



Operational Range Assessment

Goodfellow Air Force Base

Air Force Operational Range Assessment Program

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

- 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, as required.

Installation Overview

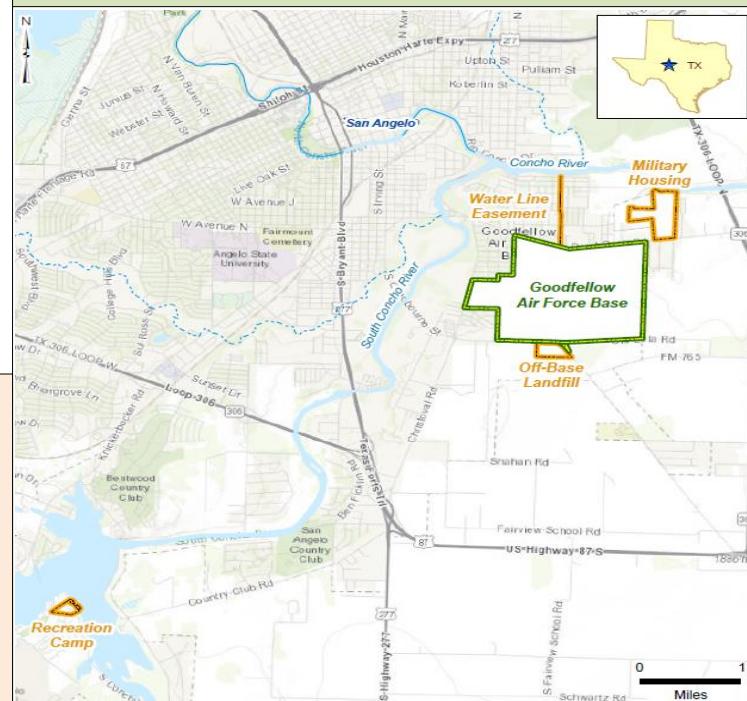
Goodfellow AFB encompasses approximately 1,234 acres of land in Tom Green County, Texas. The installation is within the city limits of San Angelo, Texas. Goodfellow AFB also manages the following Geographically Separated Units (GSUs): Water Line Easement, Military Housing, Off-Base Landfill, and the Recreation Camp.

ORAP Findings: August 2024 ORA Report

- No Munitions Constituents (MC) transport mechanisms deemed viable for the area assessed at Goodfellow AFB.
- No off-range MC release exists for the area assessed at Goodfellow AFB.
- No potential risks to human health and the environment were identified for the area assessed.

Next Steps

Goodfellow 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.



Location of Installation

Installation Overview Continued

During implementation of the ORAP at Goodfellow AFB, two operational areas were determined to be eligible for assessment under the Program: the Joint Forces Field Training Area (TA) Complex and the Canine TA.

The Canine TA was not identified for a full assessment based on minimal MC source due to limited use of small caliber blanks during training. Eligibility, use, and MC source shall be re-evaluated during the next installation-wide ORAP effort.

The following provides a range overview and summary of periodic assessment findings at the Joint Forces Field TA Complex. This is the second assessment of the Joint Forces Field TA Complex under the DAF ORAP.

Joint Forces Field TA Complex Assessment Overview

The Joint Forces Field TA Complex encompasses a total of 230 acres along the eastern installation boundary. The Joint Forces Field TA Complex includes ten sub-areas including from approximately north to south: Confidence Course, Practice Grenade Range, Joint All-Domain Expeditionary Forward Operations Readiness Generation Exercise (JADE FORGE), Camp Sentinel, Military Operations on Urban Terrain (MOUT) Village, Explosives Proficiency Range, Convoy Route, Specialized Seismic Training Area, the Paintball Area, and the Lodge Recreation Area.

The area was first used for military training in approximately 1964. Overall, the complex is used for approximately 32 times per year for weeklong exercises. Various DoD entities utilize the Joint Forces Field TA Complex including the U.S. Army, Air Force, Navy, and Marines. Munitions expended within the Joint Forces Field TA Complex include small caliber blanks and dye

Joint Forces Field TA Complex Assessment Overview

Continued

marker rounds, practice hand grenades, smoke grenades, and ground burst simulators.

The Joint Forces Field TA Complex was initially assessed in 2017. The 2017 ORA Phase 1 identified the ground within the partially buried metal culvert pipes used to contain the deployed munitions as a potential MC source area. Known/suspected MC were identified as iron, perchlorate, and 2,4,6-trinitrotoluene.

No viable transport mechanisms were identified; thus, it was determined there was no threat of release and no potential risks to off-range receptors. As such, the Joint Forces Field TA Complex was recommended for a periodic Phase 1.

This periodic ORA Phase 1 confirmed a potential source of MC throughout the complex due to usage of munitions throughout the various sub-areas. Suspected MC identified include aluminum, copper, iron, zinc, perchlorate, and 2,4,6-trinitrotoluene. Aluminum, copper, and zinc were added to the MC list to account for the usage of dye marker rounds. The air, soil, surface water/sediment, groundwater, and biota transport pathways were assessed, and no complete pathways were identified. Although various munitions are used throughout the complex, due to limited use and the collection of debris which prevents weathering of the casings and munitions debris, limited MC, if any, are anticipated to be present in soils because of training.

Therefore, there is no potential threat of release of MC to off-range areas and no risks to receptors. The Joint Forces Field TA Complex was recommended to undergo a periodic Phase 1 during the next review cycle to reconfirm the findings of this periodic Phase 1 ORA.

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/>