NOTE: If you receive a security warning, the "active content" used in this file enables the internet and document hyperlinks. To allow this, click the security banner (if present) and click "allow blocked content."

In cooperation with

MAIW USAF Eielson AFB – Winter 2006/2007

Version: 1.0
For FS 2004 / FS9
Package Lead: Dan "Delta" Bourque, deltabourque@msn.com

This freeware AI package, produced by Military AI Works in cooperation with World of AI, contains everything needed to fully activate the A-10, F-16 and KC-135R squadrons of Eielson AFB. Everything including the remaining models, realistic aircraft textures, unique callsign voicepacks for each squadron, AFCAD, and flightplans is included in this package.

Table of Contents
(use hyperlinks to navigate)

1. About MAIW

Military AI Works (MAIW) is a loosely affiliated, international group of flightsim enthusiasts who share the common goal of seeing realistic military AI traffic in MS Flightsim.

1) Produce only high-quality, freeware packages and products
2) Create military AI traffic as accurately as possible within the bounds of MS Flightsim
3) Promote new freeware military AI models and products
4) Advance military AI modeling of countries around the globe
5) Respect the rights of designers and contributors

To learn more about MAIW or to become a contributor, visit our website at http://militaryaiworks.com.

2. Credits
Models:
- A-10 by Rysiek Winawer
- F-16C/D by Henry Tomkiewicz (with afterburner effect based on Jan Rosenberg's work)
- KC-135R by Project AI

FDE Design for RWAI A-10 and HTAI F-16s
- Mike MacIntyre

Repaints:
- A-10s by Graham King
- F-16s by Dan Bourque
- KC-135R by Graham King

AFCADs, Flightplans and Voicepacks:
- Dan Bourque

Easy-to-install packaging by World of AI

3. Units Included in this Package
Patches from http://usafpatches.com – used with permission

Eielson AFB (PAEI)

354th Fighter Wing, PACAF

18th Fighter Squadron
Aircraft: F-16C/D
Callsign: "Moose"

355th Fighter Squadron
Aircraft: A-10
Callsign: "Igloo"

168th Air Refueling Wing,
Alaska ANG

168th Air Refueling Squadron
Aircraft: KC-135R
Callsign: "Chena"

4. Installation

Step 0) (if required) Remove traffic file from *Alaska & Islands ANG Package*

This step is only required if you previously installed the ***Alaska & the Islands ANG Military AI Package*** (ai_ang4.zip), otherwise, skip to step 1.

Delete the file "Traffic_USAF_ANG_AKIslands_Eielson.bgl" from your "Flight Simulator 9/Scenery/Scenery" folder

NOTE: Failure to remove this file will result in duplicate flightplans for this squadron. If you have added your own traffic to this file, you will need to save your changes and delete the flightplans for the 168 ARS KC-135Rs.

Step 1) Remove duplicate AFCAD files

1) Open your "Flight Simulator 9/Addon Scenery/scenery" folder and remove any previously installed AFCADs for the following airports (e.g. "AF2_KXXX.bgl," "AF2_KXXX_DEFAULT_XX.bgl" or "PAI_AF2_KXXX_DEFAULT.bgl"):

PAEI

NOTE: Failure to remove these files may result in problems with AI aircraft parking and operation. It is recommended you move these to a temporary folder instead of deleting them, however, you should not need them again as the AFCADs included in this package are thoroughly researched and highly detailed. If you are using addon scenery for one of the above airfields, it is recommended you do NOT remove the AFCAD for the addon scenery, but instead remove the MAIW AFCAD file (e.g. MAIW_KXXX_DEFAULT_XX.bgl) after installation if necessary.

Step 2) Install this package

2a) Read the installer page regarding installation of this file: http://www.world-of-ai.com/installer.html

2b) Install the package in accordance with the World of AI Installer instructions

NOTE: If an uninstall is desired at a later date, only the aircraft and flightplans will be removed. All scenery files, including AFCADs, will need to be removed manually.


Step 3) Install callsign voicepacks

3a) If you don't have the EditVoicepack 3.1 freeware installed, download it and install it by clicking here.

3b) Run EditVoicepack and import all .vcpmod files included in the Eielson AFB package

3b1) Choose "Import" from the "File" menu
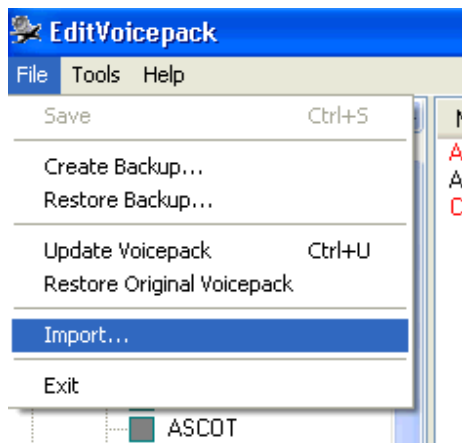
3b2) Find the folder "Flight Simulator 9/Military AI Works/USAF/Eielson AFB/Voicepack Callsigns" in the "Look in:" window
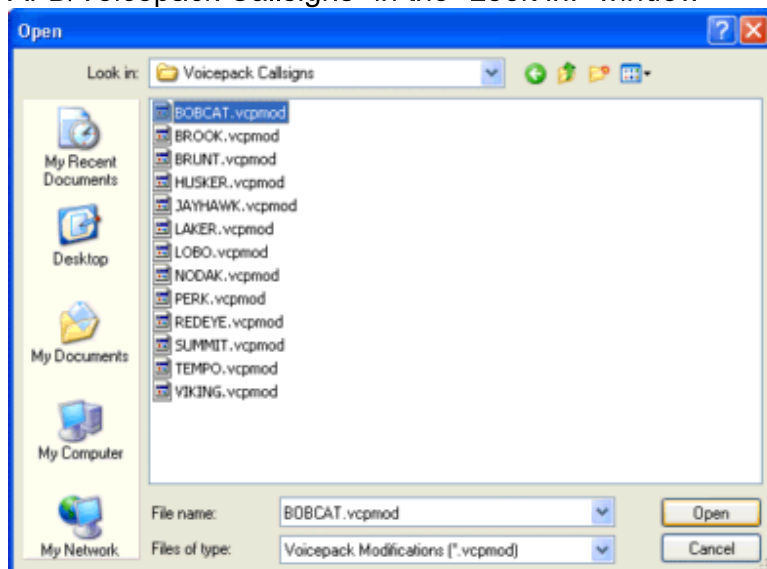
4b3) Click "open" for each file

4c) Update the Voicepack for FS9 by choosing "Update Voicepack" from the "File" menu--ensure the "Custom/Callsigns" box is checked in the left hand window. (note: the update may take a few minutes—do not attempt to start FS9 until the update is complete. Look for "Ready" in the lower left corner)
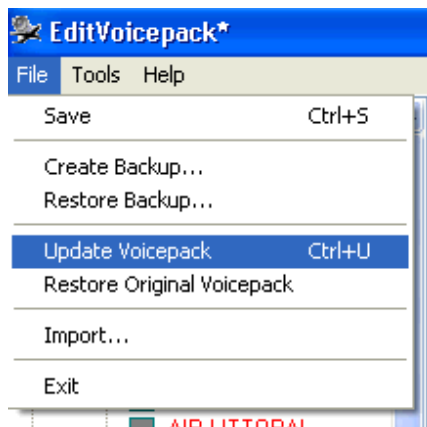
That's it! You've successfully installed this package. Your AI traffic files will be automatically updated the next time you run FS9. Here's a hint to see some of these aircraft in action: there's a touch-and-go flight scheduled to depart at 18:12:00 GMT every day.

5. Troubleshooting

Problems addressed:
"I've installed the package, but there are no AI aircraft at the airports"
"I've been watching the AI aircraft for simulated hours, and I haven't seen them move"
"When I go to an airport, there are AI planes parked on top of one another"
"When I go to an airport, the military planes are parked at the gates"
"When I go to an airport, there are general aviation aircraft on the military ramps"
"I can't find the aircraft in the aircraft selection menu"
"When the AI planes talk to ATC, they use only numbers, not callsigns"
"Why do the AI planes use only two-digit numbers instead of tail numbers"
"I'm following the AI aircraft, and they won't come back for touch-and-gos"

Problem: "I've installed the package, but there are no military AI aircraft at the airports"

Potential issue: FS9 AI traffic density set too low
Fix action: In FS9, set the AI traffic density slider to at least 60%.

Problem: "I've been watching the AI aircraft for simulated hours, and I haven't seen them move"

Potential issue: Watching at the wrong times
Fix action: Because these flightplans represent ANG and AFRC "weekend warrior" operations, most activity occurs during the weekends. To spot these AI aircraft in action, select a Saturday morning or Sunday afternoon to watch them. If you simply MUST see these aircraft flying, there is a touch-and-go flight scheduled from each home airport at exactly 18:12:00 GMT daily.

Problem: "When I go to an airport, there are AI planes parked on top of one another"

Potential issue: Multiple AFCADs active for the same airport
Fix action: Using Windows Explorer, open the folder "Flight Simulator 9/Addon scenery/scenery." Look for duplicate entries for the following airport identifiers:

PAEI

Files may be named in several ways. The most common are "AF2_KXXX.bgl," "AF2_KXXX_DEFAULT_XX.bgl" and "PAI_AF2_DEFAULT.bgl." Keep the files named "MAIW_AF2_KXXX_DEFAULT_XX.bgl" and remove all others with duplicate airport identifiers.

Problem: "When I go to an airport, the military planes are parked at the gates"

Potential issue: Old AFCAD still active for the airport
Fix action: Using Windows Explorer, open the folder "Flight Simulator 9/Addon scenery/scenery." Look for duplicate entries for the following airport identifiers:

PAEI

Files may be named in several ways. The most common are "AF2_KXXX.bgl," "AF2_KXXX_DEFAULT_XX.bgl" and "PAI_AF2_DEFAULT.bgl." Keep the files named "MAIW_AF2_KXXX_DEFAULT_XX.bgl" and remove all others with duplicate airport identifiers.

Problem: "When I go to an airport, there are general aviation aircraft on the military ramps"

Potential issue: No parking type assigned to GA aircraft
Fix action: Add a "RAMP" parking type to all of your GA aircraft.cfg entries. Copy the following line into each [fltsim.x] entry for all GA aircraft used as AI.

atc_parking_types=RAMP

This entry can be anywhere, but needs to be placed in each individual [fltsim.x] section for each GA aircraft. If you are using the default GA aircraft, this includes the

following aircraft folders within the "Flight Simulator 9/Aircraft" folder:

beech_baron_58
beech_king_air_350
c172
c182
c208B (c208 should be "DOCK")
lear45
pa28_180
Piper_J3Cub

Problem: "I can't find the aircraft in the aircraft selection menu"

Issue: These are AI aircraft and have been programmed to not show up in the flyable aircraft selection menu
Fix action: If you simply must select these aircraft, use an editing program such as AirEd and change the Aircraft type from "2" to "0"

Problem: "When the AI planes talk to ATC, they use only numbers, not callsigns"

Potential issue: Callsign Voicepacks were not installed correctly
Fix action: Run the EditVoicepack software. Look for the following callsigns in the "custom modifications/callsigns" section of the program:

CHENA
IGLOO
MOOSE

If any of these are missing, choose "File/import" and open the appropriate .vcpmod file in the folder "Flight Simulator 9/Military AI Works/USAF/Eielson AFB/Voicepack Callsigns."

Once this is complete, or if all callsigns are present, ensure the "Custom/Callsigns" box is checked in the left hand window and choose "File/Update Voicepack" to install them into FS9 (this may take a few minutes, do not open FS9 until the lower left of the EditVoicepack screen says "Ready.")

Problem: "Why do the AI planes use only two-digit numbers instead of tail numbers"

This is not a problem, per se, but I've received enough questions that it warrants explanation. Bottom line, this is realistic. Most USAF aircraft don't use their tail number or a scheduled flight number when talking to ATC and other aircraft. Many USAF flights are made up of multiple aircraft, so a standard means of addressing

each flight and each member within a flight is used. Most follow this format: callsign, flight number, aircraft designator. For example, "Bama 4-2" is Bama 4 flight, aircraft number 2. The callsign (**Bama** 4-2) can be anything, but most squadrons tend to have ones they use regularly (like those included in this package). The flight number (Bama **4**-2) is a means to distinguish between flights of aircraft which may be using the same callsign. ATC or AWACS might address the flight using only the callsign and flight number (i.e. if AWACS calls "Bama 4," Bama 4-1 will respond for the entire flight). The aircraft number (Bama 4-**2**) is important, especially in the fighter community. "1" always designates the flight lead. "2" is lead's wingman, and they comprise the first 2-ship. "3" is the second 2-ship flight lead, and "4" is 3's wingman. Fighters almost always travel in 2-ships or 4-ships, and that's the way they will move in this package. I hope this clears up my thought process on why I chose the flight numbers I did.

Problem: "I'm following the ANG AI aircraft, and they won't come back for touch-and-gos"

Potential issue: You're following your AI aircraft
Fix action: Stop following your AI aircraft. For some reason, a watched AI aircraft does not always behave the way it is programmed to. If you wait for the aircraft at the airport, it will arrive on schedule

Problem: "Do I need to install these flightplan.txt files"

NO, if you followed the instructions, you did everything you needed to do by moving the traffic_x.bgl files into the Scenery folder. The flighplan_x.txt and aircraft_x.txt files are included for advanced users who wish to modify the flightplans or aircraft assignments and recompile the traffic files using Lee Swordy's TrafficTools.

6. Notes and Resources
Ideas and Support:
Much of this package was built with the help, ideas and resources of the Military AI Works online community. If you are interested in making Fight Simulator Military AI traffic more realistic, visit this site.

Flightplans:
The flightplans are fictional, but yield realistic appearing operations. Most actual ANG training sorties are out-and-backs, but these are not supported realistically in FS9. The included flightplans include touch-and-gos at the home base and nearby airports as well as cross-country flights on the weekends. Because these are Guard units,

most of the flights occur on weekends when pilots take a break from their civilian jobs to fly for the Guard.

Fighter aircraft typically fly in 2-ship or 4-ship formations. While much research and experimentation has been done to allow AI aircraft to fly in formation. I decided it would be impractical for the general user to include these techniques because of their potential instability and impact to non-military AI traffic. Instead, fighters in this package are assigned to a 2-ship or 4-ship which will depart and arrive at the same time. These aircraft will taxi together, but will still fly as single ships and take off and land in sequence, not in formation.

All flightplans were created using the yRoute freeware AI traffic editor and tweaked using a text editor to remove spaces and unwanted characters. Flightplans were installed using Lee Swordy's TrafficTools freeware traffic compiler.

Callsigns:
The callsigns used in this package are actual callsigns used by these units based on information found online here. While squadrons generally use several different callsigns for training missions, I have included only one for each squadron for simplicity's sake.

All callsigns were created using the ingenious EditVoicepack freeware. This program is extremely simple and fun to use—if you need a new AI callsign, give it a try!

AFCADs:
I take great pride in the quality and accuracy of my AFCADs. I will typically spend between 8-16 hours researching and developing each AFCAD. Many of these AFCADs have crossing runways enabled through use of the "star runway" techniques developed and refined by many others. This will allow AI aircraft to use all runways at an airfield. All AFCADs were created using free online resources including aerial imagery from Google Earth, Google Maps, Terraserver and FAA charts from airnav.com for each airport. In addition to charts and runway information, the airnav.com pages include links to each airport's home page which were also useful for matching airlines to gates, identifying general aviation areas, etc. For the larger airports, photos from airliners.net were helpful in placing parking, taxiways and aprons.

I am reasonably confident that most airline and tenant ANG aircraft parking slots are correct, but most transient parking is a best guess based on available space. Additionally, only tenant aircraft parking is assigned parking codes—all transient parking is left unassigned (not even an "M003"). I have found this yields the most realistic parking and is the most compatible with different parking assignment schemes. Personally, I use a squadron-specific scheme and assign the squadron number and designator to each aircraft's parking code (ex. "atc_parking_codes=197A"). This ensures they park in the correct spots at their home airport and park in the unassigned transient parking spots at other airports. The included AFCADs, however, are set up to support squadron specific (ex. "188F"), aircraft specific (ex. "F16") and type specific (ex. "M001") parking assignments.

All AFCADs were created using Lee Swordy's AFCAD v2.21. This has got to be one of the finest freeware programs ever created. Want to add some AI parking to your local airport? AFCAD makes it fun!

7. Permissions and Disclaimers

Adverse Effects:
The contents of this package should not adversely affect your FS9 or computer operation if installed according to the instructions. The authors make no guarantee and bear no responsibility for adverse operation or lost/overwritten files on your computer.

Use of Contents:
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Upload to FSPLANET.com will never be allowed by Military AI Works or World of AI.

Sources:
All information used to create this package was obtained via online, open-source research. All flight plans and schedules, while reasonable for military units, are fictional.