

Pinecastle Bomb Range

FSX Scenery

By: CountryFlyboy

For use in practice air to surface attacks in
Flight Simulator.

This will add the Pinecastle Bomb range in Ocala Florida to your FSX Scenery. The Only Bomb range in the southeast certified for live ordinance training. The Pinecastle Bombing Range is an un-fenced 5,760-acre area, with the eastern edge of the range located about 2 miles west of State Road 19 and the Camp Ocala campgrounds, and one-half mile west of the Farles Lake campground. F-18 jet fighters and other aircraft take off from Jacksonville Naval Air Station, fly low over the Forest, and drop their bombs in the middle 450 acres of the range.

[Here](#) is a Gizmodo article on the range, including a video of an A-10 doing a gun run at the range.

Installing

1. Unzip the ZIP file to the desktop.
2. Inside it you will find a folder named "Pinecastle Bombrange". Inside that are 2 BGL files. Cut them and paste into your Addon Scenery/Scenery folder, located in the main FSX directory.
3. Start FSX and it should automatically rebuild the scenery database. Go to the bomb range as directed below.
4. If the scenery doesn't appear go to the scenery library in your setting, move any one of your installed scenery up or down in priority, then move it back. Press okay. That will force FSX to rebuild the scenery database. If after that it still does not work. Check and make sure you put the BGL files in the right folder.

This scenery utilizes default objects with FSX acceleration. No other download required.

This scenery should work with FSX SE. simply install as directed above.

To uninstall simply remove the BGL files

To get to the bomb range

- Spawn your aircraft at Woods And Lakes Airpark (FA38) in Oklawaha Florida. Takeoff and fly East. The bomb range is about 7 miles east of the airport.
 - This scenery also includes an update version on FA38. I corrected the runway dimensions and added hangers and static aircraft. This is a privet airport so no AI will use it. And there is no parking or fuel available.
- For Military Aircraft the following MTRs terminate over the range. VR-1005, VR-1008, and VR-1009.
- The center of the bomb range is located at
 - N29 07.065
 - W081 43.745

About the Range

The Navy's Pinecastle Impact Range in the Ocala National Forest is the only place on the East Coast where the Navy can do live impact training. The Navy drops nearly 20,000 bombs a year at the site, a few hundred of which are live. The Navy has used nearly 6,000 acres of the 382,000-acre forest for target practice for 50 years under a special use permit from the US Forest Service.

The Air force also makes use of the range. A-10's from Moody Air force base can sometime be seen practicing here.

Here's the bomb range as shown on the Orlando TAC chart. Its located in the middle of R2910A.



Here's 2 videos showing the bomb range in use.

<https://youtu.be/AEtptbI9jYw>

<https://youtu.be/MTBzUlu-dd4>

Airspace

The bomb range is protected by the R2910 complex which consist of R-2910 A, B, C, D, and E.

Details on the airspace below.

SPECIAL USE AIRSPACE ON ORLANDO TERMINAL AREA CHART

Unless otherwise noted altitudes are
MSL and in feet. Time is local.
"TO" an altitude means "To and including."
FL – Flight Level
NO A/G – No air to ground communications.
Contact Flight Service for information.

† Other times by NOTAM.
NOTAM – Use of this term in Restricted
Areas indicates FAA and DoD NOTAM
systems. Use of this term in all
other Special Use areas indicates the
DoD NOTAM system.

U.S. P-PROHIBITED, R-RESTRICTED, W-WARNING, A-ALERT, MOA-MILITARY OPERATIONS AREA

NUMBER	ALTITUDE	TIME OF USE	CONTROLLING AGENCY/ CONTACT FACILITY	FREQUENCIES
R-2901 B	14,000 TO BUT NOT INCL FL 180	INTERMITTENT 0600-2400 MON-FRI 0800-1800 SAT-SUN †6 HRS IN ADVANCE	MIAMI CNTR	
R-2901 E	1000 TO BUT NOT INCL 4000	INTERMITTENT 0600-2400 MON-FRI 0800-1800 SAT-SUN †6 HRS IN ADVANCE	MIAMI CNTR	
R-2901 M	4000 TO BUT NOT INCL 14,000	INTERMITTENT 0600-2400 MON-FRI 0800-1800 SAT-SUN †6 HRS IN ADVANCE	MIAMI CNTR	
R-2910 A	TO FL 230	INTERMITTENT 0800-2400 †6 HRS IN ADVANCE	JACKSONVILLE CNTR	
R-2910 B, C	TO 6000	INTERMITTENT 0800-2400 †6 HRS IN ADVANCE	JACKSONVILLE CNTR	
R-2910 D	2000 TO FL 230	INTERMITTENT 0800-2400 †6 HRS IN ADVANCE	JACKSONVILLE CNTR	
R-2910 E	500 TO BUT NOT INCL 2000	INTERMITTENT 0800-2400 †6 HRS IN ADVANCE	JACKSONVILLE CNTR	
R-2932	TO BUT NOT INCL 5000	CONTINUOUS	MIAMI CNTR	
R-2933	5000 TO UNLIMITED	INTERMITTENT BY NOTAM NORMALLY 24 HRS IN ADVANCE	MIAMI CNTR	
R-2934	UNLIMITED	INTERMITTENT BY NOTAM NORMALLY 24 HRS IN ADVANCE	MIAMI CNTR	
R-2935	11,000 TO UNLIMITED	INTERMITTENT BY NOTAM NORMALLY 24 HRS IN ADVANCE	MIAMI CNTR	
W-136 F	UNLIMITED	CONTINUOUS	JACKSONVILLE CNTR	
W-137 F	UNLIMITED	CONTINUOUS	JACKSONVILLE CNTR	
W-137 G	TO 13,000	CONTINUOUS	JACKSONVILLE CNTR	
W-138 E	UNLIMITED	CONTINUOUS	JACKSONVILLE CNTR	
W-497 A, B	UNLIMITED	BY NOTAM	MIAMI CNTR	

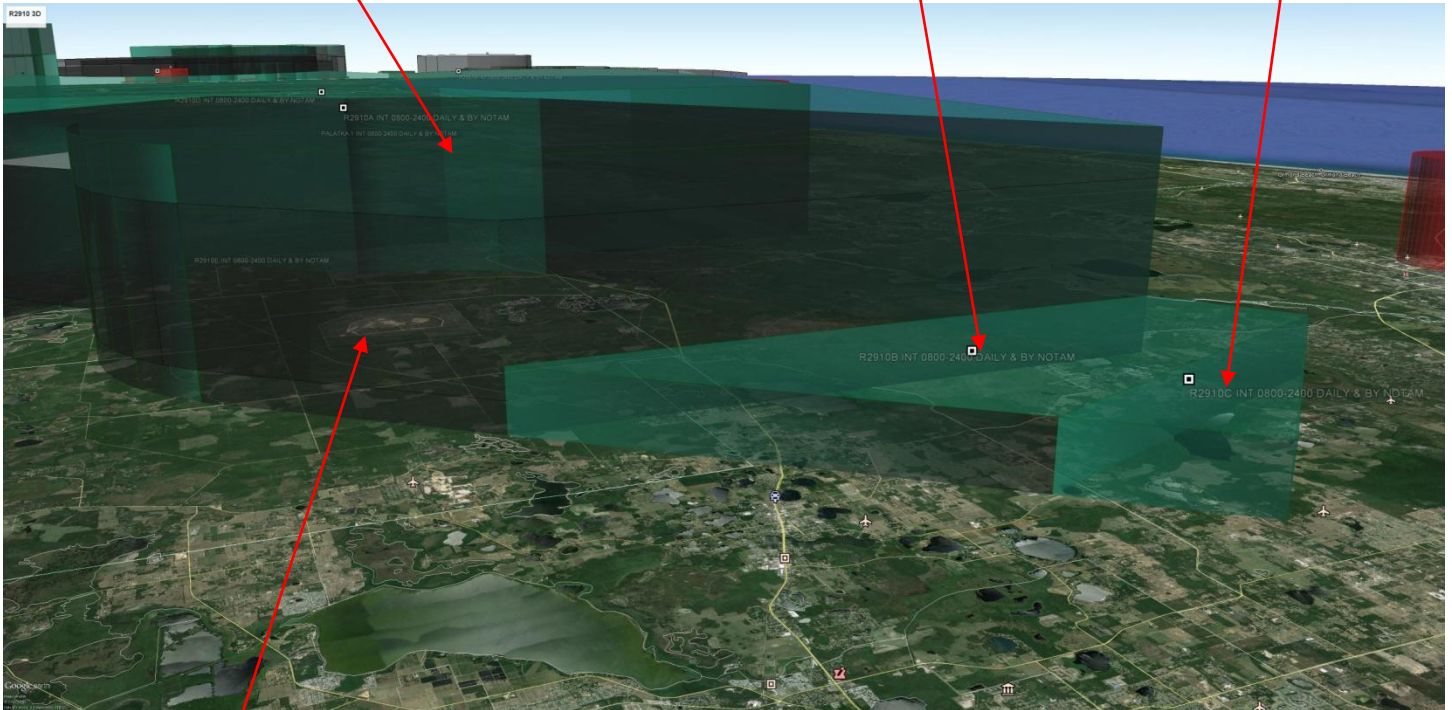
All R-2910 airspace is active intermittently between the hours of 0800z-2400z, or whenever there is a NOTAM saying it's active. The NOTAM will be posted at least 6 hours in advance.

On the next page is a 3D view of the airspace.

R-2910 A

R-2910 B

R-2910 C



Bomb Range

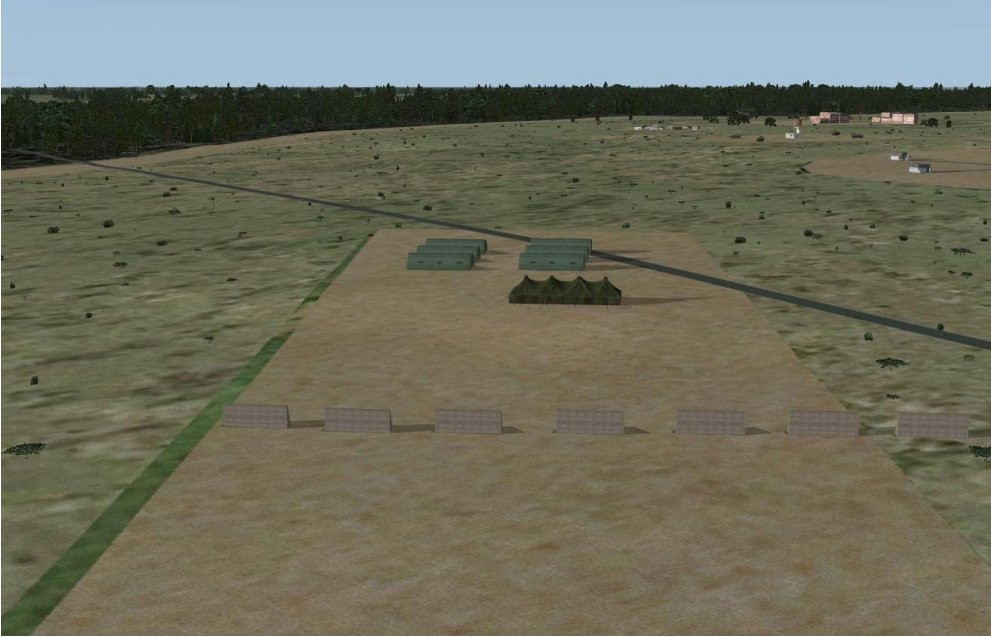
Targets

There are nine targets within the Pinecastle complex. Below is the real life targets at Pinecastle. I took some creative license and made the targets a little different in the sim.

- **Live Ordnance Impact Area:** Targets in impact area consist of vehicle hulks arranged to for a "T" and scored by WISS. Maximum 500 pound general purpose or explosive equivalent, ball ammo up to 30mm, rockets up to five inch, and practice bombs are authorized.
- **Main Bull (Special Weapons Bombing Target):** The Main Bull consists of four concentric circles of 300, 600, 900, and 1200-foot radii, encompassing a bull's-eye constructed of two 75-foot poles and two 90-foot poles with two radar reflectors and top mounted banners. The center of the bull's-eye is clear of vegetation out to 450-feet from the center pole with two rings of tires at 50 and 200-foot radii from the center pole. Additional radar reflectors are located on the 317 run-in-line, 6000-feet short of and 3800-feet beyond bull's-eye. Elevated black and white Initial Point (IP) markers are situated on the 317 run-in-line at 6000-foot intervals from 36,000-feet short to 6000-feet beyond target center.
- **Day/Night Conventional Dive Bomb/Rocket Target:** The target consists of a surplus military vehicle bull's-eye and four concentric tire rings of 50, 100, 200, and 300-foot radii. This target is equipped with an integral lighting system for night bombing exercises. Twelve radar reflectors are placed in clock positions at 400-feet. Only practice bombs are authorized on this target.
- **Surface-to-Air Missile (SAM) Site Target:** This target resembles a hexagram with a circular service road encompassing the radar and surrounding missile launcher pads. This target is not scored. Practice bombs, inert MK 80 series bombs, and inert rockets up to five-inch are authorized.
- **Strafing Target:** The strafing target consists of tow banner material suspended on the face of a berm. Ball ammo up to 30mm is authorized.
- **Inert Ordnance Runway:** This target consists of a mock runway. Practice bombs, inert MK 80 series bombs, and inert rockets up to five-inch are authorized.
- **Red Box Target:** This target consists of four red tanks positioned to form a square with a radar unit in the center. The target is located 1700-feet from the Main Bull. The square of tanks is within a 200-foot radius circle. Practice bombs, inert MK 80 series bombs, and inert rockets up to five-inch are authorized.
- **Mini-Convoy:** This target consists of various small vehicles situated approximately 800 meters from the Main Bull and 750 meters from spotting Tower No. 1.
- **Laser Target:** This target is a 50-foot by 50-foot billboard with a painted black crosshair. The target is located 3000-feet north of Tower 1. A laser sensor is positioned in the center of the crosshair. Continuous automatic scoring is available on frequency 380.8 MHz. Cassette tape scoring results are available with a 15-minute advanced notice. This target provides no-drop Laser Guided Bomb (LGB) training.

Here are the targets in the sim. Since it's a simulator all targets are certified for live ordinance training up to the biggest bomb you can carry! 😊

Gun Run. For gun or rocket attacks.



Laser Training targets. For use with laser guided ordinance.



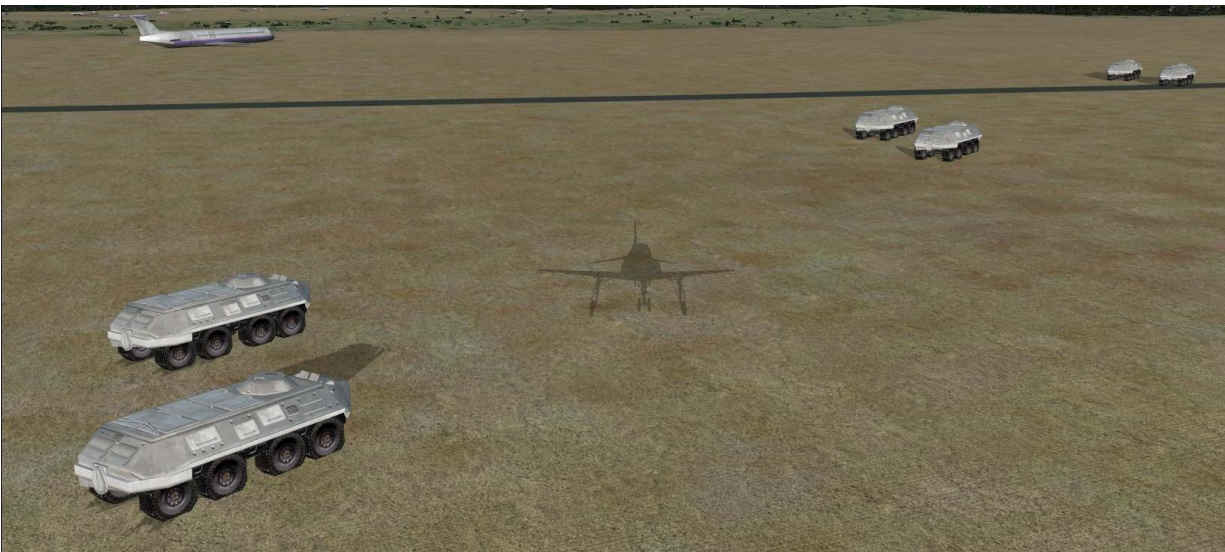
Mock Airbase Targets. For air to surface guided missile training



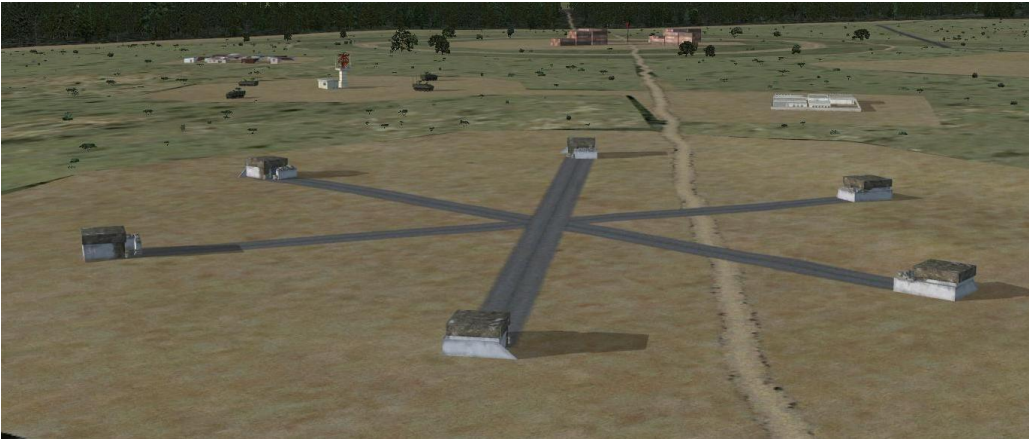
Mock Sam site. For threat training, and threat elimination training



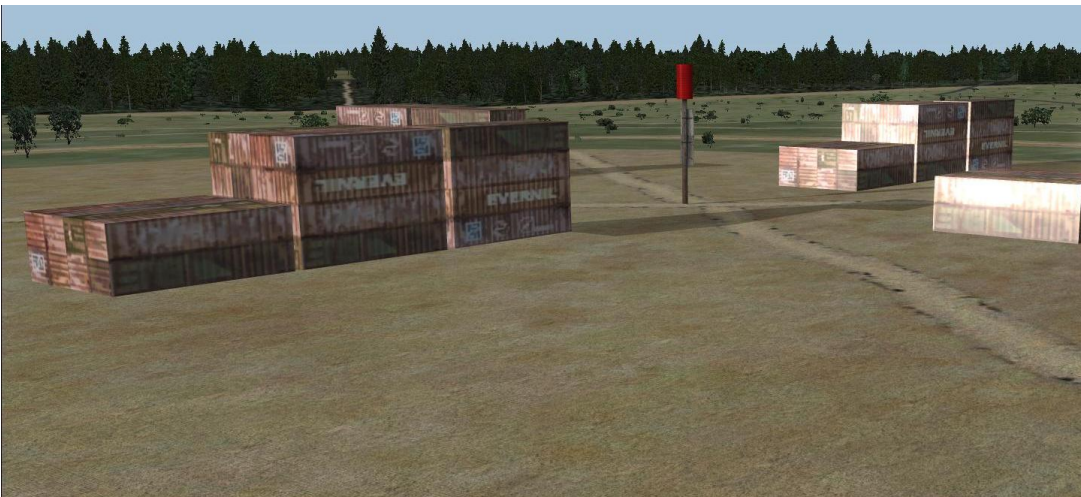
Mock vehicle Convoy. For cluster unguided bomb training.



Pillboxes. For heavy bomb/bunkerbuster bomb training



Pylon. For traditional Dive Bomb training.

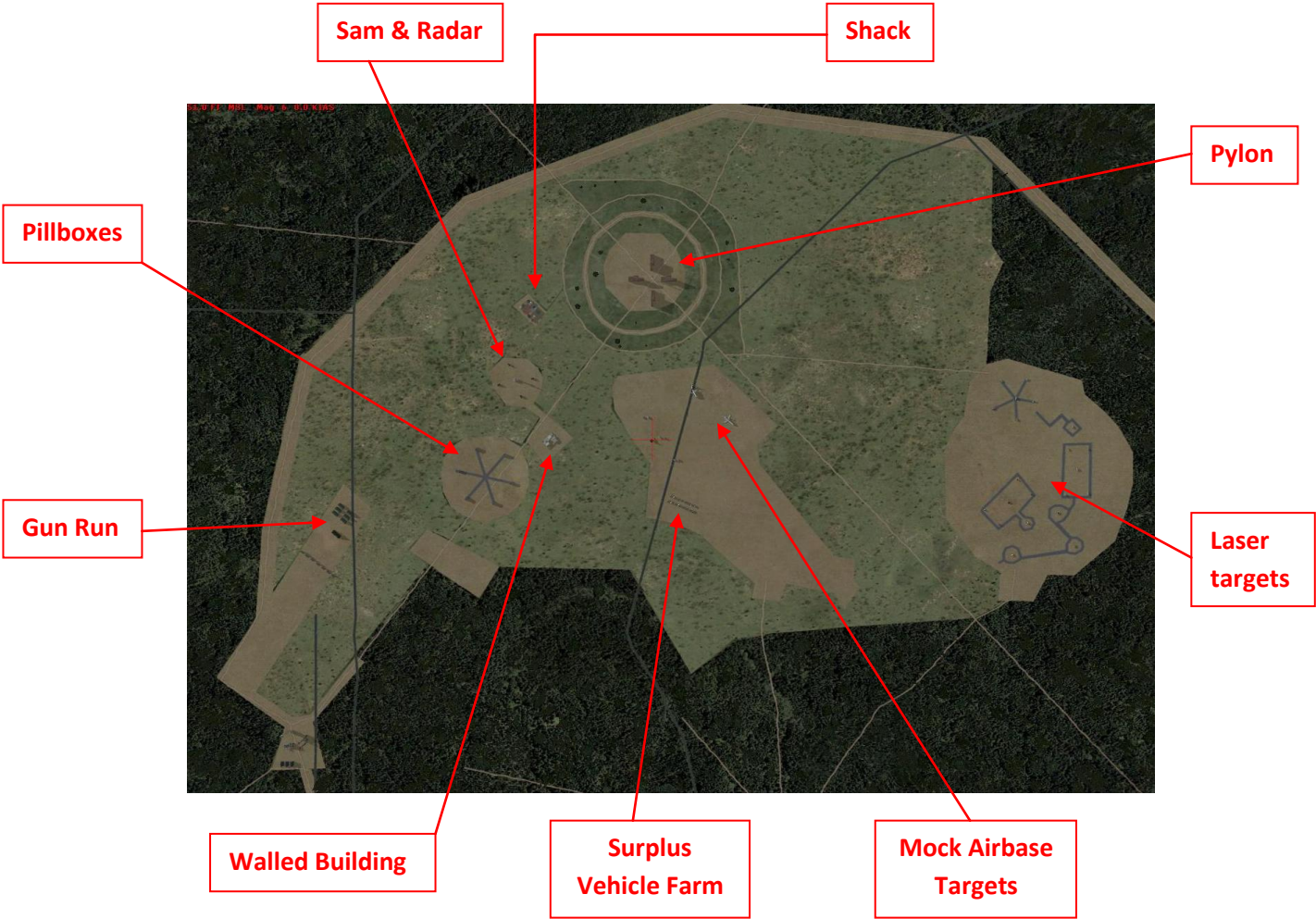


Shacks. For cluster bomb training



Not pictured is the surplus vehicle farm, and walled buildings. These target can be used for anything.

Range map



Note these 3 things are not targets. They are the maintenance/storage area, Helicopter Pad, and the FAC tower. Do not attack these objects.

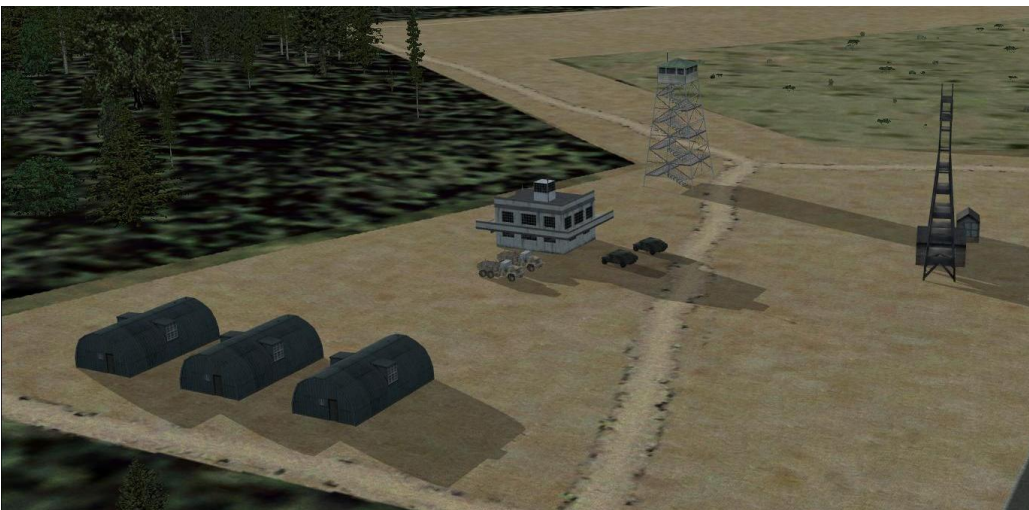
Maintenance and Storage area



Helicopter Pad



FAC Tower. Forward Air Controller sets up here. He's the guy guiding you on which targets to attack, as well as giving you BDA when your training mission is done and you leave the range.



History

The Navy's current special use permit would have expired December 1999. The Navy conducted a preliminary analysis of alternatives, including the plausibility of moving training operations to other military ranges in the southeast United States. These alternatives did not meet the Navy's operational criteria, thus were eliminated from detailed analysis. The preferred alternative would renew the Navy's authorization to use the range. Unanticipated delays in the process hindered the Navy's completion of the Environmental Impact Statement (EIS). Forest Supervisor Marsha Kearney extended the current permit to allow adequate time for the Navy to finalize the EIS and for her to then make a decision on the future of the range. The Navy had hoped to win permission in July 2001 for a 20-year renewal of that activity. Another extension to July 2002 was needed to adequately address public comments and complete additional studies needed to finalize the EIS. The Forest Service set the new deadline of 31 July 2002 for the Navy to prove that its use of the Pinecastle Range doesn't harm the forest's ecosystem.

In order to evaluate the U.S. Navy's request to renew their special use permit, an environmental analysis of Pinecastle Range located on the Ocala National Forest is in progress. A Draft Environmental Impact Statement was released for public review in January 2001. Several meetings were held to receive public input during the comment period that ended on 20 February 2001. The Florida Coalition for Peace and Justice is the only group pressing the matter. Other environmental groups, such as the Sierra Club and Audubon Society, have backed away from this issue.

Between 2 August 1951 and 15 April 1985, the Navy acquired 5,895 (including 5,765 acres of former site acreage) acres by use permit from USDA for an impact range since developed and known as Pinecastle Impact Range. Development includes an administrative site, a tracking station, remote radar sites, towers and markers, and targets. The Navy acreage is located in what was the center of the former range and includes the former Army North Bomb Target (Area #5). The Navy site has been under the jurisdiction of Jacksonville NAS and most recently, Cecil Field NAS.

The War Department (WD) acquired 40,587 acres for the former Lake Bryant Bombing and Gunnery Range in the early 1940's. On 27 June 1941, the WD acquired use of 23,167 acres for an Army bombing and gunnery range by means of a temporary use permit from the United States Department of Agriculture (USDA). By two Memoranda of Understanding with the USDA, the Army acquired more land in the same area: 3,354 acres by transfer and another 14,066 acres by conveyance bringing the total to 40,587 by 11 January 1943.

During World War II, the Lake Bryant Bombing and Gunnery Range was utilized by the United States Armed Forces Command and was under the jurisdiction of Pinecastle Army Air Field and the Orlando Army Air Base. The site was also known as the Ocala Bombing Range, the Ocala Bombing and Gunnery Range, and Ocala Aerial Bombing and Gunnery Range, and Ocala Range. The site was used for practice bombing (including the use of HE/GP bombs), AAF Board Projects, ground gunnery and rocket missions. There were also training facilities for fire fighting details. Observation towers were constructed on the site along with a camp area for the fire fighters.

At the conclusion of World War II, the WD determined the site was no longer required. It was declared surplus 2 December 1956. The entire 40,587 acre site was relinquished back to the USDA by letter of transfer dated 20 May 1947. Of these 40,587 acres, 5,765 acres are not eligible for the DERP-FUDS program because the Navy currently utilizes these acres for an active site, the Pinecastle Impact Range.

The North Bomb Target was one of the original range locations and was intended for practice bombing. It was a cleared circular area about two miles in diameter. Historical aerial photography shows a considerable amount of ground disturbance. This entire target area, with the exception of a portion along the northern edge outside of the present-day Navy range, is included in the currently active US Navy Pinecastle Target.

Legal

This scenery project was just for fun, and was not meant to recreate the Pinecastsle bomb range for any nefarious purposes.

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