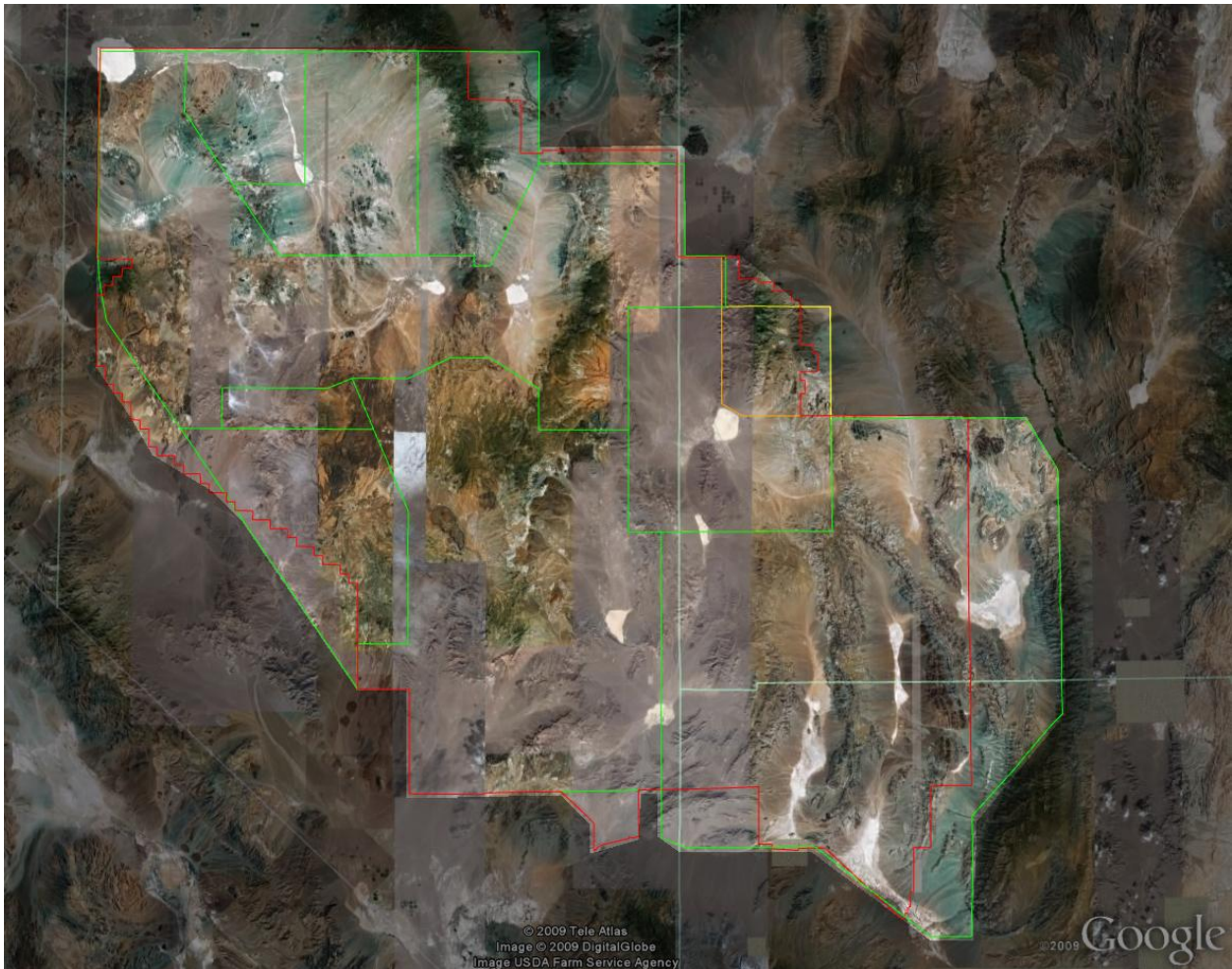




***Bonus: Nevada Test and Training Range Scenery***



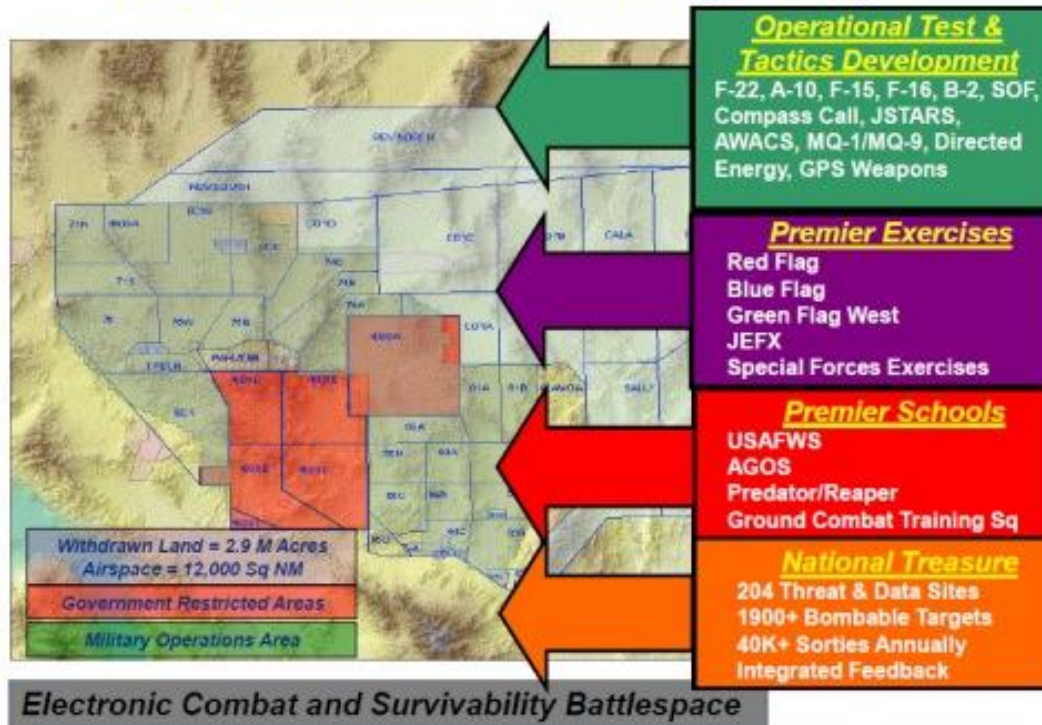
**For FS 2004  
Fall 2009**

**Scenery Creator: Mike Guenthner**

This bonus package, from Military AI Works, depicts scenery for the Nevada Test and Training Range and associated battlespace. The Nevada Test and Training Range (NTTR) consists of 2.9

million acres of federally withdrawn land, including 12,000 square miles of usable airspace to make up the world's premier testing and training battlespace. This space is controlled by the 98<sup>th</sup> Range Wing whose mission is to provide a relevant, instrumented and integrated battlespace for the full spectrum of the U.S Air Force Warfare Center missions.

## Nevada Test & Training Range



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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. Contents of this scenery package

The contents of this custom designed scenery include modified land class files, custom made scenery objects, custom made road networks, custom made ground textures and custom made airfields that represent the various fields scattered in and around the NTTR. The ground textures used in this package are designed to be seasonal to blend in with the surrounding high desert terrain. Therefore in the winter seasons, the areas will be much less noticeable due to the snow covering the local areas. While the scenery included in this bonus package is fictional, it represents a best guess as to the look and feel of the real world counterparts inside and around the NTTR.

### **Land Class additions:**

We have used land class modification files to add many of the dry salt lakes that exist inside the NTTR. In real life these dry lakes are easily visible and are used as valuable landmarks for the pilots operating inside the boundaries of the NTTR. Unfortunately these are not represented well by the default FS2004 scenery or any commercial add on programs for that matter so we have added them to the scenery package.



**Custom designed seasonal ground textures:**

We have designed several custom made ground textures that will add more realistic textures for the local airfields and simulated target areas/airfields. In addition we have also used custom made road textures that produce similar realistic results. We have tried to match what can be seen using *Google Earth* imagery in real life and the results are very realistic looking.



### **Target Scenery and customized effects:**

Using objects from the MAIW scenery libraries included with this bonus package, we have placed targets scattered in 35 different locations throughout the NTTR. While recreating the nearly 2000 bombable targets that exist in the real life NTTR is not practical, we have done our best to simulate the majority of these areas and objects without compromising performance. The result means that you should never run out of targets to attack while flying inside the target ranges. In addition to the targets, random target areas have smoke and fire effects that are timed to take place randomly throughout the month. The FS2004 effects system allows effects to be set to occur based on a 365 day schedule. Unfortunately the effects cannot be paired up accurately with AI flight plans since those operate on a weekly, 7 day schedule. The smoke and fire effects occur at the one of the various target area once every three days starting on the 3<sup>rd</sup> day of the month at various times and for various durations at each location. So for example, there are effects that will occur on the 3<sup>rd</sup>, 6<sup>th</sup>, 9<sup>th</sup>, 12<sup>th</sup>, 15<sup>th</sup>, etc at various local times between 1100-2200 hours. The effects only occur at one location at a time to simulate an active ordinance day in the range.



NTTR Radar Scenery and effects:

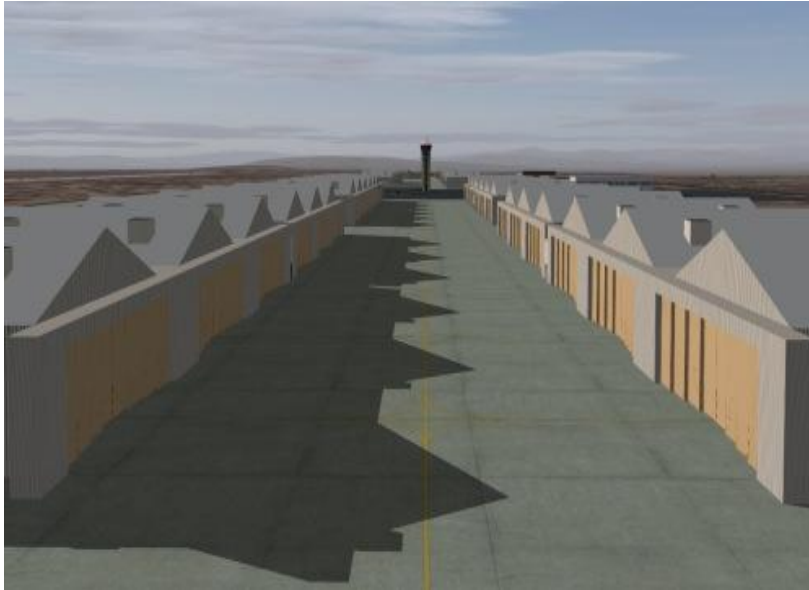
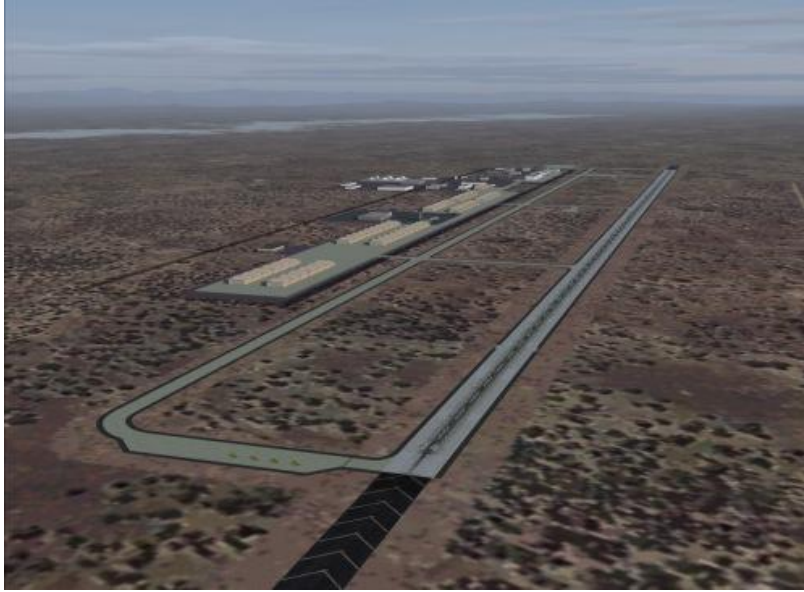
Scattered throughout the scenery are various radar sites that reside on the mountain tops inside the NTTR. Again we have added scenery to roughly 90% of the real life areas that contain mountain top structures within the NTTR. Many of these areas also have night obstruction light effects to make them more readily visible at night.



### **Airfields within the NTTR:**

We have created customized scenery for several airstrips that are located within the boundaries of the NTTR and Military Operating Areas. Some of these do not exist on any civilian aeronautical chart because they are only used by the military, however their existence is public knowledge. Several of them are part of the default FS2004 scenery but consisted of only a rudimentary runway structure. The following airfields have been added with customized scenery and AFCAD files:

**Tonopah Test Range (TNX)** has been extensively recreated to match the real world base. This airfield is known to have been the home of the F-117A Stealth Fighter when the program was top secret. It is believed that the majority of the now retired F-117's have been placed into storage back at this facility. The base today is used primarily for test purposes and as a staging field for aircraft participating in Red Flag exercises. In recent weeks news has emerged that TNX is home to the 30<sup>th</sup> Reconnaissance Squadron which operates the secretive RQ-170 Sentinel low observable unmanned aerial system.



**Base Camp (NV98)** is reportedly operated by the Department of Energy and is reported to be a staging area for workers going to and from the various facilities inside the NTTR. It is located next to a public highway in plain sight. Several Beech 1900s operate in and out of this strip on a regular basis shuttling workers back and forth.



**Keno Assault Landing Strip-NV99** and **Keno Assault Landing Strip for Helicopters-HV99** are collocated in a wide valley in the northern part of the NTTR. This is a single 7000' long runway that is used to practice assault landings and takeoffs for various aircraft participating in Red Flag and other exercises. We have added a helicopter afd file to this location to allow both aircraft and rotorcraft to operate to this location at the same time.

**Yucca Airstrip-NV11** is a restricted civilian airstrip operated by the Department of Energy and is located on the Yucca Flats Nuclear Test site. This area in real life is marked by hundreds of craters that are the result of underground nuclear tests conducted during the last half of the 20<sup>th</sup> century. The airstrip is adjacent to Yucca Dry Lake and is used to shuttle personnel and equipment to the test site.

**Pahute Mesa Airstrip-L23** is also a restricted civilian strip operated by the Department of Energy. It is believed to be no longer in use and was probably used in the past to shuttle men and equipment into the Yucca Nuclear Test Site.

### 3. Credits

#### AFCADs:

- Mike Guenthner

#### Voicepacks:

- Mike Guenthner

#### Custom Scenery:

- Mike Guenthner
- John Stinstrom

#### Object Libraries:

- John Strinstom and Mike Guenthner

Beta Testing:

- MAIW Beta Team

## 4. Installation

### Step 1) Install this package

**1a)** Run the auto installer and install this bonus scenery package in accordance with the on-screen prompts from the installer.

### Step 2) Remove duplicate AFCAD files

Open your "Flight Simulator 9/Addon Scenery/scenery" folder and remove any previously installed AFCAD's for the following airports (e.g. "AF2\_XXXX.bgl," "AF2\_XXXX\_DEFAULT\_XX.bgl" or "PAI\_AF2\_XXXX\_DEFAULT.bgl") NOTE: LEAVE ALL AFCADS BEGINNING WITH "MAIW" as they were installed with step 1:

TNX  
NV11

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.

### Step 3) Install Custom Scenery

The main contents of this package is custom designed scenery for the Nevada Test and Training Range. The installer will have placed all relevant files into their proper location for FS2004 users. However you still need to activate the scenery folders before you can enjoy this bonus scenery. Follow the steps below:

- 1) The folders "MAIW Nevada Test and Training Range" , "MAIW Scenery Library Objcets" and "MAIW Land Class" have already been installed into the "Addon Scenery" folder of your FS directory. In order to activate this scenery you must start FS9, go to Settings and find the Scenery Library.
- 2) Click on "ADD AREA" and navigate to the "MAIW Nevada Test and Training Range" folder and add that folder, then navigate to the "MAIW Scenery Library Objects" folder and add it to your scenery library. Finally navigate to the "MAIW Land Class" folder, **\*\*\*Note it is important that you place the "MAIW Land Class" folder and "MAIW Scenery Library Objects" folders as far down your addon scenery list as possible by using the Move Down button. Ideally the "MAIW Land Class" folder should be lower than any other scenery you may have added and just above the default FS9 scenery libraries. Then the "MAIW Scenery Library**

Objects" folder should be placed just above the "MAIW Land Class" folder to ensure the correct priority for the addon scenery objects.

- 1) 3) Shut down FS and then when you restart, the scenery will be installed and ready to use.

***That's it! You've successfully installed this package.***

## 5. Troubleshooting

### **Problems addressed:**

**No AI traffic at any of the airfields inside the NTTR:** There are no flight plans, aircraft, etc. included with this bonus scenery package. The AFCAD files for each of the bonus airfields are set up to handle basic AI traffic only. If you want them to handle specific traffic, you will need to modify the AFCAD files for your own use.

**I cannot see the smoke and fire effects:** The included range effects are timed to only occur on every 3<sup>rd</sup> day throughout each month. They are also set to occur at different times at different locations. So to see the effects you must look for them on those days and at those random times.

**I went to Groom Lake and I don't see anything there:** Correct! Nothing exists at this location.

**I can't find any of the included ground targets:** The ground targets are scattered throughout the NTTR. Simply flying anywhere inside the NTTR should reveal these targets on the ground. Most targets are located on either a dry salt lake or have had an area in the desert cut out for them so that they are easier to spot from the air.

## 6. Notes and Resources

This bonus 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:

There are no flightplans associated with this package as it is for scenery use only.

### 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!

#### Scenery:

The NTTR bonus scenery was created using several programs including Flight Simulator Design Shop by Abacus and SBuilder by Luis Sa, both of which can be located using a simple internet search.

## **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(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](http://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.

Thanks to everyone who made this possible.

