INVENTORY AND EVALUATION OF NAVAL WEAPONS SYSTEMS TRAINING FACILITY BOARDMAN

Boardman, Morrow County, Oregon

DECEMBER 15, 2010

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ABSTRACT

Summary of Work Completed

Hardlines Design Company (HDC) was contracted by Naval Facilities Engineering Command (NAVFAC) Atlantic Division to complete a cultural resources inventory and evaluation of buildings and structures at Naval Weapons Systems Training Facility Boardman (NWSTF Boardman). An overall cultural resources survey of buildings and structures outside of the Oregon Trail area had never been undertaken, so all buildings and structures covered in this study were surveyed for the first time. HDC surveyed 15 buildings and structures on the Navy-owned range lands. These facilities are range buildings and small structures such as spotting towers and fuel tanks, plus the aircraft bombing target range itself. However, fieldwork for the project was completed in 2008, and since that time, seven of the 15 buildings and structures originally surveyed have been demolished (see note below) and are not included in this final report. Also, the Oregon Trail crosses the south end of the range property, but resources associated with the trail have been surveyed in previous investigations and are listed in the National Register of Historic Places (National Register); HDC did not survey these resources.

The final version of this report covers eight facilities built from 1947 to 1989. According to Navy real estate records, six of these properties were constructed from 1943 to 1965 and have reached or will soon reach the 50-year benchmark established by the National Register. HDC evaluated these buildings using the regular National Register evaluation criteria of A, B, C, and D. The other two resources both have a Navy construction date of 1984, and these two structures were evaluated using National Register Criteria Consideration G, which covers resources that are less than 50 years old or that have achieved significance within the last 50 years. The eight facilities are as follows (the original function is given first, with the current function provided in parentheses):

- Facility 2: Spotting Tower (Spotting Tower 2), 1947
- Facility 5: Spotting Tower (Spotting Tower D), 1947
- Facility 6: Spotting Tower (Spotting Tower C), 1948
- Facility 7: Spotting Tower (Spotting Tower B), 1984
- Facility 8: Spotting Tower (Spotting Tower A), 1984
- Facility 18: Target (Aircraft Bomb Target Range), 1961–1963
- Facility 39: Garage (Range Operations Building), ca. 1964
- No number: Fuel or Water Tank (not in use), ca. 1964

No historic districts, buildings, or structures are recommended as eligible for the National Register as part of this study. Most buildings and structures were found to have lost integrity, or they have a low level of historical or architectural significance. The overall layout of the Boardman range was found to have changed significantly in the last 30 years and did not appear to have sufficient integrity and significance to be a historic district eligible for the National Register. No additional work is recommended for NWSTF Boardman.
**SHPO Concurrence:** On May 4, 2010, the Oregon State Historic Preservation Office (SHPO) concurred with the recommendations found in this report. None of the buildings at NWSTF Boardman are considered eligible for the National Register. A copy of the eligibility letter is provided in Appendix C.

**Note on Demolished Facilities:** The first draft of this report was submitted in April 2009 and was reviewed by the Oregon SHPO. Since that time, the Navy has demolished seven buildings that made up the Administration/Operations Area (also known as the old Air Force gunnery range), located in the far northwestern corner of the installation:

- Facility 30: Converter & Standby Generator Building, 1955–1956
- Facility 31: Sighting Station Building, 1954–1956
- Facility 32: Maintenance Building, 1956
- Facility 33: General Warehouse, 1943
- Facility 34: Water Pump Station, 1956
- Facility 35: Flammable Liquid Storage, 1963
- Facility 37: Diesel Tanks, 1962

All of these facilities were abandoned, and several were in partial ruins, as they had not been maintained for several decades. HDC recommended that all of these buildings were not eligible for the National Register, and the Oregon SHPO concurred with this recommendation. The Navy has requested that these seven buildings be removed from this report since they no longer manage those resources, but a full record of them (including Oregon Historic Site forms) can be found in the April 2009 draft version of this inventory and evaluation, which is on file at the Oregon SHPO.
## TABLE OF CONTENTS

Abstract ................................................................................................... i
List of Figures .......................................................................................... iv
List of Tables ........................................................................................... iv
Overview of NWSTF Boardman .................................................................. 1
Survey Methodology ................................................................................... 5
   Planning ...................................................................................................................... 5
   Research .................................................................................................................................. 5
   Fieldwork ................................................................................................................................... 5
   National Register Evaluation ............................................................................................... 6
Historic Context and Development of NWSTF Boardman, Morrow County, Oregon ...... 9
   Introduction .................................................................................................................................. 9
   Early History of Boardman and Morrow County................................................................. 9
      The Oregon Trail .................................................................................................................................. 9
   Morrow County ................................................................................................................. 10
   Settlement History of Boardman ................................................................................................. 13
      Samuel Boardman ................................................................................................................... 14
   Later Development in Boardman ................................................................................................. 15
History of NWSTF Boardman ........................................................................ 18
   World War II and Postwar Army Development at Boardman, 1941–1946 ................................. 18
      1959–1969 ............................................................................................................................... 25
      1970–1989 ............................................................................................................................... 30
   Recent History, 1990–2009 ......................................................................................................... 32
   Current State ................................................................................................................................ 35
Inventory and Evaluation ............................................................................37
   Introduction ...................................................................................................................................... 37
   District Potential ......................................................................................................................... 38
   Overall District Potential of NWSTF Boardman ......................................................................... 38
   Discussions of Individual Buildings and Structures ................................................................ 41
      Building 2 (Tower 2), 1947: Not eligible ................................................................................ 44
      Building 5 (Tower D), 1947: Not eligible ............................................................................... 46
      Building 6 (Tower C), 1948: Not eligible ............................................................................... 48
      Building 7 (Tower B), 1984: Not eligible ............................................................................... 50
      Building 8 (Tower A), 1984: Not eligible ............................................................................... 52
      Facility 18 (Aircraft Bomb Target Range), 1961–1963: Not eligible ..................................... 53
      Building 39 (Garage and Main Building), ca. 1964, with later additions: Not eligible .......... 56
      Fuel or Water Tank in Operations Area (no building number), ca. 1964: Not eligible .......... 58
Conclusion ..............................................................................................59
References Cited ......................................................................................61
Appendix A. Current Photographs for NWSTF Boardman
Appendix B. Oregon Historic Site Forms for NWSTF Boardman
Appendix C. Oregon SHPO Correspondence
LIST OF FIGURES

Figure 1. Location map for NWSTF Boardman, showing the location of the facility within northeast Oregon ......................................................... 2
Figure 2. 1991 USGS map of the Boardman Bombing Range ................................................................. 3
Figure 3. 2003 aerial photograph, with boundaries of NWSTF Boardman marked ........................................... 4
Figure 4. 1895 map of Morrow County .............................................................................................. 12
Figure 5. Boardman, Oregon, ca. 1927 ........................................................................................... 14
Figure 6. Samuel Boardman (date unknown) ...................................................................................... 15
Figure 7. 1967 aerial photograph of the relocated town of Boardman, Oregon ........................................ 16
Figure 8. The John Day Dam, 1969 ................................................................................................... 17
Figure 9. 1952 U.S. Air Force map of Boardman Bombing Range ......................................................... 21
Figure 10. Portion of 1952 U.S. Air Force map of Boardman Bombing Range, with current boundary of NWSTF Boardman outlined in red ............................................................................ 23
Figure 11. 1955 Air Force map of gunnery range area, Boardman Bombing Range (now demolished) ............................................................................................................................. 24
Figure 12. 1962 Navy map of Boardman Bombing Range .................................................................. 27
Figure 13. U.S. Air Force map of Boardman Bombing Range showing current property boundaries .................................................................................................................. 29
Figure 14. 1968 Navy map of Boardman Bombing Range .................................................................... 31
Figure 15. Navy map, proposed new operations and administrative area at Building 2 (Tower 2) location, Boardman Range, 1990 .................................................................................................................. 33
Figure 16. Navy sketch map of Boardman Range, 1990 ..................................................................... 34
Figure 17. 2005 aerial photograph of new administrative area, NWSTF Boardman ............................... 42
Figure 18. 2005 aerial photograph with the Aircraft Bombing Target Range (Facility 18) and surrounding spotting towers mapped (Buildings 5–8) .............................................................................. 43
Figure 19. Building 2 (Tower 2), looking southwest ......................................................................... 44
Figure 20. Building 5 (Tower D), looking northwest ........................................................................... 46
Figure 21. Building 6 (Tower C), looking northwest ........................................................................... 48
Figure 22. Building 7 (Tower B), looking northwest ........................................................................... 50
Figure 23. Building 8 (Tower A), looking northeast ............................................................................ 52
Figure 24. 2005 aerial image of Facility 18 ....................................................................................... 53
Figure 25. Facility 18 (Aircraft Bomb Target Range), looking northeast ............................................ 54
Figure 26. Building 39, southern portion of south wing, looking west .................................................. 56
Figure 27. Storage tank in operations area, looking southwest ............................................................ 58

LIST OF TABLES

Table 1. Surveyed facilities (extant and demolished) ............................................................................. 37
Table 2. Recommendations for buildings and structures surveyed at NWSTF Boardman .................. 41
OVERVIEW OF NWSTF BOARDMAN

Naval Weapons Systems Training Facility (NWSTF) Boardman is located south of the town of Boardman in a rural setting, surrounded by a nature preserve and farms for trees, potatoes, and onions. The town of Boardman is located in eastern Oregon on the south side of the Columbia River, which serves as the border between Washington and Oregon. Situated downstream (west) of the town of Irrigon and upstream (east) of Arlington, Boardman lies on the banks of Lake Umatilla, the reservoir on the Columbia River that was created when the John Day Dam neared completion in the late 1960s. The area has an arid, desert-like climate, and the soil is sandy, with natural vegetation consisting of low-lying grass and sagebrush.

NWSTF Boardman is a roughly 48,000-acre facility that was used for bombing practice by Navy aircraft before this activity was discontinued at the site in 2000. The range is not in use today but is maintained by a small crew of uniformed Navy personnel, in case the range is needed for future use. The NWSTF Boardman lands are separated from surrounding state and privately owned properties by a perimeter fence.

NWSTF Boardman is centered on the circular Aircraft Bombing Target Range (Facility 18), which is a large target array composed of concentric plowed earth circles and various smaller target objects such as laser target platforms, piles of concrete, and various defunct military vehicles. The range property also includes several steel spotting towers arrayed around the Aircraft Bombing Target Range. At the time of fieldwork in 2008, there were two clusters of buildings at NWSTF Boardman: (1) the current operations and administrative area located north of the Aircraft Bombing Target Range, and (2) the buildings located on the northwest corner of NWSTF Boardman property. This second group of buildings was once used as a gunnery sighting training facility and then later as the range operations and administrative center—all of these buildings were demolished after the fieldwork for this project was completed, and they are not included in this report. Outlying areas of the target range are mostly empty land, but the far southern portion of the range property has some earth-trail ruts and stone-building foundations associated with the historic Oregon Trail.

Figure 1 shows the area of NWSTF Boardman within the surrounding counties in Oregon and Washington; Figure 2 is a portion of a USGS quad map showing the range property; and Figure 3 is an aerial photograph showing the range boundaries.
Legend

Area of NWSTF Boardman

Figure 1. Location map for NWSTF Boardman, showing the location of the facility within northeast Oregon
The Boardman Bombing Range is located on five USGS 7.5-minute series Oregon quadrangle maps (six quadrangles are shown to complete the map):

- Northwest: Crane Butte quadrangle
- North center: Boardman quadrangle
- Northeast: Clark quadrangle
- Southwest: Ella quadrangle (contains no Navy property)
- South center: Well Spring quadrangle
- Southeast: Strawberry Canyon NE quadrangle

Figure 2. 1991 USGS map of the Boardman Bombing Range
The area outlined in black designates Navy-owned property.
Legend

Boundary of NWSTF Boardman

Figure 3. 2003 aerial photograph, with boundaries of NWSTF Boardman marked
SURVEY METHODOLOGY

Planning

Before beginning work for this project, HDC staff held a post-award conference with personnel from Naval Air Station Whidbey Island (NASWI) and NAVFAC Atlantic Division. After this conference, the HDC principal investigator reviewed background information for the properties, discussed project objectives, examined available resource data, determined field plans, and coordinated access to the site.

Research

Research for this survey was conducted by HDC to establish an overall context in which to evaluate the historical significance and architectural integrity of each site. A literature review was performed at NASWI at the Public Affairs office and at the station’s Civil Engineering office. Sources included original construction record drawings for some of the buildings and structures, maps of the range, and Navy property database records. To provide further information on Air Force activities that took place at the range, HDC examined online summaries of unit histories of the Air Force 57th Wing, which are retained at the Air Force Historical Research Center at Maxwell Air Force Base, near Montgomery, Alabama. HDC staff also consulted the Naval Historical Center in Washington, D.C., the National Archives in College Park, Maryland, and the public library at Boardman, Oregon.

Fieldwork

The HDC senior historian and architectural historian conducted field reconnaissance at NWSTF Boardman in November 2008. High-quality digital photographs were taken of all survey buildings and structures, and historical information was gathered. For survey buildings and structures dating from 1943–1989, the HDC field team completed the following items:

- An evaluation for the National Register of Historic Places (National Register)
- An Oregon Historic Site form (Appendix B)
National Register Evaluation

HDC evaluated the properties, physically and through intensive research, for eligibility for inclusion in the National Register. To be eligible, a property must possess:

The quality of significance in American history, architecture, archaeology, and culture present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, association, and:

− Are associated with events that have made significant contributions to the broad patterns of our history; or,
− Are associated with the lives of persons significant in our past; or,
− Embody the distinctive characteristics of type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or,
− Have yielded, or may be likely to yield, information important in prehistory or history.

The properties were researched to determine if they were eligible in one or more of the above National Register criteria. Given the architectural nature of the resources, the criteria most commonly cited are A, B, and C.

For Criterion A, the properties were assessed for historic context associated with the history of the Boardman Range and the history of Naval and Air Force aviation or other important Cold War issues or contexts.

For Criterion B, research was conducted to determine if any outstanding historical figures were involved with the buildings.

For Criterion C, the structures were evaluated for building form and type, architectural style, engineering technique, and cultural expression. For this criterion, the significance of the properties as military structures was evaluated, and information on other similar properties in Oregon was gathered, when practical, to assess the relative rarity and significance of the property types represented.

Criterion D was considered for each property but was not invoked for eligibility of any of the properties in this study. Sometimes consultants apply Criterion D to buildings or structures that are believed to be capable of providing additional information about historical events, but this scenario did not appear to apply to the properties covered by this study.

Criteria Consideration G was applied as a secondary criterion to the properties to cover events that happened within the past 45 years, and that may have had “exceptional” historical significance in the Cold War. This criteria was applied to cover the later histories of pre-1964 buildings and structures at the range, and was the primary criterion applied to evaluate the two structures that dated to 1984: Building 7 (Tower B) and Building 8 (Tower A). Several other sets of guidelines were consulted by HDC when assessing exceptional Cold War significance, described below.
− *Coming in from the Cold: Military Heritage in the Cold War*, the 1994 report on the Department of Defense Legacy Cold War Project, under the Legacy Resource Management Program (Center for Air Force History 1994). This report defines the Cold War context as follows:

The Cold War, a series of international military, diplomatic, and political events that occurred over a forty-five year period, shaped the lives and domestic and international expectations of millions of Americans alive today. Beginning in 1947, its hallmarks included events and developments as disparate as Winston Churchill’s “Iron Curtain” speech, the Chinese Revolution, the Soviet Union’s development of the atomic bomb, McCarthyism, the Berlin Airlift, the space race, the Cuban Missile Crisis, the division of the world into perceived “spheres of influence”, the cult of governmental secrecy and superpower politics and the Strategic Defense Initiative. It influenced foreign-policy decisions in countless locations, from Iran to the Dominican Republic to Vietnam. It added sites, structures, and cultural landscapes such as the Berlin Wall, the Defense (Distant) Early Warning (DEW) line, and the Demilitarized Zone (DMZ) to a common cultural resources vocabulary. The American military had a good deal to do with many of those developments and places. DOD “relics”, including textural and non-textural documents and sites, structures, landscapes, and artifacts, reflect elements of that larger history.

− *National Register Bulletin 22: Guidelines for Evaluating and Nominating Properties That Have Achieved Significance Within the Last Fifty Years*, (Sherfy and Luce 1998). These guidelines encourage the nomination of recently significant properties if they are of exceptional importance to a community, a state, a region, or the nation. The criteria do not describe “exceptional,” which by its own definition cannot be fully catalogued or anticipated. However, exceptional properties can reflect the extraordinary impact of a political or social event, such as the Cold War.

− *Interim Guidance: Treatment of Cold War Historic Properties for U.S. Air Force Installations* (U.S. Air Force 1993). This document states that (1) Cold War historic properties are buildings, structures, sites, objects, and districts, built, used, or associated with critical events or persons during this period and that possess exceptional historic importance to the nation or that are outstanding examples of technological or scientific achievement; (2) all Department of Defense (DOD) Cold War Properties determined significant must be designated at the national level, and (3) significant Cold War properties are those directly associated with events that have made a significant contribution to and are directly identified with, or that outstandingly represent, the broad pattern of U.S. Cold War history and from which an understanding and appreciation of those patterns may be gained.

− *A Systematic Study of Air Combat Command Cold War Material Culture* (Lewis et al. 1995). This report from the Air Force’s 1995 DOD National Conservation/Legacy Resource Management Workshop designates the types of resources that could be surveyed for “exceptional” significance (under National Register Criteria Consideration G). The overall conclusion of the workshop was that properties that were most directly involved in Cold War defense readiness and policymaking were most likely to have a high level of significance. The properties that were considered to be most important were ones directly involved with development of Cold War strategic weapons and technologies, properties
used for intelligence or strategic defense, and properties that were part of the strategic command and control system.

A more detailed explanation of each property type, taken from the 1995 guidance, is quoted below, with the categories listed by level of importance. Overall, the research and development, command, control and intelligence, and strategic weapons and support facilities were identified as property types that had the highest potential for Cold War significance, due to their close association with important Cold War events, strategies, and technologies. Operational support, training, and social support facilities were given the lowest priority for exceptional significance since these facilities were less directly tied to Cold War events. However, properties in any of the categories could be eligible for the National Register if the property is highly representative of the events or social fabric of the Cold War era (Lewis et al. 1995:131).

1. Research and Development: These properties reveal the very nature of the Cold War that produced the vast military-industrial complex devoted to technological solutions to an ideological confrontation. These properties directly led to breakthrough developments resulting in technological hardware that affected the strategic balance of power.

2. Command, Control, and Intelligence: Maintaining command, control, communications, and intelligence was the key to survivability before, during, and after a nuclear first strike. These properties thereby reveal the extent of the mistrust and suspicion of Soviet intentions.

3. Strategic Weapons and Support: Planned and deployed weapons systems and their direct support structures specifically designed to combat Soviet forces were the bargaining chips of arms control negotiations and formed the basis for the balance of power.

4. Strategic Materiel Production Facilities: The vast infrastructure of industrial facilities was used to produce the high-technology hardware that gave credence to the U.S. Cold War resolve.

5. Operational Support Facilities: Depots, storage warehouses, maintenance docks, hangars, and so on, provided operational mission support and movement of men and materiel.

6. Training Facilities: These properties were used to train personnel for Cold War missions.

7. Social Support Facilities: Dorms, theaters, chapels, exchanges, and so on, provided necessary support services for personnel. (Lewis et al. 1995:130–131)

NOTE: A draft of the U.S. Navy’s Historic Context Statement: The United States Navy in the Cold War was released after this report was mostly completed. The context statement strongly emphasized Navy reuse of World War II buildings during the Cold War. HDC reviewed Cold War installation maps and building lists to address this issue, but future inventory and evaluation efforts at NWSTF Boardman could involve further study of the reuse of World War II buildings during the Cold War, and other issues put forward by the context statement.
HISTORIC CONTEXT AND DEVELOPMENT OF NWSTF BOARDMAN, MORROW COUNTY, OREGON

Introduction

The following section is a history of Boardman, the Morrow County area, and NWSTF Boardman. Information was gathered from various military sources and from local libraries and resources on the Web (see page 5 for specific sources). This context is intended to establish a historical framework against which the National Register eligibility of properties at NWSTF Boardman can be evaluated.

Early History of Boardman and Morrow County

Lewis and Clark journeyed down the Columbia River and set foot near modern-day Boardman, Oregon, in October 1805. Following their arrival, a few early settlers began to migrate to Umatilla County (Morrow County was later created from the western part of Umatilla County), but the area remained sparsely populated until the Oregon Trail was developed ca. 1841 and passed through the Columbia River Valley. Early settlers lived a relatively peaceful existence with local Native American tribes—the Umatilla, the Walla Walla, and the Cayuse. However, the new settlers also brought new diseases, causing suspicion and straining relations between Euro-Americans and Native Americans, until widespread fighting eventually broke out. An 1855 treaty confined Native Americans to reservations, including the Umatilla Indian Reservation. As more settlers came to the region, they founded new towns and settlements. With its population increasing, Oregon achieved statehood in 1859 (Hermiston Herald 2009).

The Oregon Trail

A ten-mile stretch of the Oregon Trail passes through the southern section of NWSTF Boardman. The Oregon Trail was a 2,170-mile route from Independence, Missouri, to the Oregon Territory and California. Between 1841 and 1900, over 300,000 people traveled the trail (National Oregon/California Trail Center 2006–2010). The Oregon Trail began as an unconnected series of paths used by Native Americans and was later expanded by fur traders (Bureau of Land Management n.d.). The first wagon train to travel on the trail between Missouri and Oregon was a missionary group, led in 1836 by Marcus Whitman and his wife Narcissa. The group travelled as far as Oregon’s Willamette Valley (National Park Service 2010). Although a small amount of settlers traveled the Oregon trail over the next few years, most scholars recognize 1843 as the official start of the mass emigration over the trail, when a group of about 1,000 people gathered in Independence, Missouri, to make the trek west in the event commonly known as the Great Migration (Underwood 2000).
During the 1840s, thousands of pioneers gathered in Missouri each spring to make the trip west. Ideally, travelers departed from Missouri in the spring and arrived at their destination during later summer or early fall, before cold weather began. The departure had to be timed correctly; if the pioneers left too early in the spring, the grass along the trail could be too scarce to feed the oxen and livestock, and the travelers could be stranded and die. On the other hand, since the trip took five to six months, departing too late in the spring meant facing winter storms and treacherously cold temperatures at the end of the trip. Progress on the journey was slow, with parties advancing only 15 miles per day. One out of ten travelers died from cholera or other diseases, poor sanitation, exposure, or accident; many of the travelers were buried in shallow unmarked graves on the side of the trail (Underwood 2000).

The last third of the trail passed through the Cascade Mountains and was the most dangerous part of the journey. Before the Barlow toll road was opened in 1846, settlers had to abandon their wagons and take a boat down the Columbia River. Many drowned while facing the rapids in the river, and others suffered though early snowstorms that struck the area. The Barlow Road offered an alternative route through the Cascades that did not involve chancing the Columbia River (Underwood 2000).

The Boardman and Morrow County portion of the Oregon Trail originated in 1844, as part of an alternate, shorter route to The Dalles, a settlement 80 miles west of Boardman and recognized as the end point of the Oregon Trail. Established on a pre-existing Native American trail, this segment turned westward from the Umatilla River and Pendleton across the arid plains south of the Columbia River. From there, settlers either navigated their way down the Columbia River to the Willamette Valley, or they took the overland Barlow Trail (NASWI 2009).

This alternate route, although shorter, was one of the hottest and driest areas the pioneers encountered—the climate of the region was especially taxing in August and September, when most pioneers passed through, and the route included a 26-mile stretch with only two small springs for water. The two springs were not large enough to water an entire caravan, so the group would split, with one group heading to Upper Well Spring and the other to Lower Well Spring (also called Tub Spring). Tub Spring is located near the southern boundary of NWSTF Boardman and includes the stone foundation of a nineteenth-century homestead dwelling. Wagon ruts are still visible on the trail route through parts of the range, and there is a pioneer cemetery from the 1840s associated with the trail (NASWI 2009).

**Morrow County**

Morrow County extends from the Columbia River on the north, southward to the Blue Mountains. Elevation in the county varies from 250 feet above sea level along the river to over 6,000 feet in the mountains. In the mountain region of the county, settlers erected sawmills, mined for opals, gold, silver, and coal, and established summer grazing land for livestock. In the northern sections of the county, settlers raised grain, hay, and livestock; along the river, they established truck gardens, orchards, and dairies (Morrow County 1959).
During westward migration in the 1840s and 1850s, most people passed through the dry lands of Morrow County on way to more fertile lands in western Oregon’s Willamette Valley. Cattle ranchers also passed through the area, driving their herds over the county’s hills and valleys. Although the area remained largely unsettled in the 1850s, a few pioneers stayed there. The earliest homesteader in Morrow County was George Visono, who came from Iowa in 1852, and settled along Butter Creek. Most of the early settlers in the area were stock raisers. The first permanent house in the county was built in 1859 by John Jordan, a settler from Ohio; this log cabin was located two miles outside of the present town of Ione (Morrow County 1959). Around this time, the Willamette Valley began to fill up with settlers. At the same time, the California Gold Rush came to an end, and many of the men and women who had traveled to the west coast began to explore other options. Oregon’s Morrow County offered a place to raise cattle, on grasslands associated with the eastern slopes of the Cascade Mountains (Parsons and Shiach 1902, Morrow County 1959).

Oregon became a state in 1859, and in the 1860s, people began settling along Willow Creek. The number of homesteaders increased rapidly between 1860 and 1870 (Hermiston Herald 2009). Morrow County was established in 1885, from portions of Umatilla County and Wasco County, with Morrow County taking its name from Jackson Lee Morrow, an early settler who petitioned to establish a new county while serving as a state legislator. At the time of the county’s creation, Standsbury Flat was named as the temporary county seat. In 1873, Standsbury Flat was renamed Heppner after Henry Heppner, who ran a local store with his partner, Jackson Lee Morrow. Heppner became the permanent county seat after narrowly defeating Lexington in an 1896 special election held to determine the permanent location of the county’s government (Oregon State Archives 2009). Figure 4 shows a map of Morrow County as it appeared in 1895.

Cow herders were some of the early settlers attracted to the region because of the naturally occurring rye grass that grew in the creek bottoms. In 1883, the Oregon Railroad and Navigation Company completed rail lines across the northern portions of the county, which increased market access and encouraged wheat production. The population of the county reached a peak in 1920, at 5,600 people. It later declined during the Great Depression and World War II and did not reach 5,000 again until 1978 (Oregon State Archives 2009).

Today, the principal industries in Morrow County are agriculture, food processing, utilities, livestock, lumber, and recreation. The northern portion of the county has recently experienced growth along the Columbia River with the development of the Dairy Production Distribution Company facility, and tree farms. The Morrow County population in 2006 was over 12,000 (Oregon State Archives 2009).
Figure 4. 1895 map of Morrow County
(Source: Rand McNally Corporation)
Settlement History of Boardman

The first settler on the land that would become the town of Boardman was Samuel H. Boardman, an engineer who in 1904 established a homestead in eastern Oregon on the banks of the Columbia River. (The section “Samuel Boardman,” beginning on page 14, provides more details of Boardman’s life.) Although the land in the area was exceedingly dry, Boardman had learned of federal plans for an irrigation project that would make the site arable. He received a patent on the land in 1909 (Oregon.com 2009).

When Boardman first settled in the area, a town known as Castle Rock was situated several miles to the west on the Columbia River. Castle Rock had several businesses, a train depot, and a school, where Boardman’s wife, Anna, taught. When people began moving east of Castle Rock (on land where the town of Boardman was eventually established), Anna was hired to transport those children to school in town. In 1915, articles of incorporation were filed by the Boardman Town Site Company; members of the company were residents of nearby Hermiston, Oregon: E. P. Dodd, William Kennedy, May C. Kennedy, and Stella A. Dodd. A town plat for Boardman was filed in December 1915, and grading for the streets began in 1916 (Peck 2003a). The town was aptly named Boardman after its first settler. A post office was established in 1916 (Columbia River 2009), and that same year, the west extension of the irrigation canal arrived in Boardman, carrying water over 20 miles from the Umatilla River to the town (Oregon.com 2009). With the canal came many canal workers, who stayed and homesteaded in the area, taking advantage of the newly irrigated land.

In 1915, the town of Boardman consisted of a general merchandise store, post office, livery stable, and lumber yard. At this time, more people lived in Boardman than in Castle Rock, and eventually the community center shifted to Boardman, with Castle Rock slowly phasing out of existence. Samuel Boardman moved the school building from Castle Rock to a field he owned, in a facility that was used until 1917, when a community church was constructed. The church leased facilities to the school until a permanent school building was built (Peck: 2003b). Today, the site of the town of Castle Rock lies beneath the Columbia River; the land became part of Umatilla Lake after the 1971 completion of the John Day Dam.

In 1917, a survey was conducted for routing the Columbia River Highway (also known as Highway 30) through Boardman. In 1919, grading of the Columbia River Highway began, and by 1920, the town had two churches, a movie theater, a bank, a school, five stores, and a railroad depot. The City of Boardman was incorporated in 1927 (Peck: 2003a). Figure 5 shows a ca. 1927 photograph of Highway 30 in Boardman.
Samuel Boardman

Samuel Boardman was born in Massachusetts in 1874 and attended school in Wisconsin. Before arriving in Oregon, he worked as an engineer with the Denver Union Water Works and the Denver Rio Grande Railroad. Boardman and his wife, Anna, arrived in Oregon in 1903; he worked for the Spokane Railroad and the Portland Railroad and Navigation Company before homesteading in Morrow County in 1904 (Hunt 1962).

Boardman’s decision to move to the area was precipitated by a chance conversation during a train ride. While traveling through eastern Oregon, Boardman sat next to a Dr. Blalock of Walla Walla, who told him of an upcoming federal project that would irrigate 5,000 acres of land on Blalock Island. When the train stopped in Castle Rock, Boardman learned from a storekeeper that government land was available along the Columbia River. It was then that Boardman decided to establish a homestead in the area. While waiting for the irrigation project, Boardman took engineering jobs around the state, and his wife taught school in Castle Rock. In a 1910 census, Boardman was listed as an alfalfa farmer (Peck 2003c).
Boardman became known for his tree-planting initiatives. The area Boardman settled in was arid, with sandy soil devoid of trees and covered with scrub brush. The innovative Boardman started a nursery on his land to find species of trees that would grow in such a tough climate, and then began to plant trees at the local school house and along local roads. Because of Boardman’s efforts, the town established “tree planting day,” a day when area businesses closed and everyone helped to plant trees; even the local oil companies volunteered their tankers to haul water to the newly planted saplings.

Boardman moved on to planting trees along Highway 30 (the old Oregon Trail) and across eastern Oregon (Hunt 1962). He drew in the Oregon State Highway Commission, and the head of the commission granted Boardman an unlimited budget to plant trees between The Dalles and Ontario, Oregon. Boardman expanded his own nursery, and the Oregon Experimental Farm in Union donated two acres of nursery for the cause (Hunt 1962).

Boardman joined the state highway maintenance department in 1919 and remained with them until 1929, when he was appointed the first state parks superintendent. When he took the job in 1929, the state of Oregon had 46 parks covering 1,370 acres. When Boardman retired in 1950, the parks system had grown to 181 parks spanning over 66,000 acres. Boardman died in 1955 and is remembered as the father of the Oregon State Parks system (Hunt 1962). Samuel H. Boardman State Park, located in southern Oregon along the coast, was named in his honor in 1950 (Peck 2003c).

**Later Development in Boardman**

The city of Boardman remained in its original location throughout the Great Depression of the 1930s and World War II, but in 1952, a Highway 30 bypass was constructed south of the town, and most of Boardman’s businesses moved south to be closer to the new road. In the 1960s, the town moved to its present-day location—the John Day Dam was being constructed on the Columbia River, and the plans were to flood the original Boardman area with the newly created Umatilla Lake (Oregon.com 2009).

Begun in 1958, the John Day Dam was completed in 1971. The dam required the relocation of the Oregon towns of Arlington, Boardman, and Umatilla, as well as the Washington town of Roosevelt. Approximately 140 miles of railroad and 87 miles of road were also relocated, including Highway 30, which eventually became part of Interstate 84 (I-84) when it was
constructed. The government procured 58,540 acres of land in association with the dam’s development (Center for Columbia River History [CCRH] 1970) and created Umatilla Lake, a body of water 76 miles long, sitting behind the dam. The higher water level created by the dam eliminated many Columbia River navigation hazards, such as rapids, rocks, and islands (Lewis and Clark had noted the many islands when they traveled through the area in 1805). The dam also provided flood control and extended a navigational thoroughfare that now stretched from Lewiston, Idaho, west to the Pacific Ocean. A hydroelectric plant at the John Day Dam provides electricity for the area (CCRH 2009). The name of the John Day Dam comes from the John Day River, which empties into the Columbia River above the dam site. John Day was an early explorer in the Oregon Territory who came to the area in 1811 from Virginia with the Astor-Hunt party (CCRH ca. 1955).

The first businesses opened in the newly relocated town of Boardman in 1966, the same year that I-84 was opened through Morrow County. In 1968, as the John Day Dam was reaching completion, the gates opened, flooding the sites of the original 1915 town of Boardman and the second, 1952 location of Highway 30 (Peck 2003a). Figure 7 shows an aerial view of Boardman in its new location; Figure 8 shows the John Day Dam.

Figure 7. 1967 aerial photograph of the relocated town of Boardman, Oregon
Highway 30 (I-84) runs diagonally across the left side of the photo, and the Columbia River is visible top right
(Source: Yakima Valley Museum Digital Collection 2009)
At its new site, the town of Boardman remained small but flourished in the 1970s and 1980s, thanks to the Portland General Electric coal-fired power plant, which was established on land formerly owned by the Air Force and Navy. The population of Boardman increased from 300 to 1,500 during that period (Oregon.com 2009). The current population of Boardman is about 3,000, and the area economy relies heavily on irrigated agriculture, with important crops being potatoes, onions, mint, dairy, hay, and hybrid poplar trees (Oregon.com 2009).
History of NWSTF Boardman

The following section is a history of NWSTF Boardman, derived from maps, construction drawings, newspaper and newsletter articles, real estate records, military unit histories, and other military history sources.

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<th>Chronology Overview:</th>
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World War II and Postwar Army Development at Boardman, 1941-1946

When the United States entered into World War II after the December 1941 Pearl Harbor attack, the federal government rushed to develop America’s military capabilities. The military developed all types of new facilities across the continental U.S., including many air defense and training installations. To expand their air power, the government built not only airfields but also target ranges that allowed pilots to train and practice aerial bombing (GlobalSecurity.org 2005).

In the early 1940s, the Army Air Forces needed an aerial bombing practice range in the Northwest region, and the government began searching for an appropriate site. In 1943, a U.S. Congressional act authorized the Army to acquire 96,000 acres of land at Boardman, Oregon, for such a training facility (Crosswind 1973:2). The site was considered suitable for practice bombing since the area was sparsely populated and the arid land was not well suited for agriculture. The facility was originally named Arlington Bombing Range, but its name later became associated with the town of Boardman (GlobalSecurity.org 2005). (Hereafter in this report, the range will be called Boardman Bombing Range [Boardman range] until it becomes NWSTF Boardman.)

From 1943 to 1945, the Army Air Forces used the Boardman Bombing Range for precision aerial bombing practice. Army Air Forces units completed practice bombing runs at the range, and the Army Air Forces base at Walla Walla, Washington, used the range for air-to-ground
gunnery practice. No details have surfaced about the range’s World War II layout, the types of planes that practiced at the range, or the munitions that were dropped. In 2008, Navy records dated one of the warehouses at NWSTF Boardman (Building 33) to 1943 (U.S. Navy 2008); however, this building was demolished in 2010, after the fieldwork for this project was completed, and no identifiable World War II buildings or structures currently remain at NWSTF Boardman.

The 1943 Act of Congress that authorized development of the Boardman range also recognized that the future completion of the planned John Day Dam on the nearby Columbia River would provide additional water supplies for the area, making it valuable as agricultural land. Congress therefore required the Army to periodically review the value of the Boardman range—should the Army ever determine that the land had agricultural value, then the government would have to consider relocating the range to another site (Crosswind 1973:2).

After the end of World War II in 1945, the Army Air Forces classified the Boardman Range as surplus land (GlobalSecurity.org 2005). Despite outside pressure to transfer the land to the private sector or state government, the Army retained ownership of the property.

**U.S. Air Force Ownership of Boardman, 1947-1958**

In 1947, the Army Air Forces were established as the United States Air Force, a separate branch of the armed forces no longer connected with the Army. The Boardman Bombing Range became an Air Force facility, and the Air Force removed Boardman from surplus land rolls, announcing their intention to continue using the range for precision bombing (GlobalSecurity.org 2005). Navy real estate records indicate that the earliest Air Force facilities on the Boardman range were spotting towers used to observe and score the accuracy of practice bombings. Navy records indicate that Tower 2 (Building 2) and Tower D (Building 5), were built in 1947, and Tower C (Building 6) was completed in 1948 (U.S. Navy 2008).

Boardman Bombing Range was managed from 1952 to 1957 by the 57th Air Division, headquartered at Fairchild Air Force Base (AFB), in Washington State, near Spokane. During this time, the Air Force constructed 20 buildings at Boardman, as well as an airstrip, a gunnery range, and aerial bombing targets (GlobalSecurity.org 2005). A 1952 Air Force map of the Boardman range (Figure 9) shows a very different layout from what exists today (Figure 10 shows the 1952 map with the current boundary of NWSTF Boardman superimposed on it.) The northwest corner of the range had a flight strip, with a small cantonment nearby. From the cantonment, a road led south to a gunnery range, an area that corresponded to a cluster of buildings that was recently demolished on the western edge of NWSTF Boardman. The map also shows five aerial bombing targets, but none line up with the location of the present Navy bombing target at Boardman. Air Force Targets 1 and 2 were on the property’s western half, land now owned by the State of Oregon. Target 5 had three spotting towers and was near what is now the western boundary of Navy property. Target 4 was positioned southeast of Target 5 but did not have any spotting towers. Target 3 was in the range’s northeast corner and had three spotting towers (Strategic Air Command 1952). The 1952 map in Figure 9 appears to depict proposed development; however, its representation of the cantonment area and gunnery range is consistent with later maps, indicating that development was carried out accordingly.
Air Force unit histories indicate that the Boardman Range was used mainly for gunnery training in 1953 but by 1954 was in full use as a bombing-practice range for aircraft. In August 1953, the Boardman Range was hosting 178 men for gunnery training: 131 men from the 57th Air Division headquartered at Fairchild AFB, and 47 men from Travis AFB (U.S. Air Force 1953a:22). By early November 1953, the range was training 28 gunners from the 99th Strategic Reconnaissance Wing and 22 men from the 92nd Bomb Wing. On November 15, a generator and armament building at the range’s gunnery line was destroyed by fire (U.S. Air Force 1953b:23), causing the Air Force to close the range through February 1954 (U.S. Air Force 1954a:23).

By May 1954, a new prefabricated building purchased from the Butler Manufacturing Company had been installed at Boardman, and the gunnery range was back in full operation, except for one gunnery turret simulator that was being modified. The air bombing range was also in full use by May 1954; 40 aircraft flew over the range’s target array and dropped 165 bombs (U.S. Air Force 1954b:28). By July 1954, the gunnery range had a total of 68 trainees hailing from the 92nd Bombardment Wing and the 99th Strategic Reconnaissance Wing. Statistics indicate that 25 planes flew over the range target array and dropped 102 bombs during the month of July 1954 (U.S. Air Force 1954c:28).

The main wave of Air Force construction at Boardman was planned in 1954 and carried out from 1955 to 1956, with the bulk of the construction work completed in 1955. Construction drawings for additional buildings in the Boardman gunnery range area were completed by the U.S. Army Corps of Engineers, Seattle District, in December 1954. HDC found drawings for four buildings (all of which were demolished in 2010):

- Building 30, converter and standby generator building (Building S-326 in Figure 11)
- Building 31, sighting station (Building S-330)
- Building 32, maintenance building (Building S-325)
- Building 34, water pump station (Building S-315)

The Air Force constructed the facilities in 1955–1956, and the drawings were stamped “as built” in 1956. From construction notes on the drawings, most of the construction appears to have taken place in 1955 (U.S. Army Corps of Engineers 1954–1956). Since the 2008 fieldwork, all four of these buildings have been demolished; Figure 11 presents a 1955 Air Force map that shows their layout at that time.

The types of aircraft that practiced at Boardman, and the types of bombs dropped there during the early to mid-1950s, are not completely clear from the surviving records that HDC obtained. Based on events at Fairchild AFB in the 1950s, the probability is high that the B-36 aircraft associated with the 57th Air Division and Strategic Air Command used the range. In the 1950s, the Air Force also operated a small landing strip on the north-central portion of the range. The 1952 Air Force map (Figure 9) shows a landing strip area in the northwest portion of the range. This map shows a small cantonment at the airstrip with wood-frame barracks and support buildings (Strategic Air Command 1952). The landing strip site was not surveyed by HDC as it does not fall within the property that the Navy owns today.
Figure 9. 1952 U.S. Air Force map of Boardman Bombing Range

The current Boardman Range is located mostly on the right side of this map, while the left half is now owned by the Oregon state government (see Figure 10). The map also contains diagrams of the gunnery range that is now the recently demolished administrative area on the west side of the Navy property, and a cantonment owned by the Air Force that stood on land that is no longer owned by the Navy. (Source: U.S. Navy construction drawings on file at NASW, Office of Public Works)
During the time the Boardman Bombing Range was managed by the 57th Air Division, Fairchild AFB was a Strategic Air Command (SAC) base that accommodated long-range heavy bombers. Fairchild’s bombardment units included the 92nd Wing, based at Fairchild from 1951 to 1956, and the 98th Wing, at Fairchild from 1952 to 1955. These wings were phasing out B-29 aircraft in 1952, the year that the 57th Air Division took control of the Boardman range. From 1952 to 1957, the 92nd and 98th wings were flying B-36 bombers, large six-engine prop-driven aircraft capable of delivering conventional bombs and nuclear
weapons over long distances. In 1957, as Air Force operations at Boardman range were being phased out, Air Force units, like the 92nd Wing, were switching from the B-36 to the newly developed B-52 (Strategic-Air-Command.com 2009). Although bombardment wings at Fairchild AFB flew the B-36 while Boardman was an active Air Force range, it is not clear if the range was used primarily for B-36 exercises, or if other types of Air Force aircraft used the range.

Navy aircraft first used the range for bombing practice, along with Air Force planes, in 1956. Management of the range as an active bombing practice facility by the 57th Air Division ended in 1957, and the Air Force declared Boardman as excess land in 1958. The Navy expressed interest in the range, and in 1959, they acquired 96,000 acres of the Boardman range land (Crosswind 1973:2).
Cold War-Era Navy Ownership of Boardman Bombing Range, 1959-1989

1959-1969

Once the Boardman Bombing Range was transferred to the Navy in 1959, the issue of the range’s value as agricultural land re-emerged. Congress requested that the Navy investigate relocating the range once the John Day Dam was completed, a condition similar to that imposed on the U.S. Army in 1943. The issue resurfaced, in part, because in 1958, the construction of the dam had finally begun. In 1960, the Navy evaluated an alternate bombing range site at Wagontire, Oregon. This site had been proposed by the State of Oregon, which now wanted to acquire the Navy’s Boardman facility. However, the Navy found Wagontire to be unsuitable as a site for a bombing range (for reasons not mentioned in the article containing this statement). By 1963, the Navy and the State of Oregon reached a compromise in which the western 48,500 acres of the range were deeded to the State, with the proviso that low-flying aircraft would continue to be allowed to pass over (Crosswind 1973:2). The Navy retained the property’s eastern half and consolidated the bombing range on 47,722 acres of that land (GlobalSecurity.org 2005).

The Navy placed the Boardman range under the management of Naval Air Station Whidbey Island (NASWI), using the range for practice bombing by A-3D Skywarrior and A-6 Intruder heavy attack aircraft. In the early 1960s, articles on Boardman range began appearing in Prop Wash, the NASWI newspaper.

The first Prop Wash article on Boardman, dating to June 14, 1961, indicated that Lt. J. L. Dixon and seven enlisted men served as the range staff, and that this crew had improved the range in recent years, mainly through converting the former Air Force gunnery range buildings into an administrative area. Specifics mentioned in the article include improvements such as painting the former Air Force buildings dark green and planting trees in the new operations and administrative area. In the aircraft bombing target, Dixon’s crew installed new radar reflectors and cleared a new guide path to the target area; the path measured 40 feet wide and 40,000 feet long. The crew also took steel towers from different locations and disassembled and moved them to sites north of the target. Lt. Dixon and his men also built new range roads and telephone lines to the relocated towers (Prop Wash 1961:6).

The 1961 article further explained the Navy’s changes to the range layout, mentioning that active spotting towers were relocated to the north side of the main target—this change placed the towers closer to range headquarters and reduced the round trip from the headquarters to all of the towers from 22 miles to 14 miles, resulting in 8 less miles of road to maintain. The range’s main target and offset target could now be observed from the same three towers, without requiring the spotters to move to different towers. The three active spotting towers were positioned in a mile radius around the target (Prop Wash 1961:6).
The official Navy construction date for the main target at Boardman, known as the Aircraft Bomb Target Range, is 1963 (U.S. Navy 2008), which is the year the Navy deeded the west half of the Boardman range lands to the State of Oregon. However, the main target referred to in the 1961 *Prop Wash* article is clearly the central target array on the range’s east half, which corresponds to the current position of the main target. A 1962 Navy map (Figure 12 and Figure 13) also shows a single central target (U.S. Navy 1962). It may be that the many tasks associated with transferring the target to its present location were not completed until 1963; Navy real estate database construction dates usually represent the property’s date of completion, rather than the year construction started. In general, the current position of the main target was no doubt a product of the Navy’s need to move bombing range operations to the property’s east half.

The 1961 *Prop Wash* article also identified the range’s nerve center as the Operations Building (Building 30), a structure that was built in 1955–1956, as part of the Air Force gunnery range, and demolished by the Navy in 2010. The flat-roofed structure was located in the abandoned administrative area on the range’s west edge; all of the buildings in the abandoned administrative area were demolished at the same time in 2010. The Operations Building contained radios for communicating with aircraft, and telephones and plotting boards for scoring bomb hits and for communicating with the range spotting towers. Range air traffic was heavy, and the range had recently set new internal records for bombs dropped on a single day. Clearly, even though the Navy was still in the process of improving the range, it was already being used heavily by Navy aircraft by late 1961 (*Prop Wash* 1961:6). The Navy built one additional facility at Boardman in 1962, Facility 37, a set of equipment fuel storage tanks (demolished in 2010).

A December 1962 article in *Naval Aviation News* described a NASWI bombing derby, indicating that Boardman was part of this type of event, which was a competition between different squadrons. The 1962 derby involved heavy attack squadrons VAH-3, VAH-4, VAH-6, VAH-10, and VAH-123. All participating squadrons flew A-3D Skywarriors, carrier-based heavy attack aircraft with twin-engine jets. Among other events, the derby included bomb drops on targets at the Boardman and Fallon, Nevada, ranges (*Naval Aviation News* 1962a:31).

Another 1962 article from *Naval Aviation News* gives additional insight into the bombing activities and aircraft used at Boardman. The range accommodated about 20 planes a day and was used by crews operating the A-6 Intruder heavy attack aircraft. The A-6 crews used the range for conventional bombing practice and mock nuclear weapons attacks, and the Mark 76 conventional bomb was mentioned as a weapon that was dropped at Boardman. The range also included an unusual target, the Interim Mobile Land Target (IMLT), a remote-control dune buggy operated at speeds of about 8–10 miles per hour. At the time of the article’s completion, no pilot had yet destroyed the IMLT (*Naval Aviation News* 1962b).
Figure 12. 1962 Navy map of Boardman Bombing Range

This map shows the circular aircraft bombing target, which appears to be roughly in the same location as it is today. The location of the now-abandoned operations and administrative center is shown at the top center of the map, labeled as the “Operations Control Center.” The map also includes the soon-to-be finalized “New Property Line” (center) that would divide the range in 1963, with land in the left (west) portion of the map deeded to the Oregon state government, while Navy bombing-range activities would be consolidated on the right (east) side of the map. (Source: U.S. Navy construction drawings on file at NASWI, Office of Public Works)
The same article characterized the function of the Boardman range as important to NASWI and gave additional detail on range operations. The range employed 60 men and had five active spotting towers. The crew operated range equipment, put out brush fires caused by
exploding live bombs, and manned the range spotting towers. For each bomb dropped, it was necessary to have three towers in operation to record a score for the bomber’s accuracy.

Reports on the smoke cloud from the bomb were relayed by each of the three towers to a main spotting station, which had facilities to chart the results of the bombings. Spotting tower personnel were charged with spotting, plotting, and scoring bomb hits (*Naval Aviation News* 1962b). The target evaluations at the time required hand plotting, unlike today’s electronic laser and satellite-based scoring systems.

A few more improvements were made at Boardman during the first half of the 1960s. Navy records date two surviving facilities to 1963: Facility 18 (the current Aircraft Bomb Target Range), which had really been under development since at least 1961, and Building 35 (Flammable Liquid Storage Facility, demolished 2010). Boardman continued to be used for bombing practice by Navy A-6 crews through the 1960s, as U.S. involvement in the Vietnam War accelerated. One major Vietnam War–era alteration to Boardman was relocating Towers 2 and 7 to sites east of their original locations, and moving the old Tower 5 from its original site to a spot west of the former location of Tower 2 (U.S. Navy 1959–2008).

A 1968 Boardman Bombing Range map (Figure 14) shows a central target with concentric circles. At that time, the target array also included a small offset target southwest of the circles and a large rectangular strafing complex west of the main target. The target array also included three reflectors, four parabolic reflectors, a reflector bank target, and seven spotting towers within a three-mile circle around the main target. Facilities at the now-demolished administration area included Building 30 (Operations Building), Building 31 (General Warehouse), Building 32 (Garage), Building 34 (Water Pump Station), Building 35 (Paint and Oil Storage), and Building 37 (Equipment Fuel Storage Tanks).

### 1970–1989

By the end of the 1960s, developers were pressuring the Navy to surrender the Boardman range to private or state government ownership—the John Day Dam construction project was scheduled to be completed in 1971, and with its newly created lake, it would make new land use opportunities possible for the surrounding area. The Navy studied alternative range sites in 1970 but concluded that other sites had unsuitable geographical characteristics and would be too expensive to acquire. The availability of water from the lake inspired Portland General Electric Company to propose a nuclear power plant at a site 7.7 miles from Boardman’s main bombing target, which intensified pressure on the Navy to relocate the Boardman range (*Crosswind* 1973:2). In response, the Navy agreed to consider altering the main flight path to the Boardman target so that armed aircraft would not fly over the nuclear facility (*Crosswind* 1973:11).

The commander of NASWI rejected notions that the range could easily be moved elsewhere, suggesting instead that the proposed nuclear plant structure could be built in a way that would allow it to withstand being hit by an airplane. The commander also indicated that inert 25-pound practice bombs with no explosive charges were being dropped on the Boardman range by Navy aircraft at that time (*Tri-City Herald* 1974:1).
Figure 14. 1968 Navy map of Boardman Bombing Range

This map shows the central aircraft bombing target, which appears on a 1962 Navy map (Figure 12) but does not appear on earlier Air Force maps. It was likely under development by the Navy from about 1960-1963. The location of the demolished operations and administrative area is shown on the left side of the main map; this map also includes Inset A, on the left, which is a plan of the recently demolished old administration area.

(Source: U.S. Navy construction drawings on file at NASWI, Office of Public Works)
Although controversy continued over the Boardman range, the Navy operated the facility through the 1970s and 1980s. Portland General Electric built a coal-fired power plant near Boardman, and did not build a nuclear facility. In 1977, community leaders in Morrow County were still pressing the Navy to relocate the range to allow for nuclear power and overall economic development in Boardman (Tri-City Herald 1977:1). The Navy continued to defend its need to keep the range at Boardman, and the central portion of the Boardman range continued to be actively used for Navy aerial bombing practice, while outlying areas of Navy land were leased to local farmers for livestock grazing.

In the 1980s, the Navy improved the Boardman range, keeping up with changing technologies. One such improvement was a large wood and steel laser target, still visible, constructed in 1985 by Navy Seabees (Navy construction battalion personnel). A grandstand-like structure, the target was four stories high and supported a large tilted plywood platform. The structure’s purpose was to calibrate a laser bomb guidance system known as the Airborne Laser Accuracy Scoring Target System (ALAST). EA-6A Prowler aircraft fired lasers at the target, and a camera recorded where the laser beams hit, thereby tracking the accuracy. Lasers on the EA-6A guided bombs to the proper target coordinates (Crosswind 1985:3).

While new targets were built, the overall layout of the range remained the same during the 1980s. Navy maps from 1983 and 1986 indicate that the range’s administrative area was still located on the property’s west edge (U.S. Navy 1959–2008).

**Recent History, 1990-2009**

The Boardman Bombing Range continued to be used by the EA-6B Prowler units at Whidbey Island through the 1990s. In 1990, the Navy drew up initial plans to remove the range administrative facilities from the old administrative complex on the property’s west edge. The new administrative center was located around Building 2 (Tower 2), which sat north of the main target. Two small buildings shown on the 1990 plans (see Figure 15), one a former recreational facility and one labeled as a main building and garage, were connected and converted to a range operations building. A site plan from the 1990 plans shows the overall layout of the range at that time (Figure 16).

A second map of the range was made in 1993, as an orientation map for the 1993–1994 project to move the range operations and administrative area to the site of Building 2 (Tower 2). The 1993 map is largely similar to the 1990 map (Figure 15 and Figure 16), with the operations and administrative area still shown on the west edge of the range; the actual move of the administrative area to the new site appears to have happened ca. 1993–1994. Today, the administrative site also contains a post-1990 storage facility (Building 41) and two trailers, one used as quarters (no building number) and one used as office space (Building 36). Several of the spotting towers shown on this map have been demolished. The map does show the old administrative area (now demolished) and the Aircraft Bombing Target Range (labeled on the map as “Target Area”), as well as Building 8 (Tower A) and Building 7 (Tower B), which are still in place today. The upper left corner of the map also shows that the air strip once operated by the Air Force as part of the range was no longer part of the Navy’s property.
The 1993 map shows the area at Building 2 (Tower 2) that is now used as the NWSTF Boardman Operations Area. The buildings labeled as the “Existing Recreation Building,” “Existing Garage,” and “Existing Main Building” are now connected together to form the present NWSTF Boardman range operations building (Building 39) (see Figure 15).

The Boardman Bombing Range was re-designated the Naval Weapons Systems Training Facility Boardman (NWSTF Boardman) in the last half of the 1990s. In 2000, NWSTF Boardman was closed, and no bombs have been dropped at Boardman by aircraft since then. The Navy continues to maintain the range, and the facility remains available for future use, if needed (GlobalSecurity.org 2005).

Figure 15. Navy map, proposed new operations and administrative area at Building 2 (Tower 2) location, Boardman Range, 1990
(Source: U.S. Navy construction drawings on file at NASWI, Office of Public Works)
Figure 16. Navy sketch map of Boardman Range, 1990
(Source: U.S. Navy construction drawings on file at NASWI, Office of Public Works)
Current State
The old administrative area on the range’s western edge was demolished in 2010, and one structure (Facility 37) in the new administration area was demolished at the same time. The range headquarters are still situated north of the NWSTF Boardman main target. A small crew of Navy personnel maintains the target structure, spotting towers, and roads, in addition to attending to issues involving security and unexploded ordnance. The Aircraft Bombing Target Range (Facility 18) and the surrounding area are still littered with the remains of many bombs and other devices that were fired at the main target from 1959 to 2000.

The target array as it exists now consists of a series of concentric circles of cleared land. The target also features two steel spotting towers (Buildings 7 and 8), located on the north and west edges of the target, and defunct tanks and motor vehicles that are parked within the concentric circles and used as targets. A network of dirt roads provides vehicular access to the target area, and two defunct spotting towers (Buildings 5 and 6) still sit on the southern edge of the target array. The large laser target, built by the Seabees in 1985, is also still visible on the west side of the target array.

The Oregon Trail. Well south of the target array is a portion of the historic Oregon Trail that is listed in the National Register of Historic Places. This area of the trail is recognized and managed by the Navy as a cultural resource under Section 110 of the National Historic Preservation Act. The remains of the trail consist of visible wagon tracks along surviving portions of the trail, and foundations of structures at the Tub Spring area, which was a stop-off for water, and later a small farmstead. Since the trail is a series of foundations and trail remnants, it does not contain any buildings; it has been extensively surveyed and listed in the National Register and was not evaluated for this study.
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INVENTORY AND EVALUATION

Introduction

HDC inventoried and evaluated 15 buildings and structures for this project during fieldwork in 2008. Fourteen of the facilities were listed on the Navy real property database for NWSTF Boardman, and the other property was a steel fuel or water tank that HDC identified during fieldwork that was not listed on real property records. One property, Building 33, dated to World War II. Twelve of the properties dated from 1947 to 1964, and two properties were listed on Navy records as dating to 1984. HDC completed an Oregon historic inventory form for all 15 facilities. HDC recommends that none of the buildings at NWSTF Boardman are eligible for the National Register due to a lack of integrity and/or a low level of historical significance. On May 4, 2010, the Oregon State Historic Preservation Office concurred with these recommendations.

Since the time of the fieldwork in 2008 and the completion of the first draft in 2009, seven of the 15 buildings and structures surveyed by HDC have been demolished, all of which were located in the old gunnery range (administration and operations area) in the far northwest corner of the installation. These seven buildings had been vacant for many years and were severely deteriorated. Since these buildings no longer exist, the Navy requested that HDC remove the discussion of them from the final version of this report. Discussion of the demolished facilities is contained in the April 2009 draft of this report, which also includes their inventory forms. Table 1 lists the 15 facilities and indicates the seven buildings that were demolished.

Table 1. Surveyed facilities (extant and demolished)

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<th>Facility Number</th>
<th>Original Name/Function</th>
<th>Current Function</th>
<th>Construction Date</th>
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</thead>
<tbody>
<tr>
<td>2</td>
<td>Spotting Tower</td>
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</tr>
<tr>
<td>5</td>
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<td>Spotting Tower D</td>
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<td>Spotting Tower C</td>
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</tr>
<tr>
<td>7</td>
<td>Spotting Tower</td>
<td>Spotting Tower B</td>
<td>1984</td>
</tr>
<tr>
<td>8</td>
<td>Spotting Tower</td>
<td>Spotting Tower A</td>
<td>1984</td>
</tr>
<tr>
<td>18</td>
<td>Target</td>
<td>Aircraft Bomb Target Range</td>
<td>1961-1963</td>
</tr>
<tr>
<td>30</td>
<td>Converter &amp; Standby Generator Building</td>
<td>Demolished</td>
<td>1955-1956</td>
</tr>
<tr>
<td>31</td>
<td>Sighting Station Building</td>
<td>Demolished</td>
<td>1954-1956</td>
</tr>
<tr>
<td>32</td>
<td>Maintenance Building</td>
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<tr>
<td>33</td>
<td>General Warehouse</td>
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<td>1943</td>
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<td>34</td>
<td>Water Pump Station</td>
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<td>1956</td>
</tr>
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<td>35</td>
<td>Flammable Liquid Storage</td>
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<td>1963</td>
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<td>37</td>
<td>Diesel Tanks</td>
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</tr>
<tr>
<td>None</td>
<td>Fuel or Water Tank</td>
<td>Not in use</td>
<td>ca. 1964</td>
</tr>
</tbody>
</table>
Because the old administrative area no longer exists, the discussion below covers the district potential for only the NWSTF Boardman Bombing Range as a whole. Each of the eight buildings and structures are then discussed in terms of individual eligibility. Appendix A provides four or more photographs for each extant facility. The April 2009 draft of this report includes photographs of the demolished buildings in the old administrative area. The district potential and the individual properties were assessed for the following four periods:

- Army, World War II era, 1943–1946
- Navy, Cold War era, 1959–1964 (facilities over 45 years old—National Register Criteria A–D)
- Navy, Cold War era, 1965–1989 (facilities less than 45 years old—National Register Criteria Consideration G)

**District Potential**

**Overall District Potential of NWSTF Boardman**

*Recommendation: Not eligible for the National Register as a historic district*

The following discussion evaluates NWSTF Boardman under the four time periods mentioned above. For this survey, the overall period of significance for the range in terms of National Register Criteria A–D, focusing on the resources associated with military use of the facility, is 1943–1964 (the first three time periods). The year 1943 represents the initial year the land was developed as an Army Air Forces precision bombing range, and 1964 is a 45-year cutoff that covers buildings at or over 50 years old (built in 1959 or before) and buildings within five years of reaching the 50-year mark (built 1960–1964). The range is also assessed as a district for the fourth time period (1965–1989) under National Register Criteria Consideration G.

**Army, World War II era, 1943–1946**

Since the demolition of Building 33, no buildings or structures from this period currently exist at NWSTF Boardman. The layout of the range during the World War II period is not clear, but other than the demolished warehouse, HDC identified no major buildings or structures for that era.

Due to the lack of physical features dating to the World War II period, HDC recommends that NWSTF Boardman has no potential for a World War II-era historic district eligible for the National Register.

**Air Force, Cold War era, 1947-1958**

With the demolition of all of the buildings in the old gunnery range area, the only remaining structures at NWSTF Boardman from this period are three spotting towers. These towers were moved from their original locations when the Navy took over control of the installation in 1959.

The Air Force layout for the range consisted of five aerial bombing targets, an airstrip/cantonment complex, and a gunnery range complex. About three of the five bombing targets
were on land that is still owned by the Navy, but the target structures appear to have been demolished or have collapsed from deterioration, or in the case of spotting towers, were demolished or moved to new locations by the Navy during the years of 1959–2000. The demolished Air Force gunnery range area had the highest number of the original Air Force buildings (Buildings 30–34) of any area on the installation. The large Aircraft Bombing Target Range (Facility 18) that now dominates the central range landscape did not exist during the Air Force years of occupation.

Due to changes in the target configuration of NWSTF Boardman during the Navy years of occupation, and the scarcity of original Air Force structures that are in their original locations, and due to the 1963 size reduction of the range, HDC maintains that NWSTF Boardman as a whole has very little integrity for the 1947–1958 Air Force years, and is not eligible for the National Register as an Air Force/Strategic Air Command practice bombing range of the 1950s.

Navy, Cold War era, 1959–1964 (facilities more than 45 years old)

Boardman range also served NASWI as a bombing practice range during the years from 1959 through 1964 (and beyond). Since the 1959–1964 time frame occurred more than 45 years ago, the range can be evaluated under the regular National Register Criteria A–D. The range has better integrity for this period than it does for the Air Force era. The central Aircraft Bombing Target Range (Facility 18) appears to be in the same location as it was from 1959–1964, and the 1959–1964 complex used as the administrative area for the range still exists at its original site, although it has been heavily vandalized and is in deteriorated condition.

However, some changes to the 1959–1964 layout have occurred. All of the existing pre-1965 spotting towers were relocated from their original sites, in various episodes between 1967 and 2000. In the mid 1980s, two new spotting towers and a laser target were added to the central Aircraft Bombing Target, and the existing tanks, motor vehicles, and other small targets sitting on the central target circle appear to date from 1970 or later. A new administrative complex was constructed at a new site near Building 2 (Tower 2) from 1993–1994, and the administrative complex active during the 1959–1964 era was abandoned (and has since been demolished).

National Register evaluation:

− **Integrity.** The range has a fair level of integrity for the 1959-1964 Navy period of significance. The central target is in its original location, but new features have been added. All of the spotting towers have been relocated to support missions of the 1965–2000 period, and a new administrative center was built at a new location in the 1990s.

− **Criterion A.** Under National Register Criterion A, the range has some significance as an aerial bombing training facility for Navy flight crews flying heavy attack aircraft during the 1959–1964 years. However, training facilities are near the bottom of the list of properties that the Department of Defense considers appropriate for Cold War significance, and so the significance level of NWSTF Boardman under Criterion A is not high. Also, the range does not appear to have very many characteristics that are specific to that era of the Cold War. The circular target array, steel spotting towers, and other features of this range are features common to bombing ranges from a wide variety of
locations and time periods, and not just to the Cold War years of the 1960s. HDC recommends that as a practice bombing range for heavy attack aircraft of the 1960s that has undergone some loss of integrity since the mid-1960s, NWSTF Boardman does not have sufficient integrity or significance to have a National Register–eligible historic district associated with the years 1959–1964 under Criterion A.

- **Criterion B.** NWSTF Boardman does not have any associations with important people under Criterion B.

- **Criterion C.** As a common bombing range with a circular earth target, metal spotting towers, and typical metal and wood Air Force and Navy utility buildings, the complex has a low level of architectural, landscape, and engineering significance. The landscape of the range has also changed since 1965; the spotting towers have been relocated, and a new operations complex was added, along with new target structures, so the integrity of the original 1959–1964 landscape of the target complex is not particularly high. NWSTF Boardman is recommended as not eligible as a historic district under Criterion C.

- ** Criterion D.** NWSTF Boardman does not have any information potential related to above-ground facilities.

**Navy, Cold War era, 1965-1989 (facilities less than 45 years old)**

As a bombing practice range, NWSTF Boardman has low significance in terms of its function during the Cold War’s later years of ca. 1965–1989. As a training facility, it is low on the Department of Defense’s priority list of Cold War resources for exceptional significance. The complex did not house any strategic alert facilities, command and control facilities, or vital research and development facilities. HDC recommends that NWSTF Boardman is not eligible for the National Register as a late Cold War historic district under Criteria Consideration G for its role in the 1965–1989 years of the Cold War.
**Discussions of Individual Buildings and Structures**

HDC surveyed eight buildings and structures for individual eligibility in the National Register. Table 2 lists the eight buildings and provides original and previous function, construction date, and HDC recommendations. Figure 17 and Figure 18 show recent aerial photographs of NWSTF Boardman, with the survey buildings marked and labeled. Appendix A provides four or more current photographs of each building and structure.

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Original Name/Function</th>
<th>Current Function</th>
<th>HDC Recommendation</th>
<th>Construction Date</th>
<th>Map Figure No.</th>
</tr>
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<tr>
<td>2</td>
<td>Spotting Tower</td>
<td>Spotting Tower 2</td>
<td>Not eligible</td>
<td>1947</td>
<td>Figure 17</td>
</tr>
<tr>
<td>5</td>
<td>Spotting Tower</td>
<td>Spotting Tower D</td>
<td>Not eligible</td>
<td>1947</td>
<td>Figure 18</td>
</tr>
<tr>
<td>6</td>
<td>Spotting Tower</td>
<td>Spotting Tower C</td>
<td>Not eligible</td>
<td>1948</td>
<td>Figure 18</td>
</tr>
<tr>
<td>7</td>
<td>Spotting Tower</td>
<td>Spotting Tower B</td>
<td>Not eligible</td>
<td>1984</td>
<td>Figure 18</td>
</tr>
<tr>
<td>8</td>
<td>Spotting Tower</td>
<td>Spotting Tower A</td>
<td>Not eligible</td>
<td>1984</td>
<td>Figure 18</td>
</tr>
<tr>
<td>18</td>
<td>Target</td>
<td>Aircraft Bomb Target Range</td>
<td>Not eligible</td>
<td>1961-1963</td>
<td>Figure 18</td>
</tr>
<tr>
<td>39</td>
<td>Garage</td>
<td>Range Operations Building</td>
<td>Not eligible</td>
<td>ca. 1964</td>
<td>Figure 17</td>
</tr>
<tr>
<td>None</td>
<td>Fuel or Water Tank</td>
<td>Not in use</td>
<td>Not eligible</td>
<td>ca. 1964</td>
<td>Figure 17</td>
</tr>
</tbody>
</table>

**Discrepancies Noted During Fieldwork**

For most of the survey buildings and structures, the properties HDC observed during fieldwork corresponded with the original construction drawings, archival maps, and real property database construction dates. However, there were two exceptions: Building 36, which does not match the Building 36 described on the real property database, and Building 39, which has inconsistencies in its construction date:

- Building 36 is represented in Navy real property databases as a range operations building dating to 1962, but today, Building 36 at NWSTF Boardman is a trailer in the range operations area (Figure 17). This trailer structure is a movable temporary facility placed on concrete blocks and clearly dates to ca. 1990–2000. Since the building was a temporary movable trailer and post-dated the Cold War, HDC did not survey Building 36. HDC found no evidence on the range of an original range control structure dating to 1962. This structure may have been demolished in the past and replaced at some point with the current trailer.

- Building 39 is listed on Navy real property databases with a post-1989 construction date and currently serves as the NWSTF Boardman range operations building. However, a portion of Building 39 is a wood-frame former garage structure that, based on its construction characteristics, appears to date from the mid-1960s. This garage was probably moved to this site ca. 1980–1990, and in 1993–1994, it was joined to two newer buildings to form the current operations building. Since a portion of Building 39 was likely of older vintage, HDC surveyed the building for National Register eligibility.
Figure 17. 2005 aerial photograph of new administrative area, NWSTF Boardman
This map shows Buildings 2 and 39 and the Fuel or Water Tank, which has no building number, plus post-1989 buildings 36 and 41
Overview of NWSTF Boardman

Figure 18. 2005 aerial photograph with the Aircraft Bombing Target Range (Facility 18) and surrounding spotting towers mapped (Buildings 5-8)
Building 2 (Tower 2), 1947: Not eligible

Description and History

Building 2 (Figure 19) is a fairly typical range spotting tower, with a bolted steel superstructure that supports a small flat-roofed metal observation building. These towers are commonly found at most military air test ranges and were used to observe and record the accuracy of test and practice bombing exercises, especially in the days before modern satellite and laser scoring systems were developed.

This tower has a steel superstructure supported on four concrete pads that form the structure’s foundation. The four steel posts supporting the tower are reinforced by a series of horizontal steel beams and diagonal braces. At the top of the tower is a small steel observation platform with metal pipe railings. The observation house at the top of the tower has horizontal corrugated steel walls, a steel one-light door, fixed metal windows, and a flat metal roof. The interior still contains some 1990s-era range scoring equipment.

This tower is located north of the Aircraft Bombing Target Range (Facility 18), at the current operations and administrative area for NWSTF Boardman (see Figure 17).

Although the Navy real property database construction date for this tower is 1947, it appears that only some of the structural steel of the tower superstructure dates from that time. Around 1959–1963, the Navy installed a spotting tower with a more narrow superstructure at this site, as part of their effort to move the range’s target array to the east half of the range lands (the west half of the range was to be deeded to the State of Oregon in 1963). This narrow tower was disassembled in 1967 and moved elsewhere on the range. The tower that is currently at this site used to sit to the east and was originally known as Old Tower 5. This tower was disassembled and moved to this site by the Navy in 1967–1968. Comparing the current condition of the tower with a 1967 photograph of it indicates that the current superstructure has not changed, but the prefabricated metal building that sits atop the tower today is clearly a product of the last 30 years.
The tower presumably continued to be used for target spotting at the range until these activities were made unnecessary by electronic satellite-based scoring systems, or until the range closed in 2000. The structure is no longer in active use as a range spotting tower, although it is located within the range’s administrative area.

Range spotting towers of this type are a common property type and occur at most of the military air test and practice range facilities that were developed from World War II through the 1980s. These structures are commonly disassembled and moved to new locations as range configurations change, based on the changing military mission of the ranges. These buildings, if they remain in active use, are also frequently modified by adding a new observation house at the top of the tower.

**National Register Evaluation for Building 2 (Tower No. 2)**

**HDC recommendation: Not eligible**

Building 2 has a low level of integrity; it has been moved from its original location, and it received a new observation house structure sometime after 1967. The tower has been at this location only since 1967–1968, so it does not reflect the pre-1967 history of the Boardman Bombing Range. Since the building was reconstructed and moved in 1967, the regular National Register Criteria A–D do not apply; the tower’s current form and location date from the last half of the 1960s, a time that presently falls within the past 45 years. As a practice range spotting tower, the structure does not have an exceptional level of historical or architectural/engineering significance under National Register Criteria Consideration G for properties under 50 years old. HDC recommends that Building 2 is not eligible for the National Register.
Building 5 (Tower D), 1947: Not eligible

Description and History

Building 5 is a fairly typical 1940s-era range spotting tower (Figure 20). The structure consists of a fairly narrow steel superstructure and a small spotting house at the top. The superstructure is composed of four steel posts that are supported on concrete piling foundations and reinforced by steel beams and diagonal braces. A steel and wood staircase that runs up the tower’s center provides access to the spotting house through a trap door in the spotting house floor. The spotting house itself is a small gabled structure with metal walls. The windows of the spotting house have been boarded up, and the interior of the spotting house was not viewed; the HDC survey team judged the reliability of the timber treads of the tower staircase to be questionable.

The tower is situated in a remote corner of the range (see Figure 18), southwest of the Aircraft Bombing Target Range (Facility 18) at NWSTF Boardman. The tower can be reached only by a small earth roadway that has suffered wind erosion.

This spotting tower was likely an early improvement to the Boardman range, built just as the range was transferred to Air Force control in 1947. It is not clear what the original location of this tower was on the Boardman Bombing Range. A 1967 map of the central target does not show a tower at this location, so the tower was clearly moved to this site sometime in the 1970s through the 1990s. The tower has been abandoned for a long time, so it may have gone out of active use as a spotting tower for the Boardman range many years ago.

As was mentioned with Building 2, spotting towers are a common property at air test and practice bombing ranges dating from World War II through the 1980s, and this tower is a fairly typical example.
National Register Evaluation for Building 5 (Tower D)
HDC recommendation: Not eligible

Building 5 does not appear at this location on the 1967 map of the Boardman Bombing Range; it was relocated to this portion of the range fairly late in the range’s history, definitely within the past 40 years. As a relocated property, the tower does not represent the history and layout of the range as it existed during the 1940s through the mid-1960s, and therefore does not qualify for significance under National Register Criteria A, B, and D. Also, as a common range spotting tower, it has a low level of architectural and engineering significance under Criterion C.

The later history of the tower in its present location was not exceptionally significant in the Cold War and so does not meet the exceptional significance criteria of Criteria Consideration G. HDC therefore recommends that this tower is not eligible for the National Register.
Building 6 (Tower C), 1948: Not eligible

Description and History

Building 6 (Figure 21) is a fairly typical 1940s-era range spotting tower. The structure consists of a fairly narrow steel superstructure with a small spotting house at the top. Concrete foundations support the four steel posts that compose the superstructure of the tower; the posts are then reinforced by steel beams and diagonal braces. Running up the center of the tower is a steel and wood staircase that leads to a trap door in the spotting house floor, providing access to the spotting house.

The spotting house is a small gabled structure with metal walls. The windows of the spotting house are horizontal, and it appears that the glass and sashes have been broken out. The HDC survey team did not observe the interior of the spotting house, as the safety of the timber treads in the tower staircase was uncertain.

At NWSTF Boardman, the tower is located in a remote corner of the range (see Figure 18), southwest of the Aircraft Bombing Target Range (Facility 18). A small earth roadway leads to the tower, but the road has been eroded by wind in some areas.

Like Building 5, this tower was probably one of the early improvements to the Boardman range built when control of it was transferred to the Air Force in 1947. The original location of this tower on the Boardman Bombing Range is not clear. A 1967 map of the central target does not show a tower at this location, so it appears that the tower was moved to this site sometime from the 1970s through the 1990s. The tower has been abandoned for many years and likely went out of active use as a spotting tower for the Boardman range some time ago.

As was mentioned with the other towers, spotting towers are a common property at air test and practice bombing ranges dating from World War II through the 1980s. Building 6 is also a fairly typical example.
National Register Evaluation for Building 6 (Tower C)

HDC recommendation: Not eligible

Like Building 5, Building 6 does not appear at its current location on the 1967 map of the Boardman Bombing Range. It was moved to this site fairly late in the history of the range, sometime within the past 40 years. As a relocated property, the tower therefore does not represent the history and layout of the range as it existed during the 1940s through the mid-1960s, and it does not qualify for significance under National Register Criteria A, B, and D. Under Criterion C, it is a common range spotting tower and therefore has a low level of architectural and engineering significance.

The later history of the tower while it was at its current location was not exceptionally significant to the Cold War, and so it does not qualify under Criteria Consideration G’s criterion of exceptional significance. Building 6 is therefore recommended as not eligible for the National Register.
Building 7 (Tower B), 1984: Not eligible

Description and History
Building 7 (Figure 22) is a short, squat, steel-frame spotting tower, the shortest of the spotting towers at NWSTF Boardman. The structure consists of a steel tower with four steel legs. The legs are supported on concrete piling foundations and reinforced by horizontal steel beams and diagonal braces that are fastened together with bolted connector plates. The tower supports a steel observation deck with steel pipe railings. An observation house also sits atop the tower and features horizontal corrugated steel walls and a steel shed roof. The observation house has a one-light steel door and metal fixed-light windows. A set of steel stairs running up the inside of the tower superstructure provides access to the observation deck and the observation house.

The tower is located west of the main target (see Figure 18) in a largely empty area that is littered in some places with bomb casings from past practice bombing activity at the range.

Little information was found on this tower. The tower’s Navy real estate database construction date is 1984, and the steel design of the tower framework does suggest that it was built later than Buildings 5 and 6 (Towers D and C), which date to the late 1940s.

The tower’s design is a shorter version of a design for the U.S. Department of Defense range spotting towers that appear at many military installations. HDC researchers found no evidence that the tower was moved from elsewhere.

Building 7 appears to have been part of an effort by the Navy to upgrade the Boardman range in the mid-1980s; the 1985 Laser Target located nearby is also likely part of this improvement campaign. Building 7 was most likely used for spotting activities from 1984 until the range ended active bombing practice operations in 2000.
**National Register Evaluation for Building 7 (Tower B)**

HDC recommendation: Not eligible

Building 7 does not appear to have undergone heavy alteration since 1984. Since the tower is well under 50 years old, it would not be eligible under National Register Criteria A–D and would have to meet the exceptional significance criteria of National Register Criteria Consideration G, for properties under 50 years old. Building 7 and NWSTF Boardman did not play an important role in the Cold War during the 1980s, as an aerial bombing practice range for the EA-6B aircraft; HDC therefore recommends that Building 7 is not eligible for the National Register.
Building 8 (Tower A), 1984: Not eligible

Description and History

Building 8 (Figure 23) is a tall, narrow, steel-frame range spotting tower. The tower structure consists of four steel legs that are mounted on four concrete foundation pilings. The four legs are reinforced by a series of horizontal steel beams and diagonal braces that are bolted together with steel connector plates. At the top of the tower, the steel superstructure supports a steel observation platform that has steel pipe railings. The observation building at the top of the tower is a steel structure with steel outer cladding, a steel one-light door, and metal fixed-pane windows. The shed roof of the observation house is clad in metal.

This tower sits on the north side of the Aircraft Bombing Target Range (Facility 18) at NWSTF Boardman (see Figure 18).

The official Navy real property database construction date for this tower is 1984. Maps and drawings support the idea that this tower has been at this location only since 1984. A tower does not appear at this location on range maps of NWSTF Boardman until 1990, and no tower appears on this site on the 1967 maps.

National Register Evaluation for Building 8 (Tower A)

HDC recommendation: Not eligible

Building 8 dates to 1984 and is either completely new or was built with a mixture of new elements and parts salvaged from other spotting towers. In either case, the building is recommended as not eligible for the National Register. The tower does not represent the history and layout of the range as it existed during the 1940s through the mid-1960s, and therefore does not qualify to be eligible under National Register Criteria A, B, and D. As a common range spotting tower, it has a low level of architectural and engineering significance under Criterion C. The tower is also not exceptionally significant in the history of the Cold War years of 1984–1989, so it does not meet Criteria Consideration G for exceptional significance. HDC therefore recommends this tower as not eligible for the National Register.
Facility 18 (Aircraft Bomb Target Range), 1961-1963: Not eligible

Description and History
This facility consists of a series of rings of plowed earth oriented around a center point (Figure 24). The overall diameter of the circular portion of the target is about one mile. The plowed rings have no vegetation, but the rest of the target area is populated with the same type of scrub brush found in the surrounding area.

Positioned at the center of the target is a pile of concrete, along with an obsolete tank. Several other defunct tanks are parked at various locations around the range, with some damaged, most likely from being used as aerial targets (Figure 25). Other targets include a defunct van with missiles placed in the rear of the vehicle; this target appears to have been used as an improvised rocket launcher target. The target area also includes a large tilted platform on a wood and steel structure; this item is a laser target built in 1985 and is discussed further on page 32 in the history section.

This area of the range appears to have been empty, undeveloped land during the Army (1943–1946) and Air Force (1947–1958) occupations of the Boardman Bombing Range. The 1952 range map for Boardman developed by the Air Force’s Strategic Air Command shows no bombing target at this site. Instead, the Air Force maintained five target structures spread all over the range property, which during the 1950s was twice the size of the current range. Some of the old Air Force target locations are no longer within the Navy’s NWSTF Boardman property but instead lie on land that belongs to the State of Oregon.

Map evidence indicates that the Navy began building a bombing target at the present site around 1961, in anticipation of deeding the western half of the range property to the state, a transfer that officially occurred in 1963. By 1962, the target shows up on Navy maps in its present location, with roughly the present configuration of a central target surrounded by concentric rings. Presumably the concentric rings, in their original form, were composed of
cleared, plowed earth. A smaller offset target located to the southwest of the original target is shown on 1967 maps but is not easily visible today. The main bombing target has roughly the same configuration as what is visible on 1967 maps. The current arrangement of five spotting towers around the target dates mainly from the 1980s or 1990s, as only one spotting tower, Building 2, is in its current position on 1967 maps.

Maps from the late 1960s and recent aerial photographs also show a large, long, airstrip-like area of cleared land at the north end of the target range, well south of Building 2 (Tower 2). This area of cleared land likely dates from the Vietnam War era, as it does not show up on 1962 range maps. On 1967 maps, this structure is labeled “Q. M. Target,” and it appears to have originally held some type of moving target track or another specialized type of target. However, this target structure has been removed and only a strip of cleared land remains. HDC was not able to determine the meaning of “Q. M. Target.”

A number of objects and structures are strewn about the circular target array. Some of the items are well documented in Navy construction drawing records and news accounts, but others are difficult to date. For example, a large tilted platform structure on the west side of the target array is a structure built by the NASWI Seabees in 1985, to facilitate calibration
and testing of laser-bomb guidance equipment on the EA-6B aircraft. Other objects, such as the many rusted and derelict tanks and motor vehicles on the range, are more difficult to date, although most seem to have been placed there in the 1970s and 1980s.

**National Register Evaluation for Facility 18 (Aircraft Bombing Target Range)**

**HDC recommendation: Not eligible**

Facility 18, the Aircraft Bomb Target Range, was established at this site in about 1961–1963, so it does not reflect the theme of the Air Force use of the Boardman Bombing Range in the 1950s. Under the standard National Register Criteria of A–D, the period of significance for the target would be about 1961–1964. The overall layout of the target circles seems to have survived from this period, but they consist only of some circles of plowed land with concrete rubble placed at the center of the target. Integrity has diminished through the relocation of all but one of the spotting towers that was present there in the 1960s. In addition, the Navy has added new towers and pieces of equipment from the late 1960s through the 1980s. It is likely that the defunct tanks and vehicles that now litter the range as bombing targets were added to the facility during the Vietnam War era or later, to facilitate the target’s changing mission.

HDC therefore maintains that due to the addition of new structures at the target and the relocation of the spotting towers and other range fixtures, the central target’s integrity for the 1961–1964 era has been diminished. As a training facility, the structure also is fairly low on the Department of Defense’s list of property types that are historically significant in association with the Cold War. HDC therefore recommends that Facility 18 is not eligible for the National Register under Criteria A–D.

As a training facility for bombing practice, the target also does not appear to have played an exceptionally significant role in critical Cold War events during the years 1965–1989. Facility 18 was a training facility for bombing practice; it was not a first-strike alert facility, a test range for vital research and development, or the site of any critical Cold War command and control activities. HDC recommends that Facility 18 is not eligible for the National Register under Criteria Consideration G for its function during the later Cold War.
Building 39 (Garage and Main Building), ca. 1964, with later additions: Not eligible

Description and History
Building 39 (Figure 26) consists of two buildings (referred to here as the south wing and the north wing) that have been connected to form a single structure.

- **South wing**: The southern portion of the south wing is a small prefabricated metal building with walls and a gabled roof, all made of vertical metal. The northern portion of the south wing is a wood-frame garage with wood platform frame walls clad in wood siding.

- **North wing**: This wing is a metal prefabricated building with vertical metal walls, a gabled metal roof, and metal windows.

Building 39 sits to the north of the Aircraft Bomb Target Range (Facility 18), in a small cluster of buildings and temporary trailers that now holds the operations center for the range (see Figure 17). This operations center is arranged around Building 2 (Tower 2), a steel observation tower.

![Building 39, southern portion of south wing, looking west](image)

The building’s official Navy real estate database construction date is 1962, but the building does not show up at this site on Navy maps from 1962 or 1967. The building does show up on this site on a 1990 map of the Building 2 (Tower 2) area. On this 1990 map, the south half of the south wing is identified as the existing main building, and the north half of the south wing is identified as an existing garage. What is now the building’s north wing is identified
on the 1990 map as an existing recreation building. The wood-frame garage portion of the south part of the building appears to be the oldest part of the structure; this portion of the building may have been built around 1964 at another location on the range and then moved to the current site in the 1970s or 1980s. The other two parts of the building appear to be prefabricated metal buildings of the 1970s–1980s era.

As part of the 1993–1994 relocation of the range operations headquarters to this site, the recreation building and garage were joined by a connector and converted to the range’s operations building. The facility still serves as an operations building today. The northern portion of the building now contains radio equipment, a break room, and restroom facilities for the range, while the south portion of the building holds a small repair shop and storage space. The facilities in this building are augmented by a temporary mobile trailer that sits to the east of Building 2 (Tower 2). This trailer was brought to the site sometime after the ca. 1993–1994 relocation of range operations facilities to the Building 2 (Tower 2) site.

National Register Evaluation for Building 39 (Garage and Main Building)

HDC recommendation: Not eligible

Building 39 is an agglomeration of three buildings that have been joined together to form the current operations building for the range. The buildings do not show up at this site on 1962 and 1967 range maps, and the facility has served as the range operations facility only since about 1994. As a collection of relocated buildings joined together in the 1990s, the facility has no integrity for the 1960s era and is recommended as not eligible under National Register Criteria A–D. The building also does not have exceptional significance in the late Cold War era under Criteria Consideration G.
Fuel or Water Tank in Operations Area (no building number), ca. 1964: Not eligible

Description and History
This structure (Figure 27) is a large metal storage tank that is partially buried in an earth hill. The tank is cylindrical and appears to be composed of steel. Measuring about 6 feet tall and approximately 10 feet long, the tank is located in the operations area that centers on Building 2 (Tower 2), southwest of that tower.

The tank does not appear on maps of the range dating to the 1960s or on the 1990 and 1993 maps of the operations area. It may be an old fuel or water storage tank that was located on another portion of the range and moved to this site by the Navy in the 1970s or 1980s. The tank is a fairly typical cylindrical liquid-storage tank.

Figure 27. Storage tank in operations area, looking southwest

National Register Evaluation for Fuel or Water Tank
HDC recommendation: Not eligible
This tank does not show up on 1962 or 1967 maps of the range, or even the 1990 or 1993 maps of the administrative area. As a steel liquid-storage tank that was likely moved from another location on the range, it has a low level of historical and architectural significance under National Register Criteria A–D and is recommended as not eligible. The structure also does not have any exceptional significance in the later portion of the Cold War in terms of Criteria Consideration G.
Hardlines Design Company (HDC) was contracted by Naval Facilities Engineering Command (NAVFAC) Atlantic Division to complete a cultural resources inventory and evaluation of buildings and structures at Naval Weapons Systems Training Facility Boardman (NWSTF Boardman). HDC surveyed 15 buildings and structures consisting mainly of range buildings and small structures such as spotting towers and fuel tanks, plus the aircraft bombing target range itself. Seven of the 15 buildings and structures were demolished since fieldwork was completed in 2008; this report covers the eight remaining facilities.

Six buildings and structures constructed from 1943–1964 were evaluated by HDC using the regular National Register evaluation criteria of A, B, C, and D. The other two resources—Building 7 (Tower B) and Building 8 (Tower A)—were built in 1984 and were evaluated by HDC using National Register Criteria Consideration G, which covers resources that are less than 50 years old or that have achieved significance within the last 50 years.

No historic districts, buildings, or structures are recommended as eligible for the National Register as part of this study. Most buildings and structures were found to have lost integrity, or they have a low level of historical or architectural significance. The overall layout of the Boardman range was found to have changed significantly in the last 30 years and did not appear to have sufficient integrity and significance to be a historic district eligible for the National Register.

On May 4, 2010, the Oregon State Historic Preservation Office concurred with the recommendations found in this report. None of the buildings at NWSTF Boardman are considered eligible for the National Register. A copy of the eligibility letter is provided in Appendix C of this report.

No additional work is recommended for NWSTF Boardman.
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1953b November 1–30 1953.  


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U.S. Navy  

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Yakima Valley Museum  
2009 Boardman Oregon (Aerial view of the new relocated town of Boardman, Oregon)  
APPENDIX A. CURRENT PHOTOGRAPHS FOR NWSTF BOARDMAN
List of Buildings

Building 2 (Tower 2) .......................................................................................................................... A-1
Building 5 (Tower D) .......................................................................................................................... A-5
Building 6 (Tower C) .......................................................................................................................... A-8
Building 7 (Tower B) .......................................................................................................................... A-11
Building 8 (Tower A) .......................................................................................................................... A-14
Facility 18 (Aircraft Bomb Target Range) ....................................................................................... A-17
Building 39 ....................................................................................................................................... A-19
Storage Tank (no building number) ................................................................................................. A-22

List of Photos

Photo 1. Building 2 (Tower 2), looking southwest ............................................................................. A-1
Photo 2. Building 2 (Tower 2), looking northwest ............................................................................. A-2
Photo 3. Building 2 (Tower 2), looking northwest ............................................................................. A-2
Photo 4. Building 2 (Tower 2), looking northeast ............................................................................ A-3
Photo 5. Building 2 (Tower 2), north wall of observation building ................................................... A-3
Photo 6. Building 2 (Tower 2), interior of observation building, looking east ................................ A-4
Photo 7. Building 2 (Tower 2), interior of observation building, looking southeast ........................ A-4
Photo 8. Building 5 (Tower D), looking northeast ............................................................................ A-5
Photo 9. Building 5 (Tower D), looking northwest .......................................................................... A-6
Photo 10. Building 5 (Tower D), looking southeast ......................................................................... A-6
Photo 11. Building 5 (Tower D), base detail, looking east ............................................................... A-7
Photo 12. Building 5 (Tower D), looking up from southwest corner ................................................. A-7
Photo 13. Building 6 (Tower C), looking northwest ......................................................................... A-8
Photo 14. Building 6 (Tower C), looking northeast .......................................................................... A-9
Photo 15. Building 6 (Tower C), looking northeast ......................................................................... A-9
Photo 16. Building 6 (Tower C), detail, looking northeast ............................................................... A-10
Photo 17. Building 6 (Tower C), detail of steelwork, looking up from base .................................. A-10
Photo 18. Building 7 (Tower B), looking northwest ......................................................................... A-11
Photo 19. Building 7 (Tower B), looking northwest ......................................................................... A-12
Photo 20. Building 7 (Tower B), looking east .................................................................................. A-12
Photo 21. Building 7 (Tower B), observation building, looking northwest ..................................... A-13
Photo 22. Building 7 (Tower B), looking northeast ......................................................................... A-13
Photo 23. Building 8 (Tower A), looking southwest ......................................................................... A-14
Photo 24. Building 8 (Tower A), looking northeast ......................................................................... A-15
Photo 25. Building 8 (Tower A), looking northeast ......................................................................... A-15
Photo 26. Building 8 (Tower A), observation room, looking southeast .......................................... A-16
Photo 27. Building 8 (Tower A), interior of observation room, looking southeast ......................... A-16
Photo 28. Facility 18 (Aircraft Bomb Target Range), looking south .............................................. A-17
Photo 29. Facility 18 (Aircraft Bomb Target Range), detail of laser target, looking east .............. A-17
Photo 30. Facility 18 (Aircraft Bomb Target Range), detail of tank and debris, looking southeast A-18
Photo 31. Facility 18 (Aircraft Bomb Target Range), detail of tanks on range, looking southeast... A-18
Photo 32. Building 39, north wing (left) and garage portion (right), looking southeast ................. A-19
Photo 33. Building 39, southern portion of south wing, looking west .......................................... A-19
Photo 34. Building 39, interior, looking northwest ................................................................. A-20
Photo 35. Building 39, interior, looking south ................................................................. A-20
Photo 36. Building 39, interior, looking southeast ............................................................... A-21
Photo 37. Storage tank in mound (no building number), looking west ................................ A-22
Photo 38. Storage tank in mound (no building number), looking southwest ............... A-23
Photo 39. Storage tank in mound (no building number), looking northeast ................. A-23
Building 2 (Tower 2)

Photo 1. Building 2 (Tower 2), looking southwest
Photo 2. Building 2 (Tower 2), looking northwest

Photo 3. Building 2 (Tower 2), looking northwest
Photo 4. Building 2 (Tower 2), looking northeast

Photo 5. Building 2 (Tower 2), north wall of observation building
Photo 6. Building 2 (Tower 2), interior of observation building, looking east

Photo 7. Building 2 (Tower 2), interior of observation building, looking southeast
Building 5 (Tower D)

Photo 8. Building 5 (Tower D), looking northeast
Photo 9. Building 5 (Tower D), looking northwest

Photo 10. Building 5 (Tower D), looking southeast
Photo 11. Building 5 (Tower D), base detail, looking east

Photo 12. Building 5 (Tower D), looking up from southwest corner
Building 6 (Tower C)

Photo 13. Building 6 (Tower C), looking northwest
Photo 14. Building 6 (Tower C), looking northeast

Photo 15. Building 6 (Tower C), looking northeast
Photo 16. Building 6 (Tower C), detail, looking northeast

Photo 17. Building 6 (Tower C), detail of steelwork, looking up from base
Building 7 (Tower B)

Photo 18. Building 7 (Tower B), looking northwest
Photo 19. Building 7 (Tower B), looking northwest

Photo 20. Building 7 (Tower B), looking east
Photo 21. Building 7 (Tower B), observation building, looking northwest

Photo 22. Building 7 (Tower B), looking northeast
Building 8 (Tower A)

Photo 23. Building 8 (Tower A), looking southwest
Photo 24. Building 8 (Tower A), looking northeast

Photo 25. Building 8 (Tower A), looking northeast
Photo 26. Building 8 (Tower A), observation room, looking southeast

Photo 27. Building 8 (Tower A), interior of observation room, looking southeast
Facility 18 (Aircraft Bomb Target Range)

Photo 28. Facility 18 (Aircraft Bomb Target Range), looking south

Photo 29. Facility 18 (Aircraft Bomb Target Range), detail of laser target, looking east
Photo 30. Facility 18 (Aircraft Bomb Target Range), detail of tank and debris, looking southeast

Photo 31. Facility 18 (Aircraft Bomb Target Range), detail of tanks on range, looking northeast
Building 39

Photo 32. Building 39, north wing (left) and garage portion (right), looking southeast

Photo 33. Building 39, southern portion of south wing, looking west
Photo 34. Building 39, interior, looking northwest

Photo 35. Building 39, interior, looking south
Photo 36. Building 39, interior, looking southeast
Storage Tank (no building number)

Photo 37. Storage tank in mound (no building number), looking west
Photo 38. Storage tank in mound (no building number), looking southwest

Photo 39. Storage tank in mound (no building number), looking northeast
APPENDIX B. OREGON HISTORIC SITE
FORMS FOR NWSTF BOARDMAN
## LOCATION AND PROPERTY NAME

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Architecture / Property Description

(Building 2 (Figure 18) is a fairly typical range spotting tower, with a bolted steel superstructure that supports a small flat-roofed metal observation building. These towers are commonly found at most military air test ranges and were used to observe and record the accuracy of test and practice bombing exercises, especially in the days before modern satellite and laser scoring systems were developed. This tower has a steel superstructure supported on four concrete pads that form the structure's foundation. The four steel posts supporting the tower are reinforced by a series of horizontal steel beams and diagonal braces. At the top of the tower is a small steel observation platform with metal pipe railings. The observation house at the top of the tower has horizontal corrugated steel walls, a steel one-light door, fixed metal windows, and a flat metal roof. The interior still contains some 1990s-era range scoring equipment.)

History

(This tower is located north of the Aircraft Bombing Target Range (Facility 18), at the current operations and administrative area for NWSTF Boardman.)

Although the Navy real property data-base construction date for this tower is 1947, it appears that only some of the structural steel of the tower super-structure dates from that time. Around 1959–1963, the Navy installed a spotting tower with a more narrow superstructure at this site, as part of their effort to move the range's target array to the east half of the range lands (the west half of the range was to be deeded to the State of Oregon in 1963). This narrow tower was disassembled in 1967 and moved elsewhere on the range. The tower that is currently at this site used to sit to the east, and was originally known as Old Tower 5. This tower was disassembled and moved to this site by the Navy in 1967–1968. Comparing the current condition of the tower with a 1967 photograph of it indicates that the current superstructure has not changed, but the prefabricated metal building that sits atop the tower today is clearly a product of the last 30 years.

The tower presumably continued to be used for target spotting at the range until the range closed in 2000. The structure is no longer in active use as a range spotting tower, although it is located within the range's administrative area.

Range spotting towers of this type are a common property type and occur at most of the military air test and practice range facilities that were developed from World War II through the 1980s. These structures are commonly disassembled and moved to new locations as range configurations change, based on the changing military mission of the ranges. These buildings, if they remain in active use, are also frequently modified by adding a new observation house at the top of the tower.)

Research Information

(Check all of the basic sources consulted and cite specific important sources)

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Local Library: Oregon Trail Library District, Boardman

University Library: Naval Air Station Whidbey Island, WA

Historical Society:

Bibliography: GlobalSecurity.org


Naval Aviation News

U.S. Navy
Oregon Historic Site Form

Station Whidbey Island, Washington.
2008 Property record database for NWSTF Boardman
# Oregon Historic Site Form

**Tower D**

**NWSTF Boardman**

**Boardman, Morrow County**

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**Current/Other Names:** Building 5

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## GROUPINGS / ASSOCIATIONS

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**Building 5, looking northeast**
ARCHITECTURAL / PROPERTY DESCRIPTION
(Include expanded description of the building/property, setting, significant landscape features, outbuildings, and alterations)

Building 5 is a fairly typical 1940s-era range spotting tower. The structure consists of a fairly narrow steel superstructure and a small spotting house at the top. The superstructure is composed of four steel posts that are supported on concrete piling foundations and reinforced by steel beams and diagonal braces. A steel and wood staircase that runs up the tower’s center provides access to the spotting house through a trap door in the spotting house floor. The spotting house itself is a small gabled structure with metal walls. The windows of the spotting house have been boarded up, and the interior of the spotting house was not viewed; the HDC survey team judged the reliability of the timber treads of the tower staircase to be questionable.

The tower is situated in a remote corner of the range, southwest of the Aircraft Bombing Target Range (Facility 18) at NWSTF Boardman. The tower can be reached only by a small earth roadway that has suffered wind erosion.

HISTORY
(Chronological, descriptive history of the property from its construction through at least the historic period [preferably to the present])

This spotting tower was likely an early improvement to the Boardman range, built just as the range was transferred to Air Force control in 1947. It is not clear what the original location of this tower was on the Boardman Bombing Range. A 1967 map of the central target does not show a tower at this location, so the tower was clearly moved to this site sometime in the 1970s through the 1990s. The tower has been abandoned for a long time, so it may have gone out of active use as a spotting tower for the Boardman range many years ago.

As was mentioned with Building 2, spotting towers are a common property at air test and practice bombing ranges dating from World War II through the 1980s, and this tower is a fairly typical example.

RESEARCH INFORMATION
(Check all of the basic sources consulted and cite specific important sources)

- Title Records
- Sanborn Maps
- Obituaries
- City Directories
- Census Records
- Biographical Sources
- Newspapers
- Building Permits
- Property Tax Records
- SHPO Files
- State Archives
- State Library
- Local Histories
- Interviews
- Historic Photographs

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University Library: Naval Air Station Whidbey Island, WA
Historical Society: Other Repository: Naval Air Station Whidbey Island, WA

Bibliography: GlobalSecurity.org

Naval Aviation News

U.S. Navy
Oregon Historic Site Form

Station Whidbey Island, Washington.
2008 Property record database for NWSTF Boardman

Page 3 of 3
**LOCATION AND PROPERTY NAME**

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**SHPO INFO FOR THIS PROPERTY**

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<td>08-2242</td>
<td>11/18/2008</td>
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Building 6 is a fairly typical 1940s-era range spotting tower. The structure consists of a fairly narrow steel superstructure with a small spotting house at the top. Concrete foundations support the four steel posts that compose the superstructure of the tower; the posts are then reinforced by steel beams and diagonal braces. Running up the center of the tower is a steel and wood staircase that leads to a trap door in the spotting house floor, providing access to the spotting house.

The spotting house is a small gabled structure with metal walls. The windows of the spotting house are horizontal, and it appears that the glass and sashes have been broken out. The HDC survey team did not observe the interior of the spotting house, as the safety of the timber treads in the tower staircase was uncertain.

At NWSTF Boardman, the tower is located in a remote corner of the range, southwest of the Aircraft Bombing Target Range (Facility 18). A small earth roadway leads to the tower, but the road has been eroded by wind in some areas.

Like Building 5, this tower was probably one of the early improvements to the Boardman range built shortly after control of it was transferred to the Air Force in 1947. The original location of this tower on the Boardman Bombing Range is not clear. A 1967 map of the central target does not show a tower at this location, so it appears that the tower was moved to this site some-time from the 1970s through the 1990s. The tower has been abandoned for many years and likely went out of active use as a spotting tower for the Boardman range some time ago.

As was mentioned with the other towers, spotting towers are a common property at air test and practice bombing ranges dating from World War II through the 1980s. Building 6 is also a fairly typical example.
Oregon Historic Site Form

Station Whidbey Island, Washington.
2008 Property record database for NWSTF Boardman
## Oregon Historic Site Form

### LOCATION AND PROPERTY NAME

- **address:** NWSTF Boardman  
  - **block nbr:**  
  - **lot nbr:**  
  - **tax lot nbr:**  
  - **township:** 3N  
  - **range:** 25E  
  - **section:** 21  
  - **1/4:** NW  
- **historic name:** Tower B  
- **current/other names:** Building 7  

### Optional Information

- **assoc addresses:** Target and Range Area  
- **location descr:** (remote sites)

### PROPERTY CHARACTERISTICS

- **resource type:** Building  
  - **height (# stories):** 2  
- **elig. evaluation:** not eligible/ non-contributing  
- **primary constr date:** 1984  
- **total # eligible resources:** 0  
- **total # ineligible resources:** 1  
- **NR status:** (indiv listed only; see Grouping for hist dist)  
- **NR date listed:**  
- **prim style comments:**  
- **sec style comments:**  
- **siding comments:**  
- **architect:** U.S. Navy  
- **builder:** U.S. Navy

### GROUPINGS / ASSOCIATIONS

- **survey project name or other grouping name:** NWSTF Boardman 2008

### SHPO INFO FOR THIS PROPERTY

- **NR date listed:**  
- **ILS survey date:** 12/13/2008  
- **RLS survey date:**  
- **Gen File date:**  
- **SHPO Case # Date Agency Effect Eval:** 08-2242 11/18/2008

---

Building 7, looking northwest
ARCHITECTURAL / PROPERTY DESCRIPTION

(Building 7 is a short, squat, steel-frame spotting tower, the shortest of the spotting towers on NWSTF Boardman. The structure consists of a steel tower with four steel legs. The legs are supported on concrete piling foundations and reinforced by horizontal steel beams and diagonal braces that are fastened together with bolted connector plates. The tower supports a steel observation deck with steel pipe railings. An observation house also sits atop the tower and features horizontal corrugated steel walls and a steel shed roof. The observation house has a one-light steel door and metal fixed-light windows. A set of steel stairs running up the inside of the tower superstructure provides access to the observation deck and the observation house.

The tower is located west of the main target in a largely empty area that is littered in some places with bomb casings from past practice bombing activity at the range.)

HISTORY

(Little information was found on this tower. The tower’s Navy real estate database construction date is 1984, and the steel design of the tower framework does suggest that it was built later than Buildings 5 and 6 (Towers D and C), which date to the late 1940s.

The tower’s design is a shorter version of a design for the U.S. Department of Defense range spotting towers that appear at many military installations. HDC researchers found no evidence that the tower was moved from elsewhere.

Building 7 appears to have been part of an effort by the Navy to upgrade the Boardman range in the mid-1980s; the 1985 Laser Target located nearby is also likely part of this improvement campaign. Building 7 was most likely used for spotting activities from 1984, until the range ended active bombing practice operations in 2000.)

RESEARCH INFORMATION

(Check all of the basic sources consulted and cite specific important sources)

Title Records ☐ Census Records ☐ Property Tax Records ☐ Local Histories
Sanborn Maps ☐ Biographical Sources ☐ SHPO Files ☐ Interviews
Obituaries ☐ Newspapers ☐ State Archives ☐ Historic Photographs
City Directories ☐ Building Permits ☐ State Library
☐ Local Library: Oregon Trail Library District, Boardman, OR
☐ University Library: Naval Air Station Whidbey Island, WA
☐ Historical Society: 
☐ Other Repository: 

Bibliography: GlobalSecurity.org

Naval Aviation News

U.S. Navy
Oregon Historic Site Form

Station Whidbey Island, Washington.
2008 Property record database for NWSTF Boardman
**LOCATION AND PROPERTY NAME**

- **Historic Site:** Oregon Historic Site Form  
- **Address:** NWSTF Boardman
  - Boardman, Morrow County
  - Optional Information: Target and Range Area
  - Location: Morrow County
  - Block number:  
  - Lot number:  
  - Tax lot number:  
  - Township: 3N
  - Range: 35E
  - Section: 15
  - 1/4: SW
  - Current/other names: Building 8

**PROPERTY CHARACTERISTICS**

- **Resource Type:** Building
  - Height (# stories): 4
  - Eligibility Evaluation: not eligible/ non-contributing
  - Primary Construction Date: 1984
  - Secondary Construction Date: (c.)
  - Primary Orig. Use: DEFENSE: General
  - Secondary Orig. Use:  
  - Primary Style: Utilitarian
  - Secondary Style:  
  - Primary Siding: Steel
  - Secondary Siding:  
  - Plan Type: Other/Undefined
  - Total # Eligible Resources: 0
  - Total # Ineligible Resources: 1
  - NR Status: (indiv listed only; see Grouping for hist dist)
  - NR Date Listed:  
  - Orig. Use Comments:  
  - Prim Style Comments:  
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  - Siding Comments:  
  - Architect: U.S. Navy
  - Builder: U.S. Navy

**GROUPINGS / ASSOCIATIONS**

- Survey Project Name: NWSTF Boardman 2008
- Grouping Name: Survey & Inventory Project
- Farmstead/Cluster Name: Boardman Bombing Range
- External Site #: (ID# used in city/agency database)

**SHPO INFO FOR THIS PROPERTY**

- NR Date Listed:  
- ILS Survey Date: 11/13/2008
- RLS Survey Date:  
- Gen File Date:  

- SHPO Case #: 08-2242
- Date: 11/18/2008

- Building 8, looking northeast
Building 8 is a tall, narrow, steel-frame range spotting tower. The tower structure consists of four steel legs that are mounted on four concrete foundation pilings. The four legs are reinforced by a series of horizontal steel beams and diagonal braces that are bolted together with steel connector plates. At the top of the tower, the steel superstructure supports a steel observation platform that has steel pipe railings. The observation building at the top of the tower is a steel structure with steel outer cladding, a steel one-light door, and metal fixed-pane windows. The shed roof of the observation house is clad in metal.

This tower sits on the north side of the Aircraft Bombing Target Range (Facility 18) at NWSTF Boardman.

The official Navy real property database construction date for this tower is 1984. Maps and drawings support the idea that this tower has been at this location only since 1984. A tower does not appear at this location on range maps of NWSTF Boardman until 1990, and no tower appears on this site on the 1967 maps.

Bibliography:

Naval Aviation News

U.S. Navy

Printed on: 4/22/2009
Oregon Historic Site Form

Station Whidbey Island, Washington.
2008 Property record database for NWSTF Boardman
### LOCATION AND PROPERTY NAME

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- assoc addresses: Target and Range Area
- location descr: (remote sites)

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| total # eligible resources: 0 | total # ineligible resources: 1 |
| NR status: | NR date listed: (indiv listed only; see Grouping for hist dist) |
| orig use comments: | prim style comments: |
| sec style comments: | siding comments: |
| architect: U.S. Navy |
| builder: U.S. Navy |

### GROUPINGS / ASSOCIATIONS

| survey project name or other grouping name: NWSTF Boardman 2008 |
|-------------------------|---------------------|
| survey project name or other grouping name: Survey & Inventory Project |

farmstead/cluster name: Boardman Bombing Range

### SHPO INFO FOR THIS PROPERTY

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106 Project(s)

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<tr>
<td>08-2242</td>
<td>11/18/2008</td>
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This facility consists of a series of rings of plowed earth oriented around a center point. The overall diameter of the circular portion of the target is about one mile. The plowed rings have no vegetation, but the rest of the target area is populated with the same type of scrub brush found in the surrounding area.

Positioned at the center of the target is a pile of concrete, along with an obsolete tank. Several other defunct tanks are parked at various locations around the range, with some damaged, most likely from being used as aerial targets. Other targets include a defunct van with missiles placed in the rear of the vehicle; this target appears to have been used as an improvised rocket launcher target. The target area also includes a large tilted platform on a wood and steel structure; this item is a laser target built in 1985.

This area of the range appears to have been empty, undeveloped land during the Army (1943–1946) and Air Force (1947–1958) occupations of the Boardman Bombing Range. The 1952 range map for Boardman developed by the Air Force's Strategic Air Command shows no bombing target at this site. Instead, the Air Force maintained five target structures spread all over the range property, which during the 1950s was twice the size of the current range. Some of the old Air Force target locations are no longer within the Navy's NWSTF Boardman property but instead lie on land that belongs to the State of Oregon.

Map evidence indicates that the Navy began building a bombing target at the present site around 1961, in anticipation of deeding the western half of the range property to the state, a transfer that officially occurred in 1963. By 1962, the target shows up on Navy maps in its present location, with roughly the present configuration of a central target surrounded by concentric rings. Presumably the concentric rings, in their original form, were composed of cleared, plowed earth. A smaller offset target located to the southwest of the original target is shown on 1967 maps but is not easily visible today. The main bombing target has roughly the same configuration as what is visible on 1967 maps. The current arrangement of five spotting towers around the target dates mainly from the 1980s or 1990s, as only one spotting tower, Building 2, is in its current position on 1967 maps.

Maps from the late 1960s and recent aerial photographs also show a large, long, airstrip-like area of cleared land at the north end of the target range, well south of Building 2 (Tower 2). This area of cleared land likely dates from the Vietnam War era, as it does not show up on 1962 range maps. On 1967 maps, this structure is labeled “Q.M. Target,” and it appears to have originally held some type of moving target track or another specialized type of target. However, this target structure has been removed and only a strip of cleared land remains. HDC was not able to determine the meaning of “Q.M. Target.”

A number of objects and structures are strewn about the circular target array. Some of the items are well-documented in Navy construction drawing records and news accounts, but others are difficult to date. For example, a large tilted platform structure on the west side of the target array is a structure built by the NASWI Seabees in 1985, to facilitate calibration and testing of laser bomb guidance equipment on the EA-6B aircraft. Other objects, such as the many rusted and derelict tanks and motor vehicles on the range, are more difficult to date, although most seem to have been placed there in the 1970s and 1980s.
Oregon Historic Site Form

Target
NWSTF Boardman
Boardman, Morrow County

Bibliography: GlobalSecurity.org

Naval Aviation News

U.S. Navy
2008 Property record database for NWSTF Boardman
**Location and Property Name**

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**Historic Name:** Range Operations Building  
**Current/Other Names:** Building 39

**Property Description:**
- **Block Nbr:** __________  
- **Lot Nbr:** __________  
- **Tax Lot Nbr:** __________  
- **Township:** 3N  
- **Range:** 25E  
- **Section:** 4  
- **1/4:** NE  
- **Zip:** 97818

**Location Description:** New Administration Area  
**Address:** NWSTF Boardman

**Property Characteristics:**
- **Resource Type:** Building  
- **Height (# Stories):** 1  
- **Total # Eligible Resources:** 0  
- **Total # Ineligible Resources:** 1

**Primary Origin Use:** Military Facility
- **Primary Style:** Utilitarian
- **Secondary Style:** Utilitarian
- **Primary Siding:** Wood: Other/Undefined
- **Secondary Siding:** Metal: Other/Undefined
- **Plan Type:** Rectangular Block

**Property Comments/Notes:**

**Groupings / Associations:**
- **Survey Project Name or Other Grouping Name:** NWSTF Boardman 2008  
- **Survey & Inventory Project:**  

**SHPO Info for This Property:**
- **NR Date Listed:** __________  
- **ILS Survey Date:** 11/13/2008
- **RLS Survey Date:** __________  
- **Gen File Date:** __________  

106 Project(s)

**SHPO Case #**  
**Date**  
**Agency Effect Eval**
- **08-2242**  
  11/13/2008

**Building 39, looking west**

---

Printed on: 4/22/2009  
Page 1 of 3
**ARCHITECTURAL / PROPERTY DESCRIPTION**  
(Include expanded description of the building/property, setting, significant landscape features, outbuildings, and alterations)

<table>
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<th>Building 39 consists of two buildings (referred to here as the south wing and the north wing) that have been connected to form a single structure.</th>
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<td>South wing: The southern portion of this wing is a small prefabricated metal building with walls and a gabled roof, all made of vertical metal. The northern portion of the south wing is a wood-frame garage with wood platform frame walls clad in wood siding.</td>
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<tr>
<td>North wing: This wing is a metal prefabricated building with vertical metal walls, a gabled metal roof, and metal windows.</td>
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The building sits to the north of the Aircraft Bomb Target Range (Facility 18), in a small cluster of buildings and temporary trailers that now holds the operations center for the range. This operations center is arranged around Building 2 (Tower 2), a steel observation tower.

---

**HISTORY**  
(Chronological, descriptive history of the property from its construction through at least the historic period [preferably to the present])

The building’s official Navy real estate database construction date is 1962, but the building does not show up at this site on Navy maps from 1962 or 1967. The building does show up on this site on a 1990 map of the Building 2 (Tower 2) area. On this 1990 map, the south half of the south wing is identified as the existing main building, and the north half of the south wing is identified as an existing garage. What is now the building’s north wing is identified on the 1990 map as an existing recreation building. The wood-frame garage portion of the south part of the building appears to be the oldest part of the structure, and may have been built around 1964 at another location on the range and moved to the current site in the 1970s or 1980s. The other two parts of the building appear to be prefabricated metal buildings of the 1970s–1980s era.

As part of the 1993–1994 relocation of the range operations headquarters to this site, the recreation building and garage were joined by a connector and converted to the range's operations building. The facility still serves as an operations building today. The northern portion of the building now contains radio equipment, a break room, and restroom facilities for the range, while the south portion of the building holds a small repair shop and storage space. The facilities in this building are augmented by a temporary mobile trailer that sits to the east of Building 2 (Tower 2). This trailer was brought to the site sometime after the ca. 1993–1994 relocation of range operations facilities to the Building 2 (Tower 2) site.

---

**RESEARCH INFORMATION**  
(Check all of the basic sources consulted and cite specific important sources)

- Title Records
- Sanborn Maps
- Obituaries
- City Directories
- Census Records
- Biographical Sources
- Newspapers
- Building Permits
- Property Tax Records
- SHPO Files
- State Archives
- State Library
- Local Histories
- Interviews
- Historic Photographs

Local Library: Oregon Trail Library District, Boardman  
Historical Society:  
University Library:  
Other Repository: Naval Air Station Whidbey Island, WA

Bibliography:  
GlobalSecurity.org  

Naval Aviation News  

U.S. Navy  
Station Whidbey Island, Washington.
2008 Property record database for NWSTF Boardman
**LOCATION AND PROPERTY NAME**

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**SHPO INFO FOR THIS PROPERTY**

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<td>11/13/2008</td>
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ARCHITECTURAL / PROPERTY DESCRIPTION

This structure is a large metal storage tank that is partially buried in an earth hill. The tank is cylindrical and appears to be composed of steel. Measuring about 6 feet tall and approximately 10 feet long, the tank is located in the operations area that centers on Building 2 (Tower 2), southwest of that tower.

HISTORY

The tank does not appear on maps of the range dating to the 1960s, and does not appear on the 1990 and 1993 maps of the operations area. It may be an old fuel or water storage tank that was located on another portion of the range and moved to this site by the Navy in the 1970s or 1980s or later. The tank is a fairly typical cylindrical liquid storage tank.

RESEARCH INFORMATION

Local Library: Oregon Trail Library District- Boardman
University Library: Naval Air Station Whidbey Island, WA

Bibliography:
GlobalSecurity.org

Naval Aviation News

U.S. Navy
Oregon Historic Site Form

Station Whidbey Island, Washington.
2008 Property record database for NWSTF Boardman
APPENDIX C. CORRESPONDENCE WITH THE OREGON SHPO
Dr. Stephen P. Poyser  
Planner, Review and Compliance 
State Historic Preservation Office 
725 Summer St. NE, Suite C 
Salem, OR 97301-1266 

Dear Dr. Poyser:

We recently demolished seven structures at Naval Weapons Training Facility (NWSTF) Boardman and unintentionally did this without proper coordination and concurrence from your office. The buildings were housing illegal activities and collapsing, and we believe our only reasonable course of action was demolition. We believed that Buildings 30 through 35 and 37 were not considered eligible for listing on the National Register of Historic Places based on early findings from the Inventory and Evaluation 2009 performed by Hardlines Design Company (HDC). In November 2008, anticipating this result from the HDC study, we issued a Categorical Exclusion for the demolition. We awarded a contract to demolish the structures in March 2009 and demolished the buildings in May 2009. Prior to demolition, HDC’s Inventory and Evaluation was completed and supported the decision.

A records search and compilation of historic photographs will be conducted and made available to the public for education of historic events at the Naval Air Station Whidbey Island Command Display. Copies of these records and photos will be made available for more local presentation in the State of Oregon and we seek your advice on the best location to display the history of NWSTF Boardman.

We request that you accept this apology and look forward to future discussions with your staff.

Sincerely,

[Signature] 
O. L. DAVID 
Captain, U.S. Navy 
Commanding Officer
May 04, 2010

Ms. Jackie Queen  
NASWI Environmental Affairs  
1115 W Lexington St.  
Oak Harbor, WA 98278

RE: SHPO Case No. 09-2030  
Naval Weapons Systems Training Facility in Boardman Proj  
3N 25E 4, Boardman, Morrow County

Dear Ms. Queen:

We have reviewed the materials submitted on the project referenced above, and we concur with the determination that the property is not eligible for the National Register of Historic Places in accordance with 36 CFR Part 60.4. Due to the lack of integrity of the structures and the site as a whole, and based on the analysis provided by Hardlines Design Company, we agree that this facility could not be listed.

Additionally, we accept the apology for the unintentional demolition of seven structures at the Naval Weapons Training Facility (NWSTF) Boardman prior to proper coordination and concurrence from our office. We also accept your offer to make available to the public for education the historic research done to date, along with a compilation of historic photographs and any additional drawings and maps that would further describe the story of the site over its 50+ years of use. We recommend the Oregon Historical Society and the Allied Arts and Architecture Library at the University of Oregon as the best repositories for this important information.

Our response here is to assist you with your responsibilities under Section 106 of the National Historic Preservation Act (per 36 CFR Part 800). Please feel free to contact me if you have further questions, comments or need additional assistance.

Sincerely,

Julie Osborne  
Historic Preservation Specialist  
(503) 986-0661 or Julie.Osborne@state.or.us