



Military Munition Response Program (MMRP) Sites New Boston Space Force Station New Boston, New Hampshire

INTRODUCTION

Air Force is continuing to evaluate the potential for unexploded ordnance (UXO) at the New Boston Space Force Station (NBSFS). This work is being conducted under an Air Force program termed the Military Munitions Response Program (MMRP).

Over the past 15 years, portions of the base where UXO is most likely to be present have been surveyed. UXO was identified during these surveys, and has been removed. Some areas of the base are heavily wooded and have not been surveyed. It is noted that, although extensive UXO removal has taken place, UXO still may be present in deep soil or sediment. Over time, due to erosion, frost heaves, or animal activity (such as beavers) deep UXO may rise into shallow soil or become exposed to the surface and become a risk/hazard.

More recent studies are focusing on whether chemicals used in military munitions may be present in soil, groundwater, surface water or sediment, and whether or not they pose a risk/hazard to human health or the environment. One example would be the presence of lead in soil from lead shot at a trap/skeet range.

In general, the next steps involve evaluating potential actions to be taken to ensure risk from UXO hazards and related chemicals continues to remain low and that human health and the environment are protected.

The locations of the 11 MMRP sites at NBSFS are provided on **Figure 1**. The MMRP site boundaries are based on a variety of factors, but mainly on the history of

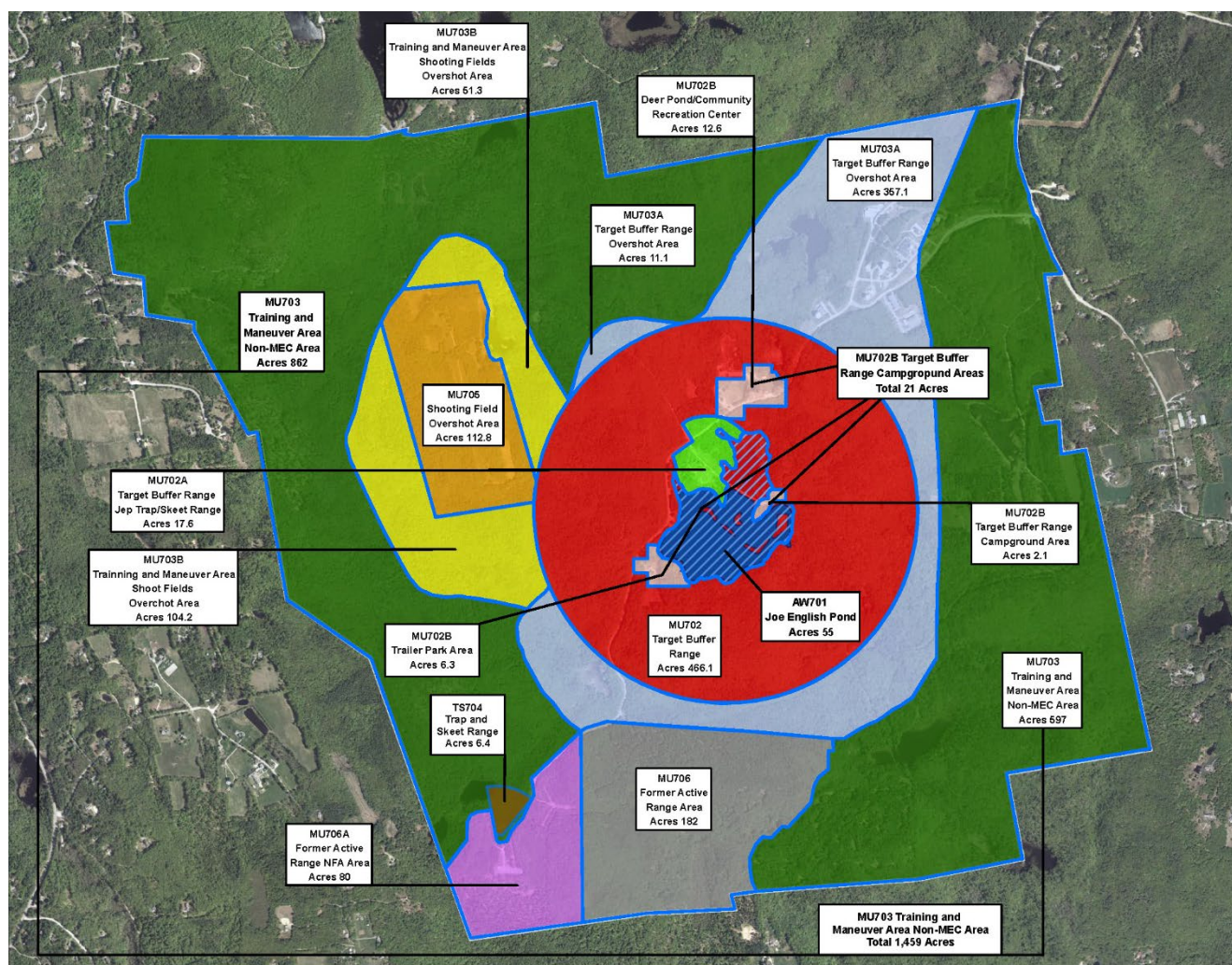


Figure 1 – Location of MMRP Sites

ammunitions use at the site and the types of UXO potentially present. At NBSFS, the Air Force Civil Engineer Center (AFCEC) acts as the lead agency in addressing environmental cleanup at the base through the Environmental Restoration Program. United States Environmental Protection Agency (USEPA) Region I and the New Hampshire Department of Environmental Services (NHDES) are the federal and state agencies that provide regulatory oversight of all MMRP activities at NBSFS, and the USEPA has ceded sole decision authority for regulatory oversight to NHDES

This fact sheet provides information on the MMRP studies conducted so far and plans for future activities.

ABOUT MILITARY MUNITIONS

NBSFS was formerly known as the New Boston Bombing and Gunnery Range and was used as an active bombing range in support of Grenier Field in nearby Manchester, NH from Fall 1941 until 1956. Prior to July 2021, the installation was known as the New Boston Air Force Station.

Aerial bombing operations aimed at targets on large diameter wooden poles anchored in the sediment of Joe English Pond. In addition to bombing activities, training and maneuver activities were performed on the property from 1956 until 2002, when the range officially closed. There were also three small arms ranges, two trap/skeet ranges, and one pistol/rifle range that were used in the 1960s through the 1980s.

WHAT ARE MUNITIONS (AMMO)?

Military munitions (ammo) are projectiles, bombs, hand grenades, and other types of ammo that the military use in training and combat. Ammo that did not work as it was supposed to work is called UXO or unexploded ordnance.



Bombs (25 lbs - 2000 lbs)



Small arms ammunition (bullets and cartridge cases)



Small, medium, and large caliber projectiles (i.e., 20mm - 155mm)



Mortars (i.e., 60mm and 81mm)

UXO REMOVAL PROCESS

UXO removal is a complex process. Personnel conducting UXO removal activities are specially trained and certified to perform such work. The general process is:

1. Divide each area into a grid to ensure all areas are appropriately surveyed. **Figure 2** shows a drained Joe English Pond being surveyed.
2. Survey each area both visually and using high sensitivity metal detectors or other special tools to identify metallic objects.



Figure 2 –Surface Sweep of Drained Joe English Pond in 2011

3. Once a metallic object is detected it needs to be identified. If the detection is below ground surface it will be dug up in order to be identified. These locations are often flagged and termed “anomalies” as it is unknown until it is dug up if it is UXO or not. For example, an anomaly could simply be metal scrap, such as a nail. A picture of flagged anomalies prior to identification at NBSFS is provided in **Figure 3**.



Figure 3 –Anomalies are Flagged prior to identification

4. If UXO is identified, the UXO personnel determine how to manage and dispose of the item. In some cases, the item may be blown up in place to remove the explosive hazard. **Figure 4** shows a practice bomb recovered at NBSFS.



Figure 4 –Typical MK23 3-lb Practice Bomb

UXO surveys can only detect anomalies a few feet below ground surface. The exact depth depends on a variety of factors, such as the tool used, the size of the item detected, and the composition of the soil. As a result, there is a potential for UXO to still be present at depth, which, as stated above, may become exposed over time.

About 3Rs Explosive Safety Education

Munitions are designed to be dangerous. Military personnel use designated remote areas of our lands and waters across the United States for live-fire training and testing to defend our nation. As a result, ammo may be present on both land and in the water. No matter what you call it — ammo, explosives, UXO, duds or souvenirs — remember munitions are dangerous and can explode if approached, touched, moved or disturbed. By visiting this website (<https://www.denix.osd.mil/uxo/>), learning and following the **3Rs (Recognize, Retreat, Report)** of Explosives Safety, you will help **protect yourself, your family, friends and community** from the potential dangers associated with the presence of munitions.

JOE ENGLISH POND

Joe English Pond is the MMRP site furthest along in the environmental cleanup process. Joe English Pond was one of the primary bombing targets at NBSFS and is now used as a recreational area with access restricted to Department of Defense (DoD) cardholders. The Final Record of Decision, which identifies the selected cleanup action for the site, was issued in December 2020. The Record of

Decision is an important milestone in the environmental process that documents Air Force’s plan to protect human health and the environment, after taking into consideration both NHDES and the public input on the plan. The selected cleanup plan is to reduce risk/hazard to human health and the environment at Joe English Pond uses land use controls (including activities like signs warning of hazards and surface UXO sweeps) and long-term monitoring of surface water and sediment to verify that concentrations of munitions-related chemicals remain at or below acceptable levels set by the regulatory oversight agencies.

OTHER MMRP SITES

No further cleanup action is needed at three MMRP sites at NBSFS, because it has been determined that the UXO risk/hazard is extremely low.

Three other MMRP sites are still in the study phase called the “Remedial Investigation.” At these sites, the UXO evaluation is complete, and focus now is on evaluating chemical concentrations in groundwater, soil, surface water, and sediment. Air Force’s goal is to complete the MMRP studies within the next two years at these sites, and then proceed to the Feasibility Study Phase.

The remaining four MMRP sites are already in the Feasibility Study phase and the Air Force is evaluating how to best protect human health and the environment.

NEXT STEPS

MMRP activities will continue at NBSFS. As with Joe English Pond, the Air Force’s goal for the other MMRP sites is to finish the investigation studies, develop Feasibility Studies, and select a remedy that will protect both human health and the environment. The Feasibility Studies will look at a variety of approaches to minimize potential future risk/hazard at each site. In general, approaches include training, warning signs, UXO surveys or future UXO removal activities to ensure UXO risk/hazard remains low. Like all environmental work at NBSFS, the Air Force will keep the community informed and will continue to encourage community input.

FOR MORE INFORMATION

For answers to questions you may have on military munitions and UXO, please contact Brett Dubner, AFCEC Remedial Project Manager, at 508-968-4670 x3001 or via email at brett.dubner.1@us.af.mil

Unexploded
Ordnance

Don't touch!



If you find any object
that resembles this,
do not touch or move it.

It's UXO and
still could explode.

**Even fragments
are dangerous.**

Note the location and
call local authorities.



<https://3Rs.mil>