

UNITED STATES NAVAL
UNDERSEA
MUSEUM



ANNUAL REPORT

2021

Cover: USS *Bremerton* (SSN 698) returns home after a six-month deployment, April 2018. The museum received several significant artifacts from USS *Bremerton* this year after the submarine's decommissioning.

Below: Seabee diver training during World War II.



2021 HIGHLIGHTS

THE U.S. NAVAL UNDERSEA MUSEUM (USNUM)

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.

Due to the COVID-19 pandemic, the museum was closed to the public from March 2020 to May 2021. The closure affected every aspect of museum operations. Throughout the closure, staff maximized virtual content and programming to continue serving our community. These efforts earned the museum record numbers of virtual impressions and new audience growth. Education staff offered distance learning workshops and STEM activity kits for curbside pickup as remote continuations of our strong educational offerings. The museum reopened its doors on May 24, 2021 with protocols in place to ensure a safe visit. Despite the closure and major reopening efforts, USNUM staff executed projects to conserve 24 artifacts and an audio-visual improvement contract in 2021.

17,238,333 virtual views earned through our social media platforms, website, and virtual tour

27,340 visitors welcomed in person after reopening May 24

76 education programs implemented for 5,426 participants

190 artifacts exhibited, 54 at other organizations

2,316 artifacts added to the collection, for a total of 50,718

161 events hosted for 5,697 Navy and civilian personnel

4,192 volunteer hours provided by 56 volunteers

24 artifacts conserved

192 research inquiries answered

DIRECTOR'S MESSAGE

The year 2021 was like no other - for the U.S. Naval Undersea Museum (USNUM), for the country, and for the world. The museum was challenged with reopening in a safe but welcoming manner after an extended closure due to COVID-19.

With the arrival of COVID-19 in 2020 and ensuing museum closure that extended through May 2021, the USNUM team continued our shift from welcoming visitors in-person to sharing our mission virtually. Our primary goal remains to serve our Navy and civilian communities and current circumstances allow us to do so in new and expanded ways.

While digital initiatives and partnerships look effortless, USNUM staff worked tirelessly, spending untold hours in research, preparation, meetings, and equipment troubleshooting to make them possible. The same can be said for the months of preparation it took to reopen the museum doors to the public. I applaud the resiliency and adaptability of the staff; the year's successes and progress are truly a testament to the level of professionalism of our team as whole. This annual report provides a year-in-review, and I think you will agree that our efforts resulted in many impressive achievements.

As one of ten official Navy museums, USNUM is an institution where responsible stewardship, service to the public, and a culture of caring, scholarship, innovation, and transparency are how we measure our impact on the U.S. Navy, the community

in which we serve, and the museum field to which we belong. This did not change in 2021. From May-December, we welcomed 27,340 physical visitors to the museum. Our virtual outreach is very impressive, earning more than 17 million views, and offering a number of innovative avenues for remaining engaged with our stakeholders.



Our goal at USNUM is to provide spaces and platforms to open dialogue and highlight human experiences that shape and inspire us as individuals, cultures, and communities. One such avenue to share these stories is through our exhibit program. While we were not able to welcome visitors through our doors for part of the year, we wanted to ensure that we still created accessible avenues to share our exhibits and collections with the public. The museum's interactive 3D virtual tour is a valuable tool to provide the

type of accessibility we want to achieve. The museum's online exhibits and STEM activities were all a resounding success.

Our education program is a key tool for relaying Navy history, culture, technology, and innovations to our community and fostering the public's engagement with technological and scientific concepts. The USNUM Education Department excels in creating exceptional, inspiring experiences for learners of all ages. Throughout 2021, the Education Department successfully continued its virtual program offerings to include #MuseumAtHome STEM activities, the very successful Curbside STEM Pickup! program, and Navy STEM Days, which doubled in offerings. The participation of more than 5,400 students and families in these programs demonstrates the public's interest in and appreciation for the opportunities USNUM provides for learning.

Our Collections Management Department is responsible for the care and preservation of the 3D artifacts, archival materials, and reference items utilized by USNUM to share our Navy's undersea stories. The 50,718 artifacts that reside within the museum's collection provide endless opportunities to develop exhibit and education programs that showcase those stories. A major triumph for the museum in 2021 was the conservation of more than 50 of the museum's artifacts, enabling the museum to hold these cherished artifacts in perpetuity for future generations to enjoy. Additional collections and conservation projects continue to be a focus of the museum.

Each year, our museum's accomplishments are made possible by the exceptional team we have working at USNUM. The USNUM staff continue to identify and participate actively in outreach events to connect with the community we serve, pursue training opportunities that improve professional skills and benefit the museum, and work dutifully to achieve institutional goals. As 2022 begins, we remain unsure where the journey through COVID-19 will take us. However, we will continue to keep our doors open, carry out our mission, and increase the museum's accessibility in any way we are able. I know that in 2022 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 wonderful museum. I look forward to the coming year with a renewed hope and focus, knowing that despite our current hardships, our museum will continue to grow and prosper.

THANK YOU for your partnership and investment in the U.S. Naval Undersea Museum. We look forward to welcoming you back.

LINDY DOSHER
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. In response to the COVID-19 pandemic, the museum continued its virtual and socially distanced education and public outreach offerings in 2021.

DIGITAL AND CURBSIDE OUTREACH

The education department continued its virtual presence by sharing STEM-based web activities for at-home application. The activities are designed for young learners and use common household objects for recreating demonstrations and experiments. In addition to online activities, the museum returned to onsite program offerings with kits available for pick-up at the museum. Our STEM partnership with Morale, Welfare, & Recreation; 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) offered drive-through pick-up locations for rotating STEM activities and virtual STEM summer camp offerings. All programming required a physical kit for each participant, resulting in approximately 4,000 kits built to serve our museum audiences.



NAVY STEM DAYS

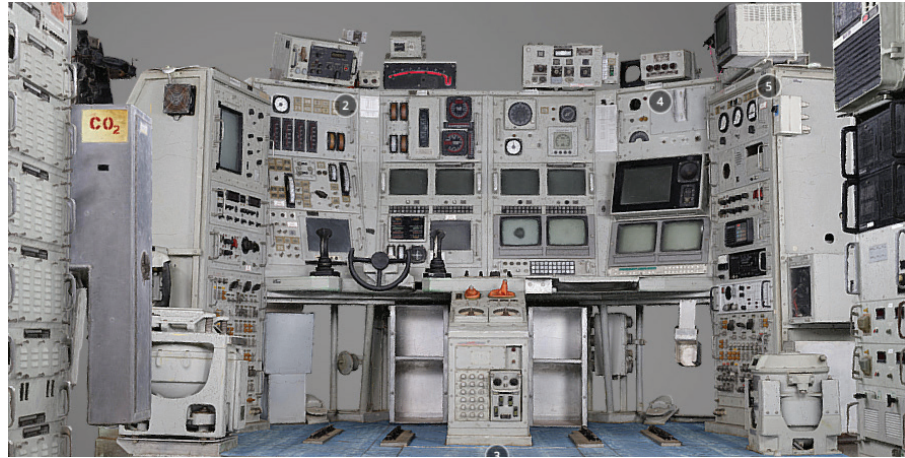
Navy STEM Days is an educational program resulting from collaboration between the museum, PSNM, PSNS & IMF, and NUWC Keyport. In its eighth year, the program continued on its virtual platform for a second year, teaching 50 sessions of STEM-based concepts to 64 local fourth and fifth grade classes.

DISCOVER E DAY

In its 23rd year, National Engineers Discover E Day was celebrated for a full week in 2021. The museum's education department shared a multitude of engineering learning experiments, videos, and resources on social media. Activities included experiments creating polymers, exploring chromatography, and testing for neutral buoyancy. The event reached more than 68,000 people.



CONNECTING TO THE UNDERSEA NAVY



Model by The Arc/k Project

As windows into the undersea experiences of the U.S. Navy, the museum's exhibits connect our visitors to key people, events, technologies, and advances in the Navy's undersea endeavors. With the museum closed for part of the year, we continued to grow virtual connections through our social media channels, virtual presentations, and digital offerings. For the second year in a row, this virtual outreach engaged record numbers of people in a wide range of undersea Navy content.

SOCIAL MEDIA

The year 2021 was USNUM's highest performing in history for virtual impressions, audience growth, and content creation. USNUM built on our expanded 2020 social media efforts to create more than 1,300 social media posts in 2021. Our 2021 content earned more than 17.2 million impressions and drew more than 9,600 new followers, growing our social media audience to more than 25,000 followers.

SPEAKERS BUREAU OUTREACH

USNUM supports civic and educational organizations through our Speakers Bureau program, which was developed in 2016 to offer interpretive presentations about naval undersea history and operations. The curatorial department gave five presentations to local and regional groups in 2021. The widespread use of virtual meeting platforms allowed USNUM to reach organizations outside our geographical area.

DIGITAL ARTIFACT MODELS

Through a year-long digitization project culminating in 2021, USNUM created interactive, digital 3D models of seven highly significant artifacts in our collection, allowing virtual users to explore the artifacts in extraordinary detail. The models were developed using photogrammetry through a collaboration with The Arc/k Project, a non-profit organization that digitally preserves cultural heritage in 3D.

Among the artifacts digitized was the control room equipment from *NR-1*, the U.S. Navy's first and only nuclear-powered submersible. Due to high public interest in this one-of-a-kind artifact, USNUM staged a virtual campaign in November debuting the finished model, timed to coincide with *NR-1*'s inactivation anniversary



Model by The Arc/k Project



Model by The Arc/k Project

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. Despite the pandemic's effects, the museum added 2,316 artifacts to the collection.

SIGNIFICANT ACQUISITIONS

Despite the pandemic's effects, the museum added 2,316 artifacts to the collection. Notable acquisitions in 2021 included:

• **Equipment from submarine USS *Bremerton* (SSN 698)**, including the ship's control panel and ballast control panel

A **MK III diving pump** used by Navy divers from the 1900s to 1940s

The name **board of USS *Trout* (SS 566)**, a Tang-class diesel submarine that served during the Cold War

Photos and records of Thomas Ansbros, a World War II Seabee diver

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 2021, the museum had 54 artifacts on loan to 32 organizations, including museums and veterans' groups.

CONSERVATION

USNUM executed several important conservation projects in 2021:

Professional conservation of a MK 10 Hedgehog projectile launcher and 20 projectiles

Conservation by professional conservators from NHHC's Conservation Branch of three historic flags ahead of use in USNUM's next exhibit

RESEARCH

As a public institution, part of the museum's mission is to assist with research inquiries. Curatorial staff fielded 192 historical and artifact questions in 2021, providing assistance such as:

Supplying documentation to the National Museum of Military Vehicles to support the accurate restoration of several undersea weapons

Providing deep submergence photographs to Submarine Development Squadron 5, for use in training personnel to earn their deep submergence insignia qualifications

Identifying historic weapons for Naval Support Activity Charleston

Scanning Sound Surveillance System (SOSUS) photographs for display in an exhibition at the Morven Museum and Garden in New Jersey

VOLUNTEER ENGAGEMENT

Knowledgeable and dedicated volunteers, 56 in all, provided 4,192 hours of essential support to the museum as they prepared the museum for reopening, safely welcomed and greeted visitors, tended the store, processed collections, assisted with educational programs, and prepped exhibit spaces. They were resilient in the face of changing pandemic precautions, ensuring the museum remained a welcoming place for visitors.

THANK YOU to the following people who volunteered their time and energy to the museum in 2021!

SILVER PRESIDENTIAL VOLUNTEER SERVICE AWARD

250+ HOURS CONTRIBUTED IN THE YEAR

John Gerten

BRONZE PRESIDENTIAL VOLUNTEER SERVICE AWARD

100+ HOURS CONTRIBUTED IN THE YEAR

Bruce Riggins	Rachel Benedict	RuthAnn Jassek
Robert Paul	Larry Snyder	Steve Grether
Cathy Wedelstaedt	Faryn Seal	Joseph Lawlis
Douglas Anderson	Steve Shapro	Douglas Crinklaw
Walt Van Dyke	Mike Peterson	Tony Carbo
Charles Gundersen	Don Jassek	Patty Dionne
Ed Seal	Mike Collier	

SUSTAINING VOLUNTEERS

Rishabh Ahluwalia

Sam Anderson

Carl Bowers

Sofia Cabrera

Aida Carbo

Don Carpenter

TMCS(SS) Christopher Cates

Jerry Coss

Floyd Crow

Dawn Dailey

Garth Dial

Rich Dixon

ITSC(SS) Timothy Donahue

Katie Fisher

MMA1(SS) Brandon Gastaud

Harry Gilger

Rick Gunderson

Patrick Harrison

Tom Heman

Darlene Iskra

Allen Keyser

Peter Lantz

Bob Latham

Randy McNary

Colleen Montoya

Brian Nyquist

Fernando Perezcarvajal

ETV1(SS/AW) Christiane Punzalan

ETN1(SS) Alecandir Sherriff

Ora Stoner

Kevin Syltebo

Bonnie Thomas

Aleck Tilbrook

Don Tjossem

Clete Wood



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 2021, the museum was able to return to hosting 5,697 people for 161 onsite events. Free use of the facility for the Navy to conduct its business promotes fleet and mission readiness.

NAVY COMMANDS SUPPORTED IN 2021:

Carrier Strike Group 3	Strategic Weapons Facility Pacific, Bangor
Commander, Navy Region Northwest	Trident Training Facility, Bangor
Commander, Submarine Group 9	United States Naval Academy
Commander, Submarine Squadron 19	USCGC <i>Sea Fox</i> (WPB 87374)
Commander, Submarine Development Squadron 5	USS <i>Alabama</i> (SSBN 731)
Marine Corps Security Force Battalion	USS <i>Bremerton</i> (SSN 698)
Naval Base Kitsap	USS <i>Carl Vinson</i> (CVN 70)
Naval Facilities Engineering Command Northwest	USS <i>Jimmy Carter</i> (SSN 23)
Naval Hospital Bremerton	USS <i>John S. McCain</i> (DDG 56)
Naval Safety Center Northwest	USS <i>Kentucky</i> (SSBN 737)
Naval Sea Systems Command, Naval Undersea Warfare Center Division Keyport	USS <i>Louisiana</i> (SSBN 743)
Naval Sea Systems Command, Puget Sound Naval Shipyard & Intermediate Maintenance Facility	USS <i>Maine</i> (SSBN 741)
Naval Sea Systems Command, Trident Refit Facility Bangor	USS <i>Michigan</i> (SSGN 727)
Navy Band Northwest	USS <i>Nevada</i> (SSBN 733)
Navy Region Northwest Fire and Emergency Services	USS <i>Nimitz</i> (CVN 68)
	USS <i>Pennsylvania</i> (SSBN 735)
	USS <i>Seawolf</i> (SSN 21)
	USS <i>Theodore Roosevelt</i> (CVN 71)

OTHER ORGANIZATIONS SUPPORTED:

Leadership Kitsap
U.S. Army Olympic Recruiting Company
U.S. Naval Sea Cadet Corps

USNUM STAFF



Lindy Doshier
Director*



Jarrod 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

DIVE IN.



UNITED STATES NAVAL
UNDERSEA
MUSEUM

1 Garnett Way, Keyport, WA 98345
NAVALUNDERSEAMUSEUM.ORG

