

Annual Report 2018



UNITED STATES NAVAL
UNDERSEA
MUSEUM

1 Garnett Way, Keyport, WA
www.navalunderseamuseum.org
360-396-4148



THE U.S. NAVAL UNDERSEA MUSEUM STRIVES to connect veterans, active-duty Sailors, and our national audience with the history, technology, and operations of the undersea Navy. Through artifacts, exhibits, and educational programs, we tell the stories of the exceptional people and cutting-edge technology that define the Navy's undersea communities.

2018 HIGHLIGHTS

67,360 VISITORS
welcomed

97 EDUCATION PROGRAMS
implemented with
9,283 participants

266 ARTIFACTS
added to the
collection

6,332 VOLUNTEER HOURS
provided by
119 volunteers

TWO PERMANENT EXHIBITS opened,
adding 3,660 sq. ft.
of exhibit space

46,515 ARTIFACTS
held in the collection

332 EVENTS for
18,475 Navy and
civilian personnel

2.4 MILLION
social media views

200 ARTIFACTS
exhibited



UNITED STATES NAVAL
UNDERSEA
MUSEUM

DIVE INTO ALL THINGS **UNDERSEA**

DEAR FRIENDS OF THE MUSEUM,

In all, 2018 was another very successful year for the U.S. Naval Undersea Museum! It was a period of continued growth and I would like to take this opportunity to appreciate and celebrate all that we have accomplished in the last year. This annual report provides a year-in-review, and I think you will agree that we are up to some great things.

The U.S. Naval Undersea Museum (USNUM) is an institution where responsible stewardship, service to the public, and a culture of caring, learning, innovation, and transparency are the measures of our impact on the U.S. Navy and the community in which we serve, and in the museum field to which we belong. Our stakeholders have taken note: we hosted more than 67,000 visits at our museum and 2.4 million online. Reflecting the museum's commitment to its audiences, we were inducted into the TripAdvisor Hall of Fame for receiving the TripAdvisor Certificate of Excellence for five consecutive years. The award is given to organizations that receive consistent, outstanding reviews by TripAdvisor travelers.

As we reflect on 2018, our nation and the world continue to experience challenging times. These times have reinforced the critical role that cultural institutions such as ours play in sharing the stories, both past and present, about the Navy's rich heritage and place on the world's stage. Our museum opens dialogues and highlights human experiences that shape and inspire us as individuals, cultures, and communities. One such avenue to share these stories is through our exhibit program. The newest exhibit *Search, Spy, Rescue, Recover: Navy Vehicles Under the Sea* shares information about how undersea vehicles grant new capabilities, optimize and simplify missions, and reduce risk to Sailors. The museum also opened a family learning area in 2018. The themes of the family learning area are to observe, ask, explore, reflect, and try again. These are skills that everyone has at their disposal to understand, discover, and create. By practicing these skills and through interactive challenges within the family learning area, families learn how they can be used every day by beginners and experts. The two recent additions to the exhibit gallery have really transformed the look and feel of the entire museum.

Our education program is another key avenue for relaying Navy history and technology to our community and fostering the public's engagement with technological concepts. Throughout 2018, education programs, including Discover Engineering ("E") Day and Navy STEM Days, continued to draw people to the museum to engage with the science and technology that allows the Navy to operate

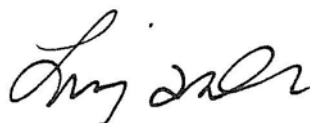
undersea. The participation of more than 9,200 students and families in these programs demonstrates the public's interest in and appreciation of opportunities the museum provides for learning.

All of the great things our museum accomplishes every year are made possible by our exceptional team. In 2018, all nine of the museum staff received On-the-Spot Awards from the Naval History and Heritage Command recognizing their dedication to the highest levels of professionalism in our field.

Throughout 2018 the U.S. Naval Undersea Museum staff and stakeholders embarked on an update of the museum's Strategic Plan. We were able to reflect on the museum's many accomplishments throughout the past five years and plan where we wish to grow as an institution. I believe the next three years will be as dynamic as the past five have been.

I look forward to 2019 knowing that the U.S. Naval Undersea Museum will continue to prosper with the strong support of the U.S. Navy, the public, the volunteer staff, and the Naval Undersea Museum Foundation. We are well-positioned for the future, and with every new exhibit, program initiative, and outreach effort, we are furthering the mission of our museum. Thank you for your partnership and investment in our wonderful museum.

All the best,

A handwritten signature in black ink, appearing to read "Lindy L. Doshier". The signature is fluid and cursive, with a prominent initial "L" and a trailing flourish.

Lindy L. Doshier
Director

HIGH VELOCITY LEARNING

Applying the best concepts, techniques, and tools to accelerate learning as individuals and families, the museum's educational programming explores the knowledge and technology that enable the U.S. Navy's presence undersea. The programs inspire participants to explore the scientific, technological, engineering, art, and mathematical (STEAM) principles that form the foundation of the Navy's daily operations. Participation in the museum's programs and exhibits fosters an interest in and understanding of STEM principles that can influence a student's career choices and encourage a lifetime of learning.

NAVY STEM DAYS

Navy STEM Days is an educational program resulting from collaboration between the museum, the Puget Sound Navy Museum (PSNM), the Puget Sound Naval Shipyard and Intermediate Maintenance Facility (PSNS & IMF), and the Naval Undersea Warfare Center Division Keyport (NUWC Keyport). In its fifth year, the program brought 1,860 local 4th through 6th graders to the museum to participate in STEM-based activities that align with Common Core and Next Generation Science Standards.

SUMMER STEAM AND SCIENCE SATURDAYS

With families working together to solve challenges and explore new concepts, the Summer STEAM program keeps students engaged in STEAM throughout the summer months. Science Saturdays take place during the school year, delivering interactive ways of discovering technology and putting lessons learned at school to use in the real world. These free public programs engaged more than 2,000 people over the course of 16 events in 2018.

NEW FAMILY LEARNING AREA

The museum developed a new Family Learning Area that introduces younger learners to undersea technology. Interactive content encourages participants to use their innate skills in observation and inquiry to launch into new explorations of the undersea Navy and museum exhibits. Families have the opportunity to get creative on the submersible design board, take a sneak-peek at artifacts not on exhibit on a touchscreen, handle 3-D printed models, try on simulated diving helmets, and embark on scavenger hunt missions in the exhibits.

DISCOVER "E" DAY

In its 20th year, National Engineers Discover "E" Day drew more than 500 children and families to the museum for a single marathon day of engineering learning experiments. Participants engaged in 13 different hands-on activities, including programming robots, designing electrical circuits, and drawing with 3-D pens. Naval Reserve personnel, civilians from the PSNS & IMF and NUWC Keyport, and museum volunteers staffed activity stations. Discover "E" Day continues to grow as a highly successful annual event for the museum.

FIELD TRIPS AND TOUR GROUPS

Field trips to the museum reinforce what students are learning in the classroom and introduce real-world applications of textbook concepts. Group visits to the museum provide the opportunity for families, friends, colleagues, or classmates to take in information and discuss it together following the museum visit, enriching the experience. More than 800 students and group members participated in museum-led field trips or guided museum tours.

"[NAVY STEM DAYS HAS] GREAT CONNECTIONS TO SCIENCE AND ENGINEERING PRACTICES IN NEXT GENERATION SCIENCE STANDARDS. [IT] REINFORCES THE ENGINEERING DESIGN PROCESS."

TEACHER, SOUTH KITSAP SCHOOL DISTRICT

CONNECTING TO THE UNDERSEA NAVY

The museum's exhibits are windows into the undersea experiences of the U.S. Navy. By visiting our exhibits and participating in our programs, visitors learn about key people, events, technologies, and advances in the Navy's undersea endeavors.

SEARCH, SPY, RESCUE, RECOVER: NAVY VEHICLES UNDER THE SEA

OPENED SEPTEMBER 14

Search, Spy, Rescue, Recover: Navy Vehicles Under the Sea, the museum's newest exhibit, explores the many ways that undersea vehicles expand the Navy's abilities. Over the last 60 years, undersea vehicles have changed the way the Navy works underwater by granting new capabilities, optimizing and simplifying missions, and removing or reducing risk to Sailors. Operations at which undersea vehicles excel include searching for and recovering lost objects, collecting data, disarming undersea mines, rescuing accident survivors, and more. *Search, Spy, Rescue, Recover* invites visitors to connect with undersea vehicles through historic artifacts, interactive elements, and vivid imagery. Among the artifacts on exhibit are a 15-foot-long remotely operated vehicle named CURV III, a micro autonomous underwater vehicle called Ranger, and a mine neutralization vehicle. Interactive elements include multiple touchscreen interactives exploring the diversity of undersea vehicles and video interviews with current Navy Sailors who work with undersea vehicles.

DEEP SEA DAY: UNDERSEA VEHICLES

Held as a companion event to the opening of the undersea vehicles exhibit, Deep Sea Day: Undersea Vehicles, invited museum visitors to get up close and personal with Unmanned Undersea Vehicle Squadron ONE (UUVRON-1) leadership and Sailors. The UUVRON-1 Commander described the level of skill in the Navy's first unmanned undersea vehicle squadron; Sailors explained their vehicles' capabilities. Event participants also got to try their skills at controlling remotely operated vehicles (ROVs) on land and in the water, and learned about building and programming robots from a local high school robotics team.

DSRV REUNION

In July, former crew members of DSRVs *Mystic* and *Avalon* visited the museum as part of the first-ever DSRV reunion. Museum staff proposed the idea for the reunion and partnered with reunion organizers to plan the day's events. Three former pilots shared stories of their time with the DSRV program at a speakers' panel attended by more than 150 people, including 90 reunion attendees. Later in the day, 44 crew members and their families enjoyed special tours inside DSRV *Mystic*, a rare opportunity offered in appreciation of the attendees' service with the DSRVs. DSRV *Mystic* provided rapid-response submarine rescue capability to the U.S. Navy from 1977 to 2008 and is now in the museum's collection.

**"THIS MUSEUM IS AMAZING!
THE EXHIBITS ARE
AMAZINGLY LAID OUT,
WONDERFULLY
INFORMATIVE, AND 100%
INTERESTING. SO MUCH FUN
FOR THE WHOLE FAMILY,
FROM THE ADULTS ALL THE
WAY DOWN TO THE THREE-
YEAR-OLD!"**

VISITOR BETTE, SEATTLE, WA

PRESERVING NAVY HISTORY

Museums derive their identities and products — education programs and exhibits — from their artifacts. In order for artifacts to be available for use in exhibits and research inquiries, they must be physically and intellectually cared for year-round. This care ensures the artifacts are physically able to withstand the pressures of exhibition now and into the future and enough data about the artifacts exists to make them valuable for exhibition and study.

SIGNIFICANT ACQUISITIONS

In 2018, we added 266 new artifacts to the collection, expanding our holdings in areas such as deep submergence history, submarine operations, and undersea technology. Notable acquisitions included:

- **CONTROL ROOM EQUIPMENT FROM *NR-1***, the world's only nuclear-powered research submersible.
- **TWO SWIMMER LAUNCHED CHARGES**, experimental weapons developed in the 1970s for use by Navy SEALs.
- **HAND CONTROLLERS FROM DSRV *MYSTIC*** used to pilot and position the long-serving rescue vehicle.
- **THE OFFICE TELEPHONE OF DR. WALDO K. LYON**, founder and chief scientist of the Arctic Submarine Laboratory.
- **A RARE BQR-3A SONAR CONSOLE**, a type used aboard only a few post-World War II submarines to receive sonar data.

STORAGE IMPROVEMENTS

A major project and collections care improvement completed in 2018 was the installation of 1,500 square feet of compact collections storage on the 3rd floor. This project allows for future collections growth and small artifact storage consolidation. Two sections of compact shelving provide housing for smaller artifacts, documents, rolled textiles, and plaques. An added benefit of this type of storage system, the units close together to mitigate earthquake damage.

LOAN PROGRAM

Providing access to museum artifacts by lending them to organizations across the globe allows a broader audience to engage with naval history and technology. In 2018, the museum had 55 artifacts on loan to 32 organizations, including museums and veterans' groups, reaching more than 2 million visitors.

RESEARCH

As a public institution, part of the museum's mission is to assist with research inquiries. Curatorial staff fielded 173 historical and artifact questions in 2018, providing assistance such as:

- **SUPPLYING INFORMATION AND HISTORIC IMAGES** to several news organizations, including the New York Times, after a mine-like object surfaced in the Puget Sound.
- **MEASURING AND PHOTOGRAPHING** portions of a Type 1 *kaiten* for the Japanese military museum Yushukan, to facilitate the restoration of the only other Type 1 known to exist.
- **IDENTIFYING AND SCANNING** submarine and rebreather photographs for Naval Special Warfare Group 3 to create a command history display.

"ONE OF THE COOLEST AND MOST UNIQUE MUSEUMS YOU WILL EVER GO TO, THIS PLACE HAS SO MANY COOL ARTIFACTS."

VISITOR ROSE

OPERATIONAL EXCELLENCE

STAFF RECOGNITION

- **VALERIE JOHNSON**, Educator, selected as American Alliance of Museums, Museum Assessment Program Peer Reviewer: Community Engagement Assessment.
- **BETH SANDERS**, Collections Manager, selected as American Alliance of Museums, Museum Assessment Program Peer Reviewer: Collections Stewardship Assessment.
- **ALL NINE MUSEUM STAFF** received On-the-Spot Awards from the Naval History and Heritage Command recognizing their dedication to the highest levels of professionalism in our field.
- See page 15 for a list of **PRESIDENTIAL VOLUNTEER SERVICE AWARD** recipients.

MUSEUM RECOGNITION

The museum was inducted into the TripAdvisor Hall of Fame for receiving the TripAdvisor Certificate of Excellence for five consecutive years. The award is given to organizations that receive consistent, outstanding reviews by TripAdvisor travelers.

SOCIAL MEDIA GROWTH

In 2018, we expanded our social media efforts to connect with a wider audience. Compared to 2017, we significantly increased our reach, number of followers, and engagement. On Facebook, our total impressions grew by 45 percent, our follower count by 78 percent, and our engagement by 266 percent. On Twitter, our impressions increased by 306 percent, our follower count by 111 percent, and our engagement by 278 percent.

FACILITY IMPROVEMENTS

After many years of staff and contractors mitigating leaks, Naval Base Kitsap funded a contract to replace the museum roof. The nearly 25-year-old roof was replaced in the fall.

The Naval History and Heritage Command (NHHC) funded the replacement of the museum's security camera system in 2018. In addition to replacing outdated cameras and digital recorders, additional cameras were added throughout the museum,

collections spaces, and to the exterior of the museum. Viewing monitors were installed in 2nd and 3rd floor staff spaces as well.

Work to install the NHHHC-funded compact shelving on the 3rd floor concluded in 2018. A total of 1,500 square feet of shelving was installed to effectively expand the museum's small artifact storage.

STRENGTHENING THE NAVY

The museum is proud to support Navy commands, Sailors, civilians, and families by providing physical space and intellectual resources at the museum for important ceremonies (retirement, change of command, promotion, commissioning) and for trainings and meetings. In 2018, the museum hosted more than 18,000 people for 332 such events. Free use of the facility for the Navy to conduct its business promotes fleet and mission readiness.

NAVY COMMANDS SUPPORTED IN 2018 INCLUDED:

- Commander, Navy Region Northwest
- Commander, Submarine Squadron 19
- Commander, Submarine Development Squadron 5
- Commander, Submarine Squadron 17
- Director, Strategic Systems Programs
- Fleet and Family Readiness
- Marine Corps Security Force Battalion
- Naval Base Kitsap
- Naval Facilities Engineering Command Northwest
- Naval Hospital Bremerton
- Naval Information Force Reserve Region South
- Naval Reactors
- Naval Sea Systems Command, Naval Undersea Warfare Center Division Keyport
- Naval Sea Systems Command, Puget Sound Naval Shipyard & Intermediate Maintenance Facility
- Naval Submarine Support Center, Bangor
- Naval Supply Fleet Logistics Center, Puget Sound
- Navy Civil Engineering Corp
- Navy Band Northwest
- Navy Gateway Inns & Suites
- Navy Gold Star Program
- Navy Region Legal Service Office Northwest
- Navy Region Northwest
- Navy Region Northwest Fire and Emergency Services
- Navy Talent Acquisition Group Portland
- Office of Civilian Human Resources, Silverdale Operations Center

- Strategic Weapons Facility Pacific, Bangor
- Trident Training Facility, Bangor
- U.S. Coast Guard Marine Force Protection Unit, Bangor
- U.S. Naval Reserves
- USS *Alabama* (SSBN 731)
- USS *Buffalo* (SSN 715)
- USS *Dallas* (SSN 700)
- USS *Henry M. Jackson* (SSBN 730)
- USS *John C. Stennis* (CVN 74)
- USS *Kentucky* (SSBN 737)
- USS *Louisiana* (SSBN 743)
- USS *Maine* (SSBN 741)
- USS *Nebraska* (SSBN 739)
- USS *Nevada* (SSBN 733)
- USS *Nimitz* (CVN 68)
- USS *Ohio* (SSGN 726)
- USS *Pennsylvania* (SSBN 735)

OTHER ORGANIZATIONS SUPPORTED:

- Brandman University (Navy College)
- Historic Naval Ships Association
- Kitsap County Firefighters
- Naval Submarine League
- Southern Illinois University (Navy College)
- U.S. Army Veterinary Corps
- U.S. Navy League Sea Cadets
- U.S. Coast Guard Auxiliary
- USS *George Washington Carver* Reunion Association
- Vincennes University (Navy College)
- Washington Department of Fish and Wildlife

VOLUNTEER ENGAGEMENT

The museum is fortunate to receive the support of knowledgeable and dedicated volunteers who do a stellar job serving as the public face of the museum as they welcome and greet visitors, conduct guided tours, attend the store, process collections, facilitate educational programs, build and install exhibits, and provide administrative support. Museum visitors highly rate their experiences at the museum not only because of the interesting exhibit content but also because of their engaging interactions with museum volunteers. In 2018, the museum's 119 volunteers contributed more than 6,300 hours to the museum, ensuring the achievement of the museum's mission to interpret naval undersea history, science, and operations for the benefit of the people of the United States.

THANK YOU to the following people who volunteered their time and energy at the museum during 2018:

SILVER PRESIDENTIAL VOLUNTEER SERVICE AWARD (250+ HOURS CONTRIBUTED IN THE YEAR)

Robert Paul
Doug Anderson

BRONZE PRESIDENTIAL VOLUNTEER SERVICE AWARD (100+ HOURS CONTRIBUTED IN THE YEAR)

Charles Gundersen	Joyce Johnson
Larry Snyder	Katie Fisher
Kevin Syltebo	John Gerten
Michael Peterson	Donald Tjossem
Michael Collier	Charlie Johnson
Bruce Riggins	Phyllis Jelley
Cathy Wedelstaedt	David Anderson
Clete Wood	Greg Shelby
David Ledbetter	Cheryl Shelby
Tom Heman	Rick Gunderson
Daniel Batman	Aleck Tilbrook
Harry Gilger	Mika Holland

SUSTAINING VOLUNTEERS

John Alcantra
Becky Alexander
Libby Anderson
Samuel Anderson
Sharon Baker
Michael Blas
Michael Brannan
Tony Carbo
Don Chalupka
Jason Clayton
Delores Contreras
Glen Curtis
Garth Dial
Rachel Flowers
Sara Ford
Steven Grether
Melissa Grundt
Nikki Haas
Katherine Hildreth
Darlene Iskra
Donald Jassek
RuthAnn Jassek
Allen Keyser
Daniel Kim
Robert Latham
Jeffrey Leader
Tom Lee
Paul Lucas
Stefans Lusi
Amanda McNeely
Estelle McNeice
Larry Meehan
Cait Mills
Ted Newman
Loren Nichols
Jan Pietras

Bill Ridley
Trish Ridley
Patrick Ryan
Ellen Schroeder
Steve Shapro
Alex Stefanski
Mary Jo Tharp
Bonnie Thomas
Dennis Totten
Kevin Trinidad
Jerome Turner
Bobbi West
Roy Wilson

DISCOVER "E" DAY VOLUNTEERS

Tatiana Adler
David Arnold
Corinne Beach
Josef Borja
Scott Bredberg
Dustin Breeze
Joshua Cason
Ryan Cuentes
James Czalbowski
Mark Dalmacio
Charles Datulayta
Denise D'Haenens-Luker
Logan Endter
Lynda Esquivel
Jennifer Froderberg
Victoria Gallegos
Ryan Grundt
Gabrielle Guerrero
Catarina Guzman
Kevin Habener
Cecilia Hartwell
Taura Helms

**"A PLACE YOU HAVE TO
VISIT WHEN IN THE AREA. THE
VOLUNTEERS ARE AMAZING
AND THE EXHIBITS ARE WELL
DESIGNED AND
INFORMATIVE."**

VISITOR DOUGLAS

Rebecca Heryford
Austin Hudson
Jeremy Jocson
Christopher Johnson
Kimberly Jones
Jay Kothman
Justina Le

Nicole Lerner
Alex Nouansavanh
Jill Ostby
Zuriel Ragan
Eldridge Raymond
Michaela Raymond
Alyssae Remigio

Warren Saunders
Ryan Soderlund
Vena Ward
Christy Wolf
Charles Wormwood
Chris Wynn
Terah Ziv-Wynn

STAFF

Lindy Doshier	Director*
Jarrold Gahr	Exhibit and Graphic Designer*
Steven Harvey	Exhibit Fabricator*
Valerie Johnson	Educator
Mary Rogers	Volunteer and Events Coordinator
Mary Ryan	Curator
Beth Sanders	Collections Manager
Lorraine Scott	Collections Manager
Olivia Wilson	Operations Manager

**Staff shared with the Puget Sound Navy Museum*