

VOLUME 57, NO. 3

FALL 2018 REPORT

PULL TOGETHER

NEWSLETTER OF THE NAVAL HISTORICAL FOUNDATION

Historic Ships Focus

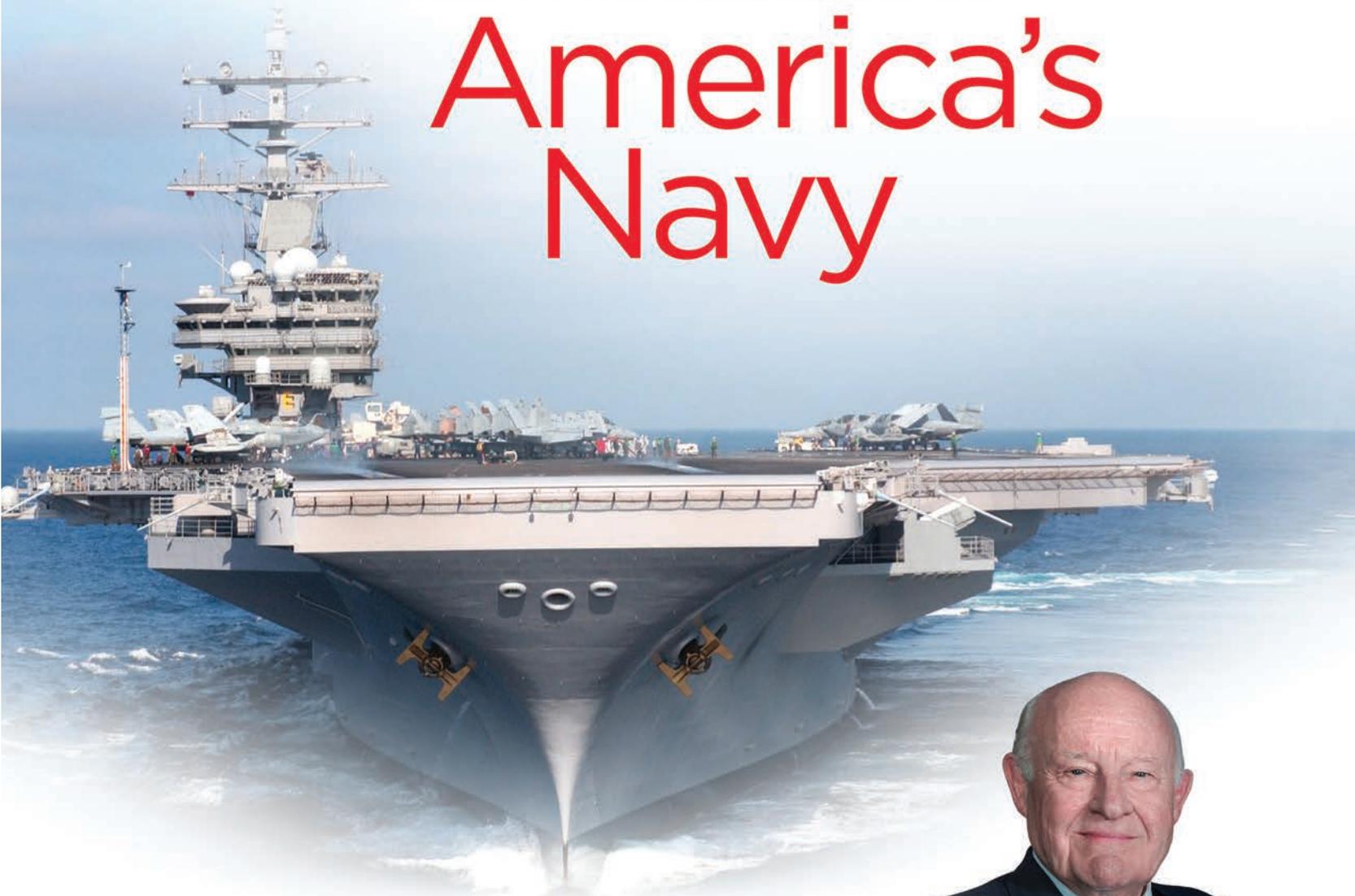
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PULLOUT SUMMARY INSIDE:

Nuclear Energy, Naval Propulsion,
and National Security Symposium

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The Naval Historical Foundation

preserves and honors the legacy of those who came before us while inspiring the generations who will follow. We focus on educating and creating global public interest about the importance of our rich naval history and linking it to today's challenges and opportunities in the maritime domain.

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COVER PHOTO: *Vasa* photo courtesy Vasa Museum.

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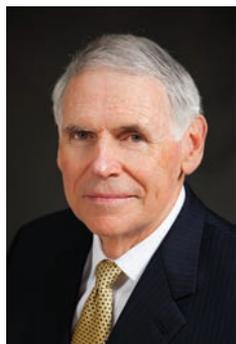
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Naval
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To Master the Future. you Must First Study the Past

Chairman's Message



During the past year, the Naval Historical Foundation has continued to work to draw lessons from our incredible naval heritage to inform current leaders as they contemplate choices that could effect the future of our Navy.

I cannot think of a better example than the Nuclear Energy, Naval Propulsion,

and National Security Symposium that we organized and co-hosted with the Center for Strategic and International Studies (CSIS), held here in the nation's capital on October 2nd. The program, introduced by Dr. John Hamre and myself, was kicked off by Chief of Naval Operations, Admiral John Richardson, who eloquently reminded the audience that America's ability to project power overseas with naval forces and to provide strategic deterrence is heavily dependent on nuclear propulsion. The CNO's introductory remarks initiated an informative discussion capped by sage observations from retired Senator John W. Warner. I would like to give special thanks to NHF board members Mike Wallace, a former Constellation Energy CEO, who helped conceive and structure the program, and Dr. David Rosenberg who moderated one of the panel sessions. We also thank Dr. John Hamre, President and CEO of CSIS and his staff for superb support, Ms. Amy Roma, Partner at Hogan Lovells for masterminding much of the program, and all of the participants for their enlightening contributions.

Another example of the use of history to inform current leaders is a partnership we have developed with

the Joint Forces Staff College to have students receive monographs from NHF for the purpose of writing reviews for Naval History Book Reviews. If you are receiving this NHF product in your e-mail inbox, stand by for some critical analyses from active duty reviewers.

For 2019 we are planning to build on some of the new programs we initiated this past year, including the U.S. Naval Academy Superintendent's Leadership and Vision Awards, and the formal Mess Night hosted at the Navy Museum.



Dr. Hamre and Admiral Fallon welcome Admiral Richardson to October 2 NHF-CSIS symposium covering nuclear energy.

With the biannual USNA McMullen History Symposium scheduled for September 2019, we again plan to recognize the work of some of our finest naval historians with the Commodore Dudley W. Knox Medal for lifetime achievement within the profession. Sadly, one of the previous recipients of this prestigious award, the former Director of Naval History Dean Allard, passed away this past September.

We have had an exciting year and look forward to bringing you additional engaging programs in the future. We cannot continue this important work without the wonderful support of our members, sponsors and donors.

Please be generous and consider assisting with a year-end tax-deductible charitable donation!

Sincerely,

Admiral William J. Fallon, USN (Ret.)

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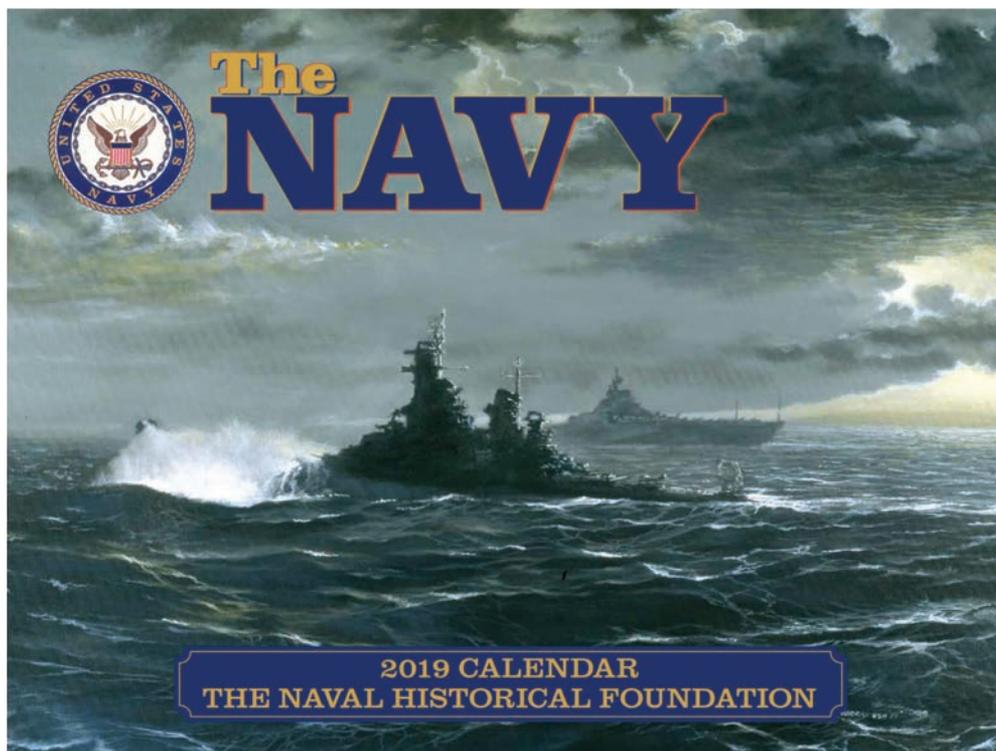


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The Director's Cut: U.S. Navy Railway Guns: A Case Study in Rapid Prototyping and Acquisition

By Rear Adm. Samuel J. Cox, USN (Ret.), Director, Naval History and Heritage Command



One of the five naval gun batteries deployed to France during World War I. Photo courtesy of the Naval History and Heritage Command.

On September 6, 1918, the 14-inch, 50-caliber Mark IV naval rifle of Battery 2, commanded by Lt. (j.g.) E. D. Duckett, USN, of the U.S. naval railway gun unit opened fire on a key German railway hub in France at a range of over 20 miles. The firing marked the combat debut of a weapon that had been conceived, designed, built, and shipped in only a few months. The five batteries—one gun each—of the naval railway unit would go on to fire 782 14-inch rounds on 25 occasions at strategic targets far behind German lines before the war ended. In fact, Battery 4 fired her last round timed to impact seconds before the armistice cease-fire was to go into effect at 1100—making it possibly the last shot to impact before the war ended.

The Germans got the jump on the Allies in building rail-mobile long-range artillery that could hit targets very accurately far behind Allied lines without risking vulnerable bomber aircraft—or the even more vulnerable Zeppelin airships. During 1917, German railway guns regularly bombarded the key port of Dunkirk, France, which was critical to supplying British troops on the

Western Front, among other targets. At the peak of the Germans' spring 1918 offensive, their largest railway gun—often erroneously referred to as “Big Bertha” (a different gun)—lobbed shells into the city of Paris.

On the Allied side, the U.S. Navy was the first to develop a similar weapon system. Rear Adm. Ralph Earle, chief of the U.S. Navy Bureau of Ordnance, led the development of requirements for the railway guns. Design work on the weapon commenced at the end of December 1917 and concluded in late January 1918. The first weapons were built and ready to ship by April 1918, as the situation in France became increasingly desperate with the rapid advance of the German army that would eventually run out of steam just short of Paris.

Each of the initial five batteries consisted of one 14-inch naval rifle on a special railroad car. As the newest U.S. battleships were being armed with 16-inch guns, a number of spare 14-inch guns were readily available for use. The guns were assembled at a naval gun factory at the Washington Navy Yard and mated with railway carriages

Continued on next page

The Director's Cut

Continued from page 7

at the Baldwin Locomotive Works and Standard Steel Car Company in Pennsylvania. In addition to the gun car, each battery included a locomotive, two ammunition cars with 25 rounds each, two construction material cars, a crane, fuel, a workshop, berthing, a kitchen, and medical cars, all under the command of a Navy lieutenant. The five batteries were each independently mobile but under the overall command of Rear Adm. Charles P. Plunkett. The entire unit had about 25 officers and 500 enlisted personnel.

Because of the limited traverse of the gun, a railway siding that pointed in the direction of the intended target would have to be quickly constructed, hence the construction cars. In addition, to elevate the gun, a pit had to be dug underneath the rail bed and the rails removed due to the width of the gun breech. The Mark II components to the gun fixed these issues, but they were not ready before the war ended. The weight of the gun carriage greatly exceeded the rated capacity of French railroads, so the trains were constrained to a speed of only about five miles per hour. The mobility of the trains was their best defense,



Rear Adm. Charles P. Plunkett commanded the naval batteries.

but they were subject to German aerial observation and occasional air attack and counterbattery fire. However, only one U.S. Navy crewman was killed as a result of enemy action, though a number were wounded.

An example of the Navy railway gun is on display at the Washington Navy Yard. This Mark I gun was used for testing in the United States and is not one of the five that deployed to France. Those were later turned over to the U.S. Army, with some serving as coastal artillery between the world wars, before eventually being scrapped.

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Vice Admiral Robert F. Dunn Essay Prizes

By David F. Winkler, Ph.D., Staff Historian



Left to Right: Admiral Fallon; Midn. Owen Platt; Father Peter Donabue, President of Villanova University; and Col. Matthew Culbertson, CO VU NROTC Unit at Vice Adm. Robert F. Dunn at the Essay Competition Grand Prize presentation on October 27, 2018. A native of Chicago, Midshipman Platt intends to become a naval aviator.

The NHF is pleased to announce that Midn. Owen Platt of the Villanova University NROTC Unit earned the grand prize (\$1,000) for his essay entitled “Theodore Roosevelt: Father of the Modern Navy.” Such was the quality of the essay that Dr. Charles Chadbourn of the Naval War College, editor-in-chief of the foundation-sponsored *International Journal of Naval History*, announced his intent to publish an edited copy of the essay in a forthcoming edition of that online journal. Midshipman Platt had the unique distinction of receiving the award in person from NHF Chairman Admiral William J. Fallon, a 1967 alumnus of Villanova.

The VADM Robert F. Dunn Prize Program was initiated in 2014 as a means to recognize the scholarship of NROTC Midshipmen as a counterpart to NHF’s long-standing Captain Edward Beach History Prize at the U.S. Naval Academy. First- and second-place cash prizes are awarded to midshipmen in each of the six NROTC geographic regions, and a grand-prize winner is selected from among those. Because not all schools require students to write essays, instructors can nominate midshipmen based on their mastery of the subject matter. In such cases, NHF sends a certificate and a one-year membership for the designated midshipman. So far in 2018, NHF has sent certificates for presentation to

midshipmen attending Tuskegee Institute, Kansas University, and Cornell University.

In addition to Midshipman Platt, cash prizes were awarded to the following midshipmen for the following essays:

- **Midn. Robert Dromsky-Reed** of the University of Rochester for “Disarmament, Power Projection and National Security”
- **Midn. Thomas Leeker** of the University of Notre Dame for “Modern Pirates: How Fighting the Barbary Pirates Influenced the Modern United States Navy”
- **Midn. Elliot R. Morgan** of Iowa State University for “John S. McCain III”
- **Midn. Anna Phillips** of the University of South Florida for “Capt. Mahan and his Impact on Naval Warfare”
- **Midn. Steven Keenan** of the University of Texas for “A Brief Analysis of Naval Intelligence and Its Effects on the U.S. Navy During the Second World War”
- **Midn. Christopher Rielage** of Stanford University for “For a Common Defense: Joshua Humphreys and His Heavy Frigates”
- **Midn. Phillip Lawton** Hall of San Diego State University for “The Battle of the Chosin Reservoir”

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Dunn Essay Prizes

Continued from page 9



Midshipmen receive award recognition for their academic scholarship from their respective professors of naval science (clockwise from top left): Midn. Anna Phillips and Capt. John Schmidt of the University of South Florida; Midn. Christopher Rielage and Capt. Jerrod Devine of Stanford; Midn. Thomas Leeker and Capt. Mark Prokopius of Notre Dame University; and Midn. Robert Dromsky-Reed and Capt. Norberto M. Nobrega of the University of Rochester.

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NEWSLETTER OF THE NAVAL HISTORICAL FOUNDATION

The Nuclear Energy, Naval Propulsion, and National Security Symposium

By Admiral William J. Fallon, USN (Ret.) and Ms. Amy Roma, Esq.

The Naval Historical Foundation and the Center for Strategic and International Studies (CSIS) co-hosted a symposium at CSIS on October 2, 2018. The objective of the symposium was to review the history of nuclear power in the U.S. Navy, highlighting the close connections between the Navy and the development and operation of the commercial nuclear power industry, and then to examine the precarious current state of the nuclear ecosystem and its impact not only on the Navy but also on national security more broadly.

Opening Keynote Address

Chief of Naval Operations (CNO) Adm. John Richardson highlighted the remarkable technical achievements in the short period from the initial exploratory experiments with nuclear energy in the 1930s until the first functional Navy propulsion reactor in USS *Nautilus*, which was launched in 1954, and its simultaneous commercial counterpart at Shippingport, Pa., the first commercial power reactor. Both programs were overseen by the

Navy's Adm. Hyman Rickover. This speedy concurrent development of the nuclear Navy and nuclear power industry was enabled by extraordinary vision, hard work, innovation, and optimism and exemplified what the nation could do when motivated and resourced.

The CNO further highlighted the 1963 globe-circling transit of the nuclear task force composed of *Enterprise*, *Bainbridge*, and *Long Beach* in Operation Sea Orbit, which showcased the U.S. nuclear propulsion program and positioned the United States in a strategic and technical counter to the Sputnik space achievements by the USSR. Admiral Richardson credited the strategic vision and drive of Admiral Rickover for developing a system of strict authority, accountability, and responsibility that enabled the naval propulsion program to succeed and be maintained to



CNO Adm. John Richardson

the high standards to which it still adheres. He stated that the program stands as an inspiration and example of what can be achieved and that these fundamental lessons apply today.

Panel 1: Historical Milestones & Achievements

The first panel focused largely on the history of the nuclear navy, the success of that program since its inception, and its importance to U.S. defense.

Continued on next page

Dr. David Alan Rosenberg, the panel moderator, walked through a chronological history of nuclear power from inception to the present. He cited the leadership of Admirals Rickover and former CNO Arleigh Burke in proposing and executing expansive plans for nuclear propulsion in U.S. Navy ships, including the underseas strategic nuclear deterrent with Polaris missile submarines. Dr. Rosenberg related several historical events involving nuclear-powered ships that impacted U.S. strategic security.

Dr. Rosenberg further pointed to the key decision by President Eisenhower to offer nuclear power technology to other nations in his “Atoms for Peace” program in 1953, the fundamental principle of which was that *the U.S. would share its nuclear energy technology with other nations if the receiving nation committed to not use the technology to develop nuclear weapons*. This highly successful initiative shared U.S. nuclear designs, standards, and safety with the world while preventing the proliferation of nuclear weapons.

Historian Norman Polmar discussed the unlikely rise to prominence of Rickover to become one of the most famous and powerful Navy historical figures despite nominal ship

and no fleet command experience. He noted that although the new (in 1948) Atomic Energy Commission was charged with reactor development, it was co-opted by Rickover to run both civilian and naval reactor programs. Mr. Polmar lauded Rickover for recruiting the best people available and training them to meet uncompromisingly exacting standards to become outstanding engineers and nuclear reactor operators. He nonetheless tempered his effusive praise of Rickover by pointing out his conservative approach to innovation, particularly in the wake of the loss of *Thresher*, although Admiral Rickover did use this disaster to leverage increased power from Congress and enforce more rigid rules on the operational nuclear fleet. Polmar also compared U.S. and USSR submarine development and explained that some Russian submarines were more advanced than U.S. submarines in most areas of design.

Dr. Joel Holwitt, a currently serving naval submarine officer, gave a presentation entitled “Naval Nuclear Power in the Space Age” in which he argued that the propulsion technology was not inevitable nor was nuclear power preordained, but that the space age was initiated by nuclear

power. He pointed out that Rickover believed technical expertise was more important than warfighting skills and that his procedure-driven operations represented a change of culture for the Navy. Dr. Holwitt cited his own experience as a participant in the intense naval reactor training regimen that is a legacy of Rickover. He contended that *Thresher* was the first space-age submarine, but her hull was constructed to less demanding specifications and standards than that of the reactor and thus the key factor in her demise. The resulting “Sub Safe” program, with its goal of increased attention to all matters related to submarine construction and operation, had lasting results (and could be a good example for the nuclear industry today).

Adm. James “Sandy” Winnefeld was the final speaker on this panel. Admiral Winnefeld was a fighter pilot early in a remarkable career, which culminated with command of U.S. Northern Command (USNORTHCOM) and ultimately his appointment as Vice Chairman of the Joint Chiefs of Staff in 2011-2015. Admiral Winnefeld also went through the naval reactor training program and commanded *Enterprise*. He used his personal experience commanding *Enterprise* at the time of the September 11th attacks on the United States (the ship dashed at high speed to be in position the next day to support the retaliatory assault in Afghanistan) to illustrate some of the advantages of nuclear-powered warships. Admiral Winnefeld highlighted not only the visionary design of the *Enterprise’s* nuclear reactors, but also, more importantly, the culture of excellence in the training, safety, and operational performance of the naval propulsion program and the strategic value it serves to national security.



Panel 1: Right to Left – Dr. David Rosenberg, Mr. Norman Polmar and Dr. Joel Holwitt look on as retired Adm. Sandy Winnefeld addresses the audience during the first session.

PHOTOGRAPHY COURTESY OF JEFF MALET PHOTOGRAPHY



Panel 2: Left to Right Mr. Michael Wallace the Hon. William Ostendorff, Adm. Frank Caldwell and moderator Dr. Mark Hagerott as they were being introduced by Admiral Fallon

Panel 2: The State of U.S. Nuclear Energy Today:

This panel focused not only on the current state of the naval propulsion program, but also the links between naval propulsion and the commercial U.S. nuclear power industry. It expanded on the broader links between the commercial U.S. nuclear power industry and national security, focusing on U.S. geopolitical and nonproliferation goals, the ties between the Navy and commercial nuclear power for jobs and supply chain, the importance of nuclear power for energy resilience and independence, and the impact a declining commercial nuclear power industry has on these national security objectives.

The panel was moderated by Dr. Mark Hagerott, a retired nuclear-trained Navy captain and current chancellor of the North Dakota University System. Dr. Hagerott discussed the state of the U.S. nuclear energy industry and its current challenges as well as its relationship with the U.S. Navy. He expanded on Admiral Richardson's description of the nuclear ecosystem and relationships between civilian, government, and naval entities. He cited the demise of General Electric, one of the foremost names in the development

of nuclear power, as an example of the declining state of the industry today. Dr. Hagerott noted the need for effective leadership in the nuclear industrial infrastructure.

Adm. Frank Caldwell, a nuclear-trained submarine commander and currently the head of the Naval Nuclear Propulsion Program, was the next speaker. He provided an overview of Navy nuclear power today and reminded the audience that nuclear-powered SSBNs are the cornerstone of national defense, with 70% of the U.S. nuclear deterrent deployed in these boats. Admiral Caldwell also highlighted the demand by combatant commanders for nuclear-powered SSNs and aircraft carriers for a variety of other national security missions. In discussing current reactor and ship construction plans, he pointed out the need for critical personnel skills and a strong industrial base. Citing diminished supply options for major industrial components as indicative of the need for a revitalized industrial base in the commercial sector, he emphasized the close partnership between Navy and commercial industry.

Admiral Caldwell concluded by emphasizing five points: (1) nuclear propulsion has been an operational game-changer for the Navy; (2) The health and well-being of the commer-

cial nuclear power industry is good for the Navy's industrial base; (3) STEM education for young people is vital; (4) Long-term contractual commitments ensure the industrial base that it has a future; and (5) People, not organizations, get things done.

The Honorable William Ostendorff was the next speaker. In addition to



Admiral Caldwell

being a nuclear-trained naval officer, Commissioner Ostendorff also served as a former principal deputy administrator at the National Nuclear Security Administration and as a commissioner on the Nuclear Regulatory Commission. He expanded the definition of the nuclear enterprise to include weapons (warhead) programs as well as Navy propulsion and commercial power reactors. Echoing Admiral Caldwell, he cited his four decades at work in the nuclear enterprise to underscore the importance of human capital and the need for well-trained people. Commissioner Ostendorff fears that the decline in commercial nuclear power plants will impact Navy nuclear personnel recruiting.

More broadly, Commissioner Ostendorff emphasized the negative ramifications to national security from a declining nuclear power industry. He underscored the negative impact a declining nuclear power industry has on U.S. domestic energy security, geopolitical influence, nonproliferation objectives, and nuclear power safety and security around the globe. Arguing that nuclear power is vital to U.S. interests, he pointed to a recent letter sent to Department of Energy Secretary Perry, signed by dozens of

Continued on next page

national security experts (including Commissioner Ostendorff), that urged U.S. government support to prevent the further decline of the commercial nuclear power industry. He further highlighted the importance of recent bipartisan legislation proposed in the Senate, S. 3422 – Nuclear Energy Leadership Act, a bill designed to help the United States return to its lead in nuclear energy technology—a position, the bill sponsors note, that the United States has yielded to Russia and China, weakening our energy security, economic competitiveness, and national security.

The concluding panelist was Mr. Michael Wallace, a former vice chairman and chief operating officer of Constellation Energy and former chairman of Constellation Energy Nuclear Group. Mr. Wallace is also a member of the president’s National Infrastructure Advisory Council, which advises the president on matters related to homeland security. Like many of the other speakers, Mr. Wallace went through the naval propulsion training program and served as an officer in the nuclear Navy.

Mr. Wallace echoed Commissioner Ostendorff in the call for U.S. government action to protect its national security interests in the face of a declining commercial nuclear power industry. Mr. Wallace discussed his recently published CSIS paper entitled “Back from the Brink: A Threatened Nuclear Energy Industry Compromises National Security.” This paper highlights the impact the commercial nuclear power industry has on U.S. national security objectives. He explained that U.S. commercial companies are forced to compete—unsuccessfully—abroad

against the nation-states of Russia and China for new nuclear projects around the world, losing the “100-year relationship” between the reactor supplier and host country (i.e., for the life of the plant).

As a result of both the declining domestic nuclear industry and declining U.S. presence abroad, Mr. Wallace further argued, U.S. geopolitical influence in strategic locations—like the Middle East, Southeast Asia, and Africa—is weakening, along with its nonproliferation voice and nuclear safety and security standards, which have historically been set by the United States.

Mr. Wallace also explained that one of the biggest reasons nuclear power plants are being shut down is that the U.S. energy markets do not value the energy security and environmental benefits of nuclear power, which provides large amounts of carbon-free baseload power, maintains a long-term fuel supply onsite, and is more resilient than other energy sources to weather, physical, or cyber-attacks. This is in sharp contrast to other countries, which are building reactors for just these reasons.

Mr. Wallace explained that U.S. government leadership is necessary to support American interests on all fronts—economic, defense, and politically—just as it did when the commercial nuclear power industry first emerged. Such actions could include tax credits for operating plants, market reform, the Department of Defense using nuclear power as a percentage of power supply for military installations, utilization of the U.S. research infrastructure to foster new nuclear innovation, and a revival of domestic U.S. uranium enrichment capabilities. Noting current Chinese and Russian construction and overseas

marketing, he stated emphatically that companies cannot compete with governments. Mr. Wallace called for a National Security Council–led government initiative, with participation from the Department of Energy, Department of Defense, and key government stakeholders, with advice from top industry executives, to drive government action and to make decisions based on the best interests of the U.S. government.

Closing Keynote

Senator John Warner delivered a rousing closing keynote in which he recalled the nation overcoming national challenges during WWII and the Cold War. Drawing on his experience as a former Secretary of the Navy and years serving on the Senate Armed Services Committee,



Senator Warner

Senator Warner emphasized the importance of good, well-trained people in our nuclear endeavors and cited their benefits to both Navy and industry.

Senator Warner also noted the need for legislative support for nuclear power and for presidential leadership. He suggested enlisting the Secretary of Defense to make the national security case for nuclear industry survivability.

Senator Warner charged the audience to take up the challenge and respond to the call to action detailed in the symposium as critically important to the Navy, nuclear power industry, and the U.S. national interest.

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Historic Ships Focus: *Vasa* and LCS 102

Editor's Note: NHF has long supported efforts to preserve historical naval vessels because they provide the ultimate “immersion experience” that today’s museums are striving for in order to tell a particular narrative. NHF has been an associate member of the Historic Naval Ships Association ([visit www.hnsa.org](http://www.hnsa.org)) and featured all of this nation’s afloat museums on its www.usnavymuseums.org website. In past *Pull Together* we have documented preservation efforts with the *Texas*, *Olympia*, *Laffey*, *Monitor*, and *Constitution* as

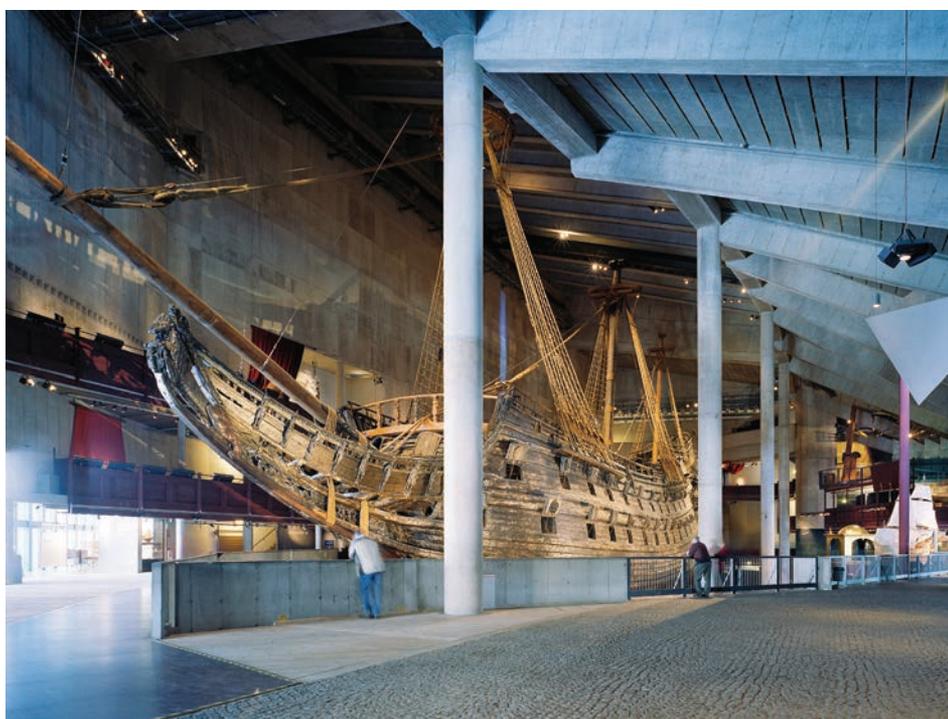
well as the HMS *Victory*. In this issue we compare two vastly different warships: One was launched in 1627 and served very briefly in the Swedish Navy, and the other was built in 1945 and served not only with the U.S. Navy but also with the Japanese and Thai navies. One vessel was built of oak and the other of steel. *Vasa* was designed to host a crew of 145 sailors and carry 300 soldiers, and LCS 102 carried a complement of 78. Both ships face challenges if they are to survive into the 22nd century.

NHF Visits *Vasa*

By David F. Winkler, Ph.D.

Approaching the large barn-like structure housing *Vasa*, I had my first aha moment when I noticed a pond to the left of the entrance. After I walked over, my suspicions were confirmed as the pond was actually the head of a former Swedish naval drydock. Back in the late 1980s, construction of the museum occurred around and over the drydock. In December 1987, the historic 17th-century warship was towed into the flooded drydock and settled into a cradle; the drydock was then permanently drained as construction on the building continued. Since the museum officially opened in 1990, *Vasa* has attracted over 25 million visitors—nearly 1.5 million in 2017 alone! As one of Sweden’s top tourist attractions, admission fees and museum store sales not only underwrite the care and maintenance of *Vasa* but also support all Swedish National Maritime Museums, which include the Swedish Naval Museum at the main naval base of Karlskrona, the National Maritime Museum in Stockholm, and—oddly—the National Railway Museum in Gävle.

Walking into the main exhibition hall built over the drained drydock, I was taken aback by the size of this nearly 400-year-old vessel. Not only was the hull over 95 percent intact, but the ornate detailed carvings reflected



The interior of the Vasamuseet.

the glory of the reign of King Gustavus Adolphus, who, in the 1620s, had taken Sweden to war against Poland and Lithuania. *Vasa*, heavily armed with bronze cannons, was rushed to completion and to sea to support a forthcoming ground offensive. Unfortunately, those bronze cannons contributed to her demise. During her maiden voyage leaving Stockholm, a gust of wind heeled the top-heavy ship to port, causing seawater to pour into open lower gun ports. Hundreds ashore watched *Vasa* go under, taking 30 members of her crew down with her. After the

Continued on next page

Vasa and LCS 102

Continued from page 15



Examples of artifacts preserved in the mud of Stockholm's harbor.

bronze cannons were salvaged, the wreck would be largely forgotten.

After the location of the wreck was identified in 1956, a successful 20-month salvage effort led to the *Vasa* returning to the surface in April 1961. Knowing that the oak timbers would quickly rot if left exposed, conservators sprayed *Vasa* with polyethylene glycol to impregnate the wood, giving the hull a shiny coating.

In addition to the hull, the ship went down with hundreds of objects from the early 17th century that have been recovered to provide historians and archaeologists with a snapshot of the Swedish economy of the period. To discuss how the ship and its artifacts were being interpreted, I met with Dr. Frederick Hocker, the director of research for the *Vasa* Museum, over a lunch that consisted of a pea-soup gruel, a meat wurst, and light beer typical for sailors in the Royal Swedish Navy in the 17th century. Impressed with Hocker's command of the English language, I was humored to learn he grew up in Northern Virginia.

"So how did you wind up in Stockholm? Do tell!" I inquired. After graduating with a B.A. in history from Middlebury College in Vermont, Hocker studied at the University of Cambridge in England where he focused on economics. He then applied to and was accepted into the doctoral program for anthropology and archaeology at Texas A&M where he went on to be an associate professor of nautical archaeology while also serving as a visiting faculty member at the Sea Education Association at Woods Hole, Mass., a research associate at the South Carolina Institute of Archaeology and Anthropology, and an archaeologist with the Bermuda Maritime Museum. Accumulating an impressive toolbox of skill sets, Hocker was recruited to be the senior researcher and research coordinator for the National Museum of Denmark Centre for Maritime Archaeology, providing interpretation for Viking-era vessels. In 2003, he was invited to cross the straits to come to Stockholm.

Evidence of Hocker's touch was evident throughout the museum with artifact displays that not only identi-

COURTESY OF THE VASA MUSEUM

fied the artifacts but also placed them within their historic context. With regard to the museum's largest artifact, the *Vasa*, Hocker discussed recent media attention concerning ongoing deterioration of the treated oak wood as more has been learned in recent decades on conservation and chemical reactions. Hundreds of bolts put in place in the 1960s to replace the long-rusted-away original bolts had themselves begun to rust, releasing iron into the treated oak, accelerating the problem. Over the past seven years, new stainless-steel bolts were installed. Walking around



Fred Hocker—An American in Stockholm

the exterior of the ship, Hocker pointed out where interior planking had been taken out to remove stress on the outer hull. Eventually, the ship will need to be recradled to better distribute weight.

Though *Vasa* is not in danger of disappearing in the near future, a trip to Sweden's Vasamuseet ought to be on anyone's bucket list of must-see nautical heritage attractions. Understanding that not everyone can make the trip over, NHF intends to work with the Navy Museum to host Dr. Hocker for a program on *Vasa* and other historic ships in 2019.

LCS 102: A Historic Amphibious Gunboat from the Pacific War

By Christopher Lehman

The Landing Craft Support Museum Foundation was established for the purpose of honoring the World War II Navy veterans of the Pacific War and preserving the history of Landing Craft Support (LCS), a class of small U.S. Navy ships that were designed to provide close-in gunfire support to American troops assaulting the islands in the Pacific leading to Japan.

The foundation is the successor to the LCS 1-130 Association that was founded in the mid-1980s to support reunions of the LCS veterans of World War II and to focus attention on the important contribution of this class of amphibious gunboats in achieving victory in the Pacific War. In a typical island assault, battleships, cruisers, and destroyers provided heavy bombardment of the landing zone and inland facilities prior to the troops heading for shore but it was the close-in gunfire support provided by the LCS(L) (with L standing for Large) ships along with their sister ships, the Landing Craft Infantry (L), or LCI(L), that led the invading force onto the beach. The mission of these small combatants was to suppress enemy fire and then remain inshore after the Higgins boats delivered the Army and Marine troops to the beach, providing additional cover and call-fire support to those ashore. If the firepower of the LCS(L)s and LCI(L)s was insufficient, the Logistic Support Ships (Large), or LSS(L)s, would



To preserve LCS 102 into the 22nd century, a dry berth on the Vallejo waterfront is envisioned.

continue to fire as a means of designating the target for greater firepower from destroyers offshore that would then take the target under attack.

It was in the early stages of the war in the Pacific that the Navy determined that additional close-in fire support was needed badly, and an urgent program was launched to convert the LCI(L) to a ship that could accompany the troops all the way to the shore with enough firepower to protect the landing troops. By the end of the war, the Navy had produced 350 LCIs in various configurations including LCI(G), LCI(R), and LCI(M), with G standing for gun, R for rocket, and M for mortar. The 130 LCS(L)s were built as gunboats from the start, and they had more firepower

Continued on next page

Vasa and LCS 102

Continued from page 17



LCS 102 recently emerged from a drydocking with a fresh coat of paint.

per ton than did a battleship. The LCS(L)s proved to be decisive in supporting the amphibious landings at Iwo Jima and Okinawa.

At Okinawa, after the first few days of supporting troop landings, LCS(L) ships wound up being used heavily in an unexpected role—that of providing anti-aircraft support against the Japanese kamikaze attacks targeting the Navy's carriers and other large warships. In the first seven weeks of the Battle of Okinawa, LCS(L)s had the following impressive total for planes shot down: 80 definites, 6 probables, and 38 assists.

Twenty-six of the LCSs were either sunk or damaged beyond repair in late 1944 and 1945. Many of the LCSs distinguished themselves in battle, with three ships earning the Presidential Unit Citation and eight other ships receiving the Navy Unit Citation. Lt. Richard M. McCool, the skipper of LCS 122, received the Congressional Medal of Honor for his heroic actions after his ship was hit by a kamikaze, and former Navy Secretary John Lehman's (and my) father John F. Lehman, Sr., was awarded the Bronze Star with Combat V for his service as the skipper of LCS 18. His ship was credited with the shoot-down of two kamikaze aircraft and participating on June 10, 1945, in the rescue of many of the crew from the destroyer *Porter*, which sank after being hit by kamikaze aircraft.

With the end of the war, LCSs continued to serve in the Pacific supporting the occupation of Japan and conducting harbor patrol and mine-clearing operations

around Japan, Korea, and mainland China as well as the island of Taiwan. More than half of the 130 LCSs built wound up serving in the navies of America's allies in the decades after the war, including France, Vietnam, Greece, and Japan.

By the 1980s most of the remaining LCS(L) ships had been scrapped or, as in the case of the LCS 18, they were eventually used for target practice and now reside at the bottom of the ocean.

Today, only one LCS(L) remains. After distinguished service in World War II, the *LCS 102* served in the Maritime Self-Defense Force of Japan and then served for decades in the Navy of Thailand.

In 2007, after more than a decade of effort by the LCS Association and vigorous and sustained support from the U.S. Senate as well as from several former Navy Secretaries and former Chief of Naval Operations Adm. Jay Johnson, the LCS Association was able to bring the ship back to the United States where it is now serving as a floating museum at the former Mare Island Naval Base in Vallejo, Calif.

The "Mighty Midgets," as the LCS ships were known, were packed with firepower and made a very important contribution to winning the Pacific War.

The LCS 102 now serves as a fitting memorial to the 10,000 sailors who served on LCSs and to all of the amphib sailors of the U.S. Navy.

Please help honor the legacy of WW II sailors for many decades to come by donating to the LCS 102 maintenance fund: <http://www.usslcs102.org/visit.html>

From the

DECKPLATE

NHF Hosts History Reception for Retired Flag Officers

It has been a fall tradition to invite retired flag officers for all-day briefings on the state of the Navy by current Navy leaders. While he was standing in the parking lot outside of the Navy Yard's Conference and Catering Center last year chatting with some of his colleagues, it dawned on NHF President Rear Adm. Bud Langston that the Navy Museum could serve as a much better gathering spot for follow-on chats.

So this past September, the NHF launched the initial NHF Retired Flag Officer Reception and Lecture. Former



Navy Secretary and new NHF board member John F. Lehman was on hand to discuss his recent book, *Oceans Ventured: Winning the Cold War at Sea*. With many veterans of that war in attendance, Lehman's observations evoked vivid memories. Lehman's narrative earned praise from NHF Chair Admiral Fallon, especially his concluding chapter that applied the lessons of the Cold War to the contemporary maritime environ-

ment in view of an emerging Chinese Navy and resurgent Russian fleet.

NHF Hosts Reception for Under Secretary Modly

Another new NHF tradition is a fall reception for new senior Navy civilian leadership to connect them with predecessors and facilitate an appreciation of naval heritage. The first such reception, held in September 2017 for new Navy Secretary Richard V. Spencer, was attended by four former SecNavs. This year the NHF welcomed Thomas B. Modly, who took on the post on December 4, 2017, as the 33rd Under Secretary. The reception enabled Under Secretary Modly to expand the grounding in naval history that he attained as a political science major at the U.S. Navy Academy and in seven years as a naval aviator. NHF recruited former Under Secretary John W. Warner, who served in the post from 1969 to 1972, to mentor Modly. During the reception Modly presented Warner with a salvaged piece of oak from Constitution. Warner had lost a piece that had been presented to him during a turnaround cruise in the early 1970s and spoke to the audience about that cruise and thanked Modly for the kind gesture.



Admiral Fallon and Under Secretary Modly with former Senator Warner.

The Case of the Mysterious Scrapbook

On a near daily basis NHF staff receive and respond to queries from members, the general public, and historians at the Naval History and Heritage Command. Because NHF is very networked, if we do not have the answer at the ready, we can steer the inquirer in the right direction. Recently we received a call from Robert Waters of Northampton, England, who found a scrapbook of an American Sailor at a local rummage sale. He sought the NHF's help in locating the family of this Sailor so the scrapbook could be "rightfully returned."

The Sailor in question was Joseph F. Witt, who served on the battleship *Oklahoma* assigned to the Navy's Battle Fleet based at San Pedro, Calif., in the 1930s. With a little online research, NHF was able to determine that Seaman Witt was born in St. Louis, Mo., in 1914 and served in the Navy for six years in the 1930s. After meeting and marrying the former Eveline Mills of Long Beach, Calif., Witt left the



USS Oklahoma circa 1929: Courtesy Naval History and Heritage Command.

Navy and he returned to St. Louis to eventually serve with the fire department. Census records from 1940 indicate that the young couple had a daughter Cecelia. After a stint as a flight attendant with Ozark Airlines, she married and moved to Brunsville, Iowa. After Witt retired as a captain in the St. Louis Fire Department, he and his

wife followed their daughter to Iowa to be close to the grandkids. Joseph Witt passed away in 2000, leaving behind his wife, married daughter, three married grandchildren, and seven great-grandchildren. With the assistance of the Le Mars Historical Society, NHF was able to locate one of Witt's grandsons, who still lived close to Brunsville. News of the scrapbook surprised the family, and Mr. Waters was delighted to send it to a proper home thanks to the detective work of the NHF. Only one unanswered question remains: How did a scrapbook of a West Coast-based battleship Sailor wind up in England?

Knox Medal Recipient Dr. Dean Allard Passes Away

Dr. Dean Allard, a notable and respected naval historian for more than 50 years, passed away September 27, 2018. He began his venture in naval history upon graduation from Dartmouth College in 1955 when Allard served three years in the United States Navy. Upon completion of his active duty service, Allard held various positions throughout the Naval Historical Center (predecessor organization to today's Naval History and Heritage Command). Starting in 1958 as the head of the Navy's Operational Archives, he culminated his career as the director of naval history in 1995. During his tenure, Allard was instrumental in expanding and modernizing the Naval Historical Center.

He introduced computerized online systems and directed a new Contemporary History Branch, adding narrative history to the institutional record. Upon retirement, Dr. Allard remained an active historian in the Washington, D.C., area, serving as vice president of the International Commission of Military History and a member of the executive council for the International Commission for Maritime History, among a multitude of other prestigious positions. In 2015, Allard was awarded the Commodore Dudley W. Knox Naval History Lifetime Achievement Award. Presented by the Naval Historical Foundation, the award recognizes an individual for a lifetime body of work in the field of U.S. naval history.

The James C. Bradford Dissertation Research Fellowship in Naval History

Awarded by the
North American Society for Oceanic History

Amount: \$1,000
Closing Date for Applications: March 15, 2019
Send Application Materials to: nasohbradfordfellowship@gmail.com
Announcement of Award: May 15, 2019

The North American Society for Oceanic History (NASOH) is offering one dissertation fellowship in North American naval and maritime history for 2019. The fellowship is named in honor of NASOH Past President and NHF Commodore Dudley W. Knox Medal recipient Dr. James C. Bradford, in recognition of his distinguished contributions to the field of American naval history.

Eligibility: Applicants must have completed all requirements for the Ph.D. at the time of application and have an approved dissertation proposal on file at their degree-granting institution. Topics in all periods of United States and North American naval and maritime history are eligible. Naval topics include strategy, tactics, and operations; institutional development and administration; biography, personnel, and social developments; exploration, science, and technology; and policy and diplomacy. Maritime (including oceans and inland waters) topics include commerce, the environment, exploration, biography, societies, fishing, labor, shipbuilding and technology, navigation, oceanography, and travel.

Application Documents: Applications should include (1) a completed and signed application cover sheet (the blank application cover sheet is available at www.nasoh.org); (2) curriculum vitae; (3) copy of approved dissertation proposal; (4) description of the status of the project (not over 1,000 words); (5) brief statement of proposed use of the fellowship funds; and (6) the names and contact information for the dissertation committee chair and two other individuals asked to submit letters of recommendation.

Submission and Deadline: All application materials and letters of recommendations are due on 15 March 2018 and should be sent by e-mail with pdf attachments to nasohbradfordfellowship@gmail.com.

Selection: Applications will be evaluated by a three-person committee of NASOH members and the recipient will be notified by May 15, 2019.

Latest Edition of International Journal of Naval History Posted!

The NHF is pleased to announce that the summer and Fall editions of the International Journal of Naval History are posted. The NHF continues to take pride in underwriting this academic journal and invites scholars to submit papers to this peer-reviewed publication.



Time to Honor, The Journey Home



Fifty years after Vietnam, an original Remember My Service documentary film has captured a collection of stories to honor and remember the service, duty, and sacrifice of Vietnam era veterans. Representing all states and services, this Vietnam 50th Commemorative Gift book and DVD are available as state sponsored gifts to Vietnam veterans. We invite you to learn more about this unprecedented commemorative gift and the states and private community partners who are making it possible. If you are a veteran—or family member of a veteran—interested in learning when your state will be ready to present the gift, or if you are a potential sponsor or State representative (Governor’s or Veterans Affairs office), go to www.vietnam50gift.com to learn how you can help honor the legacy of Vietnam Veterans!

Remember My Service

www.remembermyservice.com



Ms. Sharlene Hawkes, President of Remember My Service (RMS), and former NHF president Vice Admiral Robert F. Dunn at the IN COUNTRY: VIETNAM 1968 Symposium held on November 14-15 at the National Museum of the United States Marine Corps. Both Ms. Hawkes and VADM Dunn participated in the two day program. Ms. Hawkes highlighted RMS efforts as they work with state veterans affairs offices to provide commemorative books (and documentary film DVDs) as gifts to Vietnam veterans. VADM Dunn served as a commentator on a panel covering the air war over Southeast Asia. Organized by the Naval Historical Foundation, Air Force Historical Foundation, Army Historical Foundation, Foundation for Coast Guard History, and the Marine Corps Heritage Foundation, the gathering brought together many of this country’s top military and naval historians to focus on the pivotal year of 1968.

Since 1926, the Naval Historical Foundation has been preserving & honoring the legacy of those who came before us!

In 2018, many of you participated in events honoring the 100th anniversary of the end of World War I. Historical analysis reveals World War I was a maritime war and sea control ultimately proved decisive for the allies. After the “Great War” a number of World War I veterans took steps to assure our history and heritage were preserved.

In 1925, seven years after the end of World War I, Commodore Dudley Knox wrote “Our Vanishing Naval History.” In 1926, Knox’s founding document would lead to the creation of the Naval Historical Foundation (NHF). Knox worked several times for Admiral William Sims, who was an NHF founding member, along with former Assistant Secretary of the Navy, Franklin D. Roosevelt. The organization they founded nearly a century ago continues to preserve

history but also strives to inspire new generations by drawing lessons from our incredible naval heritage to inform leaders as they contemplate choices that could affect the future of our Navy.

In recent editions of our Naval Historical Foundation Newsletter, Pull Together, we informed our readers about the Nuclear Energy, Naval Propulsion, and National Security Symposium that we co-hosted with the Center for Strategic and International Studies. With senior attendees from The White House National Security Council, Capitol Hill, and numerous Department of Defense, Department of Energy, and industry executives, the October 2, 2018 NHF Symposium was a perfect example of how naval history continues to inform and educate maritime professionals.

In 2018, the Naval Historical Foundation:

- Initiated the U.S. Naval Academy Superintendent’s Leadership and Vision Award for USNA Midshipmen
- Re-ignited our NHF Dining Out Mess Night, tied to a 5-Star educational symposium on U.S. Navy Fleet Admirals
- Initiated Teachers of Distinction Awards program to recognize National History Day educators who are recognized for their encouragement of student to explore naval history topics.
- Published and disseminated over 60 naval history book reviews in partnership with the Joint Forces Service College.
- Responds daily to naval history public inquiries and facilitate research opportunities at the Washington Navy Yard.
- Directly supports the Naval History and Heritage Command and its National Museum of the United States Navy.

Honor the Legacy!

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All current [and new] Naval Historical Foundation members can make a donation “In Memory of” / “In Honor of”: your shipmate, your classmate, or your squadron mate, to honor their legacy of service!

If you know an active duty, retired, veteran or maritime professional you wish to honor, donating a tribute gift is a meaningful way to honor their legacy! Honorariums will be listed on the www.navyhistory.org website (if desired) and/or captured in future Remember My Service* productions.

To commemorate the 100th anniversary of the end of World War I—and the founding of the Naval Historical Foundation—we hope you consider a tax-deductible gift of \$100 or [+ increments] to help us: Honor the Legacy!

**NHF has partnered with Remember My Service (RMS) Military Productions to help commemorate active duty, retired, and veterans service to our country.*

Checks can be sent to: Naval Historical Foundation; P.O. Box 15304; Washington DC, 20003 or visit us online at www.navyhistory.org and click “Join Now”

If you desire to donate via Credit Card, please call: 202-930-5244

As a 501 (c) (3) organization, NHF is funded by the amazing gratitude of our members!

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Those Who Came Before Us, and Educates and Inspires the Generations Who Will Follow***

Membership in NHF is open to all who are interested in the history and heritage of the U.S. Navy.

Membership dues: Student (Free): High School, or USNA/ROTC, Midn./Cadets. Must use @.edu email to register.

Digital [e-] Membership (\$25): One year
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