
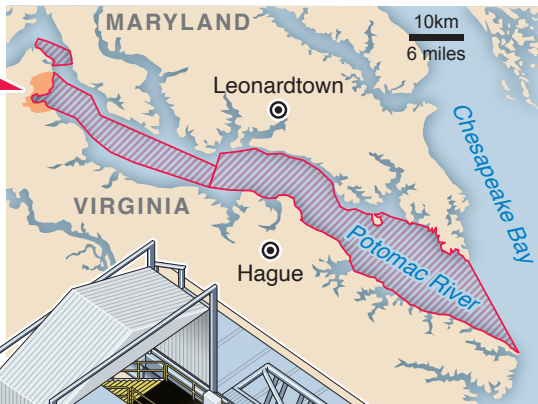


U.S. Navy tests mysterious railgun

The U.S. Navy is believed to be testing an experimental weapon called a "railgun" on the Potomac River in Virginia, closing miles of the waterway to boats and warning people to expect loud noises

U.S. Naval Surface Warfare Center Dahlgren Division (NSWCDD)

 Potomac River Test Range Complex – areas prone to closure during firing



U.S.

NSWCDD 

White Sands Missile Range, New Mexico

U.S. has two railgun prototypes – one in Virginia and another at White Sands Missile Range

SCIENCE OF RAILGUNS

Positive rail

Armature

Negative rail

Projectile

Electric current

1 Projectile placed between two conductive rails. Armature placed behind projectile, bridging gap between rails

2 Electrical pulse passes through rails, creating opposing magnetic fields

Third magnetic field created in armature, which is repulsed by fields in rails and forced out of barrel with projectile

Magnetic field along axis of rail