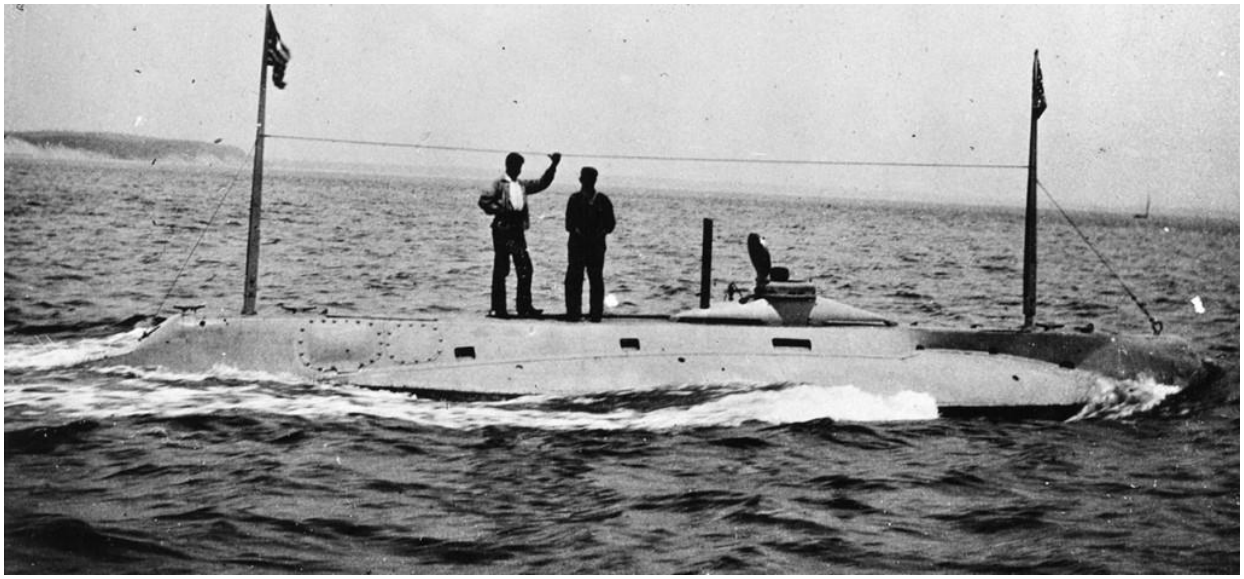
10 Things to Know about U.S. Navy Submarines

Navy Live Blog, April 11, 2017

Happy birthday to our Silent Service!

117 years ago today (April 11, 1900), John Holland sold the 64-ton submersible Holland VI to the Navy, marking the beginning of our submarine force. Several months later, the submarine was commissioned as USS Holland (SS 1).

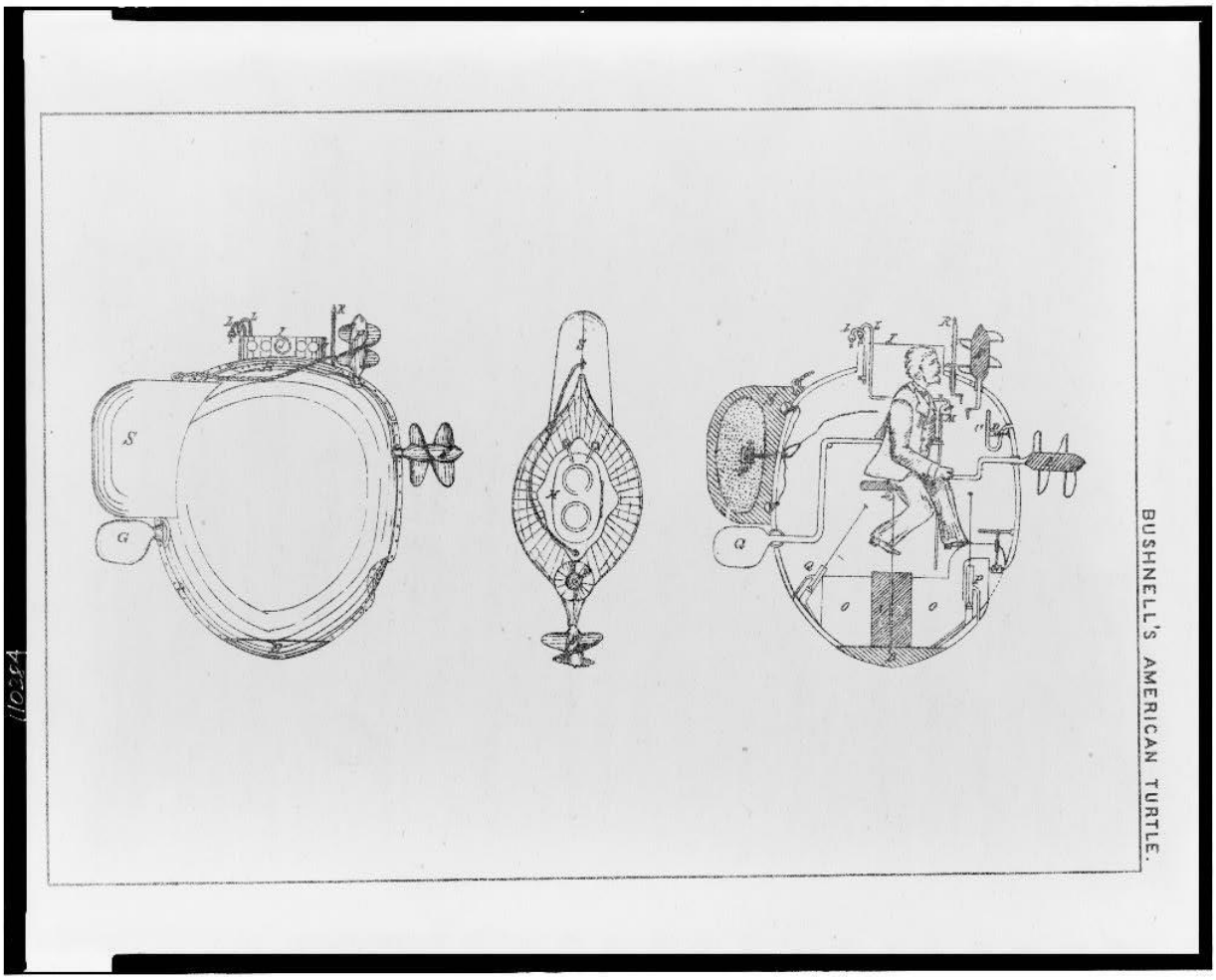


USS Holland (SS 1), 1900.

Here's a look at how submarines have continuously adapted in both quantity and quality to address more complex and rapidly evolving challenges.

Then…

1. The world's first submarine used in warfare, the 8-foot-long Turtle, debuted during the American Revolution. With an oak made, walnut-shell-shaped casing, it bobbed just below the water's surface. The one-person craft was paddled using a hand crank. It's objective was to attach an explosive to the hull of an enemy ship and get away before the explosion. In its one combat use, it failed to successfully attach the explosive, however it gave the Royal Navy enough of a scare that they moved their ships to safer distance from American Forces.

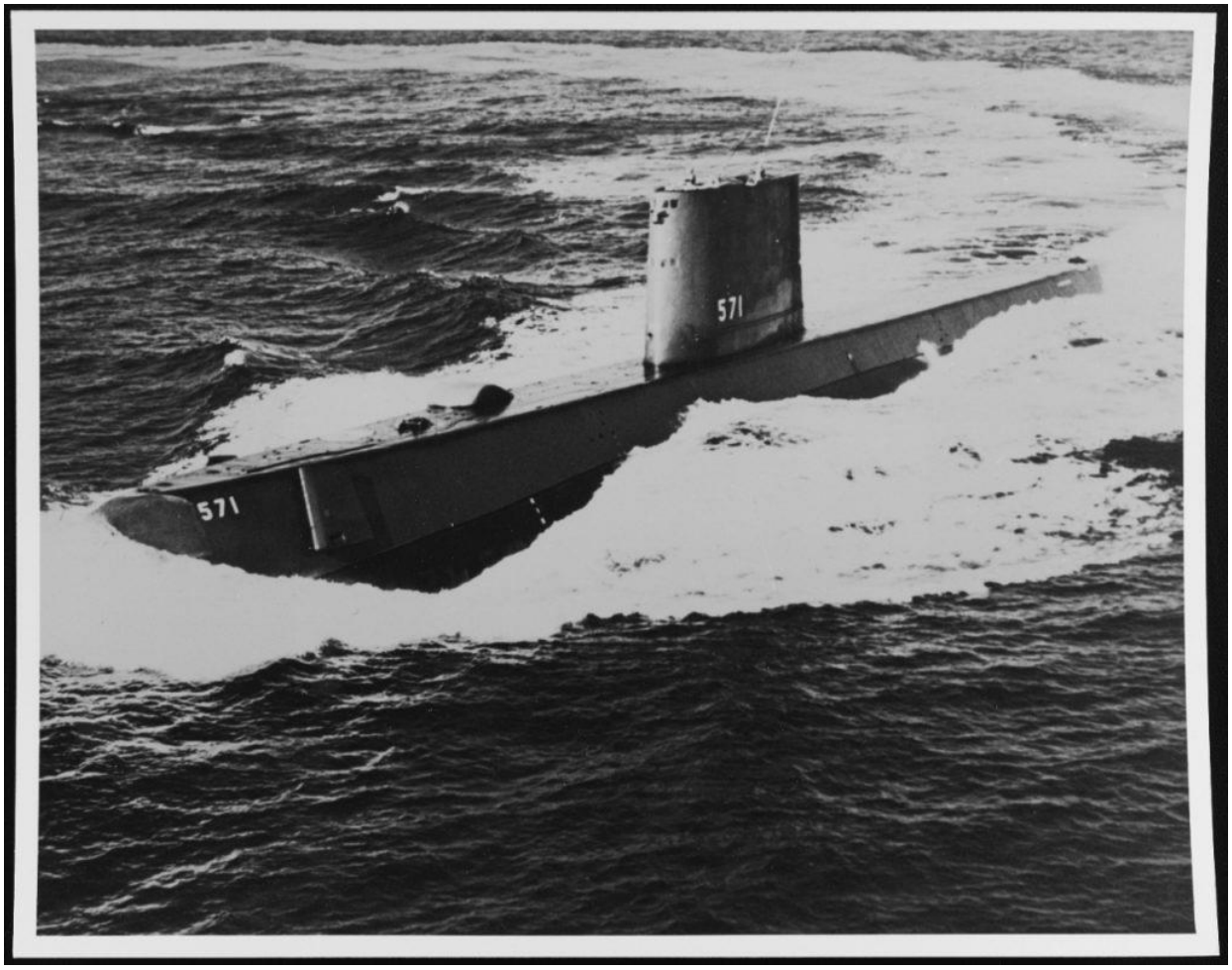


Bushnell's American turtle

2. Experimentation in subsurface craft continued after the American Revolution, including a Confederate boat, Hunley, that sunk a Union warship. Still, it wasn't until 1900 that the Navy finally commissioned a sub. Even then the technology was rudimentary but continued to improve into World War II where the submarine came of age through legendary acts of heroism and warfighting excellence. Fleet Adm. Chester Nimitz said, "We shall never forget that it was our submarines that held the lines against the enemy while our fleets replaced losses and repaired wounds."

Reproduction of USS Cabrilla (SS 288)'s World War II battle flag

3. Research and development to enhance the firepower, survivability and endurance of submarines continued after the war, culminating with perhaps the most significant technological advance in submarine history: the advent of nuclear propulsion. On Jan. 17, 1955, the crew of USS Nautilus (SSN 571) cast off lines and signaled the memorable and historic message, "Underway on Nuclear Power."



Undated photo of USS Nautilus (SSN 571)

4. Late in 1955, Chief of Naval Operations Adm. Arleigh Burke established a special project office charged with developing a fleet ballistic missile for sea launch. Just four years later, USS George Washington (SSBN 598) was commissioned. Within six months of commissioning, the ship successfully test fired two Polaris missiles and, within six months of that, deployed for the Navy's first strategic deterrent patrol. As of June 2014, U.S. submariners have completed more than 4,000 such patrols.

USS George Washington (SSBN 598) underway at sea, June 30, 1960.

Now…

5. Today's Navy submarines are 100 percent nuclear powered – patrolling the depths of our oceans, taking the fight to our enemies and providing maritime security around the world.

KINGS BAY, Ga. (March 20, 2013) The Ohio-class ballistic missile submarine USS Rhode Island (SSBN 740) returns to Naval Submarine Base Kings Bay after three months at sea. (U.S. Navy photo by Mass Communication Specialist 1st Class James Kimber/Released)

6. We have 69 commissioned submarines – attack (SSN), fleet ballistic missile (SSBN) and guided missile (SSGN).

https://youtu.be/PSE9Zjh364M *(Click on this link to watch the Hartford video)* ARCTIC CIRCLE (March 10, 2016) USS Hartford (SSN 768) surfaces in the Arctic Circle near Ice Camp Sargo during Ice Exercise (ICEX) 2016, a five-week exercise designed to research, test and evaluate operational capabilities in the region. (U.S. Navy video by Mass Communication Specialist 2nd Class Tyler Thompson and Staff Sgt. Edward Eagerton/Released)

KINGS BAY, Ga. (June 28, 2014) The Ohio-class ballistic missile submarine USS Wyoming (SSBN 742) returns to Naval Submarine Base Kings Bay following routine operations. (U.S. Navy photo by Mass Communication Specialist 1st Class Rex Nelson/Released)

BREMERTON, Wash. (June 26, 2015) The guided-missile submarine USS Ohio (SSGN 726) transits through the Puget Sound after departing Puget Sound Naval Shipyard. (U.S. Navy photo by Mass Communication Specialist 1st Class Kenneth G. Takada/Released)

7. Our submarine force includes approximately 28,000 officers, enlisted Sailors, civilians and Reservists. In 2011, female officers began serving aboard U.S. submarines. On June 22, 2015, the Navy announced the selections of the first enlisted female submariners, marking a key milestone in the continued integration of women into the Submarine Force.

PEARL HARBOR (Jan. 13, 2017) Sailors assigned to the USS North Carolina (SSN 777) stand at attention as Cmdr. Gary Montalvo, the ship's commanding officer, accepts a Navy Unit Commendation presented by Capt. Richard Seif, commanding officer of Submarine Squadron 1 onboard Joint Base Pearl Harbor-Hickam. (U.S. Navy photo by Mass Communication Specialist 1st Class Daniel Hinton/Released)

8. Our submarines are responsible for the #1 mission within the Department of Defense – strategic deterrence – accountable for approximately 50 percent of nuclear warheads.

ATLANTIC OCEAN (Aug. 31, 2016) An unarmed Trident II D5 missile launches from the Ohio-class fleet ballistic-missile submarine USS Maryland (SSBN 738) off the coast of Florida. The test launch was part of the U.S. Navy Strategic Systems Programs demonstration and shakedown operation certification process. The successful launch certified the readiness of an SSBN crew and the operational performance of the submarine's strategic weapons system before returning to operational availability (U.S. Navy Photo by John Kowalski/Released)

Future…

9. The 12-ship Columbia class will replace the existing Ohio-class nuclear ballistic submarine force; the first patrol of the lead ship, SSBN 826, is scheduled for Fiscal Year 2031.

WASHINGTON (Dec. 14, 2016) A graphic representation of the future USS Columbia (SSBN 826). (U.S. Navy photo illustration by Petty Officer 1st Class Armando Gonzales/Released)

10. The Columbia class reached Milestone B Jan. 4, enabling the program to move into the engineering and manufacturing development phase, where the attention is on achieving an 83 percent design maturity prior to construction starting in 2021.