

UNDERSEA

QUARTERLY

THE NEWSLETTER OF THE NAVAL UNDERSEA MUSEUM AND THE NAVAL UNDERSEA MUSEUM FOUNDATION



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From the Curator...

RESCUING SUBMARINERS: FROM DSRVs TO THE SRDRS



DEEP SUBMERGENCE RESCUE VEHICLE (DSRV)-PROTOTYPE DEEP QUEST

USS *Thresher* (SS-593) was the lead ship of her class, the Navy's most advanced and most promising submarine when she went down suddenly on 10 April 1963. All 129 submariners and civilians aboard were lost and the Navy was left stunned and helpless. *Thresher* had sunk off the coast of Boston to 8,400 feet, a depth far greater than the submarine's collapse depth and well beyond any rescue or

recovery capability the Navy possessed. Locating *Thresher's* remains – scattered and mangled from the immense pressure – took the Navy almost five months and depended on *Trieste*, the Navy's only vessel capable of searching at such depth.

The magnitude of this loss propelled the Navy to swift action, and two weeks after *Thresher's* loss, Secretary of the Navy Fred H. Korth established the Deep Submergence Systems Review Group (DSSRG). This panel of undersea and naval experts spent a year reviewing the Navy's deep-sea capabilities and discovered rescue ability was limited to 1,000 feet, the maximum range of the McCann Submarine Rescue Chamber. Salvaging and even locating sunken objects was determined to be almost as impossible.

The DSSRG ultimately called for the development of new means of locating downed submarines and of rescuing the personnel trapped inside. The Deep Submergence Systems Project (DSSP) was formed in 1964 as a result. Its main objective was to develop a rescue vehicle for submarine crews – a deep submergence rescue vehicle (DSRV).

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Patrons:	\$500-\$999
Benefactors:	\$250-\$499
Builders:	\$100-\$249
Providers:	\$25-\$99

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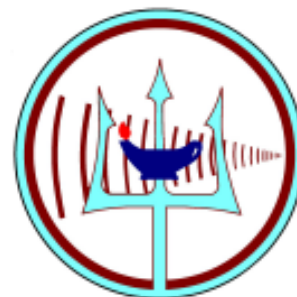
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SUPPORT YOUR FOUNDATION, YOUR MUSEUM

Have you ever wondered what to give your parents, your grandparents, your grandchildren, your friends for their birthday, for the holidays, to acknowledge their retirement, to celebrate their anniversary? A **membership** in the Foundation is an excellent gift in so many ways. The articles and information in the newsletter alone are well worth the membership cost. Many veterans and seniors appreciate the memories that the book reviews evoke. The Foundation maintains a brokerage account so that you can choose to contribute stocks.

A **Seat-In-The-Future** is another wonderful way to memorialize loved ones, fallen comrades, friends and significant figures in undersea history. A one-time gift of \$500 entitles the donor to dedicate a plaque on the arm of a seat in the Jack Murdock Auditorium to someone of their choice.

Naval Undersea Museum Foundation, P.O. Box 408, Keyport, WA 98345

From the President...

ANNUAL MEETING REPORT



Bruce Harlow

The Foundation's Annual Meeting of Members, Officers and Trustees was held on May 24th in the Museum's conference room. I greatly appreciate the attendance by our trustees, the museum staff and the foundation staff. I would like to stress that, despite the financial challenges due to the economy, the Foundation is committed to growth and continued success

Joyce Jensen gave a short synopsis of the Museum's activities as Bill Galvani was unavailable:

- Visitation is up over last year at this time.
- The process of re-accreditation with AAM is in place.
- The exhibit "The Skin They're In" is open. This is an exhibit on navy diving suits.
- The Museum's Annual Report is available from the facilities manager, Olivia Wilson at 360/396-5548 or Olivia.Wilson@navy.mil.

I appreciate Joyce stepping up at the last minute to attend the meeting.

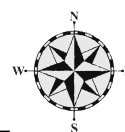
Daina Birnbaums gave a report on the Museum Store and included the encouraging news that in 2010 the store sales were up approximately 3%, which is extraordinary in these times. The Museum Store website is up and selling, and there have been some cosmetic improvements made in the Store itself; i.e. new shelving, freshly painted walls, improved traffic flow. Daina anticipates providing the same contribution to the Foundation in 2011 as in 2010. I appreciate Daina's outstanding contribution and believe wholeheartedly that the store provides an exceptional amenity for the museum visitors.

We discussed the finances for 2011 with the understanding that we will continue to be as conscientious in the future as we have in the past.

Each year, the officers and trustees whose three year terms are expiring are asked if they will continue their role. This year, VADM Roger Bacon, RADM Herb Bridge and Dr. John Rasmussen have tendered their resignations from the Board. The Foundation is deeply grateful for their many years of service and wishes them well.

From the Director...

HAIL AND FAREWELL TO JOYCE JENSEN



Mrs. Joyce Jensen, the educator at the Naval Undersea Museum for the past 18 years, will retire on July 30. I will try to relate to you the scope of Joyce's accomplishments, but my description will necessarily be incomplete because she did so many things so well during her museum career.



Bill Galvani

As a quick example, in 2000 the American Association of Museums presented to Joyce its Nancy Hanks Memorial Award for Excellence in recognition of her distinguished work from 1993 through 1999. This a national award given only once a year to only one person. The year before, the Historic Naval Ships Association awarded her its first-ever Educator Award.

Joyce's programs have been the engine that have kept the museum vital and engaged with the public. She has been a fierce and effective advocate for constructive involvement with the community. She often said to me "We can't afford to be the big white building sitting isolated on the hill."

Joyce matched her philosophy with action. From her creative mind and willing spirit rolled forth a range of programs that continues to amaze me: Engineers Discover "E" Day (still our single biggest event); Wild Wacky Wet Wednesday for families in the summer; the Youth Docent program that supports W4; the Distinguished Speakers Series; First Saturday; the August Film Festival. These are only the recurring programs. There have been so many special, one-time programs from the dramatic presentation "A Piece of My Heart" to NASA's Robots on the Road.

Joyce worked with education, special events, and our volunteers. She was equally at home and effective reading a story to pre-school visitors, meeting with distinguished



Book Review from a Guest Contributor. **LARRY TUCKER**, Museum Volunteer

THE COLD WAR BENEATH. D.M. (Don)

Ulmer. Patriot Media Publishing. 2011. ISBN 0984577769.

ISBN-13: 9780984577767. 268 pgs.

Many of us were captivated by D.M. (Don) Ulmer's stories during his recent talk and book signing at our museum. Don was here to discuss the USS *Springer's* rescue of eight members of a B-29 crew off the coast of Okinawa during the closing days of World War II. Don was a personal friend of John Bauer, commanding officer of the *Springer* at the time of this rescue. Don brought a film - shot by Bauer - of the actual rescue of the crew of the B-29 bomber named "Dinah Might". The film showed close-ups of grateful young survivors as they were plucked from the sea by the crew of the *Springer*. After decimating the Japanese Navy and merchant fleets, lifeguard duty was a vital service that US submarines performed during WWII. Our submarine fleet stood lifeguard duty as American Navy and Army Air Corps were bombing Japanese targets. American pilots and airmen had a sense of security knowing that, if shot down, the odds of their survival increased dramatically because of the submarines assigned to rescue downed crews.

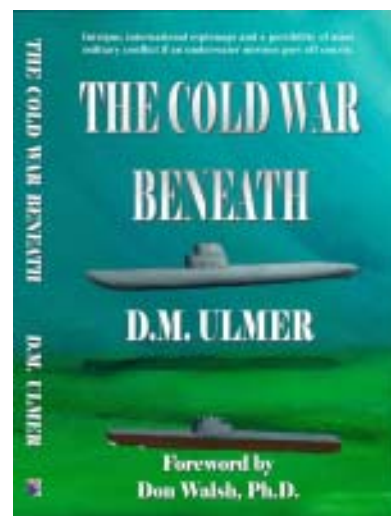
Fictional submarine stories written by Don Ulmer are accounts of what it was like to be aboard a submarine after WWII. Don's extensive career in submarines as an enlisted sailor - going on to become a Captain of the USS *Clamagore* (SS 343), is obvious in his understanding of undersea conflict on board a diesel electric submarine post WWII. "*The Cold War Beneath*" is his third story about the U.S. Navy's submarine service and how it fought the Cold War—events that happened even as the Navy made the astonishing transition from diesel to nuclear power. Don, having served in both types of submarines, is qualified to provide an accurate accounting of those times.

Many of the books that I review for the museum are non-fiction, but "*The Cold War Beneath*" is one of the best fictional submarine books

I've read in a long time. Don and I discussed how some of his submarine experiences were combined into the story line and the colorful characters of his books. He has used

unclassified records and personal accounts to prepare all of his books. I think even the seasoned submarine veterans that read this book will agree that this book does not miss the mark for accuracy and life aboard a cold war submarine.

"*The Cold War Beneath*" is about an American Guppy class submarine - U.S.S. *Piratefish* as it plays a game of watchful waiting off of our Eastern coast in 1955. The *Piratefish* inadvertently discovers a Russian floating dry-dock masquerading as a fishing vessel off the East coast of the United States. A Russian Whiskey class submarine *S-201* is seen by the *Piratefish* as it departs the drydock with mysterious equipment attached to its deck. Of course this makes the US Navy keenly interested in what the Russians are doing. The plot thickens when the Russians drop off one of their crew members to spy on American submarine operations near Groton, Connecticut. Spies and traitors are conducting espionage under the eyes of Naval Investigative Service. The author provides readers with a view of submariner duties from both sides, each concentrating on remaining hidden from its' adversary. The *Piratefish* is hunting alone as the *S-201* reveals itself by a swish of his propellers and by the noise of his machinery. The *S-201* appears and then disappears, but due to



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THE COLD WAR BENEATH

the acutely sensitive hearing and abilities of the Chief sonar operator, the *Piratefish* tracks and eventually engages the Russian submarine inside US territorial waters. You will be surprised by the drama!

This book is an outstanding depiction of a Cold War Submarine Special Operation. The men who volunteer for submarine duty choose a life of close quarters, rigorous discipline, and isolation from the outside world. Antisubmarine warfare (ASW) and intelligence gathering are major parts of this book, but the hardships, tenacity, and dedication of the heroic submariner personnel and their families are the real story. I think you will enjoy reading this book.

LARRY TUCKER

THESE BOOKS BY DON ULMER ARE CURRENTLY AVAILABLE IN THE MUSEUM STORE. MANY OF THEM ARE AUTOGRAPHED COPIES.

The Cold War Beneath

Silent Battleground

Shadows of Heroes

Missing Person

Where or When

The Long Beach Caper

Museum Store Phone

360/697-1537

CONTINUED FROM PAGE 3

From the President...

Trustee Ron Krell attended a seminar on Fundraising last year and he provided a presentation for the Board. Our newest trustees are Don Chalupka and Bruce Riggins and I am pleased to have their participation. They have agreed to develop a renewed vision and business plan including an examination of new ways to energize the Foundation's fundraising. Both Don and Bruce gave a presentation at the meeting and some energetic discussions followed.

Each year at this time, I am reminded of the support that you, the Foundation members, provide through your financial donations. Our success depends so much on each of you, each check, each time you spread the word about the Museum. There is a vast population of people who are interested in the undersea, retired military, defense industry workers, the scientific community, parents and grandparents. We do not want to be the best kept secret in this area – we want to be widely known as a significant resource for Americans, an educational and entertaining opportunity. Your continued interest in the success of the Naval Undersea Museum is heartening and inspires us to persevere. Thank you.

BRUCE HARLOW

CONTINUED FROM PAGE 3

From the Director...

authors, and creating a press release. Joyce set goals and accomplished them. She has been as dependable as the Rock of Gibraltar.

I know Joyce will enjoy and have equal success in the next phase of life that includes being a fantastic grandmother, a continuing learner, and a joyful gardener. The museum will find a person to take Joyce's position, but we will not find a person to replace Joyce.

On another topic, the accreditation team from the American Association of Museums will visit at the end of the July to determine if the museum continues to meet the standards of an accredited museum. This is our first re-accreditation visit since we initially gained accreditation in 2000. The staff, and especially the collections managers, has been working very diligently to prepare. We will likely hear the Commission's decision some time in Spring 2012.

BILL GALVANI

CONTINUED FROM PAGE 1

From the Curator...

RESCUING SUBMARINERS: FROM DSRVs TO THE SRDRS



Mary Ryan

In an effort to win the design and construction contracts for a DSRV, Lockheed Missiles and Space Company built a DSRV-prototype, *Deep Quest*. *Deep Quest* also allowed Lockheed to develop and test the technology needed for a successful DSRV.

Operated by Lockheed but used for both commercial and Navy activities, *Deep Quest* was engineered to perform a wide range of missions and could operate to 8,000 feet.

The DSSP was sufficiently impressed by *Deep Quest* and awarded Lockheed the contract to build the Navy's DSRVs. The original plan was to construct twelve, but that number was halved in 1966 due to escalating costs and the realization the DSRVs could hold 24 personnel at a time versus 16. The plan changed again in May 1968 following the loss of USS *Scorpion* (SS-589) at over 10,000 feet; the Navy recognized DSRVs were only useful if a downed submarine does not sink beyond its crush depth. Because 77% of the world's oceans are deeper than this depth, the Navy decided to only purchase two DSRVs.

The first DSRV, DSRV-1 (*Mystic*) was launched in January 1970, underwent diving tests that summer, and began rescue exercises with USS *Hawkbill* (SSN-666) in early 1971. After successfully conducting all testing, *Mystic* was officially delivered to the Navy. DSRV-2 (*Avalon*) followed and was launched July 1972. Both vehicles were not officially named until 1977 when they entered full operational status. The total development, construction, test, and initial support costs for the DSRVs were \$220 million dollars, with individual vehicle costs of \$41 million for *Mystic* and \$21 million for *Avalon*.

The DSRVs were designed for quick deployment in the event of a submarine accident – to reach any point in the world within 24 hours. They could be transported to the distressed submarine's location by truck, aircraft, ship, or a specially configured attack submarine. Once onsite,



MYSTIC (DSRV-1)

a DSRV would deploy from a mother ship or mother submarine (MOSUB), mate with the hatch of the disabled submarine, and transfer stranded submariners in groups of 24 back to the MOSUB. The 49-foot DSRVs could operate to 5,000 feet – far deeper than the collapse depth of any U.S. submarine – and ran via electric motors charged by batteries. No American submarine has sunk since *Scorpion* and since the DSRV program was implemented, but over the decades the DSRVs have performed many successful training exercises.

Avalon was deactivated in September 2000. The new Submarine Rescue Diving and Recompression System (SRDRS) replaced *Mystic* as the Navy's deep-sea submarine rescue system on 30 September 2008. *Mystic* and the DSRV began deactivation the next day.

The SRDRS is a three-part, phased acquisition system designed, like the DSRVs, to be rapidly deployed to any location in the world via air or ground. Unlike the DSRVs, each SRDRS component is capable of deploying from military or commercial vessels of opportunity (VOO), removing the need for specially-configured MOSUBs or surface support ships.

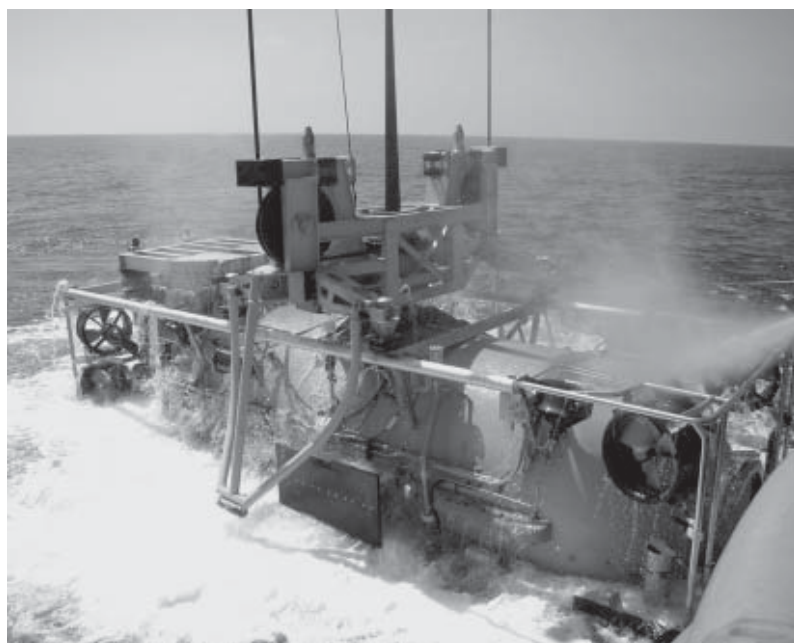
The first phase is the Assessment/Underwater Work System (AUWS), comprised primarily of

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RESCUING SUBMARINERS: FROM DSRVs TO THE SRDRS

an ADS2000 (atmospheric dive system) capable of depths to 2,000 feet and used to examine downed submarines and clear escape hatches. Phase two is the Rescue Capable System (RCS) which consists of tethered, remotely-operated pressurized rescue module (PRM) *Falcon* that mates with the escape hatches of a distressed submarine; sixteen submariners can be transferred at a time from as deep as 2,000 feet back to the VOO surface ship. The final phase of the SRDRS, to be delivered in late 2012, is a Submarine Decompression System (SDS) with Transfer Under Pressure (TUP) capability. The SDS allows up to 62 personnel rescued from a pressurized submarine to remain under pressure during transfer to a support ship's hyperbaric treatment chamber. It also provides decompression and medical treatment.



PRESSURIZED RESCUE MODULE (PRM) FALCON OF THE SUBMARINE RESCUE DIVING AND RECOMPRESSION SYSTEM (SRDRS)

The first two components of the SRDRS were tested a few years ago during NATO exercise Bold Monarch 2008. Deep Submergence Unit and Military Sealift Command personnel successfully executed 13 manned dives and 13 submarine mates to "rescue" 206 submariners. The Navy will test the SRDRS again this year at the 2011 Bold Monarch exercise to be held May 30-June 10 off the coast of host nation Spain.

"*Mystic* brought new capabilities to the fleet when she entered service in 1977," said Steve Schulze, the executive director at the time of *Mystic's* deactivation of Undersea Warfare, Naval Sea Systems Command. "Now SRDRS builds upon those innovations, delivering even greater capabilities to the international submarine community."

MARY RYAN

Personnel Directory



Websites

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Ron Roehmholdt

From the Exhibits Director...

WORK WORDS



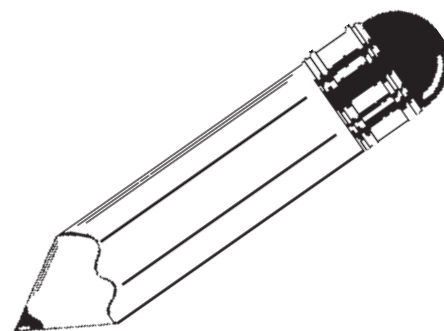
There are words...words we communicate by. Words we live by. Words we work by. I recently was thinking about the latter and the clutter of those seated in my mind. How do I describe what I do? How do I do what I do (descriptively)? It is with words. I realized just how many words I ascribe too and then I thought it may be fun and enlightening (for you and a bit healing for me) to just see what some of those words are that help me through my day.

So in one word or another and in no given order: **write**, draw, sketch, **listen**, speak, paint, hammer, **pound**, saw, trim, **fix**, repair, **pencil**, paper, glue, spray, rub, **create**, test, **bolt**, washer, nut, tools, measure, measure **again**, stick, foam core, xacto knife, tape (duct, **strapping**, **masking**, scotch, double sided, foam, etc), **computer**, **telephone**, forms, **governmental** forms and still more forms, camera, **projector**, **light** bulbs, lamps, light **emitting** diodes, sound, **recorders**, wiring, **automobile**, truck, **forklift**, scissor **lift**, gloves, radio, LCD monitor, lens, audio, cable, rope, **bits**, **RCA**, more tools, **scene**, scrim, **curtain**, **chair**, bollard, dry mount, diffuser, wood, MDF, **acrylic**,

water, images, **half-tone**, sepia, biologic, creative, inter-active, **adhesive**, immersive, gloss, matte, balance, force, vision, props, gelatins, painting, décor, backdrop, twist, turn, pick, extract, remove, lacing, **pressure**, numbering, identifying, describe, **squeegee**, sit, stand, kneel, crawl, lay, contort, **imaginative**, monitor, talk, mutter (under the breath), look, stare, **pen**, squint, frown, smile, laugh, grimace, shovel, chop, hack, melt, burn, dance (because sometimes you just have to), construct, **Plexiglas**, fabricate, box cutter, hook-up, disconnect, pluck, support, **un-bolt**, solid state, thread, **screw**, roller, tray, brush, drop cloth, dust, vacuum, wash, scrub, **lighting fixtures**, mount, level, scratch, **un-screw**, itch, plumb, PVC, true, edit, Gatorfoam, **cut**, foamcore, tap, dye, composites, corrugated, suspended, wire-rope, cleat, **nail**, dry wall, spackle, grind, file, tension, secure, **imagine**, bend, shape, form.

Now you can see that I (we) do indeed live by words and I (we) use words to work with every day to communicate ideas, thoughts, images, subjects and in doing physical work. NOW, I want you to work a little with the words I work with. You just have to find them to make it work (use the bolded words from the above paragraphs):

P S L I A N W T P C E C S L U
 E S T I B E E R U V N O E A N
 N P I R R E O T I W O M R T B
 C O S C A J V T S R T P U N O
 I U S A E P A I X I F U T E L
 L N R C L N P C S T L T X M T
 U D T T I G S I R E A E I N T
 Y O N G A M I Q N Y H R F R E
 R I A H C I A X U G L D D E L
 E M I T T I N G E E A I A V E
 I A U T O M O B I L E G C O P
 S R E D R O C E R N P G A G H
 P R E S S U R E S C E N E I O
 T F I L K R O F C R E A T E N
 M A S K I N G N I T H G I L E



Well, I hope you had as much fun finding the work words as I do using them every day. As always, if you have any questions you know where to find me. **BEST, RON**



From Collections Management.

DIGITIZING MUSEUM COLLECTIONS

People from every generation can rightly say “we live in a changing world.” Whether we’re talking about social norms, clothing styles, transportation, or technology, every year seems to bring changes to our lives. The development of technologies over the past 20 years has revolutionized the way we communicate; now on a truly global scale. In particular I am thinking of the advent of the Internet, the widespread use of computers, and general digital technology.

The computer I was lucky enough to take to my freshman year at WSU cost thousands of dollars, took up the majority of my dorm room desk, had a monitor weighing at least 25 pounds, and didn’t have the memory capacity of the cell phone I carry in my pocket today. I gained my professional education on the cusp of the digital revolution. In graduate school, there were no seminars about the impact of the digital age on managing and interpreting museum collections.

Ten years into my professional museum experience I have worked to educate myself about how and to what extent digital technology can be used in the museum field. I have been an employee of a variety of museums whose budgetary capacities ran the gamut from less than \$50,000 per year to multi-million dollar annual budgets. But all embraced and utilized digital technologies to the extent their knowledge and resources allowed.

Within museums, and particularly in Curatorial and Collections Management activities, digitization refers to the transfer (or creation) of media into a digital format. For example, museum staff has the ability to scan a photograph print and create a digital file that is an exact copy of the original photograph. The same can be done for documents, slide film, and negatives. Three dimensional artifacts are photographed using digital cameras; their images uploaded easily into collections management databases or used in an online capacity (websites, Facebook, blogs).

The equipment with which we digitize material is getting more cost-effective and has increased in quality and capability. Scanners capable of capturing information at extremely high resolution levels fit easily into a work space. External hard drives used to store digital resources we create have decreased in price and size, but most importantly, have increased storage capacity. The hard drive I currently use to backup

digital files holds 1 terabyte or 1,000,000,000,000 (trillion) bytes of digital information.

Having and using digital media brings numerous opportunities to museum staff in terms of managing collections, ensuring long term preservation of artifacts, interpretation, and exhibit planning. Digital media has transformed how we design and create exhibits. It has transformed how we share historic resources with the general public. Digitization and the proliferation of personal computers and smart phones have greatly influenced how, and to what extent, museums can share their holdings.

Accessibility of historic collections held in trust for the public has always run at odds with our mandate to preserve often fragile and irreplaceable objects. How do we balance object accessibility while preventing damage from over-use? Digitization has proved to be a key part in ensuring both accessibility and object preservation. For example, a museum may hold a unique collection of photographs that researchers repeatedly ask to see. This requires the original photos be handled, exposed to light, air pollution, and accidental damage or theft. By creating digital copies of these photographs, researchers can peruse the contents of the photographs without ever having to handle the original.

The question has been raised: if digital scans create such a high quality copy of the original photograph (or newspaper or documents)...why spend the money in acid free storage materials, staff time, and facility space to keep and store the originals? In a 1 terabyte hard drive (the size of a large paperback book) you could store the same number of photograph image files that would require rows of shelving to properly store the originals.

The answers to this question are not simple or straightforward. As much as digital technologies are now a part of our daily lives, it is still fairly new technology that, more importantly, is constantly changing and evolving. The scanners and hard



Lorraine Scott

IN MEMORIAM

CAPTAIN RALPH LINDSAY ENOS, USN



Captain Ralph L. Enos, USN passed away in Saturday, April 9, 2011 at the Retsil Veteran's Home in Port Orchard, Washington, where he resided for the past 3 ½ years.

Captain Enos was born on October 21, 1930 in Chicago, IL. He graduated from Hirsch High School in June 1948 and received a Congressional appointment to the Naval Academy. After graduation in 1952, he attended the US Naval Postgraduate School at Monterey, CA from 1958-1960 where he was awarded a Master of Science degree in electrical engineering (guided missiles).

Upon graduation, he was assigned to the USS *Mount Olympus* (AGC 8). In 1955, he attended Submarine School and subsequently served as the navigator on USS *Sam Houston* (SSBN 609), making several strategic deterrence patrols in defense

of our nation's freedom. He developed specialty in undersea ordnance and from 1974 – 1977 served as the Program Officer for the Torpedo Mk 48, the primary torpedo carried by US submarines. He was the decommissioning Commanding Officer of the Naval Ordnance Station, Forest Park, Illinois.

Following his retirement from the Navy in June 1977, CAPT Enos completed the Master's degree program in museum studies at George Mason University in Virginia. He became a close advisor to VADM Eli Reich and the other leaders of the Naval Undersea Museum Foundation at a critical time when the foundation was building the museum. CAPT Enos became the first director of the Naval Undersea Museum from 1989 to 1991.

CAPT Enos later became a consultant to the foundation in undersea technology and in submarine history. His considerable expertise in these areas contributed significantly to the high quality of the museum's permanent exhibits.

CAPT Enos took charge of the establishment of the *Undersea Quarterly*, serving as its first editor and establishing standards of scholarship, presentation and relevance which continue today. Always an interested and informed student of naval history, CAPT Enos wrote educated articles and book reviews for the *Undersea Quarterly*. His particular interest was the naval history of the Pacific

Northwest. Not confining his work to the *Quarterly*, CAPT Enos contributed articles to other publications such as the *Submarine Review*, the journal of the Naval Submarine League. His two-part article "*Onkel Karl and Uncle Charlie*" earned for him the US Naval Institute's award for the best submarine history article of 1999. CAPT Enos had a long-standing interest in and commitment to the museum's library. As museum director, he contributed many books, which improved the library's holdings. Perhaps most importantly, as an author drawing upon its resources, he showed the value of the library for contributing to the preservation, understanding and scholarship of naval undersea history and operations. CAPT Enos was a member of the Naval Undersea Museum Foundation's Board of Directors since its inception. In the fall of 2001, the museum's library was named in honor of CAPT Ralph L. Enos, USN.

CAPT Enos was a Life Member of the Naval Institute, the Naval Academy Alumni Association, the National Security Industrial Association, the American Contract Bridge League and the American Historical Association. He was awarded the Navy Commendation Medal twice and earned the Navy Occupation Medal and the National Defense Service medal.

IN MEMORIAM

FRANCIS PETER GALLES



December 7, 1925 to April 2, 2011

Francis Peter Galles was born on December 7, 1925 in Mankato, Minnesota, to Nicholas and Lucille Galles. He passed away on April 2, 2011, in Silverdale, WA, of congestive heart failure.

He was a World War II veteran with the U.S. Army and served in the 10th Mountain Division in Italy. He retired from Keyport (NUWES) after serving 40 years as the Occupational Safety and Health Manager. Fran was an avid flyer for over 60 years and started the Kitsap Aviation Squadron in 1957, which is still active today. He loved being a docent at the Naval Undersea Museum for 20 years and was also a lifetime member of the Elks Lodge BPOE 1181 and the DAV. Additionally, Fran was a founding member of Holy Trinity Catholic Parish and served the church as an usher.

Survivors are his wife Olivia of 50 years, son LTC David Galles and wife Gamze, and grandson Nicholas. He is also survived by a son, Colin Barnes, of Bremerton, WA. Several nieces, nephews, and cousins in Minnesota survive him as well.

CONTINUED FROM PAGE 9

From Collections Management..

DIGITIZING MUSEUM COLLECTIONS

drives we are using today will be obsolete in a few years. CD's are advertised as being of "archival quality" and will last "100 years". However...will there be a working computer around in 100 years that can read the media stored on that archival CD? Not likely, or, maybe in a museum! Does anyone have their collection of wax cylinder sound recordings at home that they play every night?

Because digital technology is still new, and because of rapid changes in media type and readability, it is imperative that museums not lose sight of their core function which is to preserve historic artifact collections for the public. We should embrace digital technology and use it to our advantage, but not mistake the value of the real, physical, tangible artifact. We must understand that embarking on digitization projects entails a long term commitment of staff time, money, and support from museum leadership. Once material is digitized there is on-going management required of the digital resource, including migration to new media in the future.

I believe there is room to both preserve artifacts and utilize digital technology to improve accessibility, object preservation, educational, and interpretive opportunities.

As a Collections Manager at the Naval Undersea Museum I am tasked with taking the resources we have already invested in and preparing a formal digitization plan that will address the questions of how, what, and why we digitize portions of our collection. This article addresses only the tip of the digital iceberg, as it were. There are a number of decisions to be made by the NUM Collections Committee as we develop a digitization plan for the future. I look forward to attending an in-depth training seminar at the Campbell Center for Preservation Studies this summer to further delve into this fascinating realm of museum work.

LORRAINE SCOTT



Meet Your Volunteers..

CINDY SANDINE



When asked about her three and a half years of NUM volunteer service in the Curatorial Department, **Cindy Sandine** recalls the wide variety of artifacts she has helped process into the collection. She particularly remembers the very first artifact she measured, categorized, and wrote description and condition reports for. It was a Philippine silver coin, smuggled out of Japan at the end of WWII by a U.S. Navy diver from Washington State who had been a POW, forced by the Japanese to dive for these silver coins. A moulage kit also stands out to Cindy, who spent a number of weeks processing all sorts of fake wounds (burns, compound fractures, bloody lacerations, etc). Cindy never quite knows what sort of artifact she will be processing next, or what interesting history is associated with them.

Born and raised in Oklahoma, and a proud alumna of Oklahoma State University, Cindy worked for 33 years at Tinker Air Force Base in Oklahoma City, OK. For 15 years she worked as an aircraft parts inventory manager, then 18 years as a logistics manager in support of radar maintenance for the E-3 AWACS program. Five years after Cindy and her husband Charlie (chief of aircraft maintenance) retired from their positions at Tinker, they moved to the Pacific Northwest, where they had always enjoyed vacationing.

Before her move to Washington, Cindy volunteered for the Kirkpatrick Aviation and Space Museum, a division of the Omniplex Science Museum (today called Science Museum Oklahoma). There, among other projects, she processed a donation of 750 hats from all over the

world, a collection from Admiral William Crowe, retired Chairman of the Joint Chiefs of Staff.

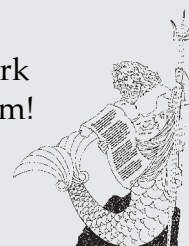
As a new collections volunteer at NUM in 2007, Cindy began working with the artifact processing backlog, as well as becoming proficient with our collections management database, KE Emu. Cindy has proved to be a patient and thorough volunteer, paying attention to myriad details that must be noted when writing descriptions or condition reports. Last year our KE database underwent a conversion, which prevented our accessing it for nearly 4 months. Cindy proved her patience and go-with-the-flow attitude while she continued to work without the database. Her meticulousness and positive attitude has been a real asset to the Curatorial Department.

Especially in the fall, Cindy loves to discuss college football, and she roots enthusiastically for her beloved OSU Cowboys. When asked what she likes about her volunteering, she said "doing the research and learning about the artifacts that I'm processing. I've been learning a whole new language after all those years with the Air Force. I enjoy the interaction with staff and volunteers, both past and present. You're all easy to work with and tolerate my questions and silly jokes."

Thank you Cindy for your commitment to the Naval Undersea Museum and all the artifacts you have helped us process. Congratulations to our Volunteer of the Quarter! **LORRAINE SCOTT**

WHY NOT BECOME A MUSEUM VOLUNTEER?

The Museum and the Museum Foundation offer many opportunities to volunteer your time, your talents, your knowledge. Are you a people person? Become a **Docent** or work in the **Museum Store**! Do you love organizing? The **Library** could use your enthusiasm! Are children your specialty? **Family Day** and **Discover "E" Day** are just the ticket! For more information, contact **Daina Birnbaums**, MuseumStore@wavecable.com, 360/697-1129, or **Olivia Wilson**, Olivia.Wilson@navy.mil, 360/396-5548.



From the Museum Store...

WHERE DOES THIS COME FROM?



About once a week, a customer will ask "What do you have that is made in America"? This is a harder question to answer than you might think. Just as your late model Ford, GM or Chrysler vehicle is certain to have foreign made parts, (or perhaps your Toyota was assembled in Kentucky?), our store pulls products from the global marketplace. We always do our best to source as close to home as possible, whenever possible. We have products in every category that were printed, sewed, or assembled in America. We also carry many items made overseas including Canada, India, Germany, the Philippines, Ecuador, Denmark and yes, China. Wherever possible, we work with companies with a proven track record of environmental responsibility and good and fair trade practices. While a product may have been manufactured overseas, it may have been designed here, (think of the i-phone model). Also, nothing reaches our store without being received, shipped and distributed by American workers.

You may think I'm missing the point about the demise of American manufacturing; I assure you, I am not. Some manufacturing may be gone from our shores for good, this is a sad reality. However, there has been a surprising resurgence in some sectors that we can all hope will continue. I promise you that we will do our best to encourage the trend while continuing to balance cost and selection for our customers and to give them the best shopping opportunity possible. As always, your purchase benefits the Naval Undersea Museum Foundation and the many educational opportunities the museum has to offer.



NEWLINE OF LOCALLY MADE JEWELRY -
BRACELETS, EARRINGS, AND BOOKMARKS
WITH AN UNDERSEA THEME.



VIVIAN AND SHARON, TWO OF OUR CHEERFUL
AND HELPFUL STORE VOLUNTEERS.

Would you like to join our team of wonderful volunteers? Flexible schedules and a retail discount available as well as knowing your work supports the museum foundation. Please contact Daina at the store museumstore@wavecable.com, 360-697-1537, or navalunderseamuseum.org.

DAINA BIRNBAUMS

From the Schoolroom..

EDUCATOR DEPARTING



Joyce Jensen

It's been almost 17 years since I came to the Museum. As I prepare for my retirement after 30 years of federal service later this summer I have enjoyed looking back over the past to see where we started. In September of 1994 our permanent exhibit consisted of the Ocean Environment. The education program consisted of the JASON Project and a small outreach effort to a couple of schools. Our volunteer appreciation events were always potlucks.

Things changed. The Foundation mounted the torpedo exhibit, installed the mezzanine, acquired the Sturgeon Sail, Deep Quest and the Greenling Control room. With Foundation help we mounted a dozen or so temporary exhibits including one from the Navy Art Gallery and one from the Smithsonian. We added the Range exhibit Submarines in World War II. We installed the Greenling and built a pad for Deep Quest and Sturgeon. We added outdoor interpretation to the SEALAB, Trieste, Deep Quest and the sail.

Education also changed. The JASON Project that linked museums with scientists in remote locations was a big draw. We participated in 1996 when the Project was in the Florida Keys. We had several thousand kids in the auditorium watching the scientists at the Aquarius Habitat and other places in Florida. The Project was using NR-1 that year so it was a perfect connection. JASON lost its luster in later years when "real time" was everywhere. In the following years, the Foundation secured funding for science kits, classroom sessions and boat trips for local schools. That was a big hit with teachers from 1999-2008. The museum started looking toward family activities as funding dried up for the SEA Program.

Our first surprise came in 1999 when over 400 people showed up for our first Engineers Discover E Day. We added summer Wednesday activities for families, the Youth Docent Program and most recently First Saturday Family Days.

We also began our adult programs including Distinguished Speakers, Film Series and Authors.

I'd have to say that my best mentors for adult programs were Ralph Enos and Bill Galvani. Both men had a love of history and deep knowledge about the subject. Bill scheduled our first author, Ned Beach. Mr. Beach was followed by many luminaries of the undersea world. We've had Sylvia Earle, John Craven, Don Walsh, Bobby Scholley, Ralph White and Toby Warson. We've had artists, authors, musicians, filmmakers, divers, submersible pilots, submarine captains, and at least half dozen University professors. This past fall we held the first ever book fair with over 25 authors here in our lobby at one time.

In the area of volunteer appreciation, my inspiration was Joan Bacon. Joan worked for the Foundation when I first got here. She was the hostess par excellence! She planned several events here that reflected her elegant hospitality. Our first volunteer appreciation event was NOT a potluck - it was a lovely luncheon at the Bacon home. As the years went by, we found ever more wonderful ways of recognizing our volunteer staff. With the financial support of the Foundation, we have held teas, a luau, an evening in Tuscany, a Mexican fiesta, a harbor tour and many Christmas parties in the lobby. Volunteer appreciation is vital to the retention of our frontline staff and these delightful events are a selling point. I am very grateful for the Foundation support in the area of hospitality. Joan Bacon helped me to learn that the key to a successful volunteer program was nurturing and caring for our volunteer staff. I am proud to say that many of those folks who were here 17 years ago are still here and are some of our best recruiters.

I think we have made a lot of good progress since 1994 and I'm glad for support from all of you. I think the future is bright for Naval Undersea Museum and I look forward to hearing about it. A new educator will bring some new energy to the work and I'm sure some exciting new directions. As for me I am off to be a useful Grandma, take history classes at University of Washington, and spend some time in my garden. Be well, do good work and keep in touch!

JOYCE JENSEN

MAKING THE DREAM COME TRUE

I believe in the Naval Undersea Museum's vision of the future and I want to help make it come true!
I want to see the Museum complete with state-of-the-art exhibits, quality supporting facilities, and exciting educational programs.

Please sign me up for the following:

- ☐ Seat(s) in the Future \$500 each
Dedicated to _____
- ☐ Sustaining membership
- | | |
|----------------------|--------------|
| Foundation Associate | *\$1000+ |
| Patron | *\$500-\$999 |
| Benefactor | \$250-\$499 |
| Builder | \$100-\$249 |
| Provider | \$25-\$99 |

*Donors of \$500 or more may participate in the Seat-in-the-Future program by dedicating a seat in the Jack Murdock Auditorium for each \$500 given.

- ☐ Other
 _____ As a one-time gift

Make checks payable to the Naval Undersea Museum Foundation (NUMF)

VISA, MasterCard, American Express, Discover accepted.

Card # _____ Exp _____

Signature _____

Send to:

**Naval Undersea Museum Foundation
P.O. Box 408
Keyport, Washington 98345**

Sustaining members receive regular quarterly newsletters, invitations to special events. The NUMF is a registered nonprofit 501(c)(3) organization. Gifts and memberships are tax-deductible for federal income tax purposes.

Name(s) _____

Address _____

City _____ State _____ Zip _____

Email _____ Phone _____



WILD, WACKY AND SOMETIMES WET WEDNESDAYS

This summer activity was just one of Joyce Jensen's innovative ideas for providing fun, educational experiences for Kitsap County families.

**THANK YOU,
JOYCE,
FOR YOUR YEARS OF
DEDICATED SERVICE
TO THE NAVAL
UNDERSEA MUSEUM.**



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Schedule of Events

Detailed information on some events may be available in other newsletter articles.
All programs are FREE. Call 360/396-5547 with questions.

EXHIBITS

Service and Sacrifice: The Trident Family - Pier Room
"The Skin You're In" Diving Exhibit - Exhibit Hall
Into the Depths: Teen Docent Exhibit – Lobby

AUGUST FILM SERIES

Titles to be announced. Each Saturday in August.
2:00 pm. Auditorium. FREE.

WILD, WACKY AND SOMETIMES WET WEDNESDAYS

Craft and science projects, face
painting, sidewalk chalk and
water fun for pre-school to age 10.
Wednesdays – all summer
from 10:00–2:00. FREE.

