Operational Range Assessment
Joint Base San Antonio (JBSA)-Randolph

Air Force Operational Range Assessment Program July 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

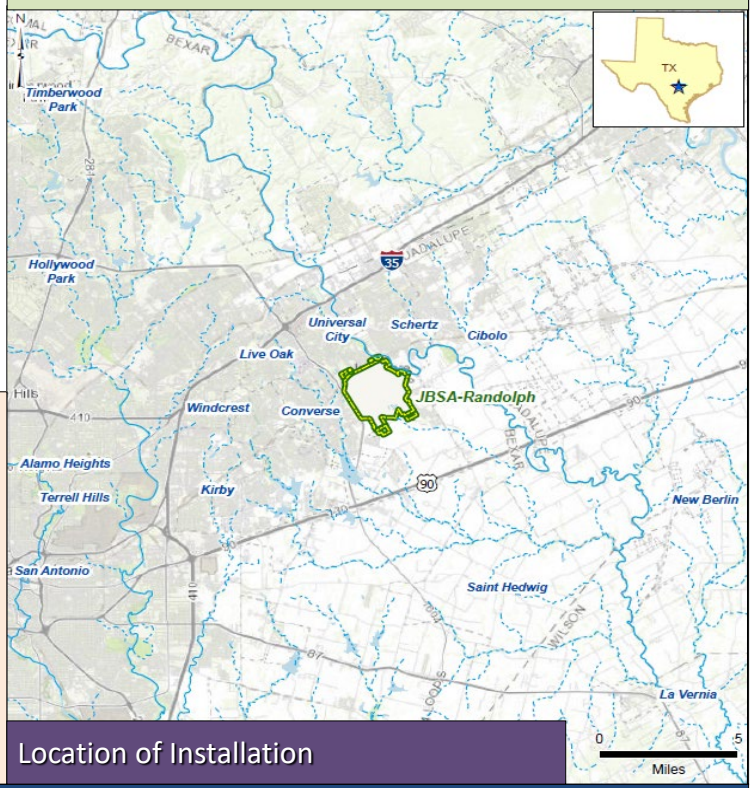
JBSA-Randolph encompasses approximately 2,881 acres of land in Bexar County, approximately 15 miles northeast of San Antonio, Texas. JBSA-Randolph is accessible from the north by Interstate 35 and from the south by U.S. Highway 90. JBSA-Randolph manages two geographically separate units: JBSA- Seguin Auxiliary Field and JBSA-Canyon Lake Recreational Site.

ORAP Findings: July 2024 ORA Report

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

Next Steps

JBSA-Randolph 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 JBSA-Randolph, three operational areas were determined to be eligible for assessment under the Program: the Small Arms Range (SAR), Canine Training Area, and Camp Talon.

The Canine Training Area 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.

Camp Talon was identified as an operational area eligible for assessment under the ORAP due to expenditure of small caliber blanks and dye marking rounds. Therefore, Camp Talon is recommended for an initial ORA Phase 1 during the next installation-wide ORAP effort.

The following provides a range overview and summary of periodic assessment findings at the SAR. This is the third assessment of the SAR under the DAF ORAP.

SAR Assessment Overview

The SAR, located in the southern portion of JBSA-Randolph, encompasses 0.29 acres which includes a fully contained, 25-m range. The SAR has been used for small arms weapons training since the 1997; however, the range became fully contained in 2012.

Currently, the fully contained primary use area consists of 10 firing positions, a concrete range floor, cinderblock side walls, a bullet trap system, and a collection unit ventilation system. Surrounding the primary use area are lands that support training at the SAR.

The SAR was initially assessed in 2010. The 2010 ORA Phase 1 identified the bullet trap as a potential MC source area. Known/suspected MC were identified as copper, iron, lead, tungsten, and zinc.

SAR Assessment Overview (Continued)

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 SAR was recommended for a periodic Phase 1.

The 2018 periodic ORA Phase 1 confirmed potential MC source areas – the firing line, range floor, and bullet trap. Known/suspected MC were identified to include copper, iron, lead, tungsten, and zinc. 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 SAR was recommended for a periodic Phase 1

This periodic ORA Phase 1 confirmed a potential source of MC present at the firing line, range floor, and bullet trap for the SAR. Suspected MC identified include copper, iron, lead, tungsten, zinc, and nitroglycerin. Nitroglycerin was added to the previous ORA MC list as it is the primary propellant associated with small caliber training.

The air, soil, surface water/sediment, groundwater, and biota transport pathways were assessed, and no complete pathways were identified due to the enclosed nature of the SAR preventing any interaction of MC with the environment. Therefore, there is no potential threat of release of MC to off-range areas and no risks to receptors. As such, no further evaluation is warranted.

As the SAR is fully contained on all sides, it is recommended that the SAR no longer be fully evaluated under the ORAP. The next installation-wide ORA effort should complete an abbreviated Phase 1, which simply confirms no changes in munitions usage and site conditions rather than complete a full assessment. If any changes have occurred at the SAR which could result in potential off-range MC migration, then the SAR should receive a full periodic Phase 1.

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/