

COLORADO (SSN-788)

Welcome to
The Christening of the
COLORADO (SSN-788)
December 3, 2016

GENERAL DYNAMICS
Electric Boat

EB
CHRISTENING

Christening PROGRAM

NATIONAL ANTHEM

Electric Boat SubTones

WELCOME

Jeffrey S. Geiger
President
General Dynamics Electric Boat

REMARKS

Matt Mulherin
President
Newport News Shipbuilding

The Honorable Joe Courtney
United States Representative
Connecticut

The Honorable David Cicilline
United States Representative
Rhode Island

The Honorable Mike Coffman
United States Representative
Colorado

The Honorable Ed Perlmutter
United States Representative
Colorado

The Honorable Jim Langevin
United States Representative
Rhode Island

The Honorable Michael Bennet
United States Senator
Colorado

The Honorable Richard Blumenthal
United States Senator
Connecticut

The Honorable Sheldon Whitehouse
United States Senator
Rhode Island

The Honorable Jack Reed
United States Senator
Rhode Island

The Honorable Dannel P. Malloy
Governor
Connecticut

Rear Admiral Michael E. Jabaley Jr.
Program Executive Officer
Submarines

ADDRESS

The Honorable Ray Mabus
Secretary of the Navy

SPONSOR REMARKS

Annie Mabus

BLESSING OF THE SHIP

Reverend Anthony Dinoto

CHRISTENING

Annie Mabus

MAID OF HONOR

Jess Ladd

FLOWER GIRL

Caitlin A. Rossman



COLORADO and the Virginia Class

Colorado is the 15th submarine of the Virginia Class. With the other ships of the class, it represents a revolution in submarine design, construction and mission capability. This versatile and powerful vessel will maximize the contribution the U.S. Submarine Force makes to national security.

Colorado and the Virginia Class are among the most effective platforms in the U.S. Navy portfolio. Unobtrusive, non-provocative and connected with land, air, sea and space-based assets, these submarines are equipped to wage multi-dimensional warfare around the globe.

The central characteristic of the class is the modularity derived from the design / build approach, which supports efficient construction and mission capability. This provides the U.S. Navy with a submarine class that advances the state-of-the-art with each succeeding ship. Colorado's adaptability makes it highly responsive to changing mission requirements.

Colorado will provide the submarine force with the capabilities required to dominate the open ocean and the littorals. In addition to anti-submarine, anti-surface ship and counter-mine warfare, Colorado will support surveillance, Special Operations and covert strike missions.

Electric Boat, its construction partner Newport News Shipbuilding, and the U.S. Navy continue collaborating to reduce the cost of future ships while introducing new capabilities to ensure the ongoing relevance of Colorado and the Virginia Class. Electric Boat's goal remains unchanged – to provide the U.S. Navy with the most sophisticated undersea warships in the world.

CHARACTERISTICS

DISPLACEMENT: 7,835 tons

LENGTH: 377 feet

BEAM: 34 feet

PAYLOAD: 40 weapons; Special Operations Forces; Unmanned undersea vehicles

WEAPONS LAUNCH: Four 21-inch torpedo tubes; Two Virginia Payload Tubes

WEAPONS: Tomahawk land-attack missiles; Mark 48 advanced capability torpedoes

CREW: 132 officers and enlisted personnel

SHIPS OF THE VIRGINIA CLASS

USS Virginia (SSN-774)

USS Texas (SSN-775)

USS Hawaii (SSN-776)

USS North Carolina (SSN-777)

USS New Hampshire (SSN-778)

USS New Mexico (SSN-779)

USS Missouri (SSN-780)

USS California (SSN-781)

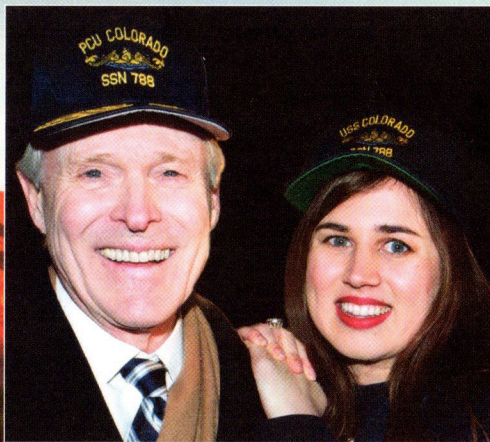
USS Mississippi (SSN-782)

USS Minnesota (SSN-783)

USS North Dakota (SSN-784)

USS John Warner (SSN-785)

USS Illinois (SSN-786)



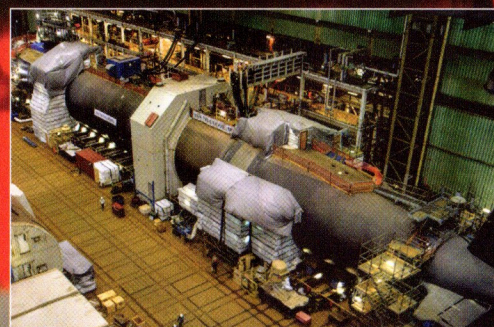
Secretary of the Navy Ray Mabus with his daughter Annie Mabus at the Keel Laying ceremony March 7, 2015

Sponsor: ANNIE MABUS

Annie Mabus was born in Jackson, Mississippi. Early in her life, she moved with her family to Saudi Arabia when her father, Secretary of the Navy Ray Mabus, served as Ambassador to the Kingdom. She returned to Mississippi for her schooling and remained there through high school. During that time, she also traveled, studying in France and seeing much of the world. Annie is an accomplished swimmer who has competed throughout her life, winning a state championship as a high school junior.

Annie attended New York University where she studied art history and studio art. She completed several prestigious internships at major art institutions, including The Whitney Museum of American Art and The Museum of Modern Art. She graduated with honors from NYU in 2014 and has remained in New York. After graduation she was appointed VIP manager at MoMA's summer music series, and currently assists a prominent art and cultural advisor with international projects. Annie plans to attend graduate school and pursue a career in museum curation.

The Navy plays an immensely important role in Annie's life. With her father's appointment as Secretary, Annie was welcomed into the Navy family and created lifelong friendships with many Sailors and Marines. She was named an honorary member of the U.S. Naval Academy's 23rd Company in recognition of her close connection with the Academy and the Brigade of Midshipmen. Her place within the Navy family was cemented when she was named Ship Sponsor of Colorado, and she looks forward to a lifelong relationship with the submarine and its crew.



Colorado's pressure hull was completed February 29, 2016

Speaker: RAY MABUS Secretary of the Navy

Ray Mabus is the 75th United States Secretary of the Navy, the longest to serve as leader of the Navy and Marine Corps since World War I.

Throughout his tenure, Secretary Mabus has focused on four key priorities - People, Platforms, Power and Partnerships - that enable the Navy and Marine Corps' unique ability to maintain the global presence that reassures our allies and deters our adversaries.

Responsible for an annual budget of more than \$170 billion and leadership of almost 900,000 people, Secretary Mabus has worked to improve the quality of life of Sailors, Marines and their families; decrease the Department's dependence on fossil fuels; strengthen partnerships with industry and internationally; and increase the size of the Navy fleet.

During his tenure, the Navy went from building fewer than five ships per year to having more than 70 ships under contract, an average of 14 ships per year put under contract. Most of those contracts are fixed-price, multi-year deals assuring value for taxpayers and certainty for the Navy's industry partners. Mabus' shipbuilding efforts reversed the decline of the Navy's fleet and will increase it to more than 300 ships by the end of the decade despite fiscal constraints.

Leading the world's only global Navy, Mabus has traveled over 1.3 million miles, visited over 150 countries and territories and all 50 states, to meet with Sailors and Marines forward deployed or stationed around the world, to maintain and develop international relationships, and to reconnect the

American public with the Navy and Marine Corps.

Mabus also directed the Navy and Marine Corps to change the way they use, produce and acquire energy, setting an aggressive goal of relying on alternative sources for at least 50 percent of their energy by 2020. In 2012, President Obama announced in his State of the Union address that the Navy and Marine Corps would purchase or facilitate the production of 1GW of renewable energy (50 percent of total shore energy) for use on Navy and Marine Corps installations by 2020. This goal will be reached four years early. The Navy also demonstrated the Great Green Fleet in 2012, a carrier strike group in which every participating U.S. Navy ship and type of aircraft operated on alternative energy sources including nuclear energy and biofuels.

Before his appointment by President Obama, Mabus held a variety of leadership positions. From 1988 to 1992, Mabus served as Governor of Mississippi, the youngest elected to that office in more than 150 years. Mabus was Ambassador to the Kingdom of Saudi Arabia from 1994-1996 and later was Chairman and CEO of a manufacturing company which he led out of bankruptcy.

Secretary Mabus is a native of Ackerman, Mississippi, and received a Bachelor's Degree, summa cum laude, from the University of Mississippi, a Master's Degree from Johns Hopkins University, and a Law Degree, magna cum laude, from Harvard Law School. After Johns Hopkins, Mabus served in the Navy as an officer aboard the cruiser USS Little Rock.

CONSTRUCTION TIMELINE

March 2, 2011
Construction Start

June 25, 2012
Naming Ceremony

March 7, 2015
Keel Laying

February 29, 2016
Pressure Hull Complete

December 3, 2016
Christening

August 31, 2017
Contract Delivery

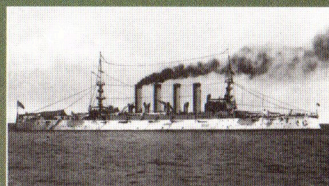
Previous Ships NAMED COLORADO

The submarine Colorado is the fourth U.S. Navy ship to be named for the nation's 38th state.

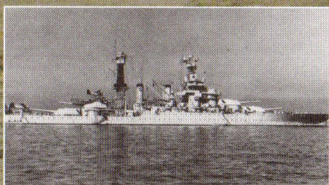
The first Colorado was a three-masted steam-screw frigate launched at Norfolk Navy Yard in 1856. During the Civil War, Colorado was flagship of the North Atlantic Blockading Squadron and played a prominent role in the seizure of Fort Fisher in North Carolina. In the post-war years, the ship cruised on Asiatic Station; in 1885, the ship was sold to private interests and broken up.



The next ship named for Colorado was a 13,680-ton armored cruiser launched in Philadelphia in 1903. In 1915, Colorado became the flagship of the Pacific Reserve Fleet, and a year later, was renamed Pueblo so that a larger ship could bear the name of the Centennial State. USS Pueblo escorted troop ships to France in 1917, and after the end of the war in 1918, brought more than 10,000 troops home to the U.S.



The third ship named Colorado, the lead ship of the Colorado Class of battleships, was launched in Camden, N.J., in 1921. During World War II, the ship participated in the invasions of Kwajalein and Eniwetok in 1944 and later provided fire support for the landings at Saipan, Guam and Tinian. While off Tinian, Colorado received 22 hits from shore batteries, killing 43 men and wounding 198. A week after arriving in Leyte Gulf, the ship was hit by two kamikazes, which killed 19 of its crew. Colorado received seven battle stars for World War II service; in 1947, the ship was taken out of commission.



Colorado and Block III

REDUCING COSTS. RETAINING CAPABILITIES.

Colorado is the fifth of the eight-ship group of Virginia-class submarines known as Block III.

These ships embody a Navy/industry commitment to reduce costs while maintaining or improving capabilities. The goal of this effort is to build Virginia-class submarines at a price that enables the Navy to maintain a production rate of two ships per year.

The cost reduction goals have been achieved through an initiative comprising improvements in construction practices, investment in new and more efficient facilities, a multi-year contract that enables the cost efficient purchase of material in multi-ship quantities and the Design For Affordability (DFA) program.

The Design For Affordability program focuses primarily on the redesign of the submarine's bow, which will lower costs by \$800 million over the remaining ships in the class while improving capability.

This redesign centers on the replacement of the existing sonar sphere with a Large Aperture Bow (LAB) Array and the 12 individual vertical launch missile tubes with two Virginia Payload Tubes (VPTs). These are large diameter tubes that will each initially carry six missiles in multiple all-up round canisters.

The new LAB Array eliminates hundreds of hull penetrations, and replaces transducers with lower-cost, life-of-the-ship hydrophones resulting in reduced new construction and life-cycle maintenance costs.

By nearly doubling the payload space available from 1,200 cubic feet with the 12 vertical launch tubes to 2,300 cubic feet, the VPTs will allow Virginia-class ships to deploy a wider variety of payloads.

Improvements in construction performance – coupled with the Virginia Class multi-year procurement acquisition strategy – are reducing the time required to build a Virginia-class submarine from 84 months to 60 months. This is being achieved by maximizing the application of modular-construction techniques, and completing all planned work to exact, first-time quality standards, thereby improving efficiency. Colorado is the eleventh ship of the class assembled from the four-module build plan. By comparison, the lead ship, USS Virginia, was assembled from 10 modules.

These steps – along with others in process or development – support the production rate of two Virginia-class submarines per year and help the U.S. Navy achieve the force levels it requires.

