



Operational Range Assessment Eglin Air Force Base

Air Force Operational Range Assessment Program

May 2024

Background

DoD uses and manages operational ranges to support national security objectives and maintain the high state of operational readiness essential to its mission requirements. The Department conducts non-regulatory, proactive, and comprehensive operational range assessments (ORAs) to support the long-term sustainability of these ranges while protecting human health and the environment. The purpose of an ORA is to determine if there is a release or substantial threat of a release of munitions constituents from an operational range to an off-range area that exceeds an applicable regulatory standard or creates a potential unacceptable risk to human health or the environment.

The DAF Operational Range Assessment Program (ORAP), established to comply with DoD policy, sets forth procedures for consistently conducting ORAs throughout the Air Force. The DAF ORAP assessment methodology uses an installation-wide approach to verify the ORAP inventory and accomplish range-specific assessments. An Air Force ORA is comprised of two primary phases: Qualitative Assessment, Phase 1 and Quantitative Assessment, Phase 2 (if required).

- A Qualitative Assessment, Phase 1, encompasses records review, interviews, and a visual survey.
- A Quantitative Assessment, Phase 2, encompasses records review, interviews, visual survey, and environmental media sampling.

Installation Overview

Eglin AFB is located approximately 15 miles east of Pensacola, Florida. The installation encompasses 464,411 acres of land area within Santa Rosa, Okaloosa, and Walton counties in Northwest Florida and airspace overlying 124,642 square miles of water ranges in the Gulf of Mexico. Eglin AFB also manages Camp San Blas, a geographically separate unit, located about 125 miles southeast in Gulf County, Florida.

ORAP Findings: March 2023 ORA Report

- Munitions Constituents (MC) metals have the potential to be transported to off-range areas through surface water mechanisms.
- No release or substantial threat of an off-range of release was identified.
- No unacceptable risks to human health was identified. A potential risk to ecological receptors may exist.

Next Steps

Eglin AFB is scheduled to be assessed in accordance with DAF and DoD policy specifying periodic assessment at least every five years or sooner if significant changes occur that may impact assessment decisions.



Installation Overview Continued

The water ranges at Eglin AFB were evaluated as to feasibility to be assessed under the DAF ORAP given the area is composed entirely of sea space. The evaluation deemed the area 'infeasible' to accurately assess.

Note: The Air Force is working with Sister Services to modify assessment methodology in order to evaluate such areas under the DAF ORAP.

During implementation of the ORAP at Eglin AFB, one area was determined to be eligible and assessed – The Eglin Test and Training Complex (ETTC).

ETTC Assessment Overview

The ETTC boundary is defined by the installation boundary as it encompasses the entire land area of Eglin AFB.

The ETTC was previously evaluated in 2004 under a precursor to the ORAP. This is the fourth ORA for the ETTC under the DAF ORAP.

The ETTC encompasses approximately 464,411 acres with roughly 67,000 acres being used for operational test and training. The remaining acres are set aside for future test and training use, and currently act as safety buffer zones.

The ETTC provides a full spectrum of open-air munitions test capabilities, from multi-purpose air-to-ground and ground-to-air ranges to highly specialized instrumented test sites. Other sub-areas within ETTC support training with small-, medium, and large-caliber munitions at live-fire ranges, mortar positions, gun positions, training/maneuver areas, airspace, tactical and administrative landing and drop zones, waterways, beaches, and various training facilities.

Frequently used munitions include missiles, bombs, rockets, small arms and gun ammunition, chaff, and flares. Munitions range from small arms to 500-pound bombs. Inert bombs include the bomb dummy unit (BDU)-33D/B, guided bomb unit-10 and BDU-50.

The prior ORA, conducted in 2016, included soil, surface water, sediment, and groundwater sampling. The 2016 ORA determined there was no threat of release nor potential risks to receptors (human and ecological).

ETTC Assessment Overview (continued)

This 2022 Phase 2 ORA confirmed the evaluation of the ETTC as a range complex encompassing over 130 sub-areas and interstitial space (safety zones).

The ORA effort included the collection of 18 surface water and 18 sediment samples from locations within major creeks and streams draining the sub-areas of the ETTC. Shallow groundwater was planned to be collected from existing monitoring wells; however, due to access restrictions shallow groundwater was sampled from one existing monitoring well. Samples were analyzed for metals, explosives, perchlorate, and white phosphorus.

No explosives, perchlorate, or white phosphorus was detected in surface water, sediment, or groundwater samples.

Metals were detected in surface water and sediment; however, metals are known to occur at high concentrations in the region.

- Iron was detected above background and ecological project action limit (PAL) at one downgradient surface water location.
- Chromium was detected in one surface water sample and lead in two surface water samples at elevated concentrations; however, levels deemed to be within natural background variance and were below ecological PALs.
- Chromium, Copper, Iron, Lead, and Zinc were detected at elevated levels at multiple sediment sample locations. However, all detections were below ecological PALs.

Based on ORA efforts, the potential for MC to be transported via surface water is viable and could pose a potential risks to off-range ecological receptors. No risks to off-range human receptors identified. All other exposure pathways were deemed incomplete.

The ETTC is recommended for a periodic Phase 2 to further evaluate potential for MC to be transported from sub-areas within ETTC and establish more robust background levels for MC metals.

For more information on this assessment or the Air Force Operational Range Assessment Program contact the Ranges Subject Matter Expert, Technical Branch, Environmental Quality Directorate, Air Force Civil Engineer Center
For more information on the DoD Operational Range Assessment Program visit <https://denix.osd.mil/orap/home/>