

TORPEDO ALLEY



Vol. 4, No. 8

August 2008

Newsletter of Charleston Base, United States Submarine Veterans, Inc.



USSVI Creed

"To perpetuate the memory of our shipmates who gave their lives in the pursuit of their duties while serving their country. That their dedication, deeds, and supreme sacrifice be a constant source of motivation toward greater accomplishments. Pledge loyalty and patriotism to the United States Government"



Base web page: www.ussvicb.org

National web page: www.ussvi.org

Base Meeting:

August 14, 2008

Social hour 1800, General Meeting 1900

Location:

Fleet Reserve Association Branch 269, Low Country Home
99 Wisteria Rd.

Goose Creek, South Carolina. Phone 843-569-2962

| Base Officers | | Phone Number |
|----------------|--------------|--------------|
| Commander | Steve Nelms | 843-563-7115 |
| Vice Commander | Carl Chinn | 843-875-3098 |
| Secretary | Rick Collins | 843-851-3490 |
| Treasurer | George Lisle | 843-559-4242 |

| Special Officers | | Phone Number |
|----------------------|------------------|--------------|
| Chief of the Boat | Marty Sessler | 843-871-1536 |
| Public Affairs | Richard Cleeve | 843-899-4563 |
| Publicity | Open | |
| Sub Vets WWII | Barnwell Chaplin | 843-762-6945 |
| Nuclear Historian | Rick Carlson | 843-875-4030 |
| Veterans Affairs | Jim Morrison | 843-832-9716 |
| Chaplain | John Nichols | 843-873-5897 |
| Membership | Carl Chinn | 843-875-3098 |
| Holland Club | Terry Trump | 843-873-9563 |
| Little David Project | Rick Wise | 843-875-5559 |
| Roving Reporter | Rick Wise | 843-875-5559 |
| Scholarship | Jim Yates | 843-873-0246 |
| Newsletter | Carl Chinn | 843-875-3098 |
| Storekeeper | Paul Viering | 843-797-2623 |
| Alcohol & Gaming | Dave Mueller | 843-553-2775 |

Minutes of the July 2008 meeting

Attendance for the July 10, 2008 meeting was 109

Opening Ceremony: Base Commander called the meeting to order. A Quorum was present and the meeting was commenced at 1900.

Introductions: New people were introduced; Lewis Leal, Bruce Barber, J. Mills MMC, Bill Allen EMCS. Welcome aboard.

District Commander: Jerry Stout discussed the National Awards

* Charleston Base has been nominated for Gold Anchor Award

* Carl Chinn has been nominated for the "Joe Negrie" Award.

Fleet Reserve: No report

Holland Club: No report

Secretary: Secretary Rick Collins asked for a motion to approve the meeting minutes from last month. A motion was made and seconded. Minutes approved.

Treasurer: George Lisle gave the treasurer's report.

Storekeeper: No report

Chaplain: June Report: Cards were sent as follows:
Cards were sent as follows To:

Bob & Jean Lowe who are both fighting cancer.

Janice Carrigg who is also fighting cancer.

Jerry Coutou wishing him well as he recovers from leg amputation.

Mike Stuffle wishing him well as he recovers from leg amputation.

Ron Willis wishing him well as he is being treated for his sickness.

Ron and Peggy Williams on the death of their son, Kris. Ron is the DRUM base Commander.

Margaret Cake on the death of Paul Cake, Jr. RMCS(SS)USN Retired. Paul was not a member of our base.

Notes were received from:

Summerville Medical Center thanking the SUBVETS Charleston Base for their support in the flag retirement ceremony held on 23rd of June.

Ron and Peggy Williams, DRUM base, thanking us for our thoughts and prayers on the death of their son. If you know of shipmates or spouses from other bases who are having a difficult time, had surgery, etc. and would like for USSVI Charleston Base to send them a card please send their name and address to the Chaplain via email or phone call.

Scholarship: Buy base challenge coins to support the scholarship fund.

Public Affairs: Need a replacement for the Publicity Coordinator.

Sub Vets WWII: The last WWII 2009 calendar is now on sale for \$7, get yours now. Also we have a good deal on 2008 colanders.

Veteran's Affairs: We have a new booklet, Federal Benefits for Veterans and Dependents, free for the taking.

Vice Commander Report: No report

Membership: Carl Chinn reports we have 305 members. Dues will be due on 1 October, pay early.

Little David: No report

Newsletter: No report

Alcohol & Gaming: No-neck has Tee shirts and ball caps from The After Battery for sale.

Chief of the Boat: No report

Base Commander: Had the Vice Commander review the National election and the proposed changes to constitution and bylaws. Discussion was held and everyone that was eligible to vote voted.

Nuclear Historian: No report

Old Business: None

New Business: None

Good Of The Order: The depth charge drawing was held. The winner was Ken Hutchinson, \$320 to the winner.

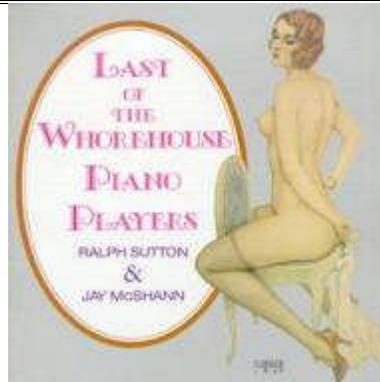
Presentation of the 1st annual Charleston Base Distinguished Submariner Award:

The Base Commander called James Eckles to the front of the room and called in from outside the distinguished guests, Mrs. Sue Eckles, Debbie their daughter and her husband Randy, Admiral Flatley, a long time friend of Jim's.

The award was presented and Buddha made a moving speech. Admiral Flatley also spoke of Jim and how he taught a whole generation of sailors how to go on liberty.

The Base Commander adjourned meeting at 2000.

**** End of the minutes for July 2008 ****



"Don't tell mom I'm a submariner, she thinks I play piano in a whorehouse."



| | | | |
|-----------|------------|-------------|---------------|
| Addington | Allison | Andersen, D | Chinn, R |
| Cleeve | Daughter | Davis, D | Freligh |
| Graff | Hardaway | Henderson | Hutchinson, C |
| Ianuzzi | Ilgenfritz | Irving | Kirby |
| LaRose | Larsen | Lowman | Miller, C |
| Mills | Morgart | Morrow | Mulkey |
| Nelms | Roberts | Spagone | Turner |
| Wise | Young | | |



August 14 – Monthly meeting

Membership Dues

2009 membership dues are payable on 1 October 2008. You can pay anytime. Let's make this easy and everyone pay on time or early!

If you're not sure what you owe, contact Carl Chinn at carlc@sc.rr.com or 875-3098.

There will be a list at the meetings starting in July.



Chaplain's Corner

A Wakeup Call

Shortly after taking command of USS Daniel Boone (SSBN629 Blue) we deployed from the crew base at Charleston, South Carolina to the submarine base at Kingsbay, Georgia. My crew was very rusty and short on experience after an extended three-year refueling overhaul at the shipyard in Newport News, Virginia. Morale was in the pit and overshadowed by a grounding incident in Thimble Shoals Channel coming out of the shipyard. The ship was reparable but my predecessor's career was not. I was diverted from the newer ship I was scheduled to command to the Boone to relieve the Captain who had grounded the ship.

August Submarines Lost:

| | | |
|--------------|--------|-----------------|
| USS Grunion | SS 216 | August 16, 1942 |
| USS S 39 | SS 144 | August 16, 1942 |
| USS Pompano | SS 181 | August 29, 1943 |
| USS Flier | SS 250 | August 13, 1944 |
| USS Harder | SS 257 | August 24, 1944 |
| USS Bullhead | SS 332 | August 6, 1945 |
| USS Cochino | SS 345 | August 26, 1949 |

Lost Harbor

There is a port of no return, where ships
 May ride at anchor for a little space
 And then, some starless night, the cable slips,
 Leaving an eddy at the mooring place . . .
 Gulls, veer no longer. Sailor, rest your oar.
 No tangled wreckage will be washed ashore.

New Turtle Will Be On Display

At Museum Soon

July 10, 2008, ESSEX - The now year-long "Search for the Turtle" - David Bushnell's Revolutionary War submarine - has not yet produced the hoped for results, but a new Turtle, believed to be an exact replica of Bushnell's creation, is expected to make its debut "within the next week or two."

Jerry Roberts, executive director of the Connecticut River Museum at the Steamboat Dock, tells this newspaper that, unlike an earlier replica, this one will be interactive, with visitors actually able to go inside to push the buttons and pedals that made the original Turtle work.

Roberts believes that the new Turtle, along with another all-new exhibit, "Messing Around In Boats," will attract many new and repeat visitors throughout the summer, when the museum is open seven days a week.

It had been hoped that the "Search for the Turtle," launched a year ago, might turn up some evidence of what happened to Bushnell's submarine after its attempted attack on a British ship in New York Harbor.

There are a number of theories. One is that the Turtle made it back to the Saybrook shop where Bushnell had built it and that he dismantled it there. Another is that it may have taken on water and sunk somewhere between New York Harbor and here. But there is as yet no hard evidence to support either of these theories or one of a number of others that have been advanced.

But Roberts is not about to give up. As far as he's concerned, the search goes on.

After a 30-day refit at Kings Bay we went to sea through the St. Mary's River channel past Ft. Clinch and Fernandina Beach, FL to the local operating area off the South Carolina coast. This was my first opportunity to take the ship to sea without any observers and to start the transition of the crew from the rustiness of the shipyard environment to the professionalism of the operational strategic deterrent force.

Sea trials are always high tempo packed events using every minute to test every system and train every crewmember. With our green crew we had run drill after drill for two days. I was exhausted but we were due to surface at midnight for the seven-hour surface transit across the continental shelf to Kings Bay for a turn around and personnel transfer in preparation for the last half of the 4-day sea trials. At about 11PM I lay down in my stateroom for a quick nap before the periscope operations and the surfacing procedure. With 15 years of sea duty on submarines and about 350,000 miles submerged, I was very familiar with the submariner's psalm:

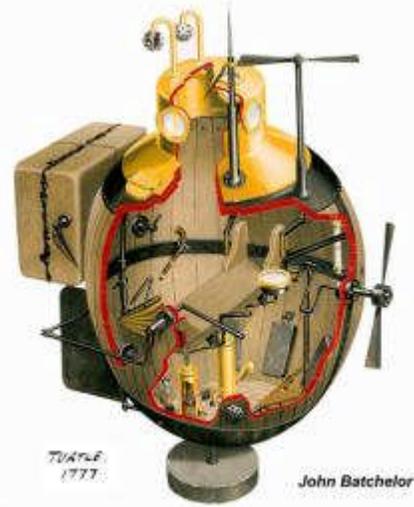
Psalm 139

*Where can I go from Your Spirit?
Or where can I flee from Your presence?
If I ascend into heaven, You are there;
If I make my bed in hell, behold, You are there.
If I take the wings of the morning,
And dwell in the uttermost parts of the sea,
Even there Your hand shall lead me,
And Your right hand shall hold me.*

Many nights during my career the loneliness and family separation had been heavy on my heart. This night was the same. After a few minutes I was startled awake, like I'd been shaken by a strong man. There was no one in my stateroom, but I knew there was something wrong.

I bolted out of my stateroom and started running toward the conning tower down the passageway and heard the Officer of the Deck giving orders to the helmsman and Diving Officer, "Make your depth 350 feet, all ahead full." "Right full rudder, steady course 270", I countermanded the order running down the passageway. The helm responded, "The Captain has the Conn."

The continental shelf shoals up rapidly off the coast of South Carolina from 500 fathoms (3000 feet) to 20 fathoms (120 feet). The shelf was less than 10 miles away from our position and we would have run aground at a deep depth, going fast and could easily have lost the ship and all hands on board.



Social Security for Veterans

Editor's note: The SSA website says this is automatic. Better to be sure; ask so you don't lose the benefit! Visit the 2 websites listed below to get all of the information. 1940 to 1956 is different.

Please share this with anyone who's had active duty service prior to January 2002 and planning for retirement. In a nutshell it boils down to this: You qualify for a higher social security payment because of your military service, for active duty any time from 1940 through 2001 (the program was done away with in January 2002). Up to \$1200 per year of earnings credit credited at time of application - which can make a substantial difference in social security monthly payments upon your retirement.

You must bring your DD-214 to the Social Security Office - and you must ask for this benefit to receive it! Soc Sec website:

<http://www.ssa.gov/retire2/military.htm>

also: <http://www.ssa.gov/retire2/veterans.htm>

This is something to put in your files for when you apply for Social Security down the road. It is NOT just for retirees, BUT anyone who has served on active duty prior to January 2002. FYI - this benefit is not automatic, you must ask for it!

Former Nautilus Crew Looks Back On Polar Feat

GROTON, Conn. — Former Nautilus crew members say it does not seem like 50 years have passed since they made their historic crossing of the North Pole under the ice cap, and that if the Navy would kindly give them another nuclear power plant, they could man their ship and head back out to sea.

When God sends a wakeup call, make sure you're listening and act on it, NOW.

Respectfully,

Dr. Stephen M. Jarrett CDR, USN (Ret)

Former Commanding Officer, USS Daniel Boone (SSBN 629)

(Dr. Jarrett is currently DBA/ITM Chief Technologist, SPAWAR Systems Center Charleston)



From the Storekeeper

Please pick up the items that were ordered.

The following have items to pick up:

Heber, Cline, Miller, Hendrix, Kirk, Morris, and Camp.

Books by Ken Sewell are available:

"Red Star Rogue", \$15.00 hardbound and \$5.00 paperback

"All Hands Down", \$20.00

Submarine In Dire Straits

The wreck of the first British-made submarine is in dire straits at the bottom of the Solent, according to a new report.

English Heritage says the A1, built in 1903 and sunk twice with the loss of 11 submariners by 1911, is in 'significant decline'.

Divers have been blamed for speeding up the natural decay of the historic vessel by visiting the site and taking items away with them.

The English Heritage 'At Risk Register' also lists Gosport Railway Station and nine other sites in the area as badly needing help to prevent them falling into disrepair.

The Vickers-built A1 lies two miles south of Chichester harbour and is in such a poor condition naval experts fear for her future.

George Malcolmson, archivist at the Royal Navy Submarine Museum in Gosport, said: "It stands to reason that if the wreck is lying under the sea it will rust, but there have been other problems with her.

Over the years divers have taken fittings from her and so she is not in an ideal condition.

She is of great maritime importance because, unlike Holland 1, she was built in this country.

If money were no object I would be calling for her to be raised to the surface as quickly as possible."

Mark Dunkley, a marine archaeologist from English Heritage, put together a list of wrecks around the UK coast. He said: "The report says A1 has extensive problems and her future will be one of significant decline.

"The site has been subject to unauthorised dives and a chain of shellfish pots was fixed by an unknown diver to the vessel's hull, causing abrasive damage.

"When you first join the Navy and look forward to 20 years and retirement, you say, 'That's forever.' I put 28 in, and it seems like it all happened just yesterday," said Al Charette, a Sonarman on board for the North Pole trip. "Every time we have a reunion, the crew thinks we should go out and get that ship underway. We're ready. We're still a crew."

"We remember each little feature of rigging it for dive. We feel very confident we could do that again," said Jack Kurrus, an engineman also on the trip. "Wouldn't it be nice to go to sea one more time?"

Nautilus (SSN 571) left Pearl Harbor, Hawaii, on July 23, 1958, under top-secret orders to conduct Operation Sunshine, the first crossing of the North Pole by a ship. About 10 months earlier, the Soviet Union had launched the first artificial satellite into space.

"We wanted to out-Sputnik the Russians," Charette said.

The crew of 116 men reached the North Pole at 11:15 p.m. on Aug. 3, 1958. They received the Presidential Unit Citation, the first ever issued in peacetime.

Charette, Kurrus and another former crew member, Joe Degnan, were at the U.S. Navy Submarine Force Museum Friday for the unveiling of a new exhibit that commemorates the 50th anniversary of their voyage. The exhibit, which includes artifacts and previously unpublished color images, runs through March 2009.

The successful 1958 trip was not the Nautilus' first attempt to cross from the Pacific to the Atlantic over the top of the world.

The crew was in the Arctic a year earlier to see how the submarine would operate under the ice. When the ship lost power to its gyrocompasses, Cmdr. William R. Anderson gave the order to turn back because there was no way to fix the ship's position. "We spent 72 hours trying to find our way out and that was really, really scary," Kurrus said.

Nautilus visited the Pacific in 1958, under the cover of teaching those in the Pacific Fleet about nuclear submarines. The submarine headed to the North Pole but encountered heavy ice and shallow water on the way. At one point, the 320-foot submarine had just a few feet of water over its sail and about 20 feet below the keel.

The crew returned to Pearl Harbor and waited a month for the ice to break up and melt before making another attempt to go to Portland, England, by way of the North Pole.

We want to reduce each year the number of protected historic shipwrecks on the register to ensure their value and significance is maintained.”

Jillian Haines, 69, is the granddaughter of submariner Albert Fleming, who died when A1 first sank in Portsmouth harbour in 1904.

She said: “I am so sad to learn that she is in this condition. Obviously there will be wear with her being below the water but I never thought it was this much.

I imagine it would cost a lot of money to raise her up but she is a cornerstone of the Royal Navy.”

Ceremony Honors First Navy Chaplain: Current Chaplains-In-Training Attend

BARRINGTON — In a ceremony that Navy Capt. T. Randy Cash said “linked the past with the future,” students and chaplains of the Naval Chaplains School in Newport, R.I., gathered at the Pine Grove Ceremony Friday afternoon to honor the Rev. Benjamin Balch, the first known American naval chaplain.

Balch, originally from Dedham, Mass., served aboard the ships Boston and Alliance during the American Revolution and eventually settled in Barrington, where he was the minister of the Barrington church and became the town's first librarian.

Before the idea of chaplains being noncombatants took hold during the Civil War, he served just as much as a soldier as he did a chaplain, according to Barrington resident Bruce Decker, who wrote a short history of Balch.

Friday during the ceremony, Decker, dressed in colonial garb for the occasion, stood at attention opposite about 20 chaplain school students dressed in white naval uniforms facing Balch's grave. About 50 visitors, including descendants of Balch, also were present.

Cash, the Navy school's commanding officer, drove up from Rhode Island on buses with his students. He called Balch a “great American” and said it's up to the chaplain students to “carry on his legacy.”

“We have the past and the future with us,” Cash said. “By remembering Balch, you continue to carry forth that legacy of Navy chaplains.”

Reading from Psalm 46, Cash said: “Though the waters rage and swell, and though the mountains quake at the towering seas, there is a river whose streams make glad the city of God, the holy place of the dwelling of the Most High.”

“Benjamin Balch would've understood that without any problem,” Cash said. “He ventured forth from his home to serve in the struggling Continental Navy.”

Kenneth Carr, who was then a lieutenant and later retired as a vice admiral, said it was “pretty routine on board” as they neared 90 degrees North on Aug. 3, 1958.

Carr said he asked the scientist on the trip, “how will we know we crossed the pole?” Dr. Waldo K. Lyon pointed to a machine with a green dot going around in a circle.

“He said the dot would stop and go in the other direction, and it did,” Carr said. “It wasn't anything dramatic.”

Once the Nautilus surfaced, Anderson sent a message to the Navy: “Nautilus 90 North.”

“I'm not sure we really appreciated the depth of what had just happened, and I think it was a long time before any of us realized it,” Charette said. “All we knew was when we ended up in England, everyone and their brother wanted an autograph.”

Those on board nicknamed themselves PANOPOs, an acronym from the phrase from the Pacific to the Atlantic via the North Pole. A “Welcome Home PANOPOs” banner is one of the artifacts on display in the new exhibit. Sarah Martin, who works at the Naval Submarine Base, was the graphic designer for the exhibit.

Several events are planned at the museum leading up to the anniversary, including a book signing and lecture by Alfred McLaren about the Queenfish on July 12 and by Don Keith about the Nautilus on Aug. 2, and a ceremony on the Nautilus Aug. 3.

The Nautilus Alumni Association is planning a reunion Sept. 25-28 at the Groton Inn and Suites.

Navy Commander Says Iran Expected To Attack US, Israel

Philadelphia Bulletin 07 JUL 08

Jerusalem - A leading U.S. Navy commander said NATO should prepare for Iranian missile strikes on member states.

U.S. Navy Sixth Fleet commander Vice Adm. Sandy Winnefeld said in a magazine article published this month that an Iranian attack on Israel was the most likely scenario and would demand a response from the Western alliance.

“Perhaps most worrisome of the threats in the region is Iran's increasing ability to quickly launch ballistic missiles in an attempt to overwhelm Israel's organic defensive systems,” Vice Adm. Winnefeld said. “This is, in my opinion, by far the most likely employment of ballistic missiles in the world today, and it demands our immediate attention in the event of a need for a U.S. or NATO response.”

While serving aboard the Alliance, where he conducted prayer services twice daily and also acted as a schoolmaster, Balch was seen "in the midst of the fray" in a sea battle between two British ships, the Trepassey and Atalanta, according to Decker. The Alliance heavily damaged the Trepassey and forced the commander of the Atalanta to surrender.

From then on, Balch became known as the "fighting parson" because of his efforts during the battle.

After Cash led students and visitors in the singing of "Amazing Grace" to close the ceremony, he presented two framed pictures of the Navy school to both church members and descendants of Balch. He also gave Decker a certificate for keeping Balch's memory alive.

Balch "is our patriarch," Cash said.

Run Silent, Run Cheap

July 22, 2008:

For over a decade, the U.S. Navy has had an internal feud going on over the issue of just how effective non-nuclear submarines would be in wartime. In an attempt to settle the matter, from 2005 to 2007, the United States leased a Swedish sub (Sweden only has five subs in service), and its crew, to help train American anti-submarine forces. This Swedish boat was a "worst case" scenario, an approach that is preferred for training. The Gotland class Swedish subs involved are small (1,500 tons, 200 feet long) and have a small crew of 25. The Gotland was based in San Diego, along with three dozen civilian technicians to help with maintenance.

For decades, the U.S. Navy has trained against Australian diesel-electric subs, and often came out second. The Gotland has one advantage over the Australian boats, because of its AIP system (which allows it to stay under water, silently, for several weeks at a time). Thus the Gotland is something of a worst case in terms of what American surface ships and submarines might have to face in a future naval war. None of America's most likely naval opponents (China, North Korea or Iran), have AIP boats, but they do have plenty of diesel-electric subs which, in the hands of skilled crews, can be pretty deadly.

It's only a matter of time before China gets lots of AIP boats. Meanwhile, China is rapidly acquiring advanced submarine building capabilities. One new Chinese diesel electric sub design, the Type 39A, or Yuan class, looks just like the Russian Kilo class. In the late 1990s, the Chinese began ordering Russian Kilo class subs, then one of the latest diesel-electric design available. Russia was selling new Kilos for about \$200 million each, which is about half the price

Vice Adm. Winnefeld, in an article titled "Maritime Strategy in an Age of Blood and Belief," for the U.S. Navy's Proceedings Magazine, said Iran could be provoked into a massive strike by what he termed an "isolated, and perhaps seemingly unimportant, event." The commander said the U.S. Navy must deploy missile defense assets and rapid-response forces to counter the Iranian threat.

"While U.S. Navy missile-defense capability need not be on-station all the time, it needs to be present in the theater conducting other missions, ready to respond quickly as needed," Vice Adm. Winnefeld said. "It would be wise for several of our very capable European partners to consider achieving this capability as well for their own defense against this threat."

In the article, Vice Adm. Winnefeld called for enhancement of NATO and U.S. capabilities in what he termed maritime domain awareness, the understanding of vessels, people and cargo in a naval arena. He said this would require intelligence and operations integration.

"While our capable and highly valued maritime partners are present in the Mediterranean on a daily basis, there is a broad disparity among them regarding the threshold for action before or during a crisis," Vice Adm. Winnefeld said. "However, farther south lies an area with great promise for coalition maritime action."

From District Commander

Charleston Base members,

Voting Season is here for USSVI. Every two years, our members have the opportunity to vote for our new National Officers, changes submitted to the Constitution and Bylaws and in local region election. 2008 is no different; actually this is an extremely important year for elections.

The Constitution and Bylaws is a complete rewrite and the proposals submitted for the creed and the Holland Club if approved will change the way USSVI does business for many years to come.

Please take the time to read over these changes and read the bios of the candidates whom are running.

If you have not voted, the next copy of the American Submariner will be out soon. Online is easy too. From our last meeting, most of Charleston Base has voted. I appreciate your support.

Set aside Saturday, September 13th, with more details on the time for the first annual Eastern Region South District Two BBQ. Denizens of the Deep have offered to host this event. This will be a

other Western nations sell similar boats for. The Kilos weigh 2,300 tons (surface displacement), have six torpedo tubes and a crew of 57. They are quiet, and can travel about 700 kilometers under water at a quiet speed of about five kilometers an hour. Kilos carry 18 torpedoes or SS-N-27 anti-ship missiles (with a range of 300 kilometers and launched underwater from the torpedo tubes.) The combination of quietness and cruise missiles makes Kilo very dangerous to American carriers. North Korea and Iran have also bought Kilos.

The Chinese have already built two Yuans, the second one an improvement on the first. These two boats have been at sea to try out the technology that was pilfered from the Russians. A third Yuan is under construction, and it also appears to be a bit different from the first two. The first Yuan appeared to be a copy of the early model Kilo (the model 877), while the second Yuan (referred to as a Type 39B) appeared to copy the late Kilos (model 636). The third Yuan may end up being a further evolution, or Type 39C.

The Type 39, or Song class, also had the teardrop shaped hull, but was based on the predecessor of the Kilo, the Romeo class. The Type 39A was thought to be just an improved Song, but on closer examination, especially by the Russians, it looked like a clone of the Kilos. The Yuan class also have AIP (Air Independent Propulsion), which allows non-nuclear boats to stay underwater for days at a time. China currently has Song class, 12 Kilo class, one Yuan class and 32 Romeo class boats.

Based on the experience with Australian and Swedish subs, the U.S. Navy has been developing new anti-submarine tactics and equipment. In secret, obviously. But now there is another complication. Animal rights groups have succeeded in getting courts to rule that the navy use of their anti-submarine training center near San Diego is illegal, and use of sonar must be limited (because of possible harm to marine animals). The navy keeps fighting the lawsuits, but it now faced with the prospect of abandoning the training site, for one somewhere the lawsuits can't reach. The training site is expensive because it is wired, with under water sensors that enable training or test results to be precisely recorded, and changes made to equipment or tactics. The center also enables sonar operators to get realistic training. There is no opportunity to get trained on the job, as mistakes can get your ship quickly sunk.

Meanwhile, potential enemies build more of their cheaper, and higher quality, diesel-electric boats, and

great time to network, socialize, assist in fundraising efforts and combine all of our ideas to make the District even better. I have thought too of joining resources in building floats too. Most of all, this will be a time to talk among Submarine Veterans of the great states of South Carolina and Georgia. In addition, I want to present several Holland Club Certificates to our Submarine Veterans of WWII, who were just able to join USSVI and become life members recently.

Jerry Stout

District Two Commander

Candidate for eastern Region South Director

Official: No Conventional Trident, But A Smaller Missile Is Possible

Alternative Missile Could Solve Ambiguity Concerns

The Pentagon has abandoned the conventional Trident missile program amid budget cuts and concerns that it would be mistaken for a nuclear missile, but defense officials should consider developing a much smaller missile that would differ significantly from a Trident, a senior Navy official said in Washington last week.

Due to concerns that firing a Trident missile – which currently carry nuclear warheads – with a conventional warhead could be mistaken for a nuclear attack, Pentagon and Navy officials should consider a missile that is half the diameter of a Trident to carry conventional warheads and clear up ambiguity concerns, said the official, who declined attribution because the missile was not part of a program of record.

The Pentagon's initial push to equip Trident missiles with conventional warheads was shot down by Congress, which eliminated funding for the program from last year's budget request due to concerns about the missile's ambiguity. The official said the Defense Department has completely abandoned the idea.

"Claims that there is work continuing on conventional Trident are not accurate," he said.

Instead, DOD is currently working on a warhead that will be "too big, too tall" to fit on a Trident missile, he said.

Trident missiles are equipped on the 14 Ohio-class ballistic missile submarines and are meant to provide a nuclear deterrent. The Pentagon wants the subs to also have a conventional strike capability to boost the military's ability to conduct prompt global strikes on virtually any spot around the globe.

train their crews by having them stalk actual warships (including U.S. ones.) The subs are getting more numerous, while U.S. defenses are limping along because of the sheer technical problems of finding quiet diesel-electric boats in coastal waters, and the inability to train and test enough because of lawsuits.

The Scuttlebutt

Overheard at a recent gathering at The After Battery

COB to Buddha: "Having you around is just like the television show, *This Old House*. Bob Vila never does anything and is always in the way of the guys who do. Guess we'll start calling you Buddha-Vila."

San Diego Sub Vets Propose 52 Boat Memorial



The motto of the U.S. Submarine Veterans of WW II is to: "Perpetuate the memory of those shipmates who gave their lives in submarine warfare."

In 1995 the San Diego Chapter voted unanimously to create a memorial to the 52 U.S. Navy submarines and the more than 3500 American submariners lost in World War II, and work began with the San Diego Park & Recreation Dept. to find a suitable location. The city suggested the new park that was going to be created on the grounds of the former Naval Training Center San Diego, which had been designated for closure by the Base Realignment and Closure Commission (BRACC).

All military operations ceased at the base in 1997 and the land was reconveyed to the City of San Diego.

The City of San Diego developed a master plan for the use of the 328 acre site that includes the restoration and preservation of many of the historic buildings. It also includes a new 40 acre City Park on the waterfront that will be one of the crown jewels of the City park system.

Already being referred to as "Balboa by the Bay," in reference to San Diego's world famous Balboa Park, the new park at Liberty Station will have athletic facilities including a swimming pool complex, picnic areas, hiking trails, a nature preserve, and a central plaza the size of three football fields designed around the 52 Boats Memorial.

The design of the memorial includes a planting of 52 American Liberty Elm trees, one for each of the lost boats. The trees will line broad sidewalks that flank the plaza on

The alternative missile could be only 40 inches in diameter and would have a long list of differences from the Trident that would solve ambiguity concerns while maintaining basically the same 4,500-mile range, the official said.

"If you change the missile and you change it substantially ... it's clearly a different missile when it comes out of the water," he said. "[It's] clearly a different duration, clearly two stages, not three ... and a whole different signal.

"Now, when the dust really does finally settle, you never know what's in that warhead until it comes off ... but it is a whole different ballgame if you know you're looking at a much smaller missile," he continued.

The official cautioned that he was saying this "not to propose any particular path forward," but to inform the community of what its options are as the service makes decisions on the capabilities of the Ohio-class sub and the follow-on sea-based strategic deterrent down the road.

"We may not choose to do that," he said, "but we should look carefully at the engineering, because the industrial base advantages, and therefore the cost advantages and the training, the similarity, are certainly significant."

The missile could borrow some elements from the Trident, such as its guidance and control system, which would cut down on cost, he said.



Ronald Lee Ron Willis, 60, of Moncks Corner, SC, a retired CHIEF NUCLEAR TEST ENGINEER at the Charleston Naval Shipyard and in Norfolk, VA, died Sunday, July 13, at the Medical University of South Carolina. A celebration of life will be held 6:00 PM Saturday evening, July 19, 2008, at the Overton Fire Department. Friends may visit the family at the fire department from 5:00 PM until the hour of service on Saturday.

In lieu of flowers, please make donations to the American Diabetes Association at PO Box 11454, Alexandria, VA, 22312 or to the Multiple Myeloma Research Foundation at 383 Main Ave., 5th Floor, Norwalk, CT, 06851. Arrangements by DIAL-MURRAY FUNERAL HOME, MONCK'S CORNER.

Ron was born September 18, 1947 in Norwich, Connecticut to the late Robert Lee Willis and Natalie Hoagland Willis and lived in various Eastern Connecticut towns before attending Southern Connecticut State College.

two sides leading down to the waters edge. In front of each tree will be a black granite monument laser etched with the name and picture of one of the lost boats, the circumstances of the boat's loss and the names of all the men who were lost with the boat.

A provision will be made to fly a flag at each monument on the anniversary of the boat's loss. On national holidays and other special events, all 52 flags will be flown. Other monuments and trees will honor submariners lost in World War II on boats that survived the war, and submarines lost at times other than World War II.

NOAA Goes Diving For U-Boats In North Carolina

DIAMOND SHOALS – Deep purple water with streaks of sparkling azure concealed a war grave 110 feet beneath the surface. A vessel plying the waters off the Outer Banks on Saturday was hunting for what was once the hunter, a German submarine sunk 66 years ago by depth charges dropped by an American bomber.

Divers on the National Oceanic and Atmospheric Administration's new 41-foot catamaran were geared up and waiting to descend to survey the U-701, the most intact of discovered U-boats sunk off the North Carolina coast.

Boat captain Chad Smith, NOAA's East Coast vessel coordinator, slowed the catamaran's motor and circled the position above where the wreck lay mostly buried on the ocean floor about 22 miles off Avon.

"All right, guys, start moving toward the stern," dive master Tane Casserley said to the five divers. The boat's motor was cut.

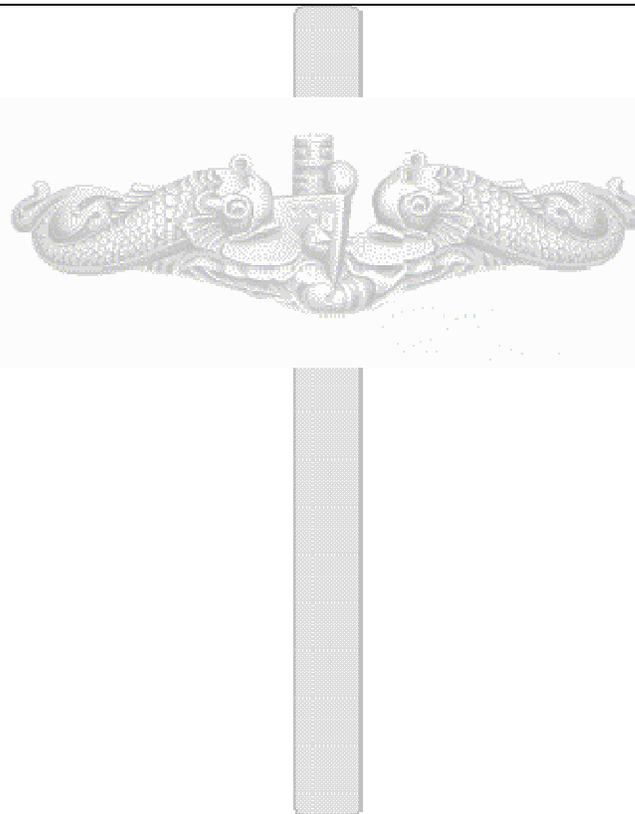
"Dive, dive, dive!"

Casserley, a NOAA archaeologist and diver who is serving as the principal co-investigator in the research expedition, watched as the men disappeared under the water. The divers on the vessel were part of a 19-day project to study the U-701 and two other submarine wrecks sunk off the coast in 1942 during the Battle of the Atlantic.

"Ultimately, the goal is to protect all the wrecks around here," said Casserley, the national maritime heritage coordinator for NOAA's Office of the National Marine Sanctuaries. "What we want to stop is the looting and souvenir hunting that goes on."

On their second attempt, the divers, some carrying huge cameras as well as the 120 pounds of tanks on their backs, located the U-701. Visibility was good, they said, but the strong 2-knot current made it a challenge to survey the wreck.

"Everything is on it - all the hatches, everything, " John McCord, education programs coordinator with the University of North Carolina Coastal Studies



He joined the United States Navy November 29, 1968, and served aboard the USS Seawolf SSN-575 and the USS George Bancroft SSBN-643. Ron took the path of Nuclear Power and graduated from Submarine School, Basic Electrical and Electronics School and Nuclear Power School while in the Navy. He proudly served his country in the Vietnam War. He was ranked as an EM2 (SS) Electricians Mate Second Class Submarine Qualified before he was honorably discharged from the Navy on November 5, 1974. After leaving the Navy, Ron took a civil job with the Department of Defense which ultimately brought him to the Charleston Naval Shipyard as an Engineering Technician in January 1975. He climbed the ranks over the years and held titles including Shift Nuclear Test Engineer, Assistant Chief Nuclear Test Nuclear Engineer and finally left Charleston Naval Shipyard as a Chief Nuclear Test Engineer, GS 14, in 1996. Over the 31 years he spent in Charleston, he was responsible for the acceptance testing of nuclear reactors and overhauling boats before they were sent back out to sea. Ron relocated to Norfolk Naval Shipyard in Virginia upon Charleston's closing where he was the Superintendent of the Nuclear Special Emphasis Project until he retired on January 3, 2003. Upon his retirement, Ron returned to the Charleston, SC area.

He lived in Moncks Corner with his wife, Sue. To keep himself active, he took a job with Legend Oaks Golf Club in Summerville and quickly became known as Pro Shop Ron. He loved the work, the social activity, and, most of all, the people at Legend Oaks.

He was a member of the Submarine Veterans Association, the National Association of Superintendents of U.S. Naval Shore Establishments and had held numerous officer positions of the Overton Civic Association. In his free time, Ron enjoyed golfing, fishing, riding jet skis, refinishing antiques, traveling,

Institute, said as he peeled off his diving gear. "I had my feet dug in and I was leaning as far back as I can. Every time I'd sit back and film, it would slowly push me back up."

Exploration of the U-352 off Morehead City began the week of July 7, but four days were lost to bad weather. The U-85 off of Nags Head, as well as the U-701, will be studied this week.

NOAA and partners from the state, the Minerals Management Service, the National Park Service, East Carolina University and the UNC institute have combined their areas of expertise in surveying and photographing the vessels.

"Never has a detailed archaeological survey of the wrecks been done," David Alberg, superintendent of the Monitor National Marine Sanctuary, said in an interview before the expedition. "This is step one. We're not digging, and we're not touching the site."

At least 10 German sailors are believed to be entombed in the U-701. The U-352 also contains war dead. U.S. and international policies prohibit disturbance of maritime graves.

The U-85, the first U-boat submarine sunk in U.S. waters, and the U-352 have been popular recreational diving sites for years; each has been picked clean of artifacts. But until 2004, the U-701 was undisturbed because only one diver knew the coordinates, and he kept them secret.

After Hurricane Isabel partially unburied the submarine, word got out about its location. NOAA worked with other government agencies and members of the diving community to create a diving preserve at the site. Within months, a dive team discovered that numerous parts of the wreck had been stolen.

But still, the U-701 retains much of its original condition, and NOAA has maintained its goal of creating a sanctuary for the wreck.

"This is the one that has the most chance of being preserved and protected for the American public," Casserley said.

The other two submarine sites may also qualify for cultural protection, he said. A goal of the project is to have the wreck sites listed on the National Register of Historic Places as well as to establish diving sanctuaries. There are 14 protected areas in the National Marine Sanctuary System.

"We're not limiting divers by any means," Casserley said. "We want divers to enjoy them. We just don't want them to take anything from them."

Researchers plan to post the data learned from the expedition online, he said. And next year, the expedition will be surveying a yet-to-be-learned

listening and dancing to his favorite music, and telling funny stories.

Surviving are his wife, Sue Grady Willis; his mother, Natalie Hoagland Willis of Westbrook, CT; a daughter, Linley Elizabeth Willis of Charlotte, NC; two step daughters, Jennifer Green of San Francisco, CA, and Kimberly Pearce of Ponca City, OK; two step sons, Zachary Miller of Summerville and Jake Slade of Charleston; two brothers and sisters-in-law, Gary Lee and Pat Willis of Chesapeake, VA, and Richard Lee and Debbie Willis of Old Lyme, CT; four step grandchildren and many special nieces and nephews.

Ron will be incredibly missed by his family and friends, especially those he made in the Overton neighborhood and Legend Oaks Golf Club. He will be fondly remembered and will remain forever in the hearts of his friends and family.



USS Holland SS1

USS Holland (SS-1) was the United States Navy's first commissioned submarine, named for her Irish-American inventor, John Philip Holland. The boat was originally laid down as "Holland VI", and launched on 17 May 1897.

The work was done at (Ret.) Navy Lt. Lewis Nixon's Crescent Shipyard of Elizabeth, New Jersey for John Holland's company, then known as the Holland Torpedo Boat Company. The craft was built under the supervision of John Holland who designed the vessel and its details in unison with the Crescent Shipyard's chief constructor/naval architect, Arthur Leopold Busch. A recent émigré to the United States from Great Britain, Busch subsequently played an integral role in the development of the modern naval submarine. After meeting Holland in 1896, Busch had essentially taken Holland's sketches and ideas and transformed them into blueprints and steel.

The keel to this craft was laid at this time with both men present at the scene. The two men worked together using many of John Holland's proven concepts and patents to make the submarine a reality, both men complementing each other's contributions to the development of the modern submarine.

The Holland included many features that

number of Allied wrecks sunk in waters off the North Carolina coast.

The project is a significant step in preservation of maritime history and culture, said Joe Hoyt, a maritime archaeologist contractor for NOAA.

"It's one of the closest places where the war came home to America continuously," he said.

"It's really the only place where you can visit the battlefield of the Atlantic."

Unique Navy Sub Calls It A Career

NR-1 Returns To Groton Base For Last Time



GROTON – Standing on top of the research submarine NR-1, Cmdr. John P. McGrath looked over his shoulder Wednesday afternoon as a flash in the distance illuminated a blackened sky.

McGrath scurried down into the vessel when it began to pour, and the crew sped up efforts to tie the Naval Research Vessel to the pier at the Naval Submarine Base.

But even the thunder and lightning could not stop Jennifer Tevepaugh, who had been promised the first kiss. She dashed out from under a tent to greet her returning husband, Storekeeper Leading Petty Officer Roger Tevepaugh, and even lingered in the rain to pose for pictures.

submarines of the early 20th century would exhibit, albeit in later, more advanced forms. It had both an internal combustion engine for running on the surface, and an electric power plant for submerged operation. She had a reloadable torpedo tube and a deck gun, in its case a pneumatic dynamite gun. There was a conning tower from which the boat and its weapons could be directed. Finally, she had all the necessary ballast and trim tanks to make precise changes in depth and attitude underwater. The Holland VI eventually proved its validity and worthiness as a warship and was ultimately purchased by the American Government for the sum of \$150,000.00 on 11 April 1900. It was considered to be the first truly successful craft of its type. The United States Government soon ordered more submarines from Holland's company, which were to be known as Plunger-class. These became America's first fleet of underwater naval vessels.

Holland, along with six other Holland-type submarines, were based in New Suffolk, New York on the North Fork of Long Island between 1899 and 1905, prompting the hamlet to claim to be the "First Submarine Base" in the United States. The success of the submarine was instrumental in the founding of the Electric Boat Company - now known as the General Dynamics Electric Boat, a division of General Dynamics Corporation. The company can trace its origins to this point with these events, beginning with the formation of John Philip Holland's original company and the revolutionary submarines that were developed at this shipyard.

The Holland VI was modified since its christening, and was renamed USS Holland (SS-1) when it was commissioned by the U.S. Navy on October 12, 1900, at Newport, Rhode Island, with Lieutenant Harry H. Caldwell in command.

The USS Holland was the first commissioned submarine in the United States Navy and is the first of the unbroken line of submarines in the Navy. It was the third submarine to be owned by the Navy however. (The first such submarine was the Submarine Propeller (aka Alligator) while the second was the Intelligent Whale.)

On October 16, 1900, in order to be kept serviceable throughout the winter, Holland left Newport under tow of tug Leyden for Annapolis, Maryland, where she was used to train midshipmen of the United States Naval Academy, as well as officers and enlisted men ordered there to receive training vital in preparing for the operation of other submarines being built for the Fleet.

“Whatever it takes,” she said.

Meanwhile, McGrath's 7-year-old daughter, Kelly, was jumping up and down in anticipation of seeing her dad. “I can't wait till I get to hug him,” she yelled. “Me too,” said McGrath's wife, Kimberly, who was holding the couple's other daughter, Meghan, 2, on her hip.

McGrath, the officer in charge, briefly hugged and kissed his family after stepping ashore - and before the wind began to blow rain into the tent, putting a damper on the festivities.

“It's not raining on my parade,” McGrath said as he led the crowd into a nearby office building.

It was a bittersweet moment for the sub's crew; it was the last time they would pull up to the pier on the NR-1 to be greeted by family and friends following a successful deployment.

The NR-1, scheduled to be inactivated by the end of this year after almost 40 years in service, is the Navy's only nuclear-powered, deep-diving ocean engineering and research submarine, and there currently are no plans to build another. The reactor core would last until 2012, but the Navy has not budgeted for the normal maintenance to run the ship until the end of its life.

“It's the end of an era for a very unusual Navy asset,” said McGrath, who also served as the engineer officer on NR-1 from 1997 to 2000.

During the recent four-month deployment, McGrath said the crew completed three missions successfully. He said he could not talk about two of the missions for security reasons. But the third, helping a local foundation search for the wreck of John Paul Jones' Revolutionary War ship the *Bonhomme Richard*, was no secret.

What they found, however, still is. That's because both the researchers at the Ocean Technology Foundation in Groton and the NR-1 crew are not sure whether one of the shipwrecks they saw off of Flamborough Head, England, is in fact the *Bonhomme Richard*.

“Maybe,” McGrath said, when asked whether the search was successful. “We investigated 26 wrecks, and we have one candidate that is very intriguing and probably warrants further investigation.”

Melissa Ryan, the foundation's project manager, said the foundation is analyzing the data, and she remains confident that the *Bonhomme Richard* is within the search area. The NR-1, she said, exceeded her expectations.

McGrath said he “couldn't think of a more fitting way to write the final page in this ship's history than by searching for the *Bonhomme Richard*.”

Holland proved valuable for experimental purposes in collecting data for submarines under construction or contemplation. Her 166 miles (267 km) surface run from Annapolis to Norfolk, Virginia, January 8 to January 10, 1901, provided useful data on her performance underway over an extended period.

Except for the period June 15 to October 1, 1901, which was passed training cadets at the Naval Torpedo Station, Newport, Rhode Island, Holland remained at Annapolis until July 17, 1905, as a training submarine.

Holland finished out her career at Norfolk, Virginia. Her name was struck from the Naval Vessel Register on November 21, 1910. She was sold as scrap to Henry A. Hitner & Sons, of Philadelphia, Pennsylvania, on June 18, 1913 for one hundred dollars. Her purchaser was required to put up \$5,000 bond as assurance that the submarine would be broken up and not used as a ship.

Sub, Sailors Worth Remembering

Sixty-six years ago this month, a U.S. submarine went down in the cold Bering Sea, killing all 70 men aboard, including a young father from West Homestead.

Jack Edwin Pancoast's wife, Julia, would have been sent the same telegram as all the other families, the same regrets from the U.S. Navy.

“...The Department appreciates your anxiety but details are not now available...”

The *Grunion* remains on the U.S. Navy's books as missing, cause unknown. But six years ago, the three sons of the lost *Grunion* Capt. Mannert L. “Jim” Abele – Bruce, Brad and John – got a lead on the lost sub's location from a Japanese naval historian they'd tracked down via the Internet. So in the summer of 2006, a crab boat they'd hired out of Seattle made the 2,000-mile journey to the Bering Sea and on Aug. 15, the sonar device that it was towing signaled an image that appeared to be a submarine, 3,000 feet below the surface. The following summer, the same lucky crab boat carried a high-definition video camera to bring long-sought resolution to the Abele brothers: The *Grunion* had been found.

Now the extended family of the men who went down with that boat on July 30, 1942, are on a mission of their own: have a story doing honor to the men in each of the hometown newspapers that never got to tell much of their story back in the day. Elk County native Carmine Anthony Parziale was a torpedoman's mate third class on the vessel.

The crew will now remove the submarine's equipment from its support ship, the Carolyn Chouest, prepare for the inactivation process at Portsmouth Naval Shipyard, and plan an inactivation ceremony in Groton, scheduled for Nov. 21.

McGrath said it will take at least six months to dismantle the submarine at the New Hampshire shipyard.

U.S. Rep. Joe Courtney, D-2nd District, hopes the NR-1 will then return to Groton. His staffers have asked the Navy and local organizations about the possibility of moving the sub to the U.S. Navy Submarine Force Museum, which is already home to the USS Nautilus (SSN 571).

'Golden Hello' Bid To Boost Navy Recruiting

The Royal Navy is offering "golden hello" and "golden handcuff" deals worth between £5000 and £25,000 to encourage new sailors to join the submarine fleet and to persuade experienced senior staff to extend their commitment to the silent service. The lump-sum cash bounties are being paid to stem shortages in key areas among all crews in the nuclear fleet, from sonar operation to atomic engineering.

Figures seen by The Herald show that the 13 attack and strategic missile boats are facing shortfalls of more than 20% among sensor operators, weapons specialists and the chief petty officers and lieutenants who act as nuclear "watchkeepers", supervising reactor and engine performance and safety. The main incentives on offer are £7500 for sailors willing to transfer from surface warship or shore duties, a £5000 bonus for trainees when they complete the submarine course and are awarded their distinctive "Dolphins" insignia, and £25,000 for officers and CPOs when they qualify as watchkeepers and agree to sign on for an extra three years.

Other bonuses include £1000 "recruit an oppo" payments for submariners who succeed in talking a colleague into joining an undermanned branch of the submarine service, and an extra £5500 boost for those who extend their tours after five years of experience.

An Royal Navy spokesman said yesterday: "There are undoubtedly manning issues affecting particular branches of the submarine service and this is one way to boost recruitment and retention.

"It has already been tried with some success by both the Army and the RAF."

A submariner who contacted the newspaper added: "Many guys opt for submarines intending to put in 22 years and then collect their pension and lump-sum terminal bonus.

"But a lot of them are still only in their early 40s at

His niece, Mary Bentz, who grew up in Brockway but now lives in Bethesda, Md., e-mailed me about Mr. Pancoast, a motor machinist's mate about whom little else is known.

He was four months shy of his 24th birthday when he died. His wife, Julia, was a Filipino native and they had a son, Jack Pancoast Jr. There is a record of the sailor's widow and son getting on a ship from Manila to the United States on July 24, 1945. The boy was then 3 years old, so he must have been a newborn when his father was killed.

What became of them is not known. Mr. Pancoast's much younger stepbrother, Bob Knight, lives in Baldwin Borough. He understands that his stepbrother's widow and son moved back to the Phillipines, but had no more information.

If anyone does know more about Jack Edwin Pancoast or his survivors, they should contact Ms. Bentz at ca.par@hotmail.com or 240-447-4189.

I asked Ms. Bentz why these men were so important to her. Her uncle, the aforementioned Carmine Parziale, and the others died two years before she was born.

"The family never forgot him," she said. "Every time the family got together, whenever one of them was around, they always talked about Carmine.

Carmine was a musician. So, to me, he was just somebody who lived very far away

"It really hit me when I finally grew up and realized what terrible pain my family must have suffered not knowing where Carmine was."

She says about a half-dozen men from the Grunion still have not had their obituaries.

"An obituary makes it real ... This name of Jack Edwin Pancoast being printed in the Pittsburgh Post-Gazette, where he lived, we're now making it real and so now he can rest in peace."

The last radio message from the Grunion came on July 30, 1942, describing heavy enemy activity around the harbor of the Aleutian Island of Kiska, then held by the Japanese. Earlier that month, the Grunion had sunk two Japanese submarine chasers and damaged a third in the area.

Bruce Abele, 78, oldest son of the submarine commander, was 12 when his father died.

Consultations with Japanese historians in recent years have led him and others to believe the sub's demise came during a confrontation with a Japanese cargo ship, the Kanu Maru, which was firing 3-inch shells.

The hours of video show no sign of shell penetration on the sub, however, so the precise cause of its demise remains a guess.

that point, with valuable training and experience under their belt.

"Submariners with practical nuclear experience are now worth their weight in gold because of the government's decision to go down the nuclear power station route to generate electricity.

"Although submarine pay and trade qualification bring in a fairly competitive naval salary, industry recognises that those with the knowledge are in a seller's market.

"It will take bounties to retain all but the most committed."

The RN has four Vanguard-class Trident missile boats and two Swiftsure attack boats based at Faslane on the Clyde, and seven Trafalgar-class attack submarines based at Devonport.

Crews have to be prepared to undertake patrols lasting up to three months at a time. The missile boats each have two complete crews to carry out alternative sorties.

At least one Vanguard is at sea at any given time as the UK's strategic deterrent, lurking deep beneath the Atlantic for the duration of their patrol cycle.

The attack boats are equipped for intelligence-gathering missions and trained for anti-shiping and land-attack roles in wartime. Their Tomahawk missiles launched from torpedo tubes can strike targets hundreds of miles inland from an enemy coast.



A memorial service for the Grunion is planned for Oct. 10-12 at the USS Cod, now docked on Lake Erie in Cleveland. The same class submarine as the Grunion, the Cod is a museum ship dedicated to the more than 3,900 submariners who have died in service to the U.S. Navy.

The six Pennsylvanians who went down with the Grunion are, in addition to Mr. Pancoast and Mr. Parziale, Electrician's Mate First Class Woodrow Wilson Lehman of Mercer and Seaman First Class Albert Ullman, Executive Officer Millener Weaver Thomas and Electrician's Mate Second Class Raymond Eugene Webster, all of Philadelphia.

Admiral Osborne Scholarship Fund

How about helping out the scholarship fund? We are offering a Charleston Base Challenge Coin for sale. ALL proceeds go into the scholarship fund. Coins only cost \$7 each. Available for an additional \$1 is a protective plastic capsule.

To get your coin(s) see Jim Yates, Julian Villegas or Carl Chinn.

Make sure you have one for "when you get challenged"!

Buy several for great gifts!

