpit at the Korea terrain you can see that the terrain included with FF3 (if it is indeed altered at all?) is quite good. Though not as sharp and detailed as Thomas Waelti's high-tiles, they are totally functional and present the world in a totally believable light. Other incredible features are the beautifully rendered clouds that have a distinct feel of volume to them, and the addition of shadows cast by the clouds onto the terrain. This is old news to the BMS 2.0 veterans, but each new feature is a revelation to me!



Looking down at the right MFD again I can see I have a bit more than 100 miles to go to the target and my threat receiver is picking up sporadic radar guided AAA and search radars ahead.



A MiG-31 roams the skies looking for business. My apologies if I misidentify some aircraft and nationalities with this new campaign since I'm not really well versed on the order of battle and alliances for Korea 2005.



With a spike off to our north-west I turn our flight slightly off course to the west to peruse the airspace on our flank with our A2A radar. Assured that our flank is clear I quickly resume a northerly heading toward the strike area.

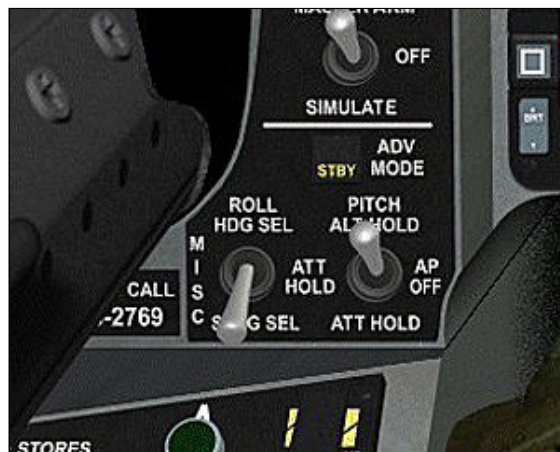


The F-4 Phantoms seem to have gotten a nibble and they accelerate out well in front of us to engage targets over the FLOT. A four-ship flight of Tomcats also pops up on our left side, assuring me that our left flank will be well covered now.





Our flight has finally reached our cruise and attack altitude of 20-thousand feet and I reach down to the left sub-panel and put the autopilot on steering and altitude hold.



One thing I've noticed thus far with FF3 is that the flight model feels a bit more "doggy" with a full load-out. Flying at 20,000 feet and doing some mild 60 degree bank turns (2G turns) bleeds speed a bit more than previous installs and recovering airspeed after maneuvers requires a bit more time as acceleration back to cruise is a bit slower. I don't know if I'm imagining it or not, but the fully loaded F-16 feels much more draggy and heavy; precisely how I would "imagine" it to feel. It is how I would think the real aircraft would feel although that is pure supposition on my part.

The sound effects in FF3 are outstanding, with new aural tones in the cockpit and new Bitchin' Betty sounds. They are very well done and are excellent replacements for the previous effects. I also like the gear retraction sounds and in flight sound.

The radar cursor has a new effect also in that when you slew the radar scan volume to below sea-level, the bottom numbers turn red indicating a negative value. Nice touch.

Coming up on 68 miles to the target and things are heating up over the area. Multiple flights are engaging enemy bandits and AWACS has multiple threats when I query them for the picture.







Meanwhile an ROK F-5 takes advantage of the high-cover to dart toward his target and drop his bombs.



And another unidentified plane wanders around without any A2A missiles, probably not a good idea!



Things are now VERY busy over the target area, with converging flights all intent on accomplishing their assigned tasks. CAP flights from both sides mix it up while strike aircraft try desperately to slip by long enough to deliver their munitions.

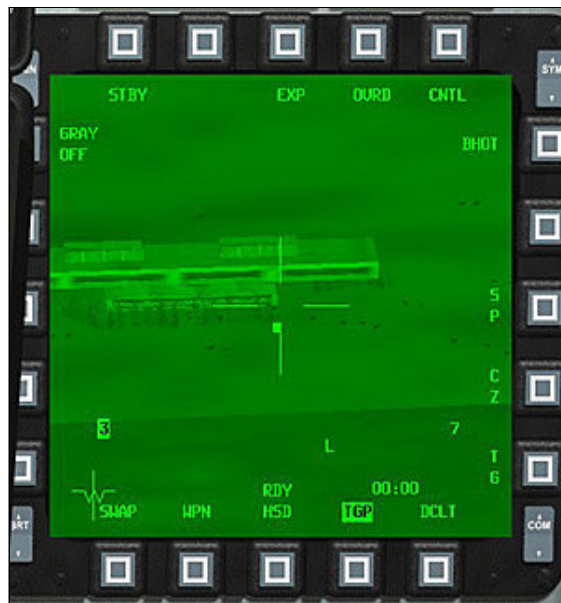


Let me take a second to say that the opening moves of the campaigns in F4 are very intense and heavy with air activity. Eventually the new-comer will learn situational awareness and the proper use of your onboard sensors and AWACS to grasp the big picture. That said, the beginning of the campaign can be extremely daunting to the new F4 flier. Take heart that as the campaign progresses attrition and runway denial missions will eventually take their toll and the air threats become much more manageable. Patterns will evolve and soon you will recognize situations that will help you become successful in the prosecution of your campaign. Just don't be discouraged by the volume of activity in the opening hours of the war.

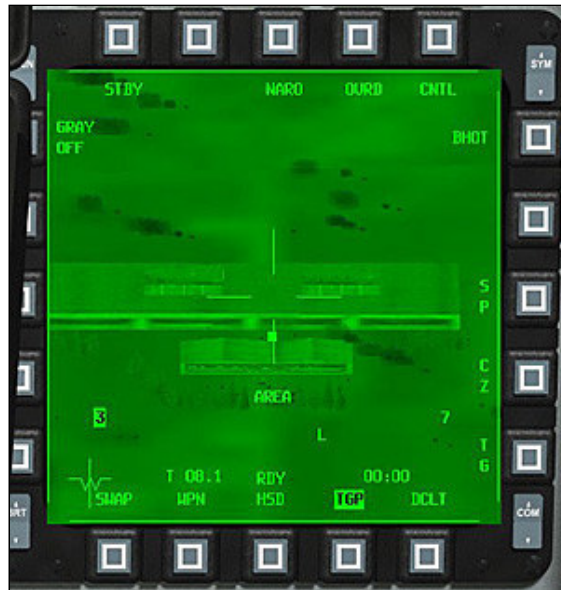
With less than 15 miles to go to the target, I put my trust in the CAP flights and ignore the air battle raging ahead as I select the A2G radar mode. The cursors are set to the strike steerpoint so merely hitting the designate button on my HOTAS should point the targeting pod toward the depot and make the targeting pod the sensor of interest (SOI).



The TGP image clearly shows the depot complex with several dozen vehicles either parked or moving through the area. I quickly slew the cursors over the smaller building and attempt to lock the TGP image on the building. After multiple attempts to get a target designator (TD) box to lock on the building my only guess is that there is a new technique for designating in FF3 and that target lock is not necessary, only aiming the TGP crosshairs onto the desired impact point (this is a RTFM moment if ever there was one!). With the TGP crosshair on the smaller building I order my wingman to attack that target.



With my wingman on the case I slew the cursors up slightly and settle them on the center of the larger depot building for my bomb.



I steady my steering and wait for the bomb release line to drop down to the flight path marker (FPM) on my HUD. The HUD is showing 14 seconds to release and soon the TOSS cue (a flashing circle) appears and then the level release cue starts working down the bomb fall line toward the FPM.



Holding the pickle button I hold my breath as the line touches the FPM and I wait for the “thunk” of the 2000 pound bomb releasing. But nothing happens. Damn, I must have missed a step!

Sighing with frustration I start a gentle break turn to the right (east) to egress the area and sort out my problems while some light puffs of AAA appear over the target area.



Heading south-east to clear the area I see a pair of Harriers zooming across the area, no doubt with their bombing switches set correctly.



Lucky for me I have a competent wingman and as he passes over the target in trail formation he hollers "GBU" and releases his weapon. The GBU tracks nicely and impacts the smaller depot building dead center, collapsing the building and setting multiple vehicles parked in the courtyard ablaze.



My TGP pod is still slaved to the target area and I can see the building explode on the right MFD.



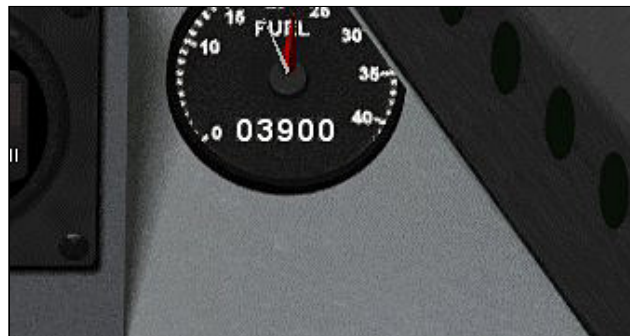
Nearby a flight of F-22s patrols the east side of the peninsula. I'm sure the enemy perks up quickly when they see an F-22 threat symbol on their threat warning gear.



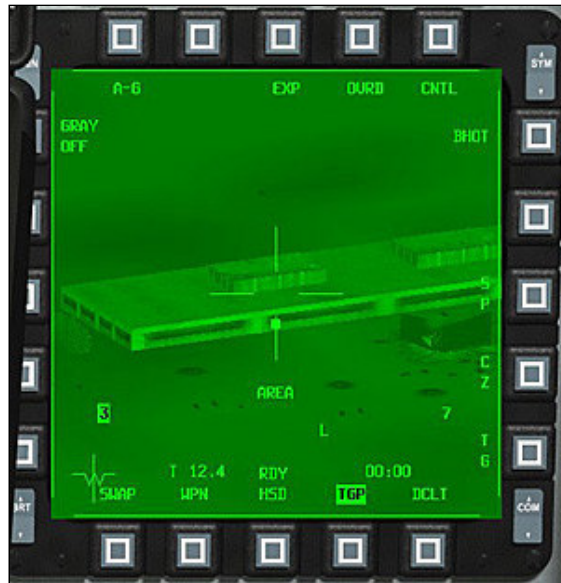
This DPRK MiG-29 is spoiling for a fight and climbs to engage the AV-8Bs despite being pinned in between an F-16 flight and the F-22s.



Taking a glance at the fuel gauge on the right sub-panel I can see I'm down to 3900 pounds, enough for a remedial pass on the target depot.



After extending about 20 miles south-east of the target to allow for enough time to re-designate the target we turn back inbound and settle the TGP cursors on the large depot building.



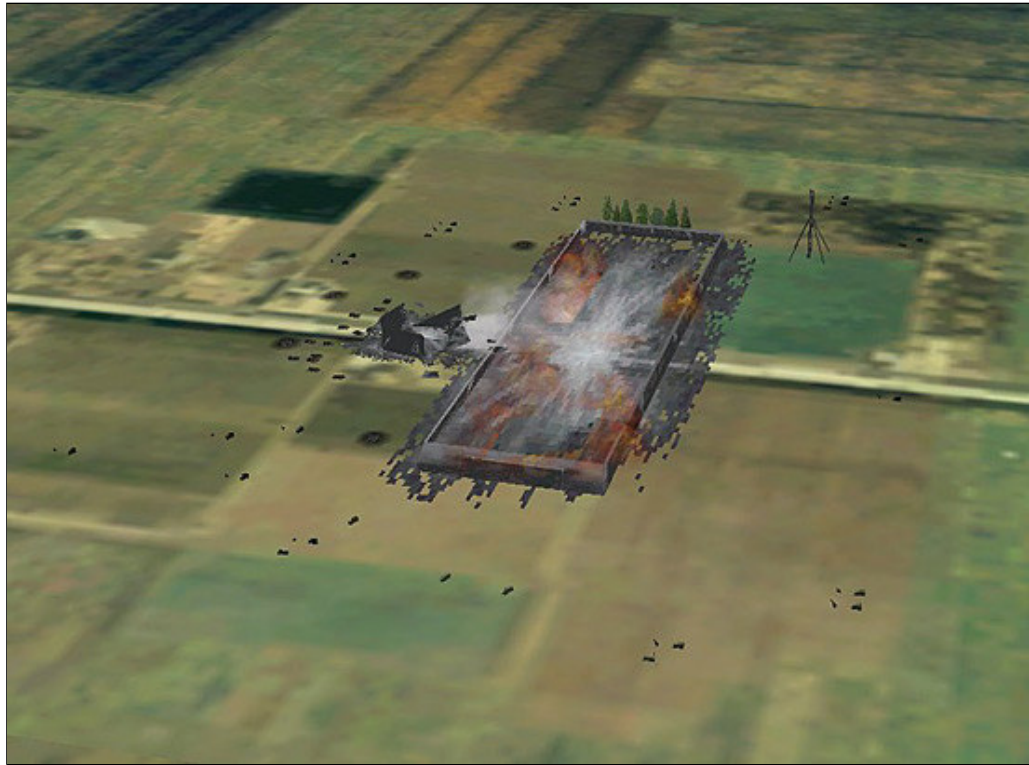
I check and double-check all the switches and settings for this second run and in the back of my mind I'm wondering if maybe the lack of a TD "lock" box on the target is preventing the bomb from being released by the fire control computer but try as I might I can't get a TD box to lock on the target building.

Once again the bomb release cue drops and hits the FPM while I hold the pickle button and nothing happens. In a fraction of a second a light-bulb goes off in my head and I reach forward and slam the space-bar on the keyboard and the bomb releases with a satisfying "thunk".

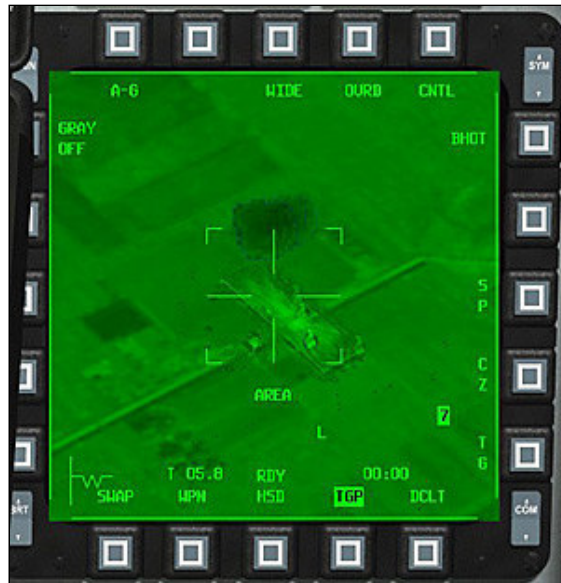


The problem on both runs was that I assumed my old X45 profile would work flawlessly with FF3, but apparently the weapon release button on my HOTAS wasn't mapped to the proper command (spacebar) with the FF3 install. I'll need to review and re-program my X45 to assure all the previous commands will work with FF3.

As I turn away from the target back to the south-east once again I watch with satisfaction as the bomb impacts the large building, crumbling it and setting it ablaze.



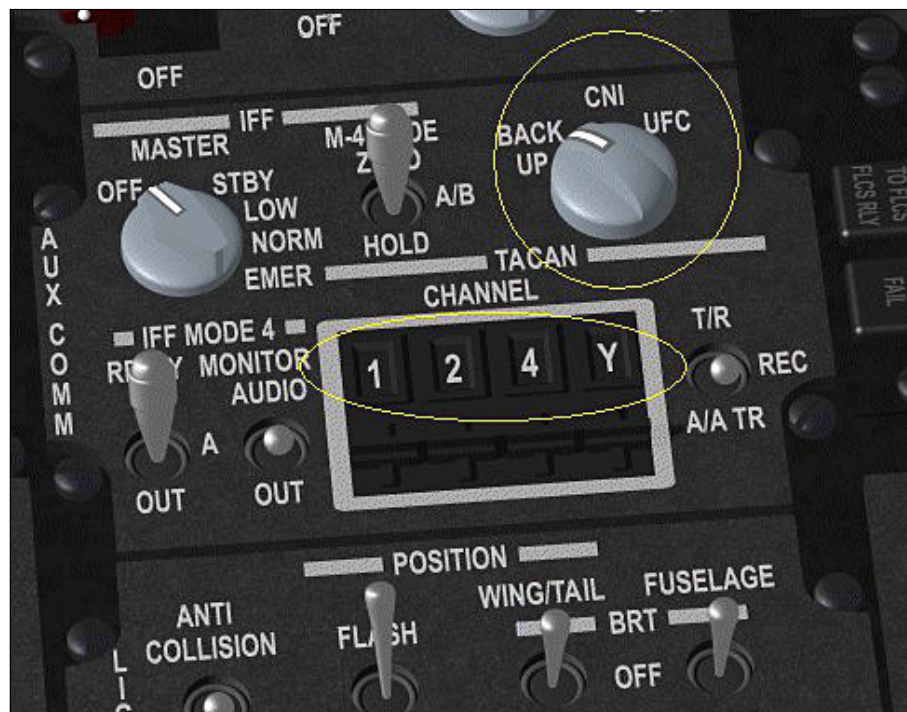
The TGP pod continues to track the burning target area until the gimble limits are reached and it breaks lock.



Pulling off to the south-east I look down at the fuel gauge and see I'm down to 1800 pounds. Considering that I have one GBU left, 4 CBUs and a full load-out of AMRAAMs I figure I'm still packing a lot of firepower and would rather use it than take it home with me.

Calling up AWACS I ask for a steer to the nearest tanker and the controller immediately responds with a vector to the tanker, 120 degrees for 40 miles. I query Troll 2-2 for his fuel status and he responds with a call of 3000 pounds, apparently he has been much more frugal with his throttle usage.

The tanker gives me the tanker frequency of 124Y and I plug the new frequency into my TACAN equipment taking care to also select "BACKUP" on the TACAN control knob so that the TACAN will take the frequency from the left sub-panel manual entry instead of the up-front controller (UFC). The TACAN frequency can also be entered via the UFC, but I'm not quite sure how to do that yet.



We also have to select TCN on the HSI display setting so that the TACAN data will show on the HSI instead of steer-point data.



The new tanker model is outstanding and FF3 adds support for probe and drogue capable aircraft as well (notice the drogue housings on the wingtips).



With AWACS giving an initial bearing and range it only takes a moment to pick out the tanker in his track on the A2A radar at 19-thousand feet.



As soon as I have the tanker in visual range I make my request on the tanker frequency for fuel. He responds by clearing me into the pre-contact position while I cut across his turn and slide into position behind him. I hit SHIFT-R to open the fuel door on the spine of my aircraft and already the tension is starting to mount.



I place my radar in QUIET mode as I approach the tanker and a bit late I also remember to place my MASTER ARM switch to OFF.



As the tanker turns to a southerly heading I close the gap careful and try to concentrate on flying smoothly with very tiny adjustments. I find the best refueling view is the “one click up” view from the cockpit, with just the HUD visible in the bottom half of the screen. This helps keep the tanker in sight while giving speed and altitude information through the HUD.



Surprisingly I make contact on my second approach in after slightly overshooting on the initial approach. The boom operator drives the refueling boom into place and the fuel starts to flow while my wingman waits on my wing. I only suffer one disconnect during the refuel, which takes me from nearly 1000 pounds to about 6800 pounds.



When I move off the boom I'm surprised to hear my wingman (Troll 1-2) call the tanker and get cleared on the boom as well! I don't know if this is a recent addition with FF3, but it adds to the realism of the refueling evolution. I don't actually see him move onto the boom, but when I call him later he has apparently taken fuel because he reports his fuel as near 4500 pounds. I call him to rejoin and we head back toward the strike area.

Having flown enough F4 missions in the past it is my desire to "bounce the rubble" with my remaining LGB since even though a target can appear destroyed the full destruction of a target cannot be ascertained from a visual bomb damage assessment. I'm also anxious to get rid of the LGB so I can turn my attention to delivering some CBU's on the enemy formations I see swarming south near the target complex!

Taking up a heading toward the strike waypoint some 70 miles distant I go through the motions of assuring my A2G weapons are set correctly. It is a good thing I do too because when I enter the A2G mode the weapon selected is a CBU instead of the LGB on pylon #7. I quickly make the correction, slave the TGP pod to the ground radar steerpoint and wait for the target site to emerge from the haze ahead.



I think this Su-27 is on our side, but whatever the case that is a cool paint job he is sporting!



Finally the depot emerges from the haze with the TGP set on maximum zoom (NARO). Again I'm not sure if this is a recent addition with FF3, but a nice feature in the TGP image is the target distance information located just above the WPN push-button. The target distance read-out changes as you slew the cursors around, another nice touch.



Flying toward the target I wait for the release timer to drop to zero I keep the steering lined up when all of the sudden I hear a tearing sound through my head-phones. I know that sound well! The ripping sound is the threat warning audible sound for an active radar homing missile! A glance at the RWR scope verifies the MiG-29 symbol, which wasn't there a second ago.



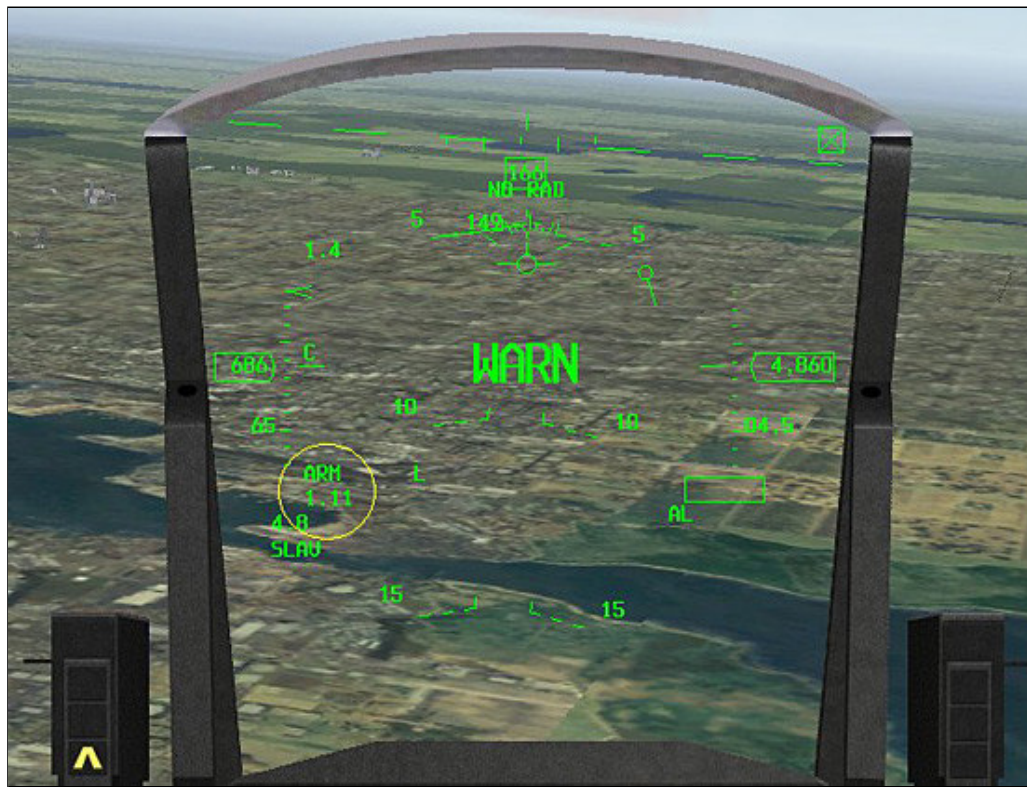
Giving up on the bombing run I roll inverted and split-S toward the ground, picking up a southerly heading as I pick up speed. I can only hope that the missile was fired at maximum range and that I can outdistance it. I select afterburner and gulp the newly acquired fuel as I keep pointed downhill away from the threat.

I pop continuous flares and chaff as I run and pretty much give up on my wingman, hoping he has the wits to evade on his own. Much to my amusement the AWACS controller comes on the frequency and warns me that "new threats are airborne" and gives me a bearing and range. Like I didn't already know!

The AA-10 follows me down and I can see my aircraft spitting flares and chaff as it stays locked on me.



The missile is really close now and despite hearing things ripping and groaning from my airframe I know it is better to bend the airplane aerodynamically than suffer the fate of getting hit by an AA-10. The pylons moan and multiple warning lights illuminate as I pass through the sound-barrier. The Bitchin' Betty wails multiple warnings but I don't let up. We bottom out of the dive at Mach 1.11 as we scream south over the former DMZ.



The missile gets within a few hundred meters before it peters out and falls away behind me. I start to breathe a sigh of relief and briefly consider turning back to re-attempt my bombing run, perhaps bagging a MiG-29 too! But the damage to my airframe during the dive is too extensive. I find even my avionics are not functioning as my radar has shut down and I cannot switch any of the avionics modes. I can't even select new steerpoints or HSD ranges. My mission is over and I take a steer from AWACS for homeplate.



Even though the radar doesn't appear to be working, I turn it off and safe my Master Arm.



Overflying another base on the way home (Osan?) I see a ramp full of A-10s armed and waiting for their mission time.



And another flight of F-16s with the best paint-job in the theater is taxing out for what looks to be a long range strike mission. The specular highlights on the bombs are really fantastic; you have to see it in motion to really appreciate it.



Arriving at Kunsan I declare an emergency and get cleared for the straight in approach. It feels miserable to bring back so much ordnance but we did hit the target and we both members of our flight are returning safely, which can be an accomplishment in itself.

Wheels and boards out I turn onto final.



A smooth touchdown although there was a distinctly higher Vref speed required on final due to our heavy weight. Great job on the flight model!



While rolling out I gently tap the brakes and am pleased to find that FF3 finally removed the awful brake “squeal” sound effect that has been present in F4 for a long time. Gone is the annoying screech of sliding rubber! After slowing to a dead stop I engage the nose-wheel steering and attempt to taxi off the runway. It seems like excessive “breakaway” thrust is needed to get the jet rolling, which one would expect at such a high weight, but it felt like I almost needed afterburner to get moving. I taxi into the ramp and enjoy the sweet feeling of having flown another complete mission in the best flight simulator in existence.

The mission is rated a success with both Troll 1-1 and 1-2 hitting portions of the depot facility. My wingman was also rewarded with many additional vehicle kills from the parking area surrounding the depot.

DEBRIEFING

MISSION:

Success

(Strike P'anmun Depot)

YOUR TASK:

Success

(Destroy Depot at target site)

PILOT RATING:

Excellent

Actual TOT:

09:41:31 (90 seconds late)

Losses:

0

PACKAGE STATISTICS:

Flight

Aircraft

Comments

Troll2 (Strike)

2 F-16CG

Mission success: Significant damage to target site.

Event List

FLIGHT STATISTICS:

Callsign

Status

Ordnance Fired

Results

Troll21

Damaged

1 x GBU-24/GP: 1 hit (100%)

Troll22

Damaged

2 x GBU-24/GP: 2 hits (100%)

2 x CBU-87/103 CEM: 2 hits (100%)

PILOT STATISTICS:

Callsign

Aircraft

Pilot

Status

AA Kills

AG Kills

Rating

Troll21

F-16CG

Lt. Beach

OK

0 (0)

1 (0)

Excellent

Troll22

F-16CG

Maj. Kil

OK

0

20

Excellent

RESULTS:

The operation has dealt a significant blow to the enemies' war machine.

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Beach joined as Troll21 at 09:22:00
DPRK ZIL-135 destroyed by Troll22 at 09:42:05
DPRK ZIL-135 destroyed by Troll22 at 09:42:05
DPRK T-72 destroyed by Troll22 at 09:42:05
DPRK T-72 destroyed by Troll22 at 09:42:05
DPRK T-72 destroyed by Troll22 at 09:42:05
DPRK BMP-3 destroyed by Troll22 at 09:42:05
DPRK BMP-3 destroyed by Troll22 at 09:42:05
DPRK BMP-3 destroyed by Troll22 at 09:42:05
DPRK ZSU23-4 destroyed by Troll22 at 09:42:05
DPRK ZSU23-4 destroyed by Troll22 at 09:42:05
DPRK KrAz F 255B destroyed by Troll22 at 09:42:05
DPRK KrAz F 255B destroyed by Troll22 at 09:42:05
DPRK ZIL-135 destroyed by Troll22 at 09:42:05
DPRK ZIL-135 destroyed by Troll22 at 09:42:05
DPRK ZPU-2 destroyed by Troll22 at 09:42:05
DPRK Depot destroyed by Troll22 at 09:42:06
DPRK ZIL-135 destroyed by Troll22 at 09:42:06
DPRK BMP-3 destroyed by Troll22 at 09:42:06
DPRK ZIL-135 destroyed by Troll22 at 09:42:06
DPRK Depot destroyed by Beach at 09:54:58
AA-10A launched at Beach 10:19:51
Beach landed at 10:35:04
Troll22 landed at 10:35:24

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A look at the post flight intel screen shows my fears that the entire complex wasn't completely destroyed were well founded. Although both of the buildings are listed as destroyed, the depot is still listed as 40% operational. Now you can see why it is a good idea to drop excessive ordnance on a target structure to ensure it is 100% destroyed. It is a shame we were chased off by the MiG-29 before we could drop two more GBUs on the site to complete the job. It is possible (and a much better idea) to drop both bombs on a single pass, but when you fear you might miss it is sometimes a good idea to keep one bomb in reserve. You're damned if you do, damned if you don't.

 P'anmun Depot		40% Operational	
Depot	Destroyed	Destroyed	Medium
Depot			Medium



I know this wasn't a brilliant "showcase" mission. One bomb, no air-to-air kills, not a lot of flash and bang, but it does represent a realistic portrayal of how F4 missions can sometimes play out. Often a one pass mission is all you will be lucky enough to accomplish. F4 isn't "Air Quake" so there shouldn't be an expectation that you will either survive a mission or survive a mission with 10 kills and 30 ground targets destroyed.

This first FF3 mission for me was a great opportunity to see many of the advances that have been made since I installed SP3, FF2 and BMS.99. While one mission certainly doesn't tell the whole story I feel it gives good insight into what a typical user might encounter. The great thing about F4 these days is the opportunity to fly multiple types of aircraft, with very good representative cockpits, into a very well done campaign environment that really makes you feel part of something massive. I think FF3 is a definite winner and as soon as my current campaign is over I will migrate to a FF3 install.

While the included cockpits are very well done (and free!), I do still prefer my 1600 x 1200 Aeyes 2D and 3D cockpits. **Aeyes Pits** seem a bit more realistic in that they seem less "computer generated". The included FF3 cockpits however, are very, very good and I think they are a great addition to the package for folks not wanting to spend money on a payware cockpit.

The terrain in the standard install, while adequate, doesn't match **the high resolution tiles of Thomas Waelti's** tiles. Tom's tiles are much higher resolution, and look less "muddy" and really add to the experience.

The FF3 install is simply brilliant. It really can bring into the fold many pilots who feared "the dance" as being the biggest obstacle to getting into F4.

Many thanks to all the authors, 3D modelers, FM modders, skin and cockpit artists, and everyone else who has helped put together such an awesome user created package for F4. It is truly a job well done.

Note - All images in this report were re-sized from 1600 x 1200 .bmp to .jpg format to reduce file dimensions. Irfanview was used to convert them from .bmp to .jpg so the images are slightly reduced in quality. Your on-screen results should be even better!