



Operational Range Assessment Mountain Home Air Force Base

Air Force Operational Range Assessment Program

June 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

Mountain Home Air Force Base (AFB) is located in Elmore County, Idaho, approximately 50 miles southeast of the City of Boise and 8 miles southwest of the City of Mountain Home in Elmore County, Idaho. Mountain Home AFB manages several geographically separate units including Saylor Creek Range (SCR) and Juniper Butte Range (JBR).

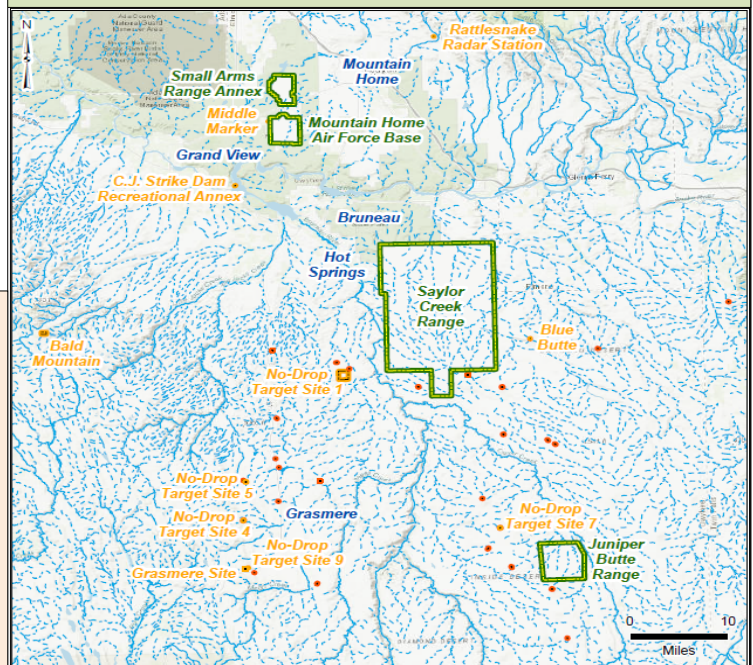
ORAP Findings: June 2021 ORA Report

- Munitions Constituents (MC) including metals, explosives, and perchlorate may be transported through soil (via stormwater runoff) and surface water/sediment pathways.
- No actual off-range MC release exists for areas at Mountain Home AFB.
- No unacceptable risks to human health; however, potential risks to the environment were identified.

Next Steps

Mountain Home AFB 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.

- Due to possible MC migration and potential risks, additional sampling and monitoring to be performed during periodic Phase 2.



Installation Overview Continued

During the implementation of the ORAP at Mountain Home AFB, six operational areas were determined to be eligible for assessment under the USAF ORAP – a Small Arms Range (SAR) Annex, Combat Arms Training and Maintenance (CATM) Range, Explosive Ordnance Disposal (EOD) Proficiency Training Range, SCR, JBR, including the three associated No-Drop Targets (NDTs) 1, 4, and 5, and Canine Training Area (TA).

The Canine TA was determined to be eligible for assessment under the ORAP but was not in the scope of this effort and will be evaluated during the next scheduled installation-wide assessment.

This is the second assessment for the SAR Annex and CATM Range, third assessment for the EOD Proficiency Training Range, and the fourth assessment for SCR and JBR.

SAR Annex Assessment Overview

The SAR Annex consists of seven sub-areas including, from west to east, the Historical SAR; Active SAR; Former Mounted Vehicle Firing Area; M240/M249B Firing Area; M203 Firing Area; Shoot Move Communicate Area; and Former MK-19 Firing Area. The central portion of the SAR Annex was formerly used as an EOD Proficiency Training Range (Site OT-21) that was closed out under the Installation Restoration Program in 1990. Since the construction of the range in 1943, small caliber munitions and practice munitions have been used for training. The SAR Annex is used quarterly for proficiency training for small caliber munitions and a couple times per year for M203/M320 training.

In 2020, a periodic Phase I was conducted which identified a source of MC at the firing lines, target areas, range floors, and impact berm. No viable transport mechanisms were identified, and exposure pathways were identified as incomplete to human and ecological receptors.

CATM Range Assessment Overview

The CATM Range is a partially contained outdoor range located off of B-Street in the north-central portion of Mountain Home AFB.

CATM Range Assessment Overview (continued)

Prior to the construction of the CATM Range, the western portion of the CATM Range was used as a concrete wash rack that was built in the 1960s (Environmental Restoration Program [ERP] Site SD-27). The CATM Range has been used continuously since its construction in 1985. Historically, non-frangible small caliber ball ammunition was used for training, prior to the construction of the bullet trap. Currently, training at the CATM Range is conducted daily with frangible ammunition only.

In 2020, a periodic Phase I was conducted which identified a potential source of MC at the firing line, range floor, bullet trap, and historical impact berm. Soil (via stormwater) and surface water/sediment were identified as viable transport mechanisms; potentially complete pathways identified to ecological receptors. No complete exposure pathways or potential risks to human receptors were identified. The CATM Range was recommended for an initial Phase 2 to evaluate the soil (via stormwater) and surface water/sediment pathways.

EOD Proficiency Training Range Assessment Overview

The EOD Proficiency Training Range is located in the southwestern portion of Mountain Home AFB and includes a detonation area, rescue training structure (spookhouse), conex boxes, pavilion, an improvised explosive device training area, and a temporary ammunition storage area, which contain two holding areas. Prior to the construction of the EOD Proficiency Training Range, the western portion of the range was used as a burn bit from 1953 to 1962 for aviation fuels and petroleum lubricants (ERP Site FT-7A). The southwest portion of the range was used from 1950 to the 1990s as a small refuse disposal area (ERP Site LF-23).

The EOD Proficiency Training Range has been used continuously since construction of the range was completed in 2001. Currently, proficiency training is conducted at least once a month and emergency detonations are conducted on an as-needed basis.

In 2020, a periodic Phase I was conducted which identified a source of MC at the detonation area and the safety zone.

EOD Proficiency Training Range Assessment Overview Continued

No viable transport mechanisms were identified, and exposure pathways were identified as incomplete to human and ecological receptors.

SCR Assessment Overview

SCR is located approximately 14 miles southeast of Mountain Home AFB proper and encompasses 109,466 acres which is fully fenced and contains a secondary exclusive use area (EUA) that encompasses 12,200 acres used for bombing-range operations. SCR has been used since 1954 for training activities including artillery, air-to-air and air-to-ground gunnery, napalm delivery, precision bombing, and tactical air-to-ground reconnaissance.

In 2020, a periodic Phase 2 was completed. Surface soil samples were collected from three downgradient locations along the northern range boundary and a background surface soil sample along the southwestern range boundary. Samples were analyzed for metals, explosives (including nitroguanidine), perchlorate, and white phosphorus). The Phase 2 concluded that MC were potentially migrating off-range via soil (in stormwater) and surface water/sediment. No risks to human receptors were identified; however, the Phase 2 concluded there are potential unacceptable risks to ecological receptors.

Based on the conclusions for this Phase 2 for SCR, a potential threat of an off-range MC release exists and there are potentially unacceptable risks to ecological receptors; thus, a Phase 2 assessment was recommended. The recommendation includes continued monitoring of soils in the downgradient channels along the northern boundary of SCR. Additional samples were recommended to be collected from on-range portions of the drainage channels to determine if MC are attenuating along the drainage pathways.

JBR Assessment Overview

JBR is located approximately 53 miles southeast of Mountain Home AFB proper and encompasses 12,141 acres. JBR includes three geographically separate ORA-eligible areas (including NDTs 1, 4, and 5). JBR has been used since 1998 for air-to-ground training and NDTs 1, 4, and 5 have been used continuously for simulated ordnance delivery.

In 2020, a periodic Phase 2 was completed. Surface soil samples were collected from two downgradient locations along the northern range boundary and a background surface soil sample along the southcentral range boundary. Samples were analyzed for metals and explosives (including nitroguanidine). The Phase 2 concluded that no MC are migrating off range.

Based on the conclusions for this Phase 2 for JBR, there are no complete exposure pathways or potential risks to human or ecological receptors at JBR. Although no risks were identified, a Phase 2 was recommended to verify the conclusions of this Phase 2. The recommendation included continued monitoring of soils in the downgradient channels along the northern boundary of JBR.

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/>