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In cooperation with



MAIW USAF JSTARS and Robins AFB – Winter 2006/2007



Version: 1.1 For FS 2004 / FS9

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This freeware Al package, produced by Military Al Works, contains everything needed to fully activate the aircraft stationed at Robins AFB, Georgia. It includes flightplans for more than 20 aircraft including 4 squadrons of E-8 JSTARS and 1 squadron of KC-135s. Everything including the models, realistic aircraft textures, unique callsign

voicepacks for each squadron, AFCAD for KWRB, and flightplans is included in this package. Also includes Nick Needham's AI Smoke effects tailored for the E-8.

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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. Our goals:

- 1) Produce only high-quality, freeware packages and products
- 2) Create military AI traffic accurately within the bounds of MS Flightsim
- 3) Promote new freeware military Al models, scenery 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 (all used with permission):

- E-8C by Chris "Elvis" Jones (UKMIL)
- KC-135R by Project AI

Repaints:

- E-8C by Graham King
- KC-135R by Graham King

Effects

- Nick's Smoke by Nick Needham (tailored for E-8 by Steve Holland)

AFCADs, Flightplans and Voicepacks:

- Dan Bourque



3. Units Included in this Package

Patches from http://usafpatches.com – used with permission

116th Air Control Wing, Robins AFB (KWRB)



12th Air Control SquadronAircraft: E-8C, Callsign: "Lemur"

16th Air Control Squadron Aircraft: E-8C, Callsign: "Razor"

128th Air Control Squadron (Georgia ANG)

Aircraft: E-8C, Callsign: "Peach"

330th Crew Training Squadron Aircraft: E-8C, Callsign: "Jewel"

19th Air Refueling Group, Robins AFB, GA (KWRB)

99th Air Refuelling Squadron

Aircraft: KC-135R



Callsign: "Borrow"

U.

4. Installation

NOTE: If you have previously installed the Southeast ANG Military Al Package, you will need to accomplish step 5 to avoid duplicate aircraft.

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"):

KWRB

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.

Step 2) Install this package

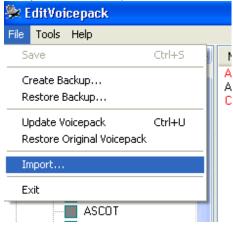
- **2a)** Read the installer page regarding installation of this file: http://www.world-of-ai.com/installer.html
- **2b)** Install the package in accordance with the World of Al Installer instructions

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.

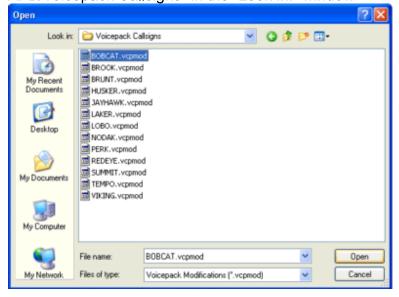
Step 3) Install callsign voicepacks

- **3a)** If you don't have the EditVoicepack 3.1 freeware installed, download it and install it by <u>clicking here</u>.
- **3b)** Run EditVoicepack and import all .vcpmod files included in the Robins AFB package

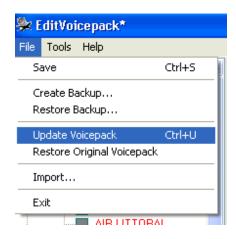
3b1) Choose "Import" from the "File" menu



3b2) Find the folder "Flight Simulator 9/Military AI Works/USAF/Robins 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)



Step 5) (if required) Replace traffic file from Southeast ANG Military AI Package

This step is only required if you previously installed the **Southeast ANG Military AI Package** (ai_ang3.zip), otherwise, installation is complete.

NOTE: DO NOT perform this step if you have modified your Southeast ANG traffic file as it will overwrite your changes—you will need to remove the E-8 flightplans manually.

Copy the file "Traffic_USAF_ANG_Southeast.bgl" from the folder "Flight Simulator 9/Military AI Works/USAF/Robins AFB/Southeast ANG Update" to the folder "Flight Simulator 9/Scenery/Scenery" and allow the file to overwrite the original. This file includes all the original flightplans for the Southeast ANG package except the E-8s which are replaced by this package.

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.

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 Military AI aircraft at the airports"

"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 Military AI planes talk to ATC, they use only numbers, not callsigns"

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

Problem: "I've installed the package, but there are no Military Al 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: "When I go to an airport, there are AI planes parked on top of one another"

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

KWRB

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 "AF2_KXXX_DEFAULT_DB.bgl" and remove all others with duplicate airport identifiers.

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

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

KWRB

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_DB.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

<u>Fix action:</u> 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"

<u>Issue</u>: These are Al aircraft and have been programmed to not show up in the flyable aircraft selection menu

<u>Fix action</u>: 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 Military AI planes talk to ATC, they use only numbers, not callsigns"

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

BORROW JEWEL LEMUR PEACH RAZOR

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/Robins 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: "I'm following the Military Al aircraft, and they won't come back for touch-and-gos"

Potential issue: You're following your Al aircraft

<u>Fix action</u>: 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



6. Notes and Resources

This package was built by the <u>Military Al Works</u> online community. If you are interested in making Military Al 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 <u>yRoute</u> freeware Al traffic editor and tweaked using a text editor to remove spaces and unwanted characters. Flightplans were installed using Lee Swordy's <u>TrafficTools</u> 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 <u>EditVoicepack</u> freeware. This program is extremely simple and fun to use—if you need a new Al 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 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 <u>AFCAD v2.21</u>. 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:

THESE FILES MAY ONLY BE UPLOADED TO AVSIM or FLIGHTSIM.COM BY THE AUTHOR.

THESE FILES MAY NOT BE UPLOADED TO ANY OTHER SITE WITHOUT THE AUTHOR'S WRITTEN PERMISSION. THESE MODELS, REPAINTS AND FLIGHTPLANS ARE FREEWARE AND MAY NOT BE SOLD, OR PUT ON ANY SITE THAT CHARGES FOR DOWNLOADING FREE FILES. THE FILES FOUND IN THIS ARCHIVE MAY NOT BE DISTRIBUTED ON CD OR ANY MEDIUM FOR ANY KIND OF FEE, INCLUDING THE COST OF PRODUCTION, MATERIALS OR POSTAGE. THE MODELS, REPAINTS AND FLIGHTPLANS OWNERSHIP REMAIN WITH THE AUTHORS AS MENTIONED IN THE PACKAGE

Upload to FSPLANET.com will never be allowed by Military Al Works.

Any questions, suggestions and feedback on the contents may be directed to the forums at www.militaryaiworks.com.

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.

