



Historical Radiological Assessment

Introduction

The Department of the Navy is preparing a **Historical Radiological Assessment (HRA)** for Naval Air Station Brunswick (NASB) in preparation for base closure. Through research, interviews and site visits, the HRA will document, refine and expand the record of historical radiological activities at NASB in order to facilitate transfer of the property for civilian redevelopment. Information for the HRA comes from record searches, interviews, and site visits regarding locations at NASB where **radioactive materials** may have been used, stored, or disposed.

Common items that used radioactive materials at NASB may have included smoke detectors, lead paint analyzers, static eliminators, non-electrically powered exit signs, aircraft parts, biological and chemical agent detectors and **radioluminescent devices**, including dials, deck markers and gauges.

The completed HRA will determine if additional **radiological investigations** are needed. The final report will be prepared in accordance with Federal and State guidelines and is expected to be complete sometime in the fall of 2010.

(Text in bold is defined on Page 3.)

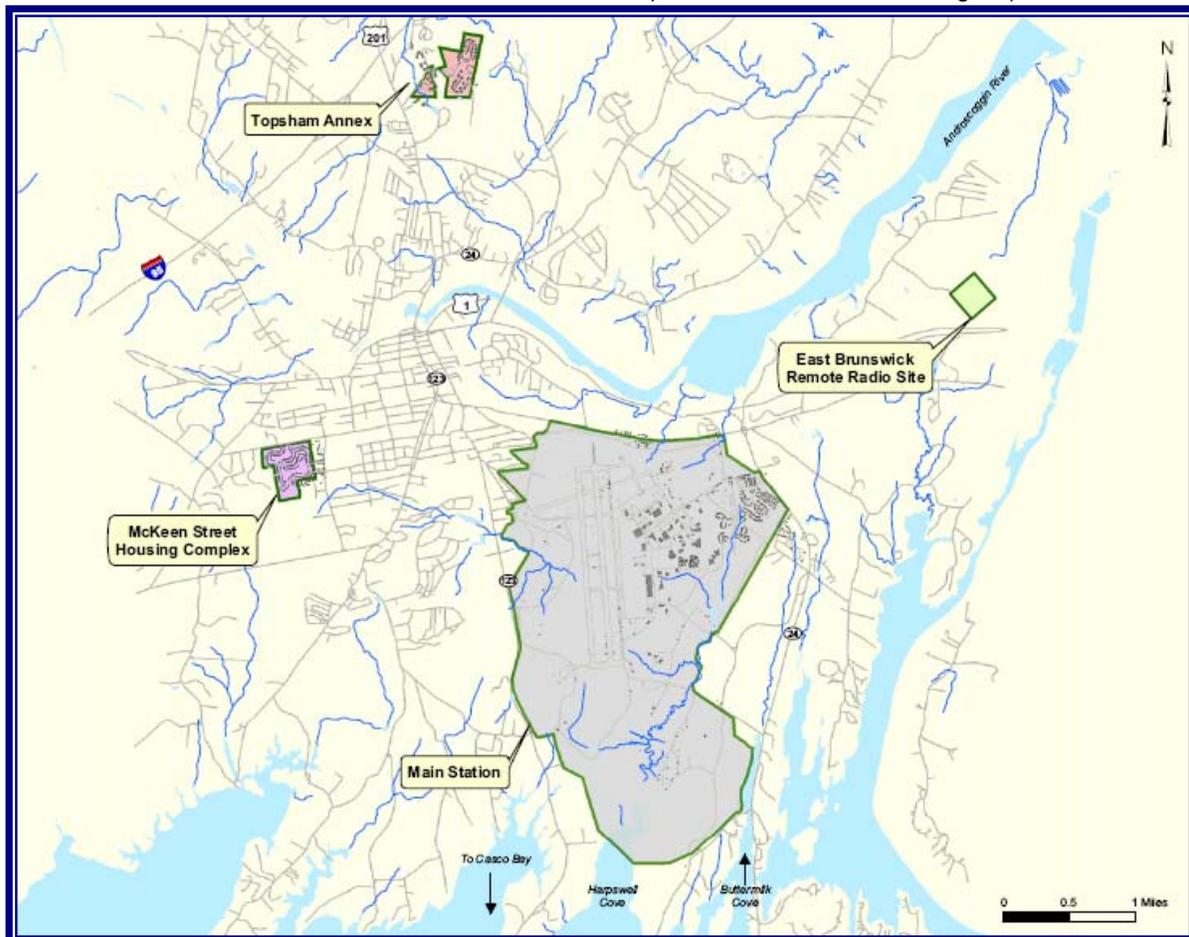


Figure 1 – Main Base and Outlying Facilities

The Navy desires to interview current and former Navy personnel, civilian employees, and contractors who can provide information regarding radiological activities at the NASB. Face-to-face, telephone, or e-mail interviews can be arranged. Information from the interviews will be used to prepare the HRA and is essential to augment historical records and develop an accurate and complete history of past radiological activities.

If you are a current or former member of the Navy, civilian employee, or contractor and have

information about radiological operations within NASB, please call **1-866-941-6426**, and tell us when and how to contact you. A member of the HRA team will return your call and schedule an interview. You can also e-mail us at NASBrunswick@tetrattech.com.

In order to expedite the HRA process and to schedule interviews, please contact the Navy before May 31, 2009

□ Overview of Base History

NASB is located in Cumberland County, Maine, and was first commissioned on April 15, 1943. The base remained active for four years, and was subsequently deactivated in 1947. On March 15, 1951, the dormant-air station was re-commissioned as a Naval Air Facility with the established mission of supporting three land-plane patrol squadrons and one Fleet Aircraft Service Squadron, and a planned future mission as a master jet air station with a primary mission of anti-submarine warfare.

On July 1, 1971 Commander Patrol Wings United States Atlantic Fleet/Commander Patrol Wing Five established its headquarters at NASB. Changes have occurred on the Air Station since 1971 so that at present, three patrol squadrons flying the P3 Orion perform their duties at NASB. In addition, two reserve squadrons are also based at NASB along with VPU-1 mission, the Naval Reserve Center and the Air Reserve Center. NASB also provides support for the ships at Bath, and various northeastern naval activities.

The NASB Main Base is comprised of approximately 2,834 acres situated between the Androscoggin River and Casco Bay southeast of the town center of Brunswick. It is bordered by Route 123 and Route 1 on the west and north sides, respectively, and is adjacent to Route 124 on the east side.

NASB is comprised of the Main Base and five remote properties listed below.

- McKeen Street Housing Complex
- Former East Brunswick Remote Radio Transmitter Site
- Topsham Annex
- Sabino Hill Rake Station No. 1
- Small Point Rake Station No. 2

Definitions

Historical Radiological Assessment (HRA) – a detailed investigation to collect historical radiological information and data for a particular site and its surroundings where radioactive materials were used, stored, or disposed.

Radioactive material – a substance that contains or emits radiation. Radioactive materials and radiation occur in nature. These materials are also used by the military and private industry and are present in common household items. Common items that use radioactive materials are smoke detectors, radioluminescent devices, including dials, ships' deck markers and gauges, lead paint analyzers, static eliminators, non-electrically powered exit signs, and biological and chemical agent detectors.

Radiological investigation – a systematic examination of an area to determine if radioactive materials are present and, if so, at what levels.

Radioluminescent device – an item containing radioluminescent paint that allows the device to be seen in the dark. These devices were commonly used by the Navy and possibly contained radium-226, strontium-90, tritium, or promethium-147.

Radiologically impacted site – a radiologically impacted site is one that has a potential for radioactive contamination based on historical information or is known to contain radioactive contamination. Areas immediately adjacent to the primary impacted site may be included in this designation. Radiologically impacted sites include: sites where radioactive materials were used or stored; sites where known spills, discharges, or other unusual occurrences involving radioactive materials have occurred, or may have occurred, that could have resulted in the release or spread of contamination; and sites where radioactive materials might have been disposed of or buried.

Radioluminescence – Radioluminescent or radioluminescence occurs when a radioactive material is mixed with another material to cause luminescence (emission of light), thus the term radioluminescence. A common item that uses this process is a tritium exit sign. Historically, timepieces, dials, and gauges were coated with paints containing radium so they would glow in the dark.

□ What is a Historical Radiological Assessment?

Historical documentation indicates the potential past use and/or storage of radioactive materials at NASB. The HRA will define the extent of former activities involving radiation and radioactive materials. The HRA will:

- Document information about radiological operations, investigations, and surveys discovered during searches of historical records and interviews;
- Identify potential, likely, or known sources of radioactive material and areas where these materials might have been used;
- Classify as “radiologically impacted” those sites where radioactive materials were known to

have been used, stored, or disposed with reasonable potential for residual contamination (all other sites are, by definition, “non-impacted” by radiological operations);

- Assess the likelihood of any potential residual radioactive material to migrate into other areas or to the environment;
- Identify sites that need further action; and recommend actions that will achieve site closure.

The Navy is currently conducting on-site inspections and record reviews at NASB and comprehensive records searches and review of relevant documents at various Federal archives.

□ **What's Next?**

Because individual knowledge of activities involving radioactive material at NASB is essential to understanding work performed there, we will interview personnel who respond to this request for interviews. The Navy has put advertisements in local newspapers to reach as many potential interviewees as possible.

The HRA is anticipated to be completed and published in the fall of 2010. We will provide periodic updates at the Navy's Restoration Advisory Board (RAB) meetings. For a schedule of RAB meetings, see the Navy's environmental website at:

<http://nasbrunswick.navy-env.com/calendar.htm>

□ **To Contact the Navy**

Call 1-866-941-6426

or

E-mail us at

NASBrunswick@tetrattech.com

