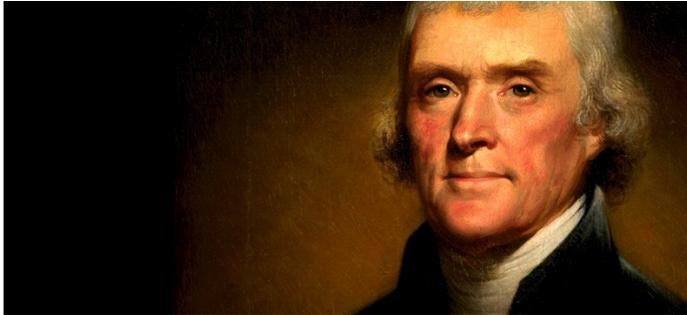


The Sea and OCEANS2015/Washington DC

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Last May the international OCEANS2015 Conference was held among the classical villas and maritime history of Genoa, Italy. (See OES Beacon, June 2015, Vol. 4, Number 2, pp 32) This October, the North America OCEANS 2015 will be in the U.S. capitol of Washington DC.

From its inception, Washington DC has attracted the best and brightest.



America's third President, Thomas Jefferson, first proposed a U.S. Navy Submarine Force in 1806.

Consider in 1806, President Thomas Jefferson was in his second term of office. With the Louisiana Purchase he had already doubled the size of America.

Robert Fulton had returned to America from time in England and France. While Fulton had extraordinary success starting in 1800 with his first submarine *Nautilus* in France, Napoleon, unable to personally witness the tests, decided Fulton was a fraud. In September 1801 Fulton left for England to gauge the interest of the Royal Navy in submarines. They kept an eye on him by keeping Fulton on retainer. In 1805, Napoleon, again showing his superb mastery of nautical engagement, ordered his fleet out of port to teach that fellow Nelson a lesson. With Trafalgar behind them, the British were no longer interested in submarines as Britannia ruled the seas. Disheartened, Fulton left his design notes on submarines with the American consul in London, and left for America. The notes were forwarded to the U.S., and shortly a meeting between Fulton and Jefferson was arranged. Thirty years earlier, Jefferson had personally witnessed David Bushnell's submarine *Turtle* engage a British 64-gun third rate ship-of-the-line during the American Revolutionary War to good effect. Jefferson was wary of the English for a number of reasons, and recognized the American navy was no match for theirs. He enthusiastically encouraged Fulton to develop the *Nautilus* submarine for American coastal defense, and, said Jefferson, "I should wish to see a corps of young men trained to this service." Jefferson further says the matter "shall be the subject of a consultation with the Secretary of the Navy." Fulton's interests, however, had moved to commercializing transport by steam-powered ships. Had Jefferson been successful in convincing Fulton to establish a **submarine corps**, clearly no one else had the knowledge or aptitude, the British might have had a more interesting time when they returned to America in 1812, and the U.S. Navy's submarine force would have recently celebrated its second centennial rather than its first.

Another watershed moment in DC nautical history began in 1957 afterhours at the **Washington Navy Yard**, in Southeast Washington DC, the oldest shore establishment of the U.S. Navy, with a brilliant story of its own. Capt. George F. Bond, and Capt. Walter F. Mazzone, both members of the Naval Submarine Medical Research Laboratory, working in the Navy Experimental Diving Unit (NEDU), began their seminal work that led to the creation of **saturation diving**. The U.S. Navy's Man-in-the-Sea Program, including the three SEALAB undersea habitats, was a result. There were hints and suggestions before, but saturation diving really started here. Period. Every bit of it: commercial, technical, military, Cousteau's Conshelf, Ed Link's SPID, Tektite, Hydrolab, Aquarius, all of it. Hyperbaric medicine was a secondary benefactor.



USN Astronaut-Aquanaut Scott Carpenter inspects the lashed rigging before SEALAB II is lowered to the seafloor off La Jolla, CA, in 1965.

(Editor's Note: There will be a reunion of many of the original Aquanauts at a dinner gala in San Diego, October 29, 2015. Parties interested in attending should visit the Marine Technology Society-San Diego website for further details).

Among the must-see Maritime Museums in the Washington DC area are:

Editor's top pick: The **U.S. Naval Academy Museum**, <<http://www.usna.edu/Museum/index.php>>. Located 35 miles east of Washington, DC on the coast in Annapolis. The U.S. Naval Academy Museum welcomes more than 100,000 visitors annually from all over the world. The Museum offers two floors of exhibits about the history of seapower, the development of the U.S. Navy, and the expanse of projects the U.S. Navy has accomplished. Exhibits include a piece of the Civil War ironclad

Monitor, a moon rock (52 astronauts were USNA grads including Alan Shepard, Wally Schirra, Jim Lovell, Jim Irwin, and Bill Anders), the largest model ship collection in North America, live model making demonstrations, a WWII German enigma coding machine, and a lot more. Visit the nearby Chapel and pay respects at the crypt of legendary Captain John Paul Jones of the American Revolutionary War. Admission is free. Bring the kids, they'll love it. Visitors must show a valid government-issued picture ID (driver's license, passport, CAC, etc.) at the gate. A few nice hours can be spent in the comfort of your den with a web tour of "A History of the Navy in 100 Objects" <<http://www.usna.edu/100Objects/Objects/Instructions.php>>.



Captain John Paul Jones, the first well-known naval fighter of the United States, fought in the American Revolutionary War. Jones famously refused to surrender his ship with the words, "I have not yet begun to fight!" He went on to win the engagement.

Historic Ships in Baltimore

<<http://www.historicships.org/historic-ships.html>>
Visitors walk among an impressive collection of vessels including the U.S. Sloop-of-War *Constellation* (1797-1853), the WWII U.S. Submarine *Torsk* (SS-423), the 1930's U.S. Coast Guard Cutter *Taney*, the Lightship *Chesapeake* (1930-1965), and the Seven Foot Knoll Lighthouse that marked the entrance to the Patapsco River and Baltimore Harbor for over 130 years. Knowing people are pretty much still the same, guests can sense life at sea back into the 18th century.



The WWII U.S. Tench Class fleet type submarine USS Torsk (SS-423) made over 10,600 career dives.

Smithsonian Museum of American History, invites you to consider **Sea-side microscopy**: "Whoever at the seaside has not had a microscope and an aquarium has yet to learn what the highest pleasures of the seaside are," according to Herbert Spencer, an eminent British intellectual, in 1860. Like reading a centuries old cookbook, you get a feel for the people of that day. Visit on-line at: <<http://americanhistory.si.edu/blog/sea-side-microscopy-favorite-19th-century-summer-hobby>>. Drop by to check out the vintage microscopes if you're already on the mall.

Annapolis Maritime Museum <<http://amaritime.org/>> engages visitors in interactive experiences that highlight the oyster and its role in shaping the history and the maritime culture of Annapolis. Not far from the U.S. Naval Academy Museum.

The National Museum of the U.S. Navy

<<http://www.history.navy.mil/museums/NationalMuseum/org8-1.htm>>

Located on the grounds of the Washington Navy Yard. Visitors must have either a DOD Common Access Card; an Active Military, Retired Military, or Military Dependent ID; or an escort with one of these credentials. All visitors 18 and older must have a photo ID. Tough to get in, but awesome displays if you can, like the actual bathyscaph *Trieste*. Plan on a whole day before or after the conference.



The USN's bathyscaph Trieste made the first manned dive to the bottom of the Mariana Trench on January 23, 1960.

Next up: OCEANS 2016 International travels to Shanghai, China in April 2016. Shanghai is home to the China Maritime Museum, which is built around a full-scale recreation of a ship captained by one of China's most famous nautical explorers, Zheng He, active in the 1400's. The architecturally inspiring museum is filled with model boats, historic relics, and interactive displays. Don't miss this article in the December 2015 Beacon.

