



Operational Range Assessment Sheppard Air Force Base

Air Force Operational Range Assessment Program

February 2019

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

Sheppard AFB, part of Air Education and Training Command (AETC), is located just north of Wichita Falls, Texas.

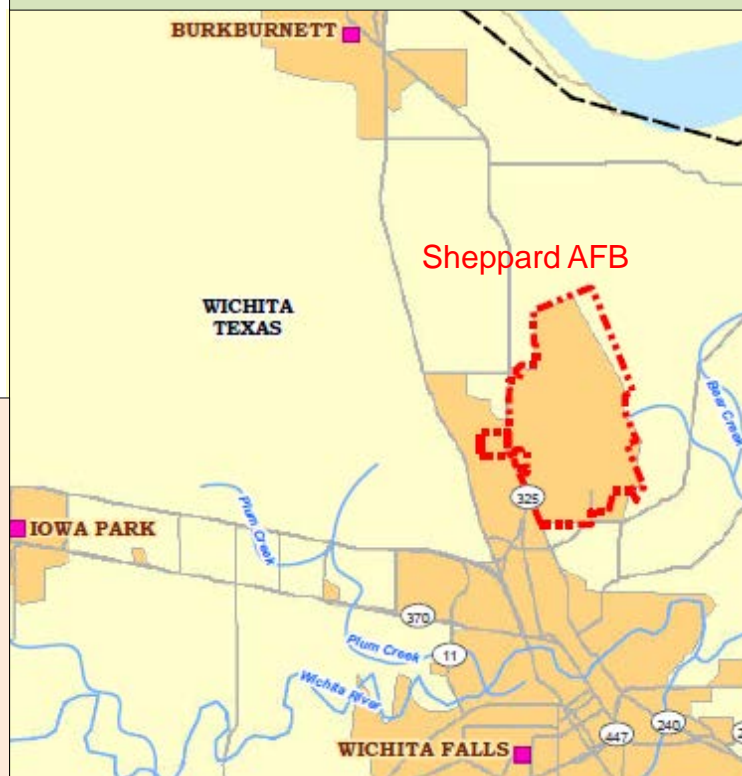
During implementation of the ORAP, three ranges were verified as eligible for an assessment under the USAF ORAP – a Small Arms Range (SAR), Practice Grenade Range (GR), and Explosive Training Area (TA).

ORAP Findings: October 2017 ORA Report

- Migration mechanisms at Sheppard AFB were identified as unlikely to transport munitions constituents (MC) to off-range locations.
- No actual or potential off-range migration of MC exists for the areas assessed at Sheppard AFB.
- No unacceptable risks to human health or the environment were identified for the areas evaluated at Sheppard AFB.

Next Steps

Sheppard 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.



Installation Overview Continued

A fourth area, Field Readiness TA, was scoped for an assessment; however, due to no verified historic or current munitions use it was determined to be ineligible and was not further evaluated. Additionally, a Skeet Range exists at Sheppard AFB but as it is used solely for recreational purposes it is deemed ineligible for an assessment under the USAF ORAP.

The following summarize ORAP efforts for the SAR, GR, and Explosive TA. This is the second ORA for the SAR and GR, and initial ORA for the Explosive TA.

SAR Assessment Overview

The SAR, constructed in 1979 on previously unused land, is located in the western portion of Sheppard AFB. The current range and previously used earthen berms are enclosed within a fence which encompasses an area of approximately 3.6 acres. The surface danger zone (SDZ) associated with the SAR extends beyond the fence as such the total SAR area is about 5.7 acres. The SAR has been used year round since its activation. The range is used primarily by the Air Force, but Army units periodically use the SAR. Prior to 2006 non-frangible rounds were expended on the range, since then only frangible rounds have been used.

In 2011 the initial ORA Phase 1 was completed. A suspected source was identified in soils associated with the historic berms. The Phase 1 determined conditions at the SAR were not suitable for significant MC transport. No potential receptor interactions were identified, and all exposure pathways to off-range human receptors were found to be incomplete.

The 2017 Phase 1 confirmed a potential source of MC within the current range floor and historic earthen berms. However, all possible MC migration routes were found to be unlikely to transport MC beyond the range boundary. The Phase 1 determined the SAR has no potential off-range MC release and no complete exposure pathways, as such no risks to human health or the environment were identified.

Practice GR Assessment Overview

The Practice GR, constructed in 1979 on undeveloped land, is located in the western portion of the Base. The range encompasses approximately 11 acres. The GR is only used by the USAF to fire practice grenade rounds and dye marking small arms rounds. All expended rounds are reportedly collected after each exercise.

In 2011 the initial ORA Phase 1 was completed. MC, if present, would be in soils near the target area. The Phase 1 concluded conditions were not suitable for MC transport and no potential receptor interactions were identified. The Phase 1 concluded exposure pathways to off-range human receptors were incomplete.

The 2017 ORA for the Practice GR indicated due to use and management practices a limited amount of MC may be present in soils near the target/impact areas. Additionally, the evaluation found all mechanisms unlikely to transport MC. Therefore, the Phase 1 concluded no potential off-range MC release and no complete exposure pathways exist, as such no risks to human health or the environment were identified.

Explosive TA Assessment Overview

The Explosives TA, encompassing roughly 7.7 acres, is located in the northwest corner of Sheppard AFB. It is assumed the area become active in 2005. Currently, this area consists of two concrete bunkers, surrounded by a flat open grass area. The USAF utilizes this area for Explosive Ordnance Disposal (EOD) personnel training.

In 2017 an initial Phase 1 was completed. The Phase 1 concluded a minimal quantity of MC residue may be deposited on bunker floors during training activities, with the majority of MC being consumed during detonation. Although the potential for MC to be present in soils is minimal, all MC migration routes were determined to be unlikely to transport MC to off-range areas. The Phase 1 concluded no potential off-range MC release and no complete exposure pathways exist, as such no risks to human health or the environment were identified.

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/>