

PRIMARY GUNS ON THE POTOMAC

5-inch/62-caliber Mk 45 Mod 4

Description:

This gun is used to evaluate new technology projectiles, propellants and firing controls.

Maximum Firing Rate: 20 rounds per minute

Military Use: Currently being installed on Arleigh Burke-Class Aegis destroyers.



57-mm MK 110 Mod 0

Description:

This gun system is a medium-caliber gun that supports gun system, firing control and ammunition testing. It also supports coast guard and sailor training.

Maximum Firing Rate: 220 rounds per minute

Military Use: Used on the U.S. Coast Guard Maritime Security Cutter and Littoral Combat Ship.



76mm Super Rapid

Description:

The 76mm Super Rapid Gun Mount is a medium caliber naval gun used for anti-air, anti-surface and shore dominant missions.

Maximum Firing Rate: 120 rounds per minute

Military Use: Potential upgrade to the version on U.S. Navy frigates.



30mm Chain Gun

Description:

The 30mm Chain Gun is a medium-caliber automatic cannon capable of being used in fighting platforms to include ground vehicle, naval and aircraft applications.

Maximum Firing Rate: 200 rounds per minute

Military Use: Used by the Navy, Marines and Air Force



Electromagnetic Launch Facility

Description:

The EMLF is used to develop and mature Railgun technologies. Railguns use electromagnetic energy instead of explosive chemical propellants to propel projectiles further and faster than current guns. These systems are tested on Dahlgren's Range under controlled conditions for future engineering and shipboard integration.

Military Use: Future use by the Navy and Marines.



8-inch High Mount Gun

Description:

This gun is a one-of-a-kind test fixture used to evaluate the electronic components of new projectile designs to insure survivability during launch shock.

Maximum Firing Rate: Single shot

Military Use: Experimental Mount.



EXPLOSIVE EXPERIMENTAL AREA (EEA) RANGE COMPLEX

Ordnance Testing and Detonations Description:

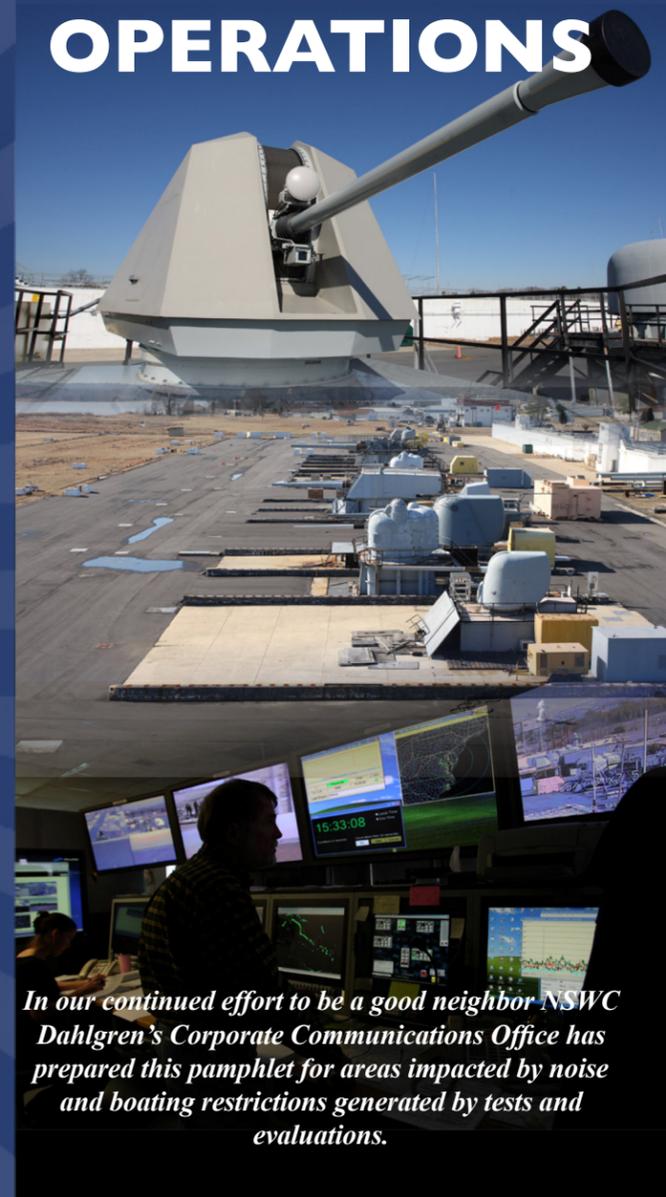
Safety effectiveness and environmental testing of ordnance items for the Department of Defense is conducted in this area. Part of Dahlgren's mission is to perform testing and evaluation in order to certify ordnance items and weapons systems safe and operable for fleet use.



Prepared by the Corporate Communications Office, NSWC Dahlgren
For more copies call 1-540-653-8152

Approved for Public Release: Distribution is Unlimited

TEST RANGE OPERATIONS



In our continued effort to be a good neighbor NSWC Dahlgren's Corporate Communications Office has prepared this pamphlet for areas impacted by noise and boating restrictions generated by tests and evaluations.

**NAVAL SURFACE WARFARE CENTER
DAHLGREN DIVISION**

BACKGROUND AND PURPOSE

On October 16, 1918, the Navy began testing at the facility now known as Dahlgren. Through the years Dahlgren established itself as the major testing area for naval guns and ammunition. Today it continues to provide the military with the technical capability and leadership to solve complex warfighting needs. With the increase in workforce, both civilian and military, development of the surrounding area has grown significantly. Housing continues to increase and more and more businesses are established to cater to the community's needs. As a result, more people notice activities related to weapons and explosives testing.

Some areas, specifically King George and Westmoreland counties in Virginia, and St. Mary's, Calvert, and Charles counties in Maryland experience occasional noise due to gunfire and explosives testing from Dahlgren. In an effort to be good stewards to the community, Dahlgren's Public Affairs Office has prepared this pamphlet. Prospective home buyers and renters in the areas indicated on the maps in this pamphlet should be aware of potential noise and occasional boating restrictions related to military activity.

Dahlgren typically conducts operations Monday through Friday between 8 a.m. and 5 p.m., with infrequent operations occurring outside these times. In recent years, efforts to use modeling and simulation test methods whenever possible have significantly diminished the level and type of operations. However, some level of live gunfire and explosives testing is necessary, resulting in noise that is audible beyond the confines of the installation. Guns shoot multiple bursts or intermittent single rounds and detonations are usually heard as booms or rumbles.

NOISE:

In an effort to remain a good neighbor, while preserving its military mission, Dahlgren has undertaken an initiative to minimize the noise impacts from ordnance test activities. A state-of-the-art noise prediction system (Sound Intensity Prediction System (SIPS)) has been developed and noise monitors have been added at various locations along the river to allow real-time monitoring of actual noise conditions. Using data from weather balloons sent into the atmosphere, SIPS calculates the predicted distribution of noise from the blast, the level of sound that may reach populated areas, and the location of high-intensity sound pockets formed by the current atmospheric conditions.

SIPS uses a combination of sophisticated computer programming to generate a map showing the predicted distribution of noise around the blast site. Using information from this system, ordnance testing can be interrupted until more favorable conditions are observed. Primary areas potentially affected by noise from gunfire and explosive operations at Dahlgren are depicted in this pamphlet.

BOATING:

During ordnance test events, range safety considerations may require restrictions on river traffic. In order to assure that such testing endangers no watercraft, range boats (international orange superstructure over white hull) patrol the proximity of areas rendered hazardous by the test operations. The upper, middle and lower danger zones are where Dahlgren conducts hazardous operations. These locations are depicted on the Boating Danger Zone in this pamphlet.

When range control boats are flying red flags, watercraft should not enter any portion of the danger zone or operate anywhere close to it without having obtained permission from the nearest range control boat. Depending on the

operation, traffic can frequently be safely rerouted around the test area. Range control personnel carefully minimize delays to both commercial and recreational boat traffic.

The range is also used for testing shipboard radars, sensors, lasers and tracking systems.



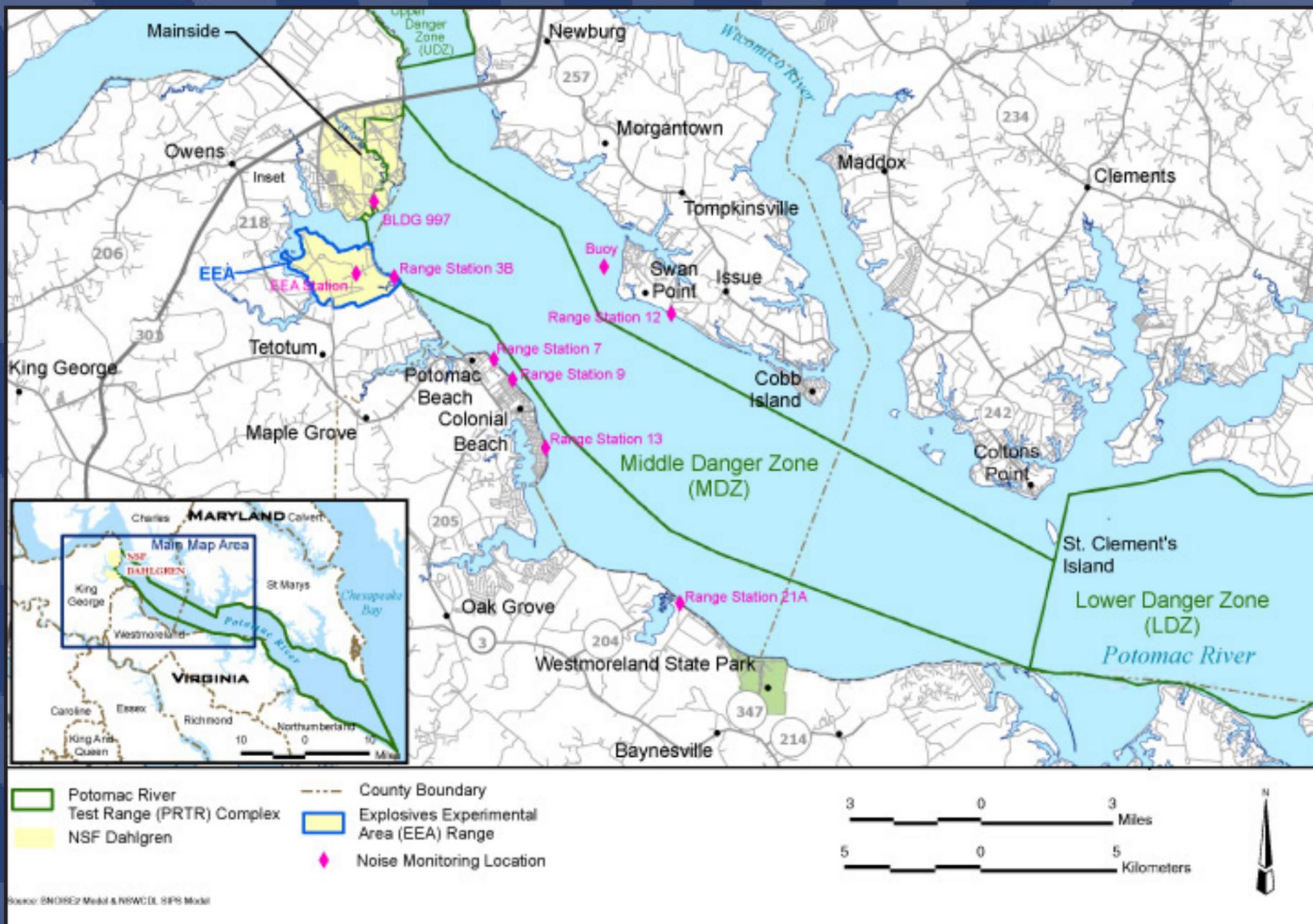
Range Boat

Dahlgren's Range Operations Center may be reached by telephone at 1-540-653-8791. The Range Operations Center monitors marine ship-to-shore channels 16 and 14 and will respond with requests for information. More specific information on the danger area can be found at <http://www.navsea.navy.mil/nswc/dahlgren/RANGE/rangeschedule.aspx>.

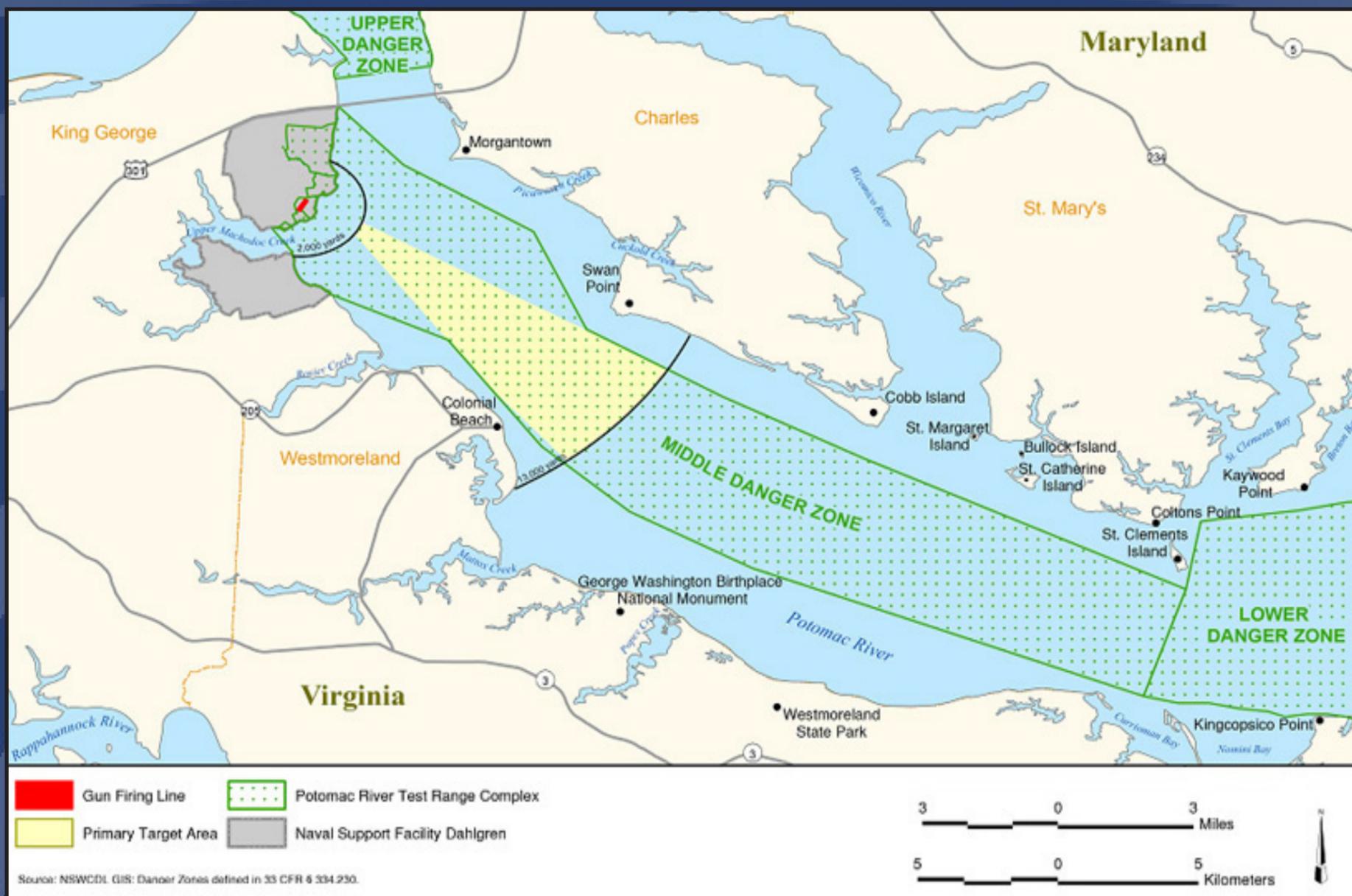
**Range/Weapons Testing Hotline
1-877-845-5656 (toll free)**

**Noise Disturbance Questions & Comments:
1-866-359-5540 (toll free)**

<http://www.navsea.navy.mil/nswc/dahlgren/RANGE/rangeschedule.aspx>



PRIMARY AREAS POTENTIALLY AFFECTED BY NOISE



BOATING DANGER ZONE