

# **Washington Physicians for Social Responsibility**

# **Trident Submarine Facts and Figures**

#### What is the Trident submarine?

A fleet of Ballistic Missile Submarines (known as an SSBN). They are nuclear-powered, able to remain submerged for long periods without surfacing, and are virtually undetectable when submerged.

Length: 560 feet; Beam: 42 feet Crew: 15 Officers, 140 Enlisted

### What is its mission?

From the US Navy:

"Since the 1960s, strategic deterrence has been the SSBN's sole mission, providing the United States with its most survivable and enduring nuclear strike capability.



Sourced from the Defense Imagery Management Operations Center. Retrieved from <a href="http://www.dimoc.mil/">http://www.dimoc.mil/</a>

The Navy's ballistic missile submarines, often referred to as "boomers," serve as an undetectable launch platform for intercontinental missiles. They are designed specifically for stealth and the precise delivery of nuclear warheads."

Trident ballistic missile submarines provide the sea-based "leg" of the triad of U.S. strategic deterrent forces. Together, the Trident submarines carry approximately 50% of U.S. nuclear warheads.

Trident submarines spend an average of 77 days at sea at a time, followed by 35 days in port for maintenance.

## How many US Navy Tridents are there?

14: 8 in Bangor, WA; 5 in King's Bay, GA; and 1 in Portsmouth, VA

## Where is the Bangor base?

The submarine base at Bangor, WA, part of Naval Base Kitsap-Bangor, is on Hood Canal north of Silverdale on the Kitsap Peninsula. Naval Base Kitsap-Bangor employs 12,825 active duty and 14,071 civilian people; it is the largest employer in north Kitsap County.



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#### What sorts of weapons are on the Trident submarines?

Bangor-based submarines are each built to carry up to 24 Trident II D-5 missiles accurate via satellite navigation to within 600 feet of their target at 4000 nautical miles. Each of these missiles can carry 8 nuclear warheads (12 in a special configuration with shorter range). Each Trident warship is built to carry 192 hydrogen-bomb warheads.

Under the 2010 New START treaty with Russia the fleet is limited to 1000 warheads, each submarine to 20 active missiles, and the Trident missiles are estimated to be carrying 4-5 warheads.

Should the order come, total flight time is 25 minutes or less, depending on how close the submarine is to the target. Depending on the type of warhead, each one is 7-30 times the power of the atomic bomb dropped on Hiroshima in 1945.

# What is the Trident "modernization" program?

In exchange for signing the New START Treaty with Russia in 2010, Congress demanded a full modernization program for the U.S. nuclear weapons complex. Current SSBNs will be replaced with new SSBNx submarines. The first is expected to be completed in 2031, with 11 more slated to be produced by 2040.

In its FY2017 budget request, Congress requested \$1.86 Billion for SSBNx development. The lifecycle cost of the new fleet of SSBNx's is estimated between \$282 and \$342 Billion.

#### **Sources**

Arms Control Association, "U.S. Nuclear Modernization Programs"

FAS Nuclear Notebook: United States nuclear forces, 2016

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