

OGDEN ARSENAL, LOCOMOTIVE REPAIR SHOP
(OGDEN ARSENAL, BUILDING 1701)
(OGDEN ARSENAL, BUILDING 701)
6233 Aspen Avenue
Layton Vicinity
Davis County
Utah

HAER No. UT-84-A0

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UTAH
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

REDUCED COPIES OF MEASURED DRAWINGS

HISTORIC AMERICAN ENGINEERING RECORD
Rocky Mountain System Support Office
National Park Service
P.O. Box 25287
Denver, Colorado 80225-0287

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HAER No. UT-84-AO

Location: 6233 Aspen Avenue, Hill Air Force Base, Layton Vicinity, Davis County, Utah

UTM: 12-414200-4554780

Date of Construction: 1942

Architect: Unknown

Builder: Unknown

Present Owner: Hill Air Force Base

Present Use: Locomotive Shop and Shelter

Significance: Rail transportation was a critical element of early regional military activity. This building provides particularly vivid images of the processes involved in the maintenance, repair, modification, and mobilization of locomotives at Ogden Arsenal. Building 1701 was one of only two such facilities organized by the Army in the 1940s. Additionally, this building provides insight into the use of locomotives by the U.S. military during the Cold War.

History: When Ogden Arsenal was first built in the 1920s, Union Pacific tracks already graced the site. Additional spurs were linked to existing lines and a self-sufficient railroad depot was built to service the Arsenal during the years immediately preceding World War II. Ogden Arsenal expanded, however, additional facilities were needed. The 1942 Locomotive Repair Shop was used to repair and maintain engines and cars for the Arsenal during its extremely active years following the attack on Pearl Harbor. During World War II, the depot ran trains for immense delivery and shipping purposes. Extensive railroad tracks ran throughout the arsenal, and trains made deliveries and pick-ups at key buildings. When the war ended and the manufacture of bombs locally ceased, the depot was no longer needed for exporting munitions. The depot became exclusively a repair station, with operations focussed in Building 1701. With the closing of the railroad repair facility at Camp Holabird, the Ogden depot became the nation's only Army-controlled rail repair facility, a distinction it still enjoys.

The original building contained 12 bays that were lighted by clerestory windows in a butterfly roof. The eastern four bays contained a large shop and a two-story administration area at the northeast corner. This corner housed bathrooms and storage areas on the first floor and offices on the second. The remainder of the structure contained the engine room with eight separate locomotive repair bays with individual tracks. This room contains two levels, with a catwalk mezzanine around the perimeter of the room. It was accessible on the north side of the building through large steel rolling type doors over each track. Two of the eight bays were originally equipped with pits and overhead cranes. The pits provided accessibility to equipment on the underside of locomotives, while the overhead cranes could be used to hoist out heavy or awkward parts. Parts were removed from the locomotive and then carried into the adjacent machine shop workroom for repair. During World War II, the depot repaired eight to twelve locomotive engines each year.

In the immediate post-war years, the depot continued to expand as it took on new responsibilities for both the Army and the Air Force. In 1945, a \$25,235.00 construction project added a 4200 sq. foot room south of the shop area. This room allowed a longer piece of track to be laid from the engine room, and provided work area for the new track. A later addition to the south provided an additional two-story office area and staircase that led to the upper mezzanine level in the engine room.

In the late 1950s, the depot converted old Army hospital cars into radar bomb scoring (RBS) trains. These trains were equipped with radar jamming devices that were intended to challenge the radar skills of B-52 and B-3 pilots, who used the altered trains as practice targets. Another of the depot's Cold War programs included the installation of flight simulator equipment in old Pullman cars. Since these cars were easily transported all around the country on existing tracks, flight crews at various locations were able to train on them. The depot also built heavily armored cars for the Atomic Energy Commission. Since these cars were designed to haul nuclear waste, heavy armor was necessary to protect the cars from random gunshots by people who did not know what the train was carrying.

These tasks required various modifications and additions to the building over the years. Interior renovations for office layout and stair placement occurred in the 1950s, when most of the original machinery was replaced with modern equipment. This machinery was upgraded again in the 1980s. A two-story metal addition to the north now contains a painting room. Storage additions have been made on both the north and south facades. Although the building has been significantly modified, its overall integrity has

not been compromised, since the changes to the building are just as important to the original structure, as we strive to understand the processes that occurred inside, and its role at Ogden Arsenal and later Hill Air Force Base. Although only three engine repair bays are currently in use, the building has continued to function in its original role for over fifty years.

General

Description: Building 1701 is a massive two-story brick industrial structure with a three-gable butterfly roof. It is a rectangular building with projecting bays on the north and south facades. The original portion of the building (100' x 242) contains eight engine repair stalls in one large room, a machine shop, and a two-story administration area in the northeast corner. The engine room contains two levels, with a catwalk mezzanine around the perimeter of the room. Two of the eight bays are equipped with pits and overhead cranes. The north side of the building is accessible to locomotives through large steel rolling type doors over each track. Many of the clerestory window lights over the original portion of the building contain translucent panes.

A large room (62' x 67') was added south of the shop area in 1945. A later, two-story addition to the south contains offices. Other alterations include: the replacement of the original machinery in the 1950s (and again in the 1980s) and interior renovations for office layout and stair placement. Storage additions have been made on both the north and south facades. A two-story metal addition to the north contains a painting room.