

# The Dahlgren Railroad Heritage Trail

In 1941, the US government acquired property from King George County landowners, by decree of condemnation, for the purpose of constructing a Dahlgren Branch railroad connecting the Dahlgren Naval base with the existing Fredericksburg rail line at Cool Springs in Stafford, VA. Construction began in early 1941 and by 1942 the Dahlgren Branch rail line was being used to ship munitions and war materials to the Navy Base at Dahlgren, VA. The Dahlgren Branch line operated until 1957, during which time it was also used as a passenger line.

After 1957 the rail line sat idle until 1963 when it was declared surplus. In 1965 the US Government offered the Dahlgren Branch for sale by auction, and the line was acquired by the Richmond, Fredericksburg, & Potomac Railroad (RF&P). In 1990 the RF&P removed most of the rails from an unused King George County segment of the Dahlgren Branch. CSX Transportation then acquired the Dahlgren Branch line in 1992, and a year later offered the abandoned portion of the King George County segment of the Dahlgren Branch for sale. It is this section of the Dahlgren Branch rail line that is tagged to become the Dahlgren Railroad Heritage Trail (DRHT).

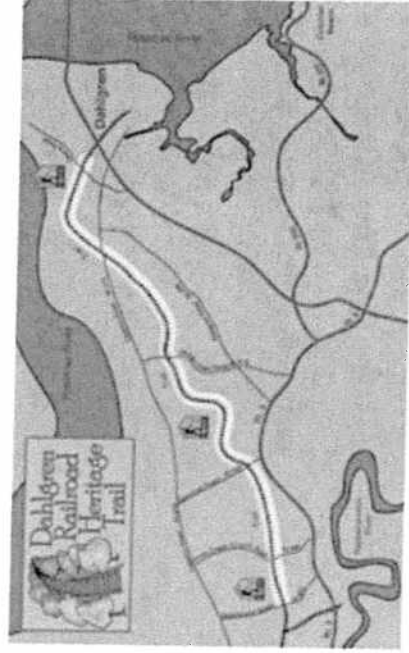
In late 1995, King George resident Joe Williams began negotiations with CSX Transportation for the purchase of the abandoned rail line. In October 1997, once Williams had a contract on the property, Jo Turek, then County Director of Parks & Recreation, wrote a letter to the King George Board of Supervisors (BoS) advising them that Williams was willing to make the railroad property available to the county and that federal grant money may be a viable means of obtaining the trail for recreational purposes. The BoS declined to support the proposal. In December 1997 Williams completed his acquisition of the railroad property.

In the years after the purchase, as Williams continued to promote the property as a county-owned or sponsored trail, State support for the creation of a King George rail trail grew – the Dahlgren Trail was listed in the 2001 updated Virginia Outdoors plan. Williams pursued a variety of options for turning the abandoned rail line into a community trail, but met with no success due in large part to a lack of support from the County BoS.

In January 2002, following a request from the Virginia Department of Conservation & Recreation (DCR), Delegate Albert Pollard submitted House Bill 1339, which would authorize DCR to accept the rail bed as a gift from the Conservation Fund which had funds to purchase the railway property. The property was to “be developed as a rails-to-trails project” and “would be managed by the Department of Conservation and Recreation.” The bill passed the House unanimously and DCR announced plans to integrate the rail trail into the Caledon Natural Area. Due to unexpected controversy, Pollard held a town hall meeting in the County to hear and respond to concerns being voiced by the trail’s neighbors. Although HB 1339 was revised, taking into consideration those citizen concerns, the Senate referred the bill back to Committee, where it died.

In early 2006 Williams and David Brickley, former director of the Virginia Department of Conservation and Recreation and a former Delegate of the Virginia, announced that Brickley had acquired the rights to establish a private recreational trail on the property as an intermediate step toward a state-supported rail trail. In June, Brickley appeared before the Board of Supervisors to explain plans for the project. Since May 2006, the Friends of the Dahlgren Railroad Heritage Trail, has worked to develop the trail. Currently the Dahlgren Railroad Heritage Trail is a private permit-only recreational trail, and users must have a valid trail permit.

# Friends of the Dahlgren Railroad Heritage Trail

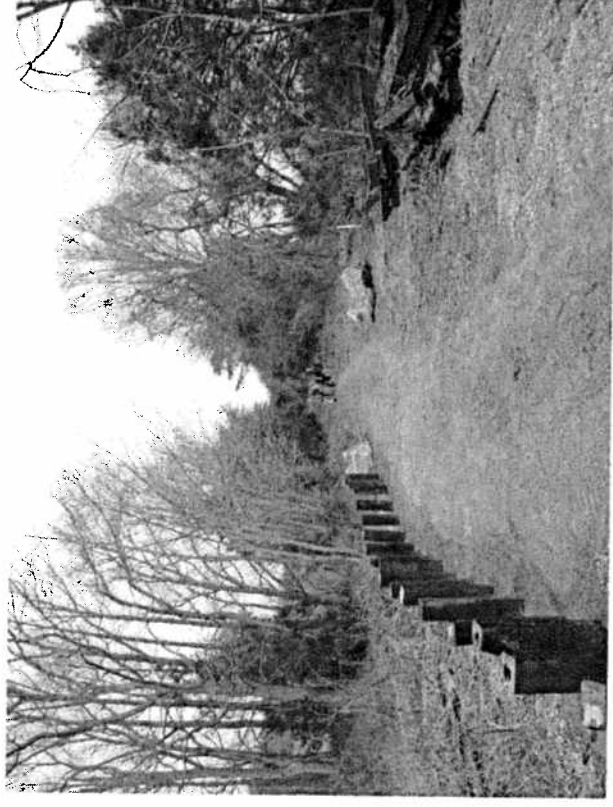


Creation of the Dahlgren Railroad Heritage Trail as a public-access Rails-to-Trails project is the dream of two men - Joe Williams, who purchased the property in 1997 with the aim to have it preserved as a rail trail, and David Brickley, a retired director of the Virginia Department of Recreation and Conservation who has acquired rights to create a trail on the property and is leading the logistics of the DRHT rail trail project.

The Friends of the Dahlgren Railroad Heritage Trail (DRHT) is an organization of trail supporters who want to see the DRHT protected for future generations. This volunteer group of citizens is working toward the completion of the proposed DRHT rail trail, first as a private-use (permit required) trail and then as a public-access rail trail. They are active in planning, design, construction and maintenance of the rail trail, membership and fundraising activities and in publicly promoting and supporting the rail trail.

The intention of Friends is to provide the residents of King George county and surrounding communities with a recreational trail for non-motorized activities such as cycling, hiking, running, and skiing, while at the same time promoting and preserving the natural and historic aspects of the rail trail. The rail trail will also serve to connect neighborhoods and provide an alternative to using roadways.

The Friends work to ensure that all trail-related questions, concerns and other issues are addressed through education and by working with the local residents, county government and other interested parties. Through perseverance, patience, and hard-work, the Friends aim to convince the residents and officials of King George county to support the protection of this land as a rail trail.



The trailhead was created in fall 2006.

## Lamb's Creek Episcopal Church

Built in 1769-1770, Lamb's Creek Church stands as an excellent example of the hip-roofed rectilinear type colonial church – an architectural form favored in the second half of the eighteenth century. The chaste structure is regarded as one of the most refined examples of colonial architecture in Virginia and illustrates the keen sense of proportion acquired by colonial builders. This refinement is especially evident in the beautifully designed and executed brick doorways with their simple pilasters and pediments.

Lamb's Creek is believed to have been designed by the colonial architect John Ariss. Ariss is known to have designed Payne's Church, Truro Parish, (now destroyed), which was very similar in design to Lamb's Creek Church. After the Disestablishment, the parish dwindled and the church was abandoned until about 1825 when the parish was reorganized and the church was restored to use. Most of the interior and furnishings were destroyed when the building was used as a stable by Federal Troops during the War Between the States. The church was repaired after the war, used for a short while and then abandoned by the Episcopalians once again. During this period it was used by the Baptists. Byrd Thornton Turner, rector of the parish, was instrumental in repairing and restoring the building to use in 1908. Although the church remained active under the leadership of Dr. George McLaren Brydon, the church has been inactive since Dr. Brydon's departure in 1914. At the present time only one service a year is held in the church.

# Marmion

Marmion was built about 1700 by Colonel William Fitzhugh. According to family tradition, it was built for his son, John Fitzhugh. Although the architect is unknown, Colonel Fitzhugh brought from England skilled craftsmen for the construction of the house, and Marmion is today the only remaining original one of four homes which the elder Fitzhugh built for his sons.

Certainly the asymmetrical plan and window arrangement shows that the building has grown through several stages. Portions of the south chimney could date from the late-seventeenth century, but the use of three-course American bond on the north chimney would seem to indicate that enlargement at that end of the house occurred after 1790. The early-eighteenth century appearance of the remaining paneling in the first floor rooms points to that time as the major building period of Marmion. The early-eighteenth century date is enhanced by the brickwork of the outbuildings, especially with the English bond, T-shaped chimney on the kitchen outbuilding.

The house, which is still preserved in its primary state, is distinguished for its exceptionally fine paneling in all the lower rooms. The southeast room once held the finest woodwork in the house, woodwork which was added to and changed in the late eighteenth century, culminating in probably the most elaborate paneled and painted room in Virginia if not in America. This famous woodwork is now displayed in the American Wing of the Metropolitan Museum of Art in New York City. In addition to the main house, other original structures still remaining are the old kitchen, dairy, smokehouse, and schoolhouse. The large garden is also an original feature of the estate, and is outstanding for its ancient pecan trees.

After the death of John Fitzhugh, Marmion descended to Philip Fitzhugh who sold it in 1797 to the nephew of General George Washington. Major George Washington Lewis, the son of Colonel Fielding and Betty Washington Lewis, of Kenmore in Fredericksburg. Until the mid-twentieth century, Marmion was in possession of direct descendants of Colonel Lewis.

# Eagle's Nest

Eagle's Nest, which was built in several stages during the mid- to late 19th century, is a two-story, rectangular, seven-bay house of timber-frame construction. The foundation of the structure is brick and employs three types of brick courses that reflect different periods of construction. The oldest part of the foundation, which includes a basement room, has a veneer of Flemish bond and appears to have been built in the late eighteenth century. The walls of the house are clad in wood clapboards, and the roof is covered in standing-seam metal. Four different building campaigns have resulted in somewhat lopsided elevations. The house was probably built mid-century on older foundations as a single-pile, three-bay, hall-parlor-plan structure with a second floor and a gable-end chimney. Later it was deepened to become a double-pile house with two chimneys at the west end. The next phase added a pair of rooms and a lateral hall on the other side of the chimneys, both downstairs and up. The last campaign, which occurred before 1890, added hipped-roof additions with staircases at both ends of the house.

The original house built by Henry Fitzhugh stood on a hill overlooking the Potomac River. It stood in a grove of ancient trees and shrubbery, and was burned down during the Civil War. The Eagle's Nest tract was first acquired by William Fitzhugh I (1651-1701), a prominent Virginia merchant, member of the House of Burgesses, and land owner. He willed it to his son William Fitzhugh II (1679-1713). At the death of William Fitzhugh II the tract passed to his son Henry. Henry Fitzhugh and his wife Lucy Carter had two children, William IV and Elizabeth. Elizabeth Fitzhugh married Benjamin Grymes (1725-1776).

Their son, Benjamin Grymes, Jr. (1756-1804), was a lieutenant in Grayson's Regiment of the Virginia Continental Line in 1777, and also served with General George Washington's Life

Guards. William Fitzhugh IV loaned the tract to his nephew Benjamin Grymes, Jr., who lived there with his family until his death. William Fitzhugh IV then deeded the property to Benjamin Grymes' son, William Fitzhugh Grymes (1780-1830), who fought in the War of 1812 and was a member of the General Assembly.

The next owner of the tract was Grymes' son Thomas Jefferson Fitzhugh Grymes, who lived there until his death in 1866 and who probably built the existing structure. His widow, Frances Irwin Grymes, lived at Eagle's Nest with her children and grandchildren until 1900. Her son Marshall Grymes was the last family member to live in the house.

# Cleydael

Originally Cleydael had 1400 acres and was called "Neck Quarter" when Dr. Richard H. Stuart bought the property in 1845. It was renamed in honor of Mrs. Stuart's ancestral home, the medieval castle of Cleydeal in Belgium, which was once owned by Oliver Cromwell. The Stuart family's principal home was "Cedar Grove," a much larger plantation house on the banks of the Potomac.

The Stuarts erected Cleydael, a two-story white frame house, as a summer residence in 1859. After the malaria epidemic of 1849, many wealthy Virginia landowners built summer homes away from the river to escape the heat and humidity, as "bad air" rather than mosquitoes was then thought to be the cause of the disease. The unusual floor plan of intersecting halls that form a T on both floors allowed cool breezes in the hot Virginia summers.

The house is a fine example of mid-nineteenth century vernacular construction as practiced in rural Virginia. To the rear of the house Dr. Stuart had an

office and waiting room. The passage from the staircase on the west end of the house would have provided Dr. Stuart easy access to his office in the east end of the house. The convenience would have been especially appreciated when patents arrived at night. Stuart could leave his second floor bedroom and walk to his office without disturbing the rest of the household.

Throughout the Civil War, Dr. Stuart and his family lived at Cleydael because they feared the Union forces would shell Cedar Grove. It was a concern shared by General Robert E. Lee whose two daughters stayed at Cleydael with their cousins the Stuarts. On Sunday, April 23, 1865, Dr. Stuart had just finished tea with his family when strange men rode into the yard. Aware of Lincoln's assassination, Stuart was suspicious of the strangers and seeing that they were armed increased his concern. One of the men, John Wilkes Booth, sought medical treatment. Stuart refused on the grounds that he was a physician not a surgeon. Stuart did agree to feed the strangers, but refused their request for accommodation.

# St. Paul's Episcopal Church

Colonial King George County contained three Episcopal parishes. The oldest, St. Paul's Parish was formed in the mid seventeenth century as the lower parish of Stafford County, which had been newly formed from the upper reaches of Westmoreland County. The Stafford County court ordered the earliest known parish church services in 1667 at the home of Robert Townsend of Chotank Creek. The lower Stafford Parish became informally known as Chotank Parish because of this association. By 1702, however, the parish was officially known as St. Paul's Parish, so named after the Bedfordshire England home parish of a leading parishioner, Colonel William Fitzhugh. Two earlier wood-frame churches constructed about 1690 and 1725 respectively preceded the present brick building, constructed in the late 1760s.

The present St. Paul's Church is of the cruciform architectural style, but has a Greek cross plan instead of the more classical Latin cross plan. With a high interior ceiling, the exterior facade contains two stories of windows, an architectural feature shared uniquely with contemporary colonial Virginia churches along the upper Potomac River. While the parish has retained a Register covering the period 1715 through 1798, no details of church construction and completion dates were included and all vestry books/records for the colonial period have been lost. Virginia Gazette records show that churchwardens advertised for Undertakers (Contractors) in 1762 and 1766. Assuming a construction start in 1766, a completion date of 1768-69 appears reasonable.

The second and incumbent Rector, The Rev. William Stuart, remained with the church and parish through the Revolutionary War, resigning because of poor health in 1796. Thereafter the parish declined and the church fell into disuse and ruins by both neglect and anti-British fostered vandalism. The Glebe lands were sold about 1808 to finance conversion of the church to a religious academy. This venture failed but the conversion drastically altered the church's original architecture; the interior was reconfigured for two floors of classrooms by walling off the wings and closing up the original entrances in the west and north facades.

The parish was reorganized in 1816 and petitioned for return of the church property, which occurred about 1820. By 1830, the church had been converted to essentially its current form; the north wing partition was retained, balconies were placed in the east, south and west wings, the main entry was through the south wing, facing a raised pulpit placed on the north wall with the altar below. This essentially converted the original cruciform architecture to a modified "T" form architecture except the altar is not in the traditional east wing location. The north wing of the altered church was intended as an interim rectory but was purportedly little used because of steep stairs and cramped space. A separate rectory was constructed nearby in the early 1840s but was converted to a parish house following parish yoking in the mid 1800s and expanded to meet growing needs in the 1960s and again in the 1980s.

# Rear Admiral John Adolphus Dahlgren

## The “Father of Modern Ordnance”

1809 – 1870



founded to manufacture new equipment, and he invented the Dahlgren gun, a more potent class of smoothbore cannon manufactured by using iron-casting techniques to produce massive guns. Made in a variety of sizes, the Dahlgren gun became the standard weapon on Union naval vessels after 1856.

In 1861, Dahlgren's commander at the Navy Yard resigned to join the Confederate Navy, and President Abraham Lincoln wanted to name Lieutenant Dahlgren to the post of Commander of the Washington Navy Yard. By law, however, that position could be held only by an officer with a rank of captain or above. Lincoln successfully persuaded Congress to pass a special act legalizing Dahlgren's appointment to the yard, and, in July 1862, Dahlgren was promoted to the rank of captain and made chief of the Bureau of Ordnance. In February 1863 he was promoted to Rear Admiral.

After almost 20 years on land, Dahlgren applied for sea duty, and in July 1863 he was given command of the South Atlantic Blockading Squadron. While overseeing operations against Charleston, South Carolina, Dahlgren saw his guns in action at Fort Wagner and Fort Sumter. He was instrumental in securing Charleston's harbor, and he aided General William Tecumseh Sherman's capture of Savannah in 1864.

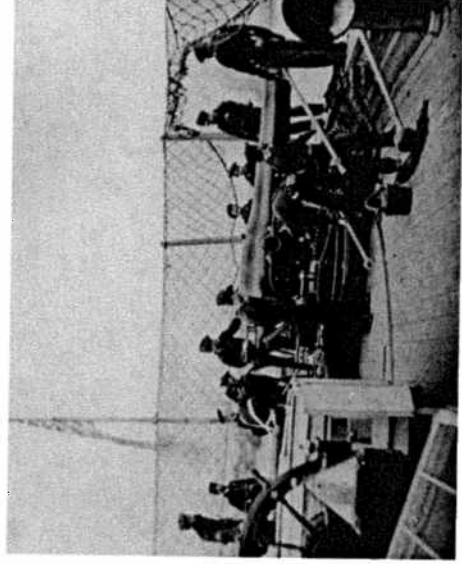
After the Civil war, Dahlgren remained in the navy, serving in the Pacific before going back to the Bureau of Ordnance. He returned to the Washington Navy Yard in 1869 and, once again, served as its commander until his death on July 12, 1870.

Rear Admiral Dahlgren beside one of his smooth cast-iron guns aboard the U.S.S. Pawnee in Charleston Harbor (Source: National Portrait Gallery, Smithsonian Institution)

Born in Philadelphia on November 13, 1809, John Adolphus Dahlgren was the son of the Swedish consul in that city. Starting his service in the U.S. Navy in 1826, Dahlgren began his career as a common sailor.

Thanks to his skill as a mathematician, Dahlgren was sent to work for the Coastal Survey from 1834 to 1837. He was assigned to the Washington Navy Yard in 1847. While there, Dahlgren established the U.S. Navy's Ordnance Department, became an ordnance expert, developed a percussion lock, and wrote a number of books.

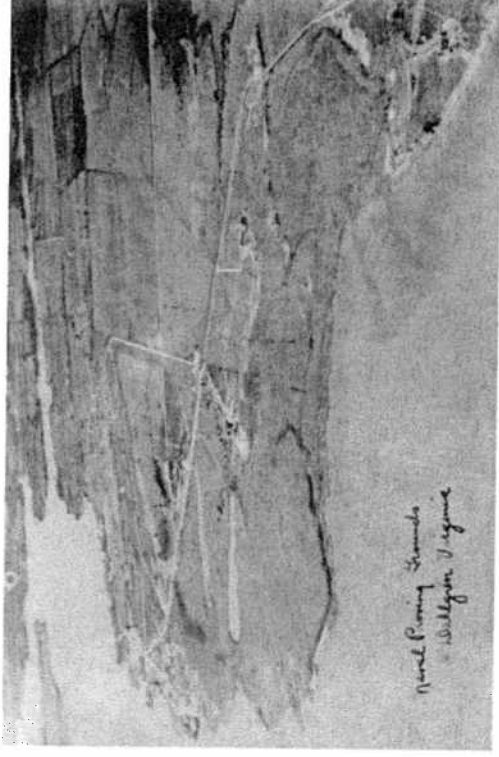
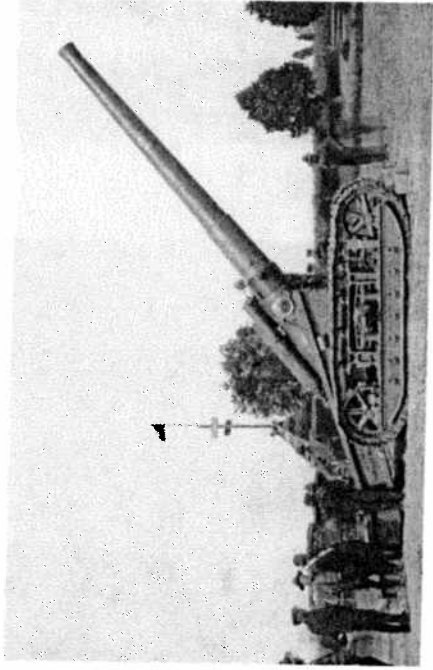
Under Dahlgren's direction, the Navy established its own



Gun crew of a Dahlgren gun at drill aboard a U.S. Navy gunboat, 1864.

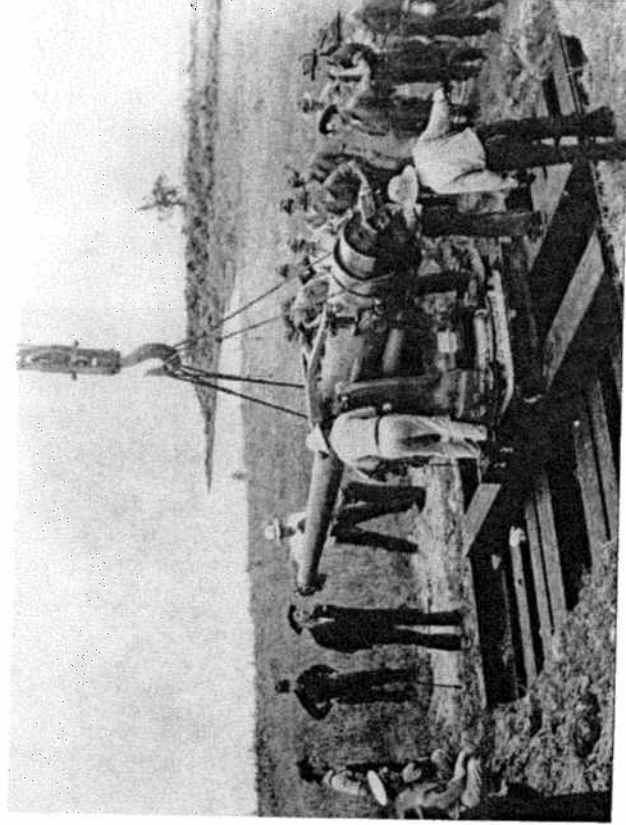


# Naval Proving Grounds at Dahlgren

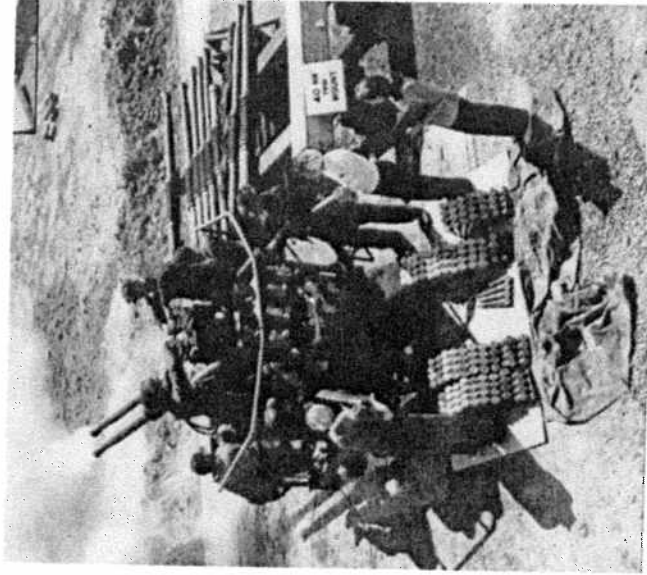


Dahlgren was established in 1918 as the Naval Proving Ground, and named Dahlgren in honor of Rear Admiral John Adolphus Dahlgren, who is considered the father of modern naval ordnance. Prior to 1918, the Navy had operated a proving ground across the Potomac River at Indian Head, Maryland, which became inadequate with advances in ordnance during World War I.

Until World War II, the principal work at Dahlgren was to proof and test every major naval gun, along with the rounds they deliver, for fleet use. This was done at the Main Range Gun Line which faces down the Potomac River. While the Gun Line still performs that vital role, the scope and depth of work at Dahlgren has grown tremendously. Reflecting this expanded mission, and Dahlgren's transition to a broad-based R&D capability, the name was changed in 1959 to Naval Weapons Laboratory.

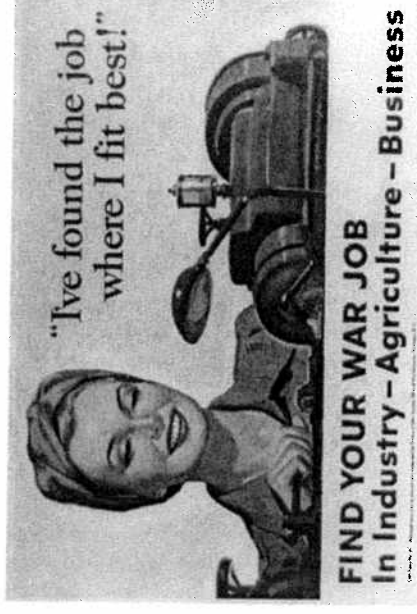


# WAVES: Women Accepted for Volunteer Emergency Services



Women assisting in range operations at Dahlgren, 1942.

World War II brought new roles to military women who went beyond conventional women's work to such assignments as flight instructor, weather observer, truck driver, and air traffic coordinator. Women Ordnance Workers (WOWs) played key roles in munitions testing at Dahlgren.



**Establishment of Women's Reserve, Public Law 689, H.R. 6807, 1942**

AN ACT to expedite the war effort by releasing officers and men for duty at sea and their replacement by women in the shore establishment of the Navy, and for other purposes.

SEC. 501. A Women's Reserve is hereby established which shall be a branch of the Naval Reserve and shall be administered under the same provisions in all respects (except as may be necessary to adapt said provisions to the Women's Reserve, or as specifically provided herein) as those contained in this Act or which may hereafter be enacted with respect to the Volunteer Reserve.

SEC. 504. Members of the Women's Reserve shall be restricted to the performance of shore duty within the continental United States only and shall not be assigned to duty on board vessels of the Navy or in combat aircraft.

SEC. 505. Members of the Women's Reserve shall not be used to replace civil-service personnel employed in the Naval Establishment, but shall be composed of women trained and qualified for duty in the shore establishment of the Navy to release male officers and enlisted men of the naval service for duty at sea.

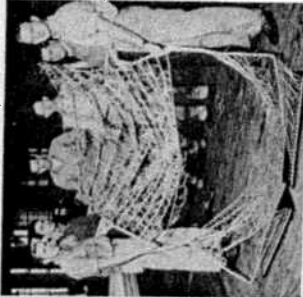
SEC. 508. The authority conferred by this Act for appointments and enlistments in the Women's Reserve shall be effective during the present war and for six months thereafter, or until such earlier time as the Congress by concurrent resolution or the President by proclamation may designate." Approved, July 30, 1942.

**Source:** *United States Statutes at Large Containing the Laws and Concurrent Resolutions Enacted During the Second Session of the Seventy-Seventh Congress of the United States of America 1942 and Treaties, International Agreements Other than Treaties, and Proclamations.* vol. 56, pt.1. Washington: Government Printing Office, 1943. pp. 730-31.

# The IBM Naval Ordnance Research Calculator

**Inside the Biggest Man-made Brain**

Navy's new calculator has speed, accuracy, paper tape, indicator, and number indicator.

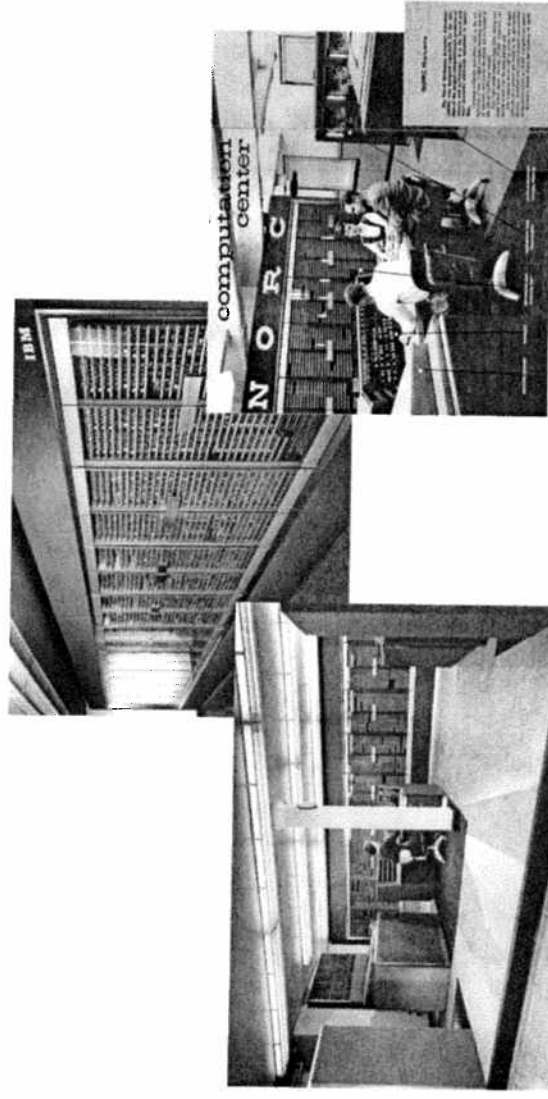


**By Stephen L. Freedman**

THE LARGEST brain in the world today is a man-made electrical mathematician built at Harvard's Computation Laboratory for the U.S. Navy Proving Grounds at Dahlgren, Va.

It has many more of electrical fiber than any other differences, too. Long strips of paper tape run on aluminum wheels and are read by a device that is about the size of a typewriter. Mark I is still in use today. It has been used to calculate the trajectories of rockets and missiles. It has been used to calculate the trajectories of rockets and missiles. It has been used to calculate the trajectories of rockets and missiles.

Mark I is a simple logic, faster, more accurate and more flexible than Mark I. The difference between the two machines is that Mark I is a simple logic, faster, more accurate and more flexible than Mark I. The difference between the two machines is that Mark I is a simple logic, faster, more accurate and more flexible than Mark I.



NORC at the US Naval Proving Ground, Dahlgren, Virginia, about 1957, from Reference 5 below. Console operator unknown: center: Mary Louise McKee, right: Dave Eliezer (Deputy Branch Head, Programming Branch).

NORC ... the most powerful large scale electronic computer ever produced. It was built at Watson Scientific Computing Laboratory, operated by Columbia University. In this photo are pictured the console (center), logical and arithmetical unit (rear), indicator panel (left, rear), printers and tape units (extreme left and right).

The Naval Surface Weapons Center at Dahlgren, Virginia, was the primary site of US naval computing, beginning with the 1948 installation of Howard Aiken's Mark II, followed by the Mark III in 1951. The center's next machine, the Naval Ordnance Research Calculator (NORC), was built at the Watson Scientific Computing Laboratory under the direction of Wallace Eckert. Initially, NORC had been scheduled for delivery to the White Oak Naval Facility near Washington, D.C., but the Navy redirected it to the experienced crew at Dahlgren. Physicist Edward Teller had been trying to have it diverted to the Lawrence Livermore National Laboratory, arguing that the lab's nuclear calculations were more important than Dahlgren's ballistic calculations. The Navy won, and NORC was dedicated at Dahlgren on December 2, 1954.