



Military AI Works 1st Anniversary Airshow

Version: 4.0

For FS 2004 / FS9

Initial Release Date: August 2007

Package Integrator: Michael MacIntyre



The Military AI Works (MAIW) was formed and officially launched with the opening of its website by Dan Martinez on 8-10-2006. In its first year of operation it has released 40 complete military AI packages, attracted more than 780 members to its website and become a premier contributor in the field of Military AI for use in Flight Simulator 9.

Here is a statement from the MAIW Team on its first year of operation:

“Wow, it’s our 1st Anniversary! It’s hard to believe it has actually been a year since we started this once little known organization called Military AI Works (MAIW). And in that year, this team has gone far beyond any of our greatest expectations. We’ve attracted new team members bringing such talents as scenery design, painting, aircraft modeling, fde design and many other disciplines, The number of new community members to the forum continues to grow with each passing week, We’ve brought new AI models of aircraft such as the F-15, Typhoon, T-38, F-117, B-1, B-2 and many others to the FS9 skies, And we’ve been able to finally fill a gap that was for too long downplayed and overlooked by the “big name” freeware and payware AI designers and have brought military AI out of the shadows with the roar of a sonic boom. We can’t thank our supporters enough for continuing to support our hard work by downloading our packages and spreading the word of what MAIW does. To date, we’ve been able to bring you over 40 separate packages including RAF Coningsby, RAF Lakenheath, the highly popular Exotic Herks series, Holloman Talons and many, many more. And while we can’t promise you exact release dates, what we can promise is... you ain’t seen nothing yet!”

The MAIW TEAM

The Military AI Works 1st Anniversary Airshow Package was produced to recognize and celebrate the first Anniversary of the Military AI Works and to provide a unique bonus AI package to all its staff, contributors and loyal customers to whom so much is owed for the success of MAIW.

MAIW (Works) Field was conceived and created by Dan Martinez as a fantasy airbase located in The Bahamas for the use of MAIW staff and contributors. Because of its unique and remote location on Andros Island in The Bahamas, it was chosen for use in this package and it has been significantly modified to provide drive through parking on both the west and east parking ramps for the 42 participating AI aircraft, parking for the 39 static display aircraft on the west parking ramp, an amusement park for the kids, refreshment stands, a small hot air balloon festival, VIP tents for flyby viewing, grandstands for flyby viewing and an entertaining venue for the presentation of the Military AI Works 1st Anniversary Airshow



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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 AI 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://www.militaryaiworks.com>.

2. Credits

Original 16 MAIW Complete AI Packages

- Contributors and Authors Credited in the Original Packages

Thunderbirds Formation Flight Demonstration Package

- Mike MacIntyre

NBAI F-15C Eagle

- Nick Black

MAIW 1st Anniversary Special Edition Paint Scheme

- Mike MacIntyre Using Kevin Reed's Paintkit

Voicepacks:

- Mike MacIntyre

Flightplans:

- Mike MacIntyre

AFCADs:

- Original MAIW Field: Dan Martinez and Rysiek Winawer

- New MAIW (Works) Field and Overlays: Mike MacIntyre

MAIW (Works) Field Scenery:

- Original MAIW Field: Dan Martinez and Rysiek Winawer

- New MAIW (Works) Field: Mike MacIntyre, Ian McCartney and Edith Black

- Optional Military Objects: Michael Carr

- Optional Picnic Tent Objects: Todd Lucas

- Optional Hot Air Balloon Objects: Seev Kahn

- Optional Fireworks Effects: Ron Jeffers

Documentation and Packaging

- Mike MacIntyre and Barry Taylor



3. MAIW and Other Packages Required by This Package

This package utilizes AI aircraft from the following previously released AI Package by Mike MacIntyre and 16 AI Packages by MAIW, all of which must be installed in your FS9 setup in order for the MAIW 1st Anniversary Airshow and scenery to be seen. They are all available at Avsim.com:

1. Thunderbirds Formation Flight Demonstration Package -
ai_tb_demo.zip
2. Osan AFB Complete AI Package -
- woamil1.zip
3. MAIW/WOA - "USAF Hickam C-17" Complete AI Package -
woamil4.zip
4. World of AI/Military AI Works - "Tinker AFB Complete AI Package -
woamil6.zip
5. United States Air Force T-37 Tweet Package -
woamil7.zip
6. MAIW/WOA "USAF JSTARS and Robins AFB" Complete AI Package -
woamil9.zip
7. MAIW/WOA "USAF Boeing E3" Complete AI Package -
woamil10.zip
8. "USAF F-117A Nighthawk" Complete Package -
woamil11.zip
9. "USAF B-1B: Dyess AFB" Complete Package Version 2 -
woamil12_207955.zip
10. MAIW/WOA "German Armed Forces GAFFTC " Complete Package -
woamil21.zip
11. MAIW/WOA "Holloman Talons" Complete Package -
woamil23.zip
12. MAIW/WOA "Peruvian Air Force part 1" Complete Package -
woamil26.zip
13. MAIW "RAF Coningsby 121st Expeditionary Air Wing" Complete Package -
maiw_raf_coningsby.zip
14. MAIW "Beale AFB" Complete Package -
maiw_beale_afb.zip
15. MAIW "Whiteman AFB" Complete Package -
maiw_whiteman_afb.zip
16. MAIW "RAF Lakenheath 48th FW" Complete Package -
maiw_raf_lakenheath.zip
17. MAIW "Langley AFB" Complete Package -
maiw_langley_afb.zip



4. Installation

Step 1) Install this package

1) Install the package in accordance with the on-screen prompts

Step 2) Remove duplicate AFCAD files and any MAIW Field scenery

1) Open your “Flight Simulator 9/Addon Scenery/scenery” folder and remove any previously installed AFCADs for MAIW Field. Look for any AFCADs with MAIW or nMAI in their name, where "n" is any single digit number.

NOTE: Failure to remove these duplicate 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.

2) If you are using any previous addon scenery for MAIW Field, it should also be removed by first disabling it in the Flight Simulator 9 Library and deleting it from the “Flight Simulator 9/Addon Scenery” folder.

Step 3) Install callsign voicepacks

1) If you don't have the EditVoicepack 3.1 freeware installed, download it and install it.

2) Run EditVoicepack and import all .vcpmo files included in with this installation

3) Choose “Import” from the “File” menu

4) Find the folder “Program Files\Microsoft Games\Flight Simulator 9\Military AI Works\The Bahamas\USAF\MAIW (Works) Field\Voicepack

Callsigns” in the “Look in:” window

5) Click CTL +A and select all files, then click “open”

6) 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 4) Installation and Activation of MAIW (Works) Field Scenery

1) Included in this package is scenery for MAIW (Works) Field using some outstanding custom buildings and objects by Ian McCartney and Edith Black as well as some default FS9 scenery objects. In addition this scenery also is set up to use some optional scenery enhancements that include military objects from Michael Carr's Modern Military Scenery and Objects package contained in the mcdmil.zip file, Todd Lucas's tents contained in the rwy12_lib1_v1.2.zip file, Seev Kahn's balloons contained in the rwy12_lib2_v1.2.zip file and Ron Jeffers effects contained in the ezeffects.zip file, which are all available at Avsim.com and if desired need to be downloaded and installed if you do not already have them installed.

2) You do not need EZ-Scenery or Rwy12 installed in order for any of these optional additional scenery objects or effects to be seen. All you have to do is first download and install the Modern Military Scenery and Objects package, the rwy12_lib1_v1.2 package, the rwy12_lib2_v1.2 package and the ezeffects package, if you do not already have them installed. All 4 of these packages have good installation instructions and are very easily installed.

3) The MAIW Installer will already have installed a folder called "MAIW (Works) Field" in your "Flight Simulator 9/Addon Scenery" directory. This folder contains all the specific scenery, exclude, AFCAD and Traffic bgl files for this package. To enable this scenery, start FS9 and go to the scenery library in settings, select "ADD AREA" and then select the path of the folder "Flight Simulator 9/Addon Scenery/MAIW (Works) Field". Click OK. If you haven't already done so, don't forget to follow the same procedure to enable the "MCDMil Scenery", "Static Objects Library" and "EZ_EFFECTS 1" scenery that you may have created in 4b) above if you desired to. Now exit FS9.

4) The next time you start up FS9, the MAIW (Works) Field scenery will all be installed and enabled so that you can visit MAIW (Works) Field and watch the Military AI Works 1st Anniversary Airshow.

Step 5) The Compromises and Limitations in the Military AI Works 1st Anniversary Airshow

1) Please read both the DON'T's and KNOWN ISSUES sections of the README file for the Thunderbirds Formation Flight Demonstration Package. The Military AI Works 1st Anniversary Airshow Package was created in a very similar manner so all those DON'T's and KNOWN ISSUES are very pertinent to this Military AI Works 1st Anniversary Airshow Package also.

2) Flight Simulator 9 was never intended to support the type of AI flights and the precision timing involved in the MAIW airshow and thus does not provide as precise control of the Estimated Times of Departures (ETD's) for the AI as would be most

effective, especially when using weekly flightplans. Therefore all the flightplans for the MAIW airshow have to be daily and the airshow occurs every day.

3) The ATC in Flight Simulator 9 also does not support the type of AI flights and precision timing involved in the MAIW airshow and thus runways 18R/36L at MAIW (Works) Field have to be uncontrolled, but Runways 18L/36R are ATC controlled. Therefore a mix of Unicom and Tower radio communications are heard during the airshow.

4) The decompiling and recompiling of traffic.bgl files with TTools can introduce ETD time drifts and in the case of the types of precisely timed AI formation flights utilized in the MAIW airshow this can be catastrophic, so please do not decompile and recompile the Traffic_MAIW_Airshow.bgl file.

5) All the waypoints that were used in this package are imaginary in that they do not have AFCADs, so none of the airshow AI can be followed and/or viewed outside the boundary of the AI viewable area around MAIW (Works) Field either with Traffic View Board or a user flyable FS9 aircraft.

6) Traffic View Board causes significant if not infinite extension of the downwind leg of the VFR AI pattern when used to follow AI VFR flights in the VFR pattern or to follow AI IFR approaches in the vicinity of AI VFR flights on the downwind leg of the VFR pattern. Since, with only a few exceptions, the AI arrivals at MAIW (Works) Field in this airshow use the VFR pattern and the few IFR approaches included are made in the vicinity of AI on the VFR downwind leg, it is recommended that Traffic View board not be used to follow any AI arrivals at MAIW (Works) Field.

Step 6) Setting Up to Watch the Military AI Works 1st Anniversary Airshow

1) The MAIW Airshow is designed to use runways 36L and 36R exclusively and to be watched on a clear, calm day. Please customize your weather accordingly with Clouds: Clear, Visibility: Unlimited, Wind Speed: None and Wind Direction: 0 degrees. This will assure the proper weather, runway use and AI course headings.

2) All the MAIW Airshow AI flights are set up to be best watched from the small, centrally located helicopter pad just off the eastern edge of Taxiway A and the west parking ramp. Please place your favorite AI spotting vehicle on this helicopter pad.

3) If you don't already have a favorite AI spotting vehicle, then it is highly recommended that you download and install the outstanding Mobile Control Tower addon from the mct074rc.zip (12.3 MB) by Ronald R. Cachemaille found at avsim.com, place it on the helicopter pad facing about 96 degrees and with Comm 1 set to 127.3. The MAIW Airshow was created using the second level of this addon with the radar active to detect the AI Flights as they come within 40 NM of Works Field.

NOTE: When you set up Mobile Control Tower in FS9 you will need to key CTRL-E to start the engine or your battery will go flat after a while and you will lose your radios.

It is also highly recommended that you use Traffic Explorer from the TrafficToolBox_SDK (1.4 MB) available from MicroSoft found at http://www.microsoft.com/games/flightsimulator/fs2004_downloads_sdk.asp to both track which AI are within the AI viewable area around Works Field and occasionally switch to spot view to follow along with any of them.

4) Now with everything set up as described in 1-3 above create a flight at MAIW (Works) Field using Mobile Control Tower's (MCT) second level by pausing FS9 and setting the date to August 10, 2007 and the FS9 time to 11:23:00 GMT and then immediately saving the flight as MAIW - Airshow AI TB Arrival.

5) Now without closing the flight and keeping FS9 paused, change the time to 12:40:00 GMT and immediately saving it as MAIW – Airshow Departures.

6) Again without closing the flight and keeping FS9 paused, change the time to 14:20:00 GMT and immediately save it as MAIW – Airshow.

7) Again without closing the flight and keeping FS9 paused, change the time to 15:15:00 GMT and immediately save it as MAIW – Airshow Returns.

8) Again without closing the flight and keeping FS9 paused, change the time to 17:55:00 GMT and immediately save it as MAIW – Airshow AI TB Departures.

9) If you have the EZ Effects 1 scenery installed and enabled, without closing the flight and keeping FS9 paused change the time to 23:00:00 GMT and immediately save it as MAIW – Airshow Fireworks.

10) Since all of these AI flights depend on as accurate and precise timing as FS9 allows, it is very important to save all of these flights with FS9 paused and using the exact times listed.

Step 7) Watching the Military AI Works 1st Anniversary Airshow

As you have seen above the airshow is divided into 6 parts for which you have now set up FS9 flights to use for watching each separately. It is imperative that the FS9 time for the first 5 flights was set to the exact start times for each part in order to maintain and repeat the timing of AI flights as precisely as FS9 will allow. FS9 tends to throw some fluke timing variations in occasionally, so if the AI timing and/or formation alignments seem to be off, just reset the particular flight and try again.

Here is a brief summary of the 6 parts of the Military AI Works 1st Anniversary Airshow:

1. AI Thunderbirds Arrival Demo at MAIW (Works) Field - FS9 Start Time Setting: 11:23:00 GMT Duration: 37 Minutes

The AI Thunderbirds are inbound from the north in 4/2 ship flights and perform a brief arrival demo.

NOTE: Due to some settings that were used in its original AI FDE, the HTAI F-16 is inherently unstable as it slows down rapidly during its first few minutes of flight after it spawns within the AI viewable area around the FS9 user's location. Therefore it is best to wait for a couple of minutes until it stabilizes before using spot view to observe these 2 or 4 ship AI Thunderbird formation flights.

2. AI Airshow Participants Depart MAIW (Works) Field - FS9 Start Time Setting: 12:40:00 GMT Duration: 1 Hour

The 40 flyby performing AI aircraft depart MAIW (Works) Field in 2 ship flights to the north, east, south, west, southwest and northwest. AI Thunderbirds 1-6 depart last.

3. AI Airshow Flybys, Thunderbird Demo and Special Arrival - FS9 Start Time Setting: 14:20:00 GMT Duration: 18 Minutes

The AI flybys are inbound and then arrive in 2 ship formation flights initially from the north and then from the south, east, west, southwest, northwest, northeast and southeast. A 2 ship flight of special MAIW 1st Anniversary Edition NBAI F-15C's arrive, land and taxi in to park on Thunderbird Row.

4. AI Airshow Participants Return to MAIW (Works) Field - FS9 Start Time Setting: 15:15:00 GMT Duration: 2 Hours 17 Minutes

The AI flyby participant aircraft return to land in formation flights of 2 at MAIW (Works) Field first from the north and then from the west, east, northeast, southeast and south. Some of these flights fly formation TNG's or Missed IFR approaches before landing. The AI Thunderbirds are the last to return and perform another brief arrival demo.

5. AI Thunderbirds Departure from MAIW (Works) Field - FS9 Start Time Setting: 17:55:00 GMT Duration: 15 Minutes

The AI C-17 carrying the Thunderbirds ground support troops departs MAIW (Works) Field followed immediately by Thunderbirds 1-8 in 2 ship formation flights to fly to their next airshow.

6. MAIW 1st Anniversary Fireworks Display - FS9 Start Time Setting: 23:00:00 GMT Duration: 3 Hours

Four fireworks launch sites along the eastern shore of Andros Island light up the evening sky over Tongue of the Ocean Channel with a 3 hour fireworks display in honor of the MAIW's 1st Anniversary.

Now just select the MAIW - Airshow AI TB Arrival flight that you saved above and start watching the Military AI Works 1st Anniversary Airshow, Enjoy!!!



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"](#)

["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-go's"](#)

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: "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 identifier:

MAIW

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

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 “0” to “2”

Problem: “When the Military 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 in the “custom modifications/callsigns” section of the program and check that all the callsigns in the folder “Program Files\Microsoft Games\Flight Simulator 9\Military AI Works\The Bahamas\USAF\MAIW (Works) Field\Voicepack Callsigns” were added.

If any of these are missing, choose “File/import” and open the appropriate .vcpmo file in the folder “Program Files\Microsoft Games\Flight Simulator 9\Military AI Works\The Bahamas\USAF\MAIW (Works) Field\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 AI aircraft, and they won’t come back for touch-and-go’s”

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



6. Notes and Resources

This package was built by the [Military AI Works](#) online community. If you are interested in making Military AI traffic more realistic, visit this site!

Flightplans:

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. While squadrons generally use several different callsigns for training missions, the aircraft in this pack have all been assigned one of the four available at random.

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:

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

Credits:

Henry Tomkiewicz: for his continued support and continued permission to use his stunning AI afterburner effects.

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(S)

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 AI 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.

