

MARYLAND HISTORICAL TRUST
DETERMINATION OF ELIGIBILITY FORM

NR Eligible: yes no

Property Name: Building E3300 Inventory Number: HA-2091
Address: Edgewood Area Historic district: yes no
City: Aberdeen Proving Ground Zip Code: 21010 County: Harford
USGS Quadrangle(s): Harford Edgewood
Property Owner: U. S. Army Garrison, APG Tax Account ID Number: N/A
Tax Map Parcel Number(s): N/A Tax Map Number: N/A
Project: Demo Agency: U.S. Army Garrison, APG
Agency Prepared By: R. Christopher Goodwin & Associates, Inc
Preparer's Name: Dean Doerrfeld Date Prepared: 12/18/2009

Documentation is presented in: _____

Preparer's Eligibility Recommendation: Eligibility recommended Eligibility not recommended

Criteria: A B C D Considerations: A B C D E F G

Complete if the property is a contributing or non-contributing resource to a NR district/property:

Name of the District/Property: _____

Inventory Number: _____ Eligible: yes no Listed: yes no

Site visit by MHT Staff yes no Name: _____ Date: _____

Description of Property and Justification: *(Please attach map and photo)*

DISTRIBUTION RESTRICTION STATEMENT APPROVED FOR PUBLIC RELEASE DISTRIBUTION UNLIMITED 9964-A-1

General Description

Building E3300 is known as the Amos A. Fries Research Laboratory (EAI Corporation 1991:E3300). This 44,500 square-foot building was constructed between 1963 and 1966. Oriented to face west, the building is roughly L-shaped and two stories in height. The overall dimensions are approximately 182' x 61' with an offset of 62' x 60'. A structural steel and reinforced cast concrete super structure supports the building with concrete masonry units filling the areas between the vertical elements. The principal entrance lies in the southwest corner of the building and is a double-leaf, metal-framed doorway with glazed sidelights. Other fenestration is minimal with fixed sash windows and metal doors opening onto metal walkways that encircle the building. An extensive ventilation system provided inlet air to all laboratory spaces with appropriate air systems located on the roof. A mechanical penthouse lies near the center of the flat roof.

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MHT Comments:

[Signature]
Reviewer, Office of Preservation Services

2/16/2010
Date

[Signature]
Reviewer, National Register Program

2/16/10
Date

201000309

Building E3300 was dedicated in 1967. The architectural and engineering design firm was Howell Lewis Shay and Associates of Philadelphia, Pennsylvania. The Piracci Construction, Co., Inc. of Baltimore, Maryland, under the U.S. Army Corps of Engineers, served as the construction contractors. Costing \$3 million when completed, the building was designed to house laboratories and offices. Special safety features were incorporated into the building design. The building served as the primary chemical surety laboratory for the Chemical – Biological – Radiological Agency (CBR Agency). As described in the dedication, the building contained work areas for 140 scientists and technicians in 53 individual laboratories "specifically designed for advanced studies of chemical compounds and materials" (RDECOM vertical files). It was centrally located in the complex of chemical laboratories along Ricketts Point Road.

The building is named for General Amos A. Fries (1873-1963) who served as Chief of the Gas Service, American Expeditionary Forces, from 1917-1920 and as Commanding Officer of Edgewood Arsenal and Director of the Chemical Warfare Service between 1921 and 1929 (Smart 1994:12, 21). General Fries emerged as a strong advocate for a permanent chemical warfare organization within the U.S. Army, an effort that saw the Chemical Warfare Service become a permanent part of the Regular Army on 1 July 1920.

Historic Context

Building E3300 was constructed between 1963 and 1966 and dedicated in 1967 to support the main chemical research programs during the Cold War at Edgewood Arsenal. The new laboratories contained in the building continued and expanded the work of the Technical Division, CBR, conducted in nearby Buildings E3330-E3331 complex constructed during World War II.

Cold War (1946-1989)

The Cold War era generally is defined as the period beginning in 1946 following Soviet activities to retain territory liberated from Nazi Germany during World War II and extending to the fall of the Berlin wall in 1989. This period was marked by a tense, hostile relationship between the Warsaw Pact countries led by the U.S.S.R. and the North Atlantic Treaty Organization (NATO) Allies led by the U.S.A. The primary role of the U.S. Army during this time was to support U.S. policies of peace through strength by maintaining ground force readiness as an alternative to strategic nuclear weapons to deter communist expansion (U.S. Army Environmental Center (USAEC) 1997).

The Cold War era was marked by major organizational changes in the armed forces and accompanied by competition for limited military appropriations among the services. Under the 1947 National Security Act, the Department of Defense was created, and the Army assumed responsibility for conducting land warfare, providing troops for occupation duty in Central Europe, and providing air defense units within the continental U.S.

The Cold War era also was marked by significant changes in U.S. Army operations. Instead of relying on a small standing army and mobilizing troops as needed, Army personnel were now ready to enter combat on short notice. This meant that a large, trained standing army was maintained in constant readiness. Troops were stationed for the first time in friendly foreign nations, under an allied command structure. Within the U.S., the Army maintained an active force prepared to deploy quickly into combat zones. During the Cold War, Army personnel were involved in conflicts in Korea and Vietnam, as well as in smaller actions, such as in the Caribbean (USAEC 1997).

During the Cold War era, Edgewood Arsenal functioned primarily as a center for chemical warfare research. In 1951, Edgewood Arsenal (Army Chemical Center) became the Research & Engineering Center for the Chemical Corps. In 1962, the Army's technical services were disbanded, and the Army Materiel Command (AMC) was established. This new command consolidated

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logistical functions to ensure integrated materiel management, including new product development, management of materiel stockpiles, testing, and technical and maintenance support (USAEC 1997). The Chemical Corps activities at the former Edgewood Arsenal were transferred to AMC. The laboratories and production facilities at Edgewood Arsenal were placed under the Chemical – Biological – Radiological Agency (CBR Agency). In 1983, the name changed to Chemical, Research and Development Center (CRDC), and, in 1986, the name was changed once again to the Chemical Research, Development and Engineering Center (CRDEC). 1992 brought about another change as the Edgewood Research, Development and Engineering Center was placed under the U.S. Army Chemical and Biological Defense Command (CBDCOM). In 1998, CBDCOM became absorbed by the Soldier and Biological Chemical Command (SBCCOM) (Smart 1997). The most recent reorganization and name change took place in 2002, when the U.S. Army Research, Development and Engineering Command (RDECOM) was created.

During the Cold War era, Edgewood Arsenal served as the national center for materiel development and testing and medical activities related to chemical warfare. Minor missions included wholesale logistical operations and activities undertaken by other departments and non-Army agencies that were located on the property. In 1971, Aberdeen Proving Ground and Edgewood Arsenal were joined administratively.

The chemical laboratories located at Edgewood conducted both basic research and materiel development for chemical warfare agents and materiel. The laboratories focused on the development of chemicals as tactical weapons and on defensive measures to counter chemical weapons attack. Basic research included the discovery and development of new chemical agents, incendiaries, and screening and signaling smokes. Materiel development focused on improved weapons delivery and dispersal systems, including flame throwers, chemical mortars, and smoke generators. In addition, the laboratories conducted research into the development of insecticides, rodenticides, and fungicides, as well as tear gas, non-lethal riot control agents, nerve agents, and defoliants (Brophy and Ross 1953; Smart 1994).

Throughout the early decades of the Cold War, chemical warfare was a hotly debated topic. However, the discovery of chemical warfare stockpiles in the Soviet Union and Iran/Iraq during the 1980s led the Army to reexamine its chemical warfare policies, including defensive measures and retaliatory capabilities. Research efforts were directed to develop new protective gear, such as masks and full body protection and to develop and produce new binary chemical weapons. The Army's proactive program contributed to negotiations of a bilateral chemical weapons destruction agreement with the Soviet Union in 1990 (Smart 1994).

The laboratories constructed during World War II, such as Building E3330, were outdated by the 1960s. The need for more laboratory space coupled with the need to meet increasing safety standards required the construction of new laboratories. Building E3300 was one of the new laboratories designed to accommodate advanced studies of chemical compounds, radioactive materials, and toxins. Constructed with an innovative design to accommodate 53 laboratories, the building received scientists and technicians formerly working in Buildings E3330 and E3331. Other laboratories constructed during the 1960s included Building E3100, completed in 1967 for the Medical Laboratories; and, Building E5100, constructed in 1969 as a quality assurance chemical testing laboratory.

Building E3300 continued to function as the primary surety chemical laboratory throughout the Cold War era and into the 1990s. Since 2000, the functions in the building have generally declined as activities were moved into more modern facilities.

Evaluation

Building E3300 was evaluated for the qualities of significance and integrity for listing in the National Register of Historic Places applying the Criteria for Evaluation (36 CFR 60.4(a-d)) and Criteria Consideration G, since the building, completed in 1966, is less than 50 years of age. In 1997, the U.S. Army Environmental Center issued Thematic Study and Guidelines: Identification and

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Evaluation of U.S. Army Cold War Era Military-Industrial Historic Properties (USAEC 1997) that identified the following significant themes for Army military-industrial history during the Cold War: basic research (laboratories); materiel development and testing (research, development, engineering centers and proving grounds); wholesale logistical operations; air defense, ballistic missile defense and army missiles; command and control, communications, computers, and intelligence; Army school system; operational forces; Army medical activities; and, miscellaneous themes including nuclear power, Army aviation, and activities associated with other services or Department of Defense agencies.

Building E3300 is associated with the Chemical-Biological-Radiological Agency and its successor agencies during the Cold War Era as the principal facility for advanced studies in chemical research at Edgewood Arsenal under the themes of basic research and materiel development and testing (USAEC 1997). Under these themes, Building E3300 appears to meet (Criterion A) for its association with events that have made a significant contribution to the broad patterns of our history during the Cold War. The building served as the principal research facility for the successful completion of research and development of advanced chemical compounds and agents. It continued in use for the same purpose throughout the Cold War although some equipment was modernized and upgraded. Testing completed in Building E3300 was critical to the research and testing missions of Edgewood Arsenal during the Cold War. Therefore, the building appears to possess significance applying Criteria Consideration G for exceptional significance.

No documentation to date associates significant persons to the activities in Building E3300 under Criterion B. Although the building is named for General Fries, it is commemorative in nature and does not illustrate the contributions he made during his career.

Applying National Register Criterion C, Building E3300 illustrates a distinctive architectural form in its design and method of construction. Concrete, steel, concrete block and minimal ornamentation are common themes at Edgewood Arsenal; however, the characteristics of this building clearly illustrate its purpose, differentiating it from the majority of the buildings at Edgewood Arsenal. The building's design reflects the type of research that occurred inside it. The building retains integrity of materials, design, location, setting, association, feeling, and workmanship. Upgrades of electronic and computer equipment do not diminish integrity significantly (Advisory Council on Historic Preservation 1991:33). Thus, Building E3300 appears to possess the qualities of significance for its physical design and construction to qualify for listing in the National Register of Historic Places under Criterion C and Criteria Consideration G.

Bibliography

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EAI Corporation

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Smart, Jeffrey K.

1994 U.S. Army Chemical and Biological Defense Command: Historical Highlights. U.S. Army Chemical and Biological Defense Command, Aberdeen Proving Ground, Maryland.

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Prepared by: Dean A. Doerrfeld, R.C. Goodwin & Associates, Inc.

Date Prepared: December 2006, revised 2009

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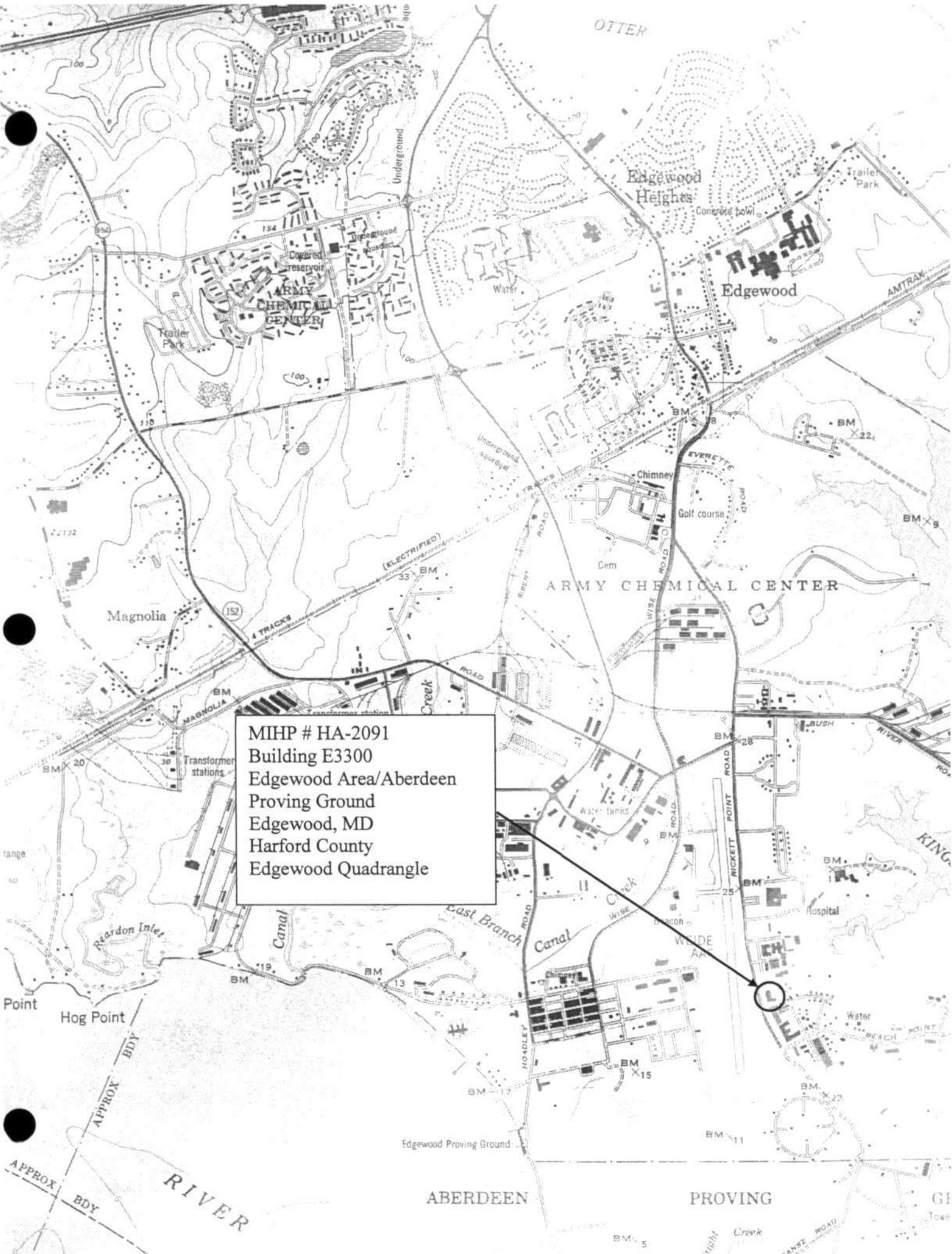
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Building E3300
Edgewood Area/Aberdeen
Proving Ground
Edgewood, MD
Harford County
Edgewood Quadrangle





MHP #HA-2091

Building E330V

Hartford Co., MD

May '05

Looking East

#1 of 1

R.L. Goodwin & Assoc.