



Operational Range Assessment Kingsley Field Air National Guard Base

Air Force Operational Range Assessment Program

January 2021

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 USAF Operational Range Assessment Program (ORAP), established to comply with DoD policy, sets forth procedures for consistently conducting ORAs throughout the Air Force. The USAF 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

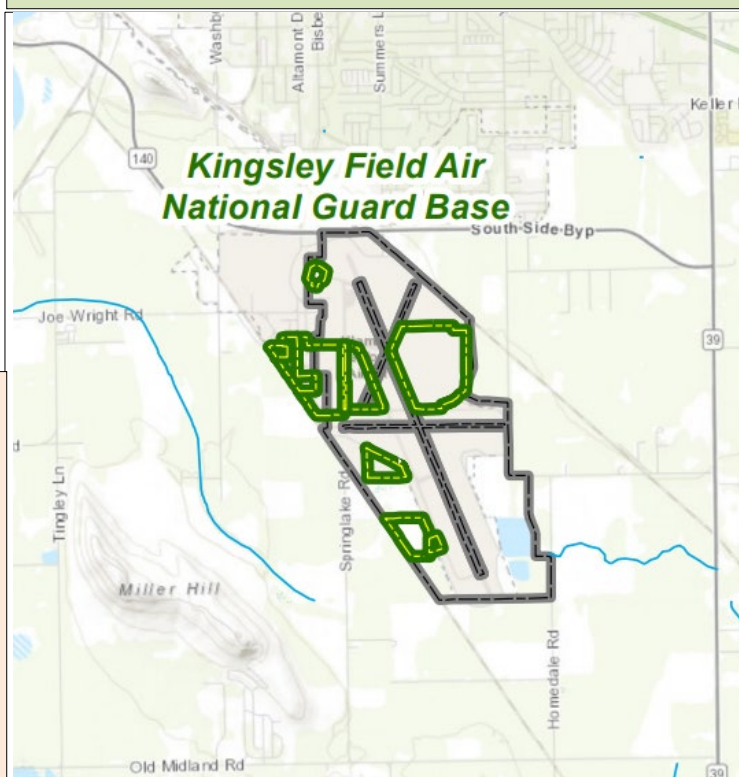
Kingsley Field Air National Guard Base (ANGB) is in Klamath Falls, Oregon, in Klamath County, approximately 4 miles southeast of downtown Klamath Falls. The base occupies approximately 901 acres; 255.87 acres are exclusive use land leased from the City of Klamath Falls, 21.10 acres are public domain USAF owned, 33.51 acres are fee owned by the USAF, and 589.91 acres are joint-use lands with the Crater Lake-Klamath Regional Airport.

ORAP Findings: January 2021 ORA Report

- Munitions constituents (MC) such as metals, nitroglycerine, and perchlorate may be transported via the groundwater pathway.
- No actual threat of an off-range MC release exists for areas assessed at Kingsley Field ANGB.
- No unacceptable risks to human health or the environment were identified.

Next Steps

Kingsley Field ANGB is scheduled to be assessed in accordance with USAF 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)

During implementation of the ORAP at Kingsley Field ANGB, two operational areas were determined to be eligible and assessed under the USAF ORAP – the Unexploded Ordnance (UXO) Munitions Detonation Pad, and the Combat Arms Training and Maintenance (CATM) Facility which includes three sub-areas: the Small Arms Range (SAR), Military Operations in Urban Terrain (MOUT) Training Area (TA), and the Tactical Training Facility.

The following sections summarize USAF ORAP efforts for the ranges. This is the first ORA conducted at the UXO Munitions Detonation Pad and the second ORA conducted at the Small Arms Range (SAR) (which is now referred to collectively as the CATM Facility).

UXO Munitions Detonation Pad Assessment Overview

The UXO Munitions Detonation Pad, first sited in 2013, is located on the installation's eastern parcel, directly northeast of the Munitions Storage Area (MSA). The UXO Munitions Detonation Pad encompasses approximately 0.92 acres, defined by an asphalt pad and an area adjacent to the north of the pad where detonations are typically performed. The 658-foot-radius clear zone is associated with the UXO Munitions Detonation Pad. The UXO Munitions Detonation Pad is used infrequently (once or twice every couple years) for emergency disposals which are performed by the Explosives Ordnance Disposal (EOD) unit from Beale Air Force Base, as Kingsley Field ANGB does not have an active EOD unit of their own.

In 2020, the initial Phase 1 ORA was completed. Limited MC source areas were identified at the UXO Munitions Detonation Pad. Due to the limited availability of MC source, subsurface geology, and vegetation, MC were determined unlikely to be available for transport via air, soil, surface water/sediment, or groundwater mechanisms. Therefore, no complete exposure pathways or risks were identified for the UXO Munitions Detonation Pad.

CATM Facility Assessment Overview

The CATM Facility is located on the base's southwestern parcel approximately 300 feet west of the approach runway and encompasses 24.26 acres. The CATM Facility is comprised of three sub-areas (SAR, MOUT TA, and the Tactical Training Facility) as well as a recreational archery range. The SAR sub-area encompasses 3.63-acres. The SAR has an associated surface danger zone (SDZ) encompassing 593.25 acres and extends 7,874 feet to the south-southeast from the firing line.

The SAR is used by Security Forces Squadron (SFS) and 173rd Fighter Wing personnel typically five times per month, dependent upon mission and training requirements. Additionally, local law enforcement is permitted to use the range under the oversight of certified range masters. The MOUT TA and Tactical Training Facility are used exclusively by SFS personnel for readiness training.

An initial ORA was completed in 2009 for the SAR. The ORA identified a potential source of MC likely present at the earthen impact berm and to a lesser extent within the SDZ. However, the ORA determined there were no complete pathways to human receptors.

In 2020, a periodic Phase 1 ORA was completed. A potential source of MC was identified at the backstop berm, firing line, and range floor of the SAR. Limited MC source areas were identified at the MOUT TA and Tactical Training Facility sub-areas. The groundwater (for human receptors) and groundwater to surface water (for ecological receptors) exposure pathways were determined to be potentially complete due to the shallow depth to groundwater (as shallow as 2-3 ft bgs) and the length of time since the last groundwater sampling event for metals was performed at the CATM Facility (wells last sampled in 2003). Based on this Phase 1 for the CATM Facility, a Phase 2 is required to sample the existing wells at the CATM facility during the next ORA to confirm there has been no change with respect to MC in groundwater since the last sampling event.

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/>