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San Diego, CA 92120-3404

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The Silent Sentinel

March 2009



Our 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 towards greater accomplishment and patriotism to the United States of America and its Constitution.



Submarine Birthday Ball 2009

Silent, Vigilant, Dominant



Doors Open 1700

Location:
San Diego Marriott
Hotel and Marina
(619)234-1500
(Be sure to Ask for
the Sub Ball rate)

Tickets
\$55
Uniform
Dinner Dress Blue Jacket
Dinner Dress Blue/
Full Dress Blue (optional)
Covers not required
Civilian: Formal Attire



April 18th

Guest Seating 1800

Menu

**Braised Beef
Short Ribs
or
Grilled Chicken Breast
Topped with Mushrooms
and Roasted Garlic Sauce**

Dessert
Brandy Snap filled with
Custard Topped
with Fresh Berries

Guest Speaker: Admiral Kirk Donald, Director, Naval Reactors

For tickets, contact your
COB/CMC or
SKC(SS) Mike Murphy at (619) 553-8729
or ETC(SS) Nick Green at (619) 553-7757

Or send checks payable to
Navy SubComm Birthday Ball

Submarine Squadron Eleven
Attention: SKC(SS) Mike Murphy
140 Sylvester Rd
San Diego, California 92106 - 5200

U.S. Submarine Veterans San Diego Base

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The Silent Sentinel via Email

To all of my Shipmates and families who currently receive our Great newsletter via the mail who would like it sent via email or continue to receive it via mail, please fill out the form and mail it to the base or myself. We are trying to cut the cost of the newsletter down from \$3700 to about \$1900 a year. By receiving the Silent Sentinel via email will cut down the printing and mailing cost. The other plus to receiving it via email is you can save it on your computer and not have the paper lying around the house.

A subscription to the Silent Sentinel newsletter will be available to surviving family members via internet email, at no charge, upon notification of the Membership Chairman. If a printed hard-copy is preferred, via US Post Office delivery, an annual donation of \$5.00 will be requested to cover costs.

NAME: _____

ADDRESS: _____

CITY/STATE/ZIP: _____

EMAIL: _____

TELEPHONE: _____

Would like the SILENT SENTINEL emailed: YES _____ NO _____

Robert Bissonnette
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USSVI Base Commander
c/o VFW Post 3787
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DUE TO LOGISTICS CONSTRAINTS, ALL INPUTS FOR THE SILENT SENTINEL MUST BE IN MY HAND NO LATER THAN **ONE WEEK** AFTER THE MONTHLY MEETING. IF I DO NOT RECEIVE IT BY THIS TIME, THE ITEM WILL NOT GET IN. NO EXCEPTIONS! MIKE

MARCH Meeting

Our monthly meetings are held on the second Tuesday of the month at VFW Post 3787, 4370 Twain Ave., San Diego. Our March meeting will be on 10 March, 2009. The post is located one-half block West of Mission Gorge Road, just north of I-8. The meeting begins at 7 p.m. The E-Board meets one hour earlier at 6 p.m.

Check us out on the World Wide Web
www.ussvisandiego.org

BINNACLE LIST

- Ron Gorence (intestinal surgery--Home)
- Richard Fullen (recuperating in Santee)
- Mike Hyman (Crohn's Disease)
- C J Glassford (had pacemake put in and recuperating at home)
- Larry Freske
- Al Strunk (now recuperating at home and doing much better)
- Bob Coates (doing well at home)

Submitted by Mike Hyman



Submarine Losses in February

Submitted by C J Glassford

- BARBEL (SS 316) - 81 Men on Board:
Sunk, on 4 February 1945, by Japanese Naval Aircraft, In South China Sea, Palawan Passage:
" ALL HANDS LOST "
- SHARK #1 (SS 174) - 58 Men on Board:
Sunk, on 11 February 1942, by Japanese Destroyer, in Makassar Strait, 120 Miles East of Manado, in the Celebes Sea :
" ALL HANDS LOST "
- AMBERJACK (SS 219) - 74 Men on Board:
Probably Sunk, on 14 February 1943, by Combined Efforts of a Japanese Seaplane, Torpedo Boat, and Submarine Chaser, Off Cape St. George, New Britain:
" ALL HANDS LOST "
- POMODON (SS486) - Duty Section on Board
Battery Explosion and Fire, on 21 February 1955, from Hydrogen Buildup during Recharging of batteries, At San Francisco Naval Shipyard :
" 5 MEN LOST "
- GRAYBACK (SS 208) - 80 Men on Board:
Probably Succumbed, on 27 February 1944, to Damage Inflicted, by Land Based Japanese Naval Aircraft suffered theday before, in the East China Sea: " ALL HANDS LOST "
- TROUT (SS 202) - 81 Men on Board:
Most likely Sunk, on 29 February 1944, by Japanese Destroyer, in the Philippine Sea Area, Off Formosa:
" ALL HANDS LOST "



Wheelchairs for Veterans

Tom Warner, one of our members and also a member of *Knights of Columbus* wants us to know that as a Knight, he has access to some wheelchairs for veterans. The caveat is that the chairs have to go to veterans who need them for non military reasons (the VA will take care of them if it is military related injury).

If you or any other veteran has a need such as this, please do not hesitate to let Tom know. He may be reached at 619-884-8471.

Membership Report for February '09

New Members: Welcome Aboard to: James Potts of Coronado, who earned dolphins aboard the USS Sabalo (SS302) in 1959; Joe Cataldo of Poway, qualified on USS Bashaw (SSK241) in 1961; James Cooney of Imperial Beach, qual boat USS Rasher (SSR269) in '63; Christopher Strows of San Diego, qualified on USS Houston (SSN713); and Lin Schima of Escondido, who won his dolphins aboard USS Scamp (SSN578) in 1971.

Called to Eternal Patrol: Shipmates and brothers of the 'phin, Denny Kriebel (d 1/27/09), and WWII heroes, Harold "Buzz" Lee (d 12/22/08) and James A. McKenzie (d 1/21/09) have received their calls to Eternal Patrol.

Sandra Lee would appreciate our attendance at services for Buzz Lee to be held at Fort Rosecrans on March 6, 2009 at 1100.

Status: 335 members as of 2/15/09, less 14 men who must be dropped from the rolls for nonpayment of dues.

Please check the Sentinel's mailing label above your name! "B08" or "R08" means your dues as a (B)ase, or (R)egular (National) were paid for '08 but not for '09. Sadly, delinquent Members' names must be removed from the active membership roster — for them, the current Sentinel will be their last (& the American Submariner, if delinquent on National). National charges \$20 for the extra work of reinstatement, and considers delinquency a break in continuous membership.

"HC" or "Life" or "L-xxxx" on your label means you will never again owe dues, but donations are always appreciated. If you know of any financial difficulty or communications problems regarding any of our men, please call me.

ABOI, (always assume best of intentions)

RonG

Election of Base Commander

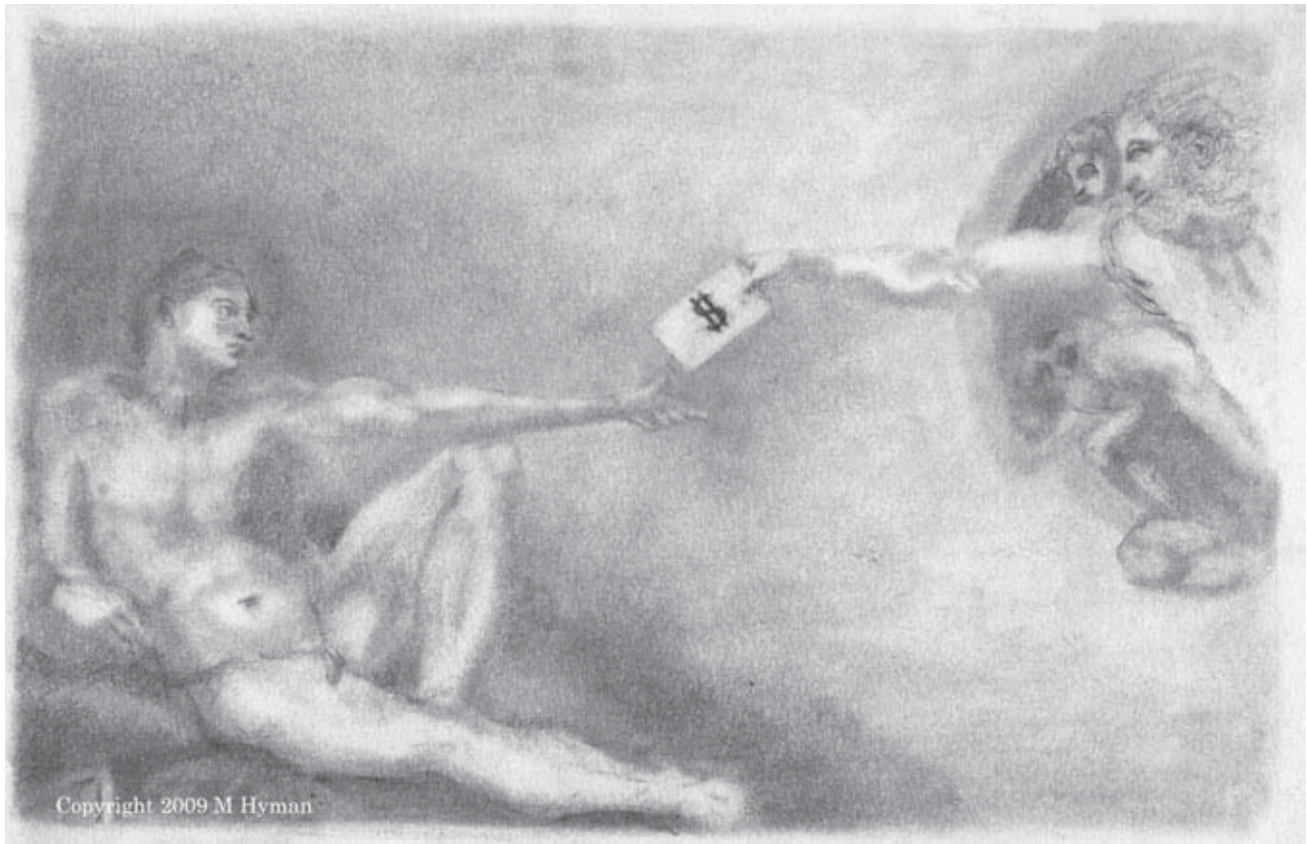
It's time again to elect a Base Commander. He is elected on the off-year from the rest of the E-Board, as voted on previously.

At our last meeting, nominations were opened and Bob Bissonnette was nominated for the position of Base Commander. At that point a call was made to close nominations, so nominations were closed. We will have another opportunity at our February meeting when nominations will once again be opened. You may than nominate the candidate of your choice. When all nominations are submitted they will be closed. Voting will take place after the nominations are closed. The candidate elected will be sworn in at our March meeting. Come to the meeting and cast a ballot for the nominee of your choice.

Thanks - Charlie Marin

Commentary by Michael Hyman

The Eighth Day (with apologies to Michelangelo)



Navy's Mk 54 Lightweight Torpedo Suffers Quality Problems

Aerospace Daily & Defense Report, Feb. 10, 2009

The DOD's Director of Operational Test and Evaluation's (DOT&E) first annual report on the U.S. Navy's Mk 54 torpedo finds the program wanting and advises the service to come up with a fix.

The Mk 54 has been plagued with problems throughout its history, from major limitations and failures discovered in 2004 tests to a production halt in 2007 due to quality assurance, workmanship and assembly issues at prime contractor Raytheon's facility. Production restarted in March 2008 after a remediation program was instituted by the Navy and Raytheon.

The Mk 54 Lightweight Torpedo is to be the primary anti-submarine warfare (ASW) weapon used by surface ships, fixed- and rotary-wing aircraft, replacing the Mk 46 torpedo as the payload section for the Vertical Launch Anti-submarine Rocket (VLA) on surface ships.

The Navy tested the VLA with an Mk 54 torpedo payload in November 2007, but none of the six missiles fired were successful. The problems were corrected by the Navy, with operational testing scheduled to restart this month.

But even if the new tests go ahead as planned, both the Navy and DOT&E agree the tests will not adequately assess the torpedo's effectiveness and weapon performance.

In its fiscal 2008 report, DOT&E recommends the Navy develop an acquisition and overall test strategy for the Mk 54 program and provide the resources to fix the torpedo's limitations, which were identified in a 2004 Operational Test report.

'The Mission Has Shifted'

Kenny: Large-Diameter UUVs Already Making Their Way To The Fleet

By Dan Taylor, Inside the Navy, Feb. 9, 2009

The Navy is moving ahead aggressively with a new large-diameter class of unmanned undersea vehicles that had been dormant for years, and the service has already begun using the vehicles in the fleet in the last few months, according to Rear Adm. (lower half) Mark Kenny, director of the Navy Irregular Warfare Office.

The sea service has partnered with Pennsylvania State University's Applied Research Laboratory to take a large-diameter UUV and equip it with signals intelligence collection capabilities, command-and-control elements and the ability to conduct real-time exploitation of radio frequency signals close to shore. It is one of multiple efforts to get large-diameter UUVs to the fleet, Kenny said during a Feb. 5 presentation at the Unmanned Systems Program Review 2009 symposium in Washington, DC, hosted by the Association for Unmanned Vehicle Systems International.

"We've shifted to large-diameter rather than 21-inch [vehicles] because we need endurance, we need payload, and we couldn't get it with 21-inch vehicles," the admiral said. "You can bring these things ... from submarines at night, they'll transit up offshore, anchor, put their antennas up and begin collection."

The Navy's UUV program had put forward a goal of four classes of UUVs in its master plan, including the large-diameter vehicle, the largest of the classes at more than 36 inches in diameter. However, the vehicle was terminated years ago as an acquisition program. That changed in December, when the Navy announced its plans to cut phase one of the mission-reconfigurable UUV program and move the funding toward pursuing a large-diameter UUV.

The reason for the new focus on large UUVs is because "the mission has shifted," Kenny told reporters after his presentation.

"Mission requirements have changed from [anti-submarine warfare] to irregular warfare," he said, adding that the shift in priorities has happened within the last six months.

The reason why UUVs of this size are needed is to enable better intelligence, surveillance and reconnaissance collection, the admiral said.

"To have enough power [to process] sensors, you need a bigger vehicle," he said. "That's mainly the driver —payload and endurance."

The fact that a number of platforms can launch a UUV of this size is an important development, Kenny said. Along with surface ships, Los Angeles-, Virginia- and Ohio-class submarines are all capable of deploying the UUV from either torpedo tubes or dry-deck shelters, making the system more cost-effective and useful to the fleet.

"That's what's also changed, because we only had a minimal amount of platforms that can carry large-diameter UUVs," the admiral said. "Multiple classes allow us more flexibility in deploying it."

Kenny declined to go into detail about where the vehicle is being used and what platforms are using it, but noted that one version is being deployed in U.S. Southern Command's area of operations and "we have other versions we're deploying into the fight today."

The effort with Penn State's lab utilizes the Seahorse family of large-diameter UUVs, which are currently used by the Navy for conducting oceanographic surveys. The service is able to modify them for classified missions by putting ISR collection sensors in the vehicles, Kenny said.

Captain Robert H. Gautier, USN (Ret)

Submitted by Dick Ahlborn, Feb. 10, 2009

It is our sad duty to report the passing of a great submariner.

Retired Capt. Robert H. "Bob" Gautier passed away in San Diego on Feb. 4, at the age of 85.

Bob graduated from the Naval Academy in 1945, and held many commands during his naval career. He served as commanding officer of two submarines – USS Conger (SS 477) and USS Blueback (SS 581) – as well as the amphibious attack transport ship USS Montrose (APA 212). He also served as a Submarine Division Commander in San Diego, Commander Submarine Development Group One, commander of an Atlantic Fleet amphibious squadron, and as Commanding Officer of the Undersea Warfare Laboratory in San Diego.

Many of you will remember Bob being a great wine maker, who graciously donated samples of his vintages at fundraisers for organizations like the Dolphin Scholarship Foundation. Bob and Fran sold their Point Loma home about a year ago and moved to a retirement community in Carlsbad, Calif., where Fran continues to reside.

In accordance with his wishes, Bob will be cremated and his ashes scattered at sea from onboard one of the San Diego submarines.

Submariners Fought For Hour To Save Trapped Sailors, Inquest Hearings

Sailors fought for nearly an hour to break into a submarine compartment to save two trapped crewmen following an explosion under the Arctic ice, an inquest has heard.

By Thomas Harding, The Daily Telegraph, Feb. 10, 2009

But with doors buckled from a detonation apparently caused by faulty equipment they could not force an entry in time to save their comrades

Over the next six weeks the Sunderland coroner will hear evidence of defective oxygen-making briquettes that exploded during a training exercise on board the hunter-killer submarine HMS Tireless submerged in waters off Alaska.

Operator Mechanic Anthony Huntrod, 20, from Sunderland, and Leading Mechanic Operator Paul McCann, 32, from the West Midlands, were killed when a Self Contained Oxygen Generator (Scog) exploded in a forward compartment in March 2007. The unit is used to provide oxygen in an emergency.

The dead men's families were given a full apology by the Armed Forces Minister and First Sea Lord following a Royal Navy board of inquiry report last year that revealed serious safety issues and defective equipment.

But Alan and Brenda Huntrod, parents of OM Huntrod, said the report showed "incredibly scant regard" for personnel safety. "We feel that if this was in any other walk of life, there would have been a prosecution for corporate manslaughter," they said.

The Scog was activated by the two submariners dropping a chemical briquette into a container, causing oxygen to be released. It exploded immediately after they started the process, according to Stores Accountant Richard Hallworth, who was working nearby.

The compartment filled with smoke and the blast caused hatch doors to close and buckle, trapping the victims.

Although a rescue party arrived moments later they were unable to free the door for another 44 minutes.

Coroner Derek Winter said: "The evidence is that they worked very hard to gain access. This was a traumatic and terrifying event for all aboard the submarine."

The submarine surfaced through a patch of ice and the bodies were taken to a nearby ice station. Another injured sailor was evacuated by helicopter to Alaska.

Post-mortems showed Mr Huntrod died from multiple injuries, while Mr McCann's cause of death was carbon monoxide poisoning.

Tests have shown that Scogs can be dangerous if not stored carefully after there had been a number of incidents on board submarines in which Scogs ignited or exploded.

In November 2006, 996 Scogs were taken from a hazardous waste store and reissued to submarines. The inquest will examine if any of this consignment was issued to Tireless.

Royal Navy military police also found that the bricks had been removed from a drying oven too soon leading to cracks. Oil is also believed to seeped into the Scogs despite the manufacturers writing in a leaflet that if they were contaminated it could lead to an explosion.

Despite recommendations that they be stored in a "clean, dry environment", the Scogs for Tireless sat uncovered on a jetty for two weeks.

More than one-fifth of the oxygen generators were later found to be defective on Tireless, a Royal Navy investigator told the inquest

"Contamination plus a cracked briquette plus constraints equals an explosion," Mr Winter said.

Tireless had to spend a year in Gibraltar in 2000 after it was discovered that a pipe had cracked in its nuclear reactor. The inquest, which is being heard without a jury, continues.

USS Carbonero (SS 337) Assn. Reunion

The USS Carbonero (SS 337) Association will be holding its next reunion for all crew members on 10 Sept. 2009 in conjunction with the annual USSVI Convention. Location is Town & Country Resort and Convention Center in San Diego, CA. All information will be included in the next newsletter in March.

Please plan to attend, if at all possible.

POC is Dan O'Dwyer, 1108 W. Bloomfield Dr. Inverness, FL 34453, (352) 341-0316 subvet08@tampabay.rr.com.

USS Charr Reunion Scheduled for Sept. 17-20, 2009

The USS Charr (SS 328) reunion to be held in Portland, Ore., September 17-20, 2009, at the Crowne Plaza Convention Center.

A registration form showing the information for all events, including prices, can be viewed at <http://www.usscharr-ss328.org/>. Those interested in attending should make their checks payable to: USS Charr Association. Mail registration form and checks to: Carl Klein, Secretary/Treasurer, 1900 Rollingwood Road, Baltimore, Md., 21228. You may also phone him at (410) 747-7292, or e-mail at ckleinsr@gmail.com.

Korean War Veterans Awarded State Medals

By Paul Post, The Saratogian, Feb. 12, 2009

BALLSTON SPA – It took more than 50 years, but a select group of area residents finally got some of the recognition due them on Wednesday.

With friends and family members looking on, 17 members of the Korean War Veterans Association, Adirondack Chapter 60, were honored with official New York state medals during ceremonies at Manna's Restaurant.

Recipients served in the Army, Navy and Marines and recalled some of the harrowing ordeals they went through while fighting in the war, which lasted from 1950-53.

“When I first went over we started out at Pusan (South Korea) and went all the way up past Pyongyang, the North Korean capital, to Unsan near the Manchurian border,” said Edward Bushey, 80, of Victory Mills. “Then the Chinese came in. We were told to get out the best way you can. I was one of the lucky ones. I got out. The next day they gave us Combat Infantry Badges and there was only 11 left of our company of 200.”

The rest had been captured or killed.

Bushey was 19 when he joined the Army in 1948 and served in Korea from August 1950 to July 1951. About a month after he got there, he was at Tagu when his outfit came under heavy tank fire. One shell obliterated a switchboard building, trapping a U.S. soldier inside where a large supply of ammunition was also stored.

Bushey quickly ordered laborers to remove debris while he pulled the soldier out and removed the ammo. His quick thinking and aggressive action was credited with saving the soldier’s life.

Returning home, Bushey spent more than 40 years working in area paper mills and leading a quiet, unassuming life. Although highly decorated, few realize the heroic deeds he accomplished while fighting for his country.

His awards include the Korean Service Medal with five Battle Stars, a Republic of Korea Presidential Unit Citation, United Nations Service Medal and Bronze Star with a ‘V’ for valor.

Bushey was one of a dozen veterans who received the New York State Senate Liberty Award on Wednesday, the state’s highest honor, for exceptional valor and dedication. He was also given a Conspicuous Service Cross – as was Saratoga Springs native John Brusco – and a Conspicuous Service Star.

Each person had a different Korean War experience. Gerald Wells of Saratoga Springs joined the Navy on his 17th birthday and served aboard a submarine while Clifton Park’s John Fascia and Lincoln Orogio of Saratoga Springs helped guard 132,000 Chinese and Korean prisoners of war on Koge Island.

“They had about 20 people in a tent and we had to go in and search them,” Orogio said. “We found things like match heads, tinfoil and pieces of steel they could use to make bombs and blades. We’d search them every day and sometimes we’d go two or three times a day.”

Before he got there, Koge Island was the scene of an infamous uprising in which prisoners rioted and captured a U.S. general. He was eventually released and tougher U.S. combat troops were sent in to keep order.

Orogio also saw more than his fair share of combat.

“We went out on patrols many a night,” he said. “At night time all you did was fire at the fire, the enemy positions. We were about 150 yards apart. At our age we had no fear at all.

“Whatever they said, we did.”

New Russian Sub Will Get Spring Sea Trial

United Press International, Feb. 11, 2009

MOSCOW – Russia’s first Borey-class strategic nuclear submarine will get its first sea trials in the spring, military officials said Wednesday.

The sub will be tested after warmer weather enables navigation to open in the White Sea, Russian Navy commander Adm. Vladimir Vysotsky told RIA Novosti.

“The ice floe conditions in the White Sea at present are still not favorable for navigation. The submarine’s crew and a team of Sevmash specialists continue to ready the vessel for the trials,” Vysotsky said.

The nuclear sub Yury Dolgoruky was completed at the Sevmash plant in northern Russia in April 2007 and is equipped with new sea-based Bulava ballistic missiles, which have not entered service but are due to undergo further testing this year, the news service said.

India’s Secret N-Submarine Project Nearing Completion

Times of India, Feb. 12, 2009

BANGALORE: In a boost to India’s long-standing aim to have “a nuclear weapon triad”, defence minister A K Antony on Wednesday said the secretive programme to construct indigenous nuclear submarines was on the verge of completion now.

“Things are in the final stage now in the ATV (advanced technology vessel) project. There were bottlenecks earlier...they are over now,” said Antony, during the ongoing Aero India-2009 here.

The hush-hush ATV project, a euphemism for the three nuclear-powered submarines being constructed at the Visakhapatnam naval dockyard, has been dogged by a series of technical hiccups since it was formally launched as far back as 1983.

The main problem has revolved around the design of miniature PWRs (pressurised water reactors) and their containment plans for the submarine's propulsion system but sources said such technical problems are a thing of the past now, with a little help from countries like Russia and France.

Sources said there had been some delay in "launching" the first prototype of the nuclear-powered guided-missile attack submarine for sea trials but it would happen soon. Antony, on his part, said, "We will announce it when it is ready."

The Navy hopes to get the first such operational submarine by 2012 or so. Concurrently, DRDO is also working on the K-15 submarine-launched ballistic missile, which will later be integrated with the submarine.

In all, five ATVs are planned under the programme, whose cost is touching around Rs 14,000 crore now, by around 2025.

The entire aim behind the ATV programme is to have nuclear-powered submarines, armed with nuclear-tipped cruise or ballistic missiles, to ensure "credible" second-strike capabilities in consonance with India's "no-first use" nuclear doctrine.

Nuclear-powered submarines have higher speeds and can stay submerged much longer than conventional diesel-electric submarines — which have to surface or snorkel frequently to get oxygen to recharge batteries — and thereby provide a much more invulnerable launch pad for nuclear weapons.

Though India already has nuclear-capable aircraft and mobile land-based missiles like the 700-km Agni-I and 2,500-km Agni-II being inducted into the armed forces now, it's hoped the ATV project will finally provide it with the third leg of the nuclear triad.

India, of course, is also trying to sort out the remaining few hitches in leasing the K-152 Nerpa Akula-II class nuclear submarine from Russia for a 10-year period, as reported by TOI earlier.

India and Russia had secretly signed the deal for the Akula lease in January 2004, along with the \$1.5 billion package deal for the refit of aircraft carrier Admiral Gorshkov and 16 MiG-29K fighters to operate from it.

With the two nations now negotiating the around \$2 billion jump in the Gorshkov contract, there is a feeling that Russia is trying to extract more money for the Akula lease also. "We will get the Akula since we have paid money for it. We will use it to train our sailors for the eventual ATVs," said a senior Navy officer.

Navy Wants To Employ Dolphins And Sea Lions As Security Guards

By Owen Lei, NBC King News 5, Feb. 12, 2009

SILVERDALE, Wash. – The U.S. Navy may be nearing completion on plans to use sea lions and dolphins to catch underwater trespassers along the Hood Canal.

Wednesday night in Silverdale, they held the first of two public meetings to hear what citizens have to say about the latest plans.

The U.S. Navy already has sea lions that can restrain unknown swimmers. They've trained dolphins to attach lighted beacons to potential threats.

But for years, they've been unsuccessful in bringing those animals to the Naval Base Kitsap-Bangor.

"It's extremely important in terms of base security that a new system be put in place," said Tom Lapuzza, U.S. Navy Marine Mammals Program.

Animal rights activists are worried dolphins will suffer in the cold waters and environmentalists worry the local habitat may suffer from the droppings of these patrollers.

At the public meeting Wednesday, Navy officials said their plans will protect both.

Two years of research and public hearings have led them to four options: sea lions and dolphins, just sea lions, unmanned vehicles, or combat swimmers.

The Navy would prefer a combination of trained California sea lions and Atlantic bottlenose dolphins to guard against swimmers breaching the base's water perimeter.

Trained dolphins would be used at night and would be accompanied by handlers in small boats. The dolphins would alert the handler if they noticed an intruder. The handler would then place a strobe light on a dolphin's nose, and the creature would return and bump the intruder, causing the light to come free and float to the surface. Guards would then find and subdue the intruder.

Sea lions would be trained to carry in their mouths a special cuff attached to a long rope and clamp the cuff around the leg of a suspicious swimmer, who then could be reeled in for questioning.

The Navy will be listening to public again but they do have to make a decision by October.

The Navy's hoping the public stands behind option one.

"We're able to do this right now if we need to do that. The other alternatives would take us time and money and research before we'd be able to put them in place," said Lapuzza.

At least Silverdale, they are getting support.

"I was curious to see how they were approaching their environmental impact statement and it looks like they've done a really good job of covering their bases," said Tom Aho.

“These animals are going to be well cared for, they’re going to be safe, and in my judgment, they’ll probably be happy,” said Dr. Pete Schroeder, marine mammal veterinarian.

But even the Navy admits they may not get this reception elsewhere. They just hope their prep work can win over the doubtful. The Navy will hold another open house and hearing on the issue Thursday 5 p.m. at Tyee High School in SeaTac.

Only seven nuclear submarine patrols in 2008

Barents Observer, Feb. 13, 2009

While Russia’s strategic bombers weekly fly over the Arctic or outside Norwegian airspace in the north, the Russian Navy’s nuclear powered submarines mostly stay pier side at their homeports on the Kola Peninsula and in the Far East.

A report published by the Federation of American Scientists earlier this month reads that the Russian Navy conducted only seven attack submarine patrols in 2008, the same as in 2007. The number of patrols with strategic submarines last year is not yet published, but in 2007 there were only three.

The report is based on declassified information provided by US naval intelligence and is referred to by Agence France-Presse (AFP).

Weekly bomber flights

Much attention is paid to Russian bombers which resumed their long-range flights in the Arctic and along the coast of Northern Norway in the summer 2007, as frequently reported by BarentsObserver.com. The bombers make fewer headlines in western media nowadays than in 2007 and 2008. Last mission was Wednesday this week when two Tu-95 carried out a routine patrol flight over the Arctic Ocean, reported by RIA Novosti. That mission was not even mentioned by BarentsObserver.com since it is no longer news.

North-eastern Barents Sea

The Russian submarine patrols are not that visible as the aircraft missions. But they are there, and other countries’ military intelligence is trying to discover their routes. Not easy. Unlike in the Cold War period the Russian Northern fleet’s strategic submarines mainly patrol in safe protected waters of the north-eastern Barents Sea and north of Novaya Zemlya, according to maps provided by the Nuclear Information Project with the Federation of American Scientists. From their submerged positions in the north-eastern Barents Sea the submarine-based missiles have the range to attack most of the targets in the world.

The few submarine patrols in 2008 are not unique. In 2007 they were on the same level, according to a report called Russian nuclear forces 2008, published by the Bulletin of the Atomic Scientists.

The peak year was 1984 with 230 patrols by nuclear powered strategic- and attack submarines. Since then, the number of patrols falls all the way down to 2002 when it was not a single patrol. Today, all other four states with nuclear powered submarines have more patrols than the Russian Navy. They are USA, China, France and Great Britain.

Intelligence reports

With reference to the Defense News, the report says information provided by the Norwegian military intelligence saw “an increase in submarine activity out of Russia’s Northern fleet bases in Murmansk in 2007. But the same report underlines that the Norwegian intelligence information is not the same as from U.S. naval intelligence which shows that Russia’s general purpose submarine patrols increased only slightly, from four in 2006 to seven in 2007. The same information indicates that strategic submarine patrols decreased to only three in 2007, down from five in 2006, the same report says.

In addition to longer patrols, shorter deployments of both strategic and multi-purpose submarines closer to homeport may also be taking place for training purposes.

Few submarines in operation

At present, there are only four operating strategic nuclear powered submarines of the Delta-IV class in the Northern fleet. According to Russianforces.org these are Verkhoturie, Ekaterinburg, Tula and Bryansk.

As BarentsObserver.com reported last week, the Delta-IV class submarines Novomoskovsk and Karelia are undergoing repair and modernization at the shipyard Zvezdotchka in Severodvinsk.

The two last of the older Delta-III class submarines which had their home port at the Kola Peninsula left the Northern fleet last year. Borisoglebsk was sent for scrapping at Zvezdotchka, while Ryazan was transferred to the Pacific fleet after it conducted a successful launch of a ballistic missile while it was submerged in the Barents Sea on August 1st, according to Interfax.

In addition, there are several multi-purpose submarines of the Oscar-II class and attack submarines of the Akula-class in operation in Russia’s Northern fleet. Also, one of the gigant Typhoon class submarine, Dmitry Donskoy, serves as a test submarine for new intercontinental missiles.

New subs in line

The first new strategic submarine to be put into operation since 1992 will be Borey-class Yury Dolgoruky. It looks more or less similar to the Delta-IV class, but will be equipped with the new Bulava ballistic missiles and has several new modifications. The submarine, which has been under construction at the Semash yard in Severodvinsk for more than a decade, will make its first sea trials this spring, reported RIA Novosti this week.

In addition to Yury Dolgoruky, two other Borey-class nuclear submarines, the Alexander Nevsky and the Vladimir Monomakh, are currently under construction at the Sevmas shipyard and are expected to be completed later in 2009 and 2011. Also at the Sevmas yard, a new class of multi-purpose submarines, the Severodvinsk-class, are under construction.

Engineer concerned over condition of submarine's generators

Sunderland Echo (UK), Feb. 13, 2009

Oxygen generators, of the type which exploded killing two crew members, had been a cause of concern on the submarine HMS Tireless.

Anthony Huntrod, 20, of Town End Farm, and Paul McCann, 32, from the West Midlands, died when a self-contained oxygen generator – known as a Scog – blew up on board the nuclear sub on March 20, 2007.

Sailors battled for more than 40 minutes to reach the two mechanics via a hatch which had been buckled by the blast but they were unable to save them.

Anthony died from multiple injuries and Paul from carbon monoxide poisoning.

An engineer on board the submarine told an inquest that he had complained about the poor condition of some of the oxygen generators but nothing had been done.

On the third day of an inquest that is expected to last six weeks, engineer Chief Petty Officer Steven Petty said the Scogs were visually checked but, despite this, there were problems with the devices being dented or corroded.

“We had a few difficulties with misfires. It had happened on a few occasions.”

He said he made it known that they weren't happy with some of the Scog misfires but there had been no feedback.

He had seen Scogs in such a condition that he would not use them, but they just went back with the rest.

The hearing was told there was no procedure for marking or quarantining defective Scogs. He agreed that another crew member could have used one that he had rejected.

Mr Petty was questioned about the efforts made to break open the damaged hatch and the inquest was told that he had been praised for his efforts during the rescue attempt.

About 120 people were on board Tireless, which had been on a joint exercise with the U.S. Navy in international waters 200 miles north of Alaska under the Arctic ice cap, when the explosion occurred.

When he opened the inquest at the Regus Centre, Doxford International, on Tuesday, the Sunderland coroner, Derek Winter, said: “This was a traumatic and terrifying event for all aboard the submarine.”

The inquest also heard harrowing details from a trapped crewman, stores accountant Richard Holleworth, of the horror which followed the explosion which killed the two submariners.

The hearing, which is being held without a jury, was told there had been seven incidents involving Scogs on the Trafalgar class sub between January 2006 and February 2007, including one fire.

An earlier Royal Navy board of inquiry said “systematic failings” probably caused the Scog explosion after it became contaminated with oil.

Civil War Enthusiasts Commemorate The 145th Anniversary Of The Sinking Of The H.L. Hunley

By Ian Silver, Live 5 News Headlines, Feb. 17, 2009

Tuesday marked the 145th anniversary of the night the H.L. Hunley submarine attacked and sank the Union war ship U.S.S. Housatonic.

Thirteen men lost their lives that night in 1864: eight from the Hunley and five from the Housatonic.

“They thought they saw a big fish, a dolphin,” said Civil War reenactor Jan Stewart. “And by the time the Hunley got close enough for them to realize that they were going to be attacked there was little time for them to put out any kind of warning.”

Within minutes the Housatonic was in flames and rescue boats were swarming around the ship.

The crew of the Hunley dropped below the surface never to come up alive again.

But their mark had been left; naval warfare had changed.

“It set the stage for our warfare that we have today concerning submarines,” said Stewart.

After a march from Fort Moultrie to the Sunrise Presbyterian Church at Breach Inlet on Sullivans Island was a memorial service and a reading of the names of each of the fallen seamen, each followed by the ringing of a bell.

After the service was a procession to the beach where two wreaths were laid in the water, then 13 flowers carried by 13 symbolic lady mourners.

Finally, three rounds of musket fire followed by three rounds of cannon fire to remember the ones they called “brave men.”

“A lot of the reasons they think the war was fought is not really why the war was fought,” said Stewart. “And I don’t want them to be forgotten and what they did to be forgotten.”

And while they didn’t change the outcome of the war, they did change the way future wars would be fought.

“This was a great, pivotal moment in American history, and in naval history throughout the world,” said Confederate Heritage Trust President, George Naumann. “This was the first successful submarine attack. {It’s a} tremendous achievement performed by the Confederates.”

That night in 1864 was not the Hunley’s first mission.

Twice before she had taken full crews to their deaths in Charleston Harbor. Both times she was brought back up and put back in service.

Between the three missions a total of 21 men died inside the Hunley.

The Hunley remained missing for generations until it was tracked down in Charleston Harbor with modern equipment in 1995. It wasn’t until after 2,000 crews were able to get it onto land to begin trying to figure out what went wrong.

Electric Motor Design Begins New Era In Ship Propulsion

MotorsDrives.com, Feb. 18, 2009

AMERICAN Superconductor (AMSC) and Northrop Grumman say their world first 36.5MW high-temperature superconductor (HTS) ship propulsion motor, could lead to the development of all-electric vessels.

The companies were contracted by the US Office of Naval Research to develop the HTS motor for potential installation on ships and submarines. Full-power testing was recently completed at a US Navy site in Philadelphia.

According to the designers, the unit incorporates coils of HTS wire that can carry 150 times more current than comparably sized copper wires. It is also less than half the size and weight of a conventional motor.

This would mean overall ship weight could be reduced by nearly 200t, making the vessel more fuel efficient and freeing up more room on board. It is also quieter than conventional motors, an important consideration for vessel stealth.

The US Navy has invested more than \$US100m (\$A157.7m) in the technology. IT is hoped the motors will also become a fixture on commercial vessels, such as cruise liners and tankers.

According to the companies, the motors are also being applied in the renewable energy industry. HTS wire is being used instead of copper in wind generator systems.

The companies are now evaluating a surface ship or submarine to deploy the motor on. They are also looking for a commercial partner.

The Latest Word On Trends And Developments In Aerospace and Defense

Defense Watch, Defense Daily, Feb. 17, 2009

McHugh In Theater. Rep. John McHugh (R-N.Y.), the new ranking member of HASC, says he tried in vain to solicit equipment requests from Marines he visited in Afghanistan during an early-month visit. “I asked them time and time again—with respect to MRAPs versus 7-tons (trucks) versus Strykers, etcetera, etcetera—’Did they feel they were being properly resourced?’” McHugh tells Defense Daily. “I worked real hard to solicit a concern, complaint, and I didn’t get a one. So if the troops on the ground, and they’re basically Marines in the area of action (in Afghanistan), don’t tell me that they need something, that’s a pretty good sign.” He and a congressional delegation also visited Iraq and Belgium.

Susan Chronicles. Sen. Susan Collins (R-Maine) now carries the dual role of appropriator and defense authorizer, after she was named late last month to SAC. The other new SAC members this session are: Sens. Mark Pryor (D-Ark.), Jon Tester (D-Mont.), George Voinovich (R-Ohio), and Lisa Murkowski (R-Alaska). In addition to Collins, three other lawmakers serve on the SAC as well as SASC: Sens. Robert Byrd (D-W.Va.), Jack Reed (D-R.I.), and Ben Nelson (D-Neb.). The pro-shipbuilding senator from Maine also is the ranking member of the Senate Homeland Security and Governmental Affairs Committee.

Missile Defense Muscle. Former Alaska GOP senator Ted Stevens may be gone, but his state’s lawmakers aren’t giving up on advocating for the Ground-based Midcourse Defense (GMD) system at Fort Greely. Murkowski, Sen. Mark Begich (D), who ousted Stevens in the November election, and Rep. Don Young (R) in a Feb. 5 letter to Defense Secretary Robert Gates say they see “absolutely no justification for reductions to the GMD System or slowing its implementation,” noting comments from SASC Chairman Carl Levin (D-Mich.) about wanting more testing of the Ballistic Missile Defense System. “The federal budget includes funding to complete the fielding of all interceptors at Fort Greely to bring the system up to full capacity,” the trio of lawmakers remind Gates, arguing successful testing will validate the system to the nation and new Obama administration.

Pres Helo Hello. Connecticut lawmakers ask Navy Secretary Donald Winter in a Feb, 11 letter for a briefing on cost overruns with the program for the VH-71 presidential helicopter, which is under contract with Lockheed Martin, Bell Helicopter Textron, and AgustaWestland. Connecticut-based Sikorsky makes the existing Marine One choppers. “We...respectfully request a thorough report,

coupled with a briefing, on the development plans for this program, including an analysis of the potential advantages of either re-opening the contract for bidding or requiring split-production between Lockheed Martin and the incumbent contractor,” states the letter from Connecticut Democrats Sen. Christopher Dodd and Reps. Rosa DeLauro, John Larson, Joe Courtney, Christopher Murphy, and James Himes.

Army Secretary? Paul “Buddy” Bucha is a leading contender to become the new Secretary of the Army, according to a source close to the process. A former Medal of Honor of winner and West Point graduate, Bucha was a foreign policy adviser to President Obama during the campaign. Bucha would replace Pete Geren, a Bush administration pick staying on until his successor is in place.

Stimulating R&D. The economic-stimulus bill readied last Friday for the president’s signature includes no Pentagon procurement funding. Yet it has \$300 million in defense research and development funds for energy-related projects, demonstrations, and manufacturing enhancements. The monies are to be divided four ways: among the Army, Navy, Air Force, and defense-wide accounts. “Funds are for improvements in energy generation and efficiency, transmission, regulation, storage, and for use on military installations and within operational forces, to include research and development of energy from fuel cells, wind, solar, and other renewable energy sources to include biofuels and bioenergy,” states a report on the final House-Senate compromise bill. The legislation passed the House last Friday and was set to be taken up by the Senate after Defense Daily’s deadline.

Purple Play. The Air Force’s top general said he will not engage in kind of “theological debates” over ownership of assets that led to heightened inter-service rivalry during his predecessor’s tenure. Gen. Norton Schwartz, the Air Force chief of staff, says he “is not threatened” by the Army’s efforts to field unmanned aerial systems and cargo aircraft. This is in stark contrast to the past several years of bureaucratic wrangling between the two services, particularly over who should control UAS and their valuable datalinks in theater. “These kinds of theological discussions are really not helpful,” Schwartz says. “What this is really about is, regardless of what uniform people are [wearing]...is the data getting to who needs it?” Army and Air Force officials have also fought over control of the Joint Cargo Aircraft. Schwartz was more circumspect: “This is not a question of ownership, but rather a question of versatility,” he said. “All this other stuff is sort of a black hole for energy,” he adds. “So we’re not playing in that game any more.”

Non-Standard Aviation. Air Force Special Operations Command will receive its first 10 Polish-built M-28 Skytruck light cargo/passenger aircraft in June, an AFSOC official says. The Skytruck will shuttle special operators to areas with unimproved landing strips, Col. J.D. Clem, deputy director of plans, programs, requirements and assessments for the command, says. The fleet will be based at Cannon AFB, N.M., like AFSOC’s other non-standard aviation assets. “If I need to carry six guys some place, I don’t want to have to send a C-130,” Clem says. “But, if I want six guys to land on an unimproved strip, the PC-12 [Pilatus] is not the plane to use.” AFSOC plans to receive the Skytrucks over the next two years. A twin engine high-wing strutted monoplane, the Skytruck can carry 19 people in the back with a maximum take-off and landing weight of 16,534 pounds and a maximum speed of 223 knots. The aircraft will not be equipped with any specialized sensors or other reconnaissance equipment. “The non-standard aviation is simply to haul people around,” Clem says. “There is nothing really cosmic about it at all.”

Onward And Upward. The Air Force plans to complete a round of flight testing for the Joint Air-to-Surface Standoff Missile (JASSM) this month despite another detonation failure on Jan. 30, a spokeswoman for the service says. A Failure Review Board is investigating the incident, but “based on preliminary analysis, the most recent failure does not appear to be the same as that noted in the Nov. 8 test missions,” says Lt. Col. Karen Platt. Two failed detonations were recorded on that date. The service now plans to complete the remaining four test shots of the Lot 5 reliability series this month, according to Platt. “Once all data is analyzed and scored, results will be released,” she says. Last May, the Pentagon allowed the Air Force and Lockheed Martin to resume the program following cost overruns and several flight test failures. The program encountered significant cost growth in the previous year and failed four flight tests within a week. The breach of a congressional cost growth cap eventually led to termination discussions. The Pentagon certified a restructured program for JASSM, a precision cruise missile, last spring.

Waiting. Pentagon acquisition chief John Young tells reporters he’d like to see the Navy award the contracts for the next two LCS. He also wants to see those ships bought for the right price too, he adds. “These contracts are critical because they are going to set a price point for the next ships,” Young says. “I am not inclined to rush that contract just to get it under contract, although I am worried about the workforce, and the learning that helped build the first ships being lost.” The price for the two FY ’09 ships is important, Young says, because it will tell the Navy and DoD whether there is any hope of getting to the congressionally mandated cost cap. “We need to have an aggressive negotiation with industry on this, and that’s what the Navy is doing right now,” he adds.

...Getting On Track. Young says he has at least a dozen initiatives that are working very hard to help programs start with a firm foundation, to execute to cost and schedule, and have oversight that restrains requirements. He is also asking the acquisition team to aggressively engage the budget process to make sure programs are funded so they can be executed. “[I am] trying real hard from a lot of different perspectives to make progress in the acquisition system,” Young notes. “We can’t let the budget stretch out programs...add cost to them...and all be mad at each other because the programs cost more money.”

Fused. GD AIS says it was awarded a Navy contract, potentially worth up to \$95.2 million, for research, development and operation of Information Fusion (IF) as it relates to the Information Fusion Center established by the Naval Air Warfare Center Weapons Division. Information Fusion is the process of correlating data from multiple sources to derive information of enhanced value to users. Efforts under this contract will include research and development, integration and testing, continual advancement and operation of the Information Fusion Center; training for newly developed software, hardware and other products; and independent verification and validation of sensors and systems relating to critical infrastructure protection and force protection, GD adds.

Saving Bucks. Five major cost-savings initiatives, by the Cumbersome Work Practices Task Force (CWP-TF) and implemented by the four Naval Shipyards (NSYs), are projected to save \$692,000 per Los Angeles (SSN-688)-class submarine, the Navy says. Among the five implemented initiatives: An action item that eliminates a submarine hull inspection requirement that necessitates removal of hull tiles during major overhauls. This effort is projected to deliver nearly \$500,000 in savings per Los Angeles-class submarine major availability, the Navy says. Counting the five initiatives that have been implemented, the task force is managing a total of 13 action items, including three new initiatives for 2009. When completed and fully implemented, the 10 initial initiatives are projected to additionally save \$1.09 million per docked planned incremental availability for aircraft carriers.

CG MOD OK. The USS Bunker Hill (CG-52) earlier this month successfully completed sea trials to test and validate its recently installed combat systems off the coast of San Diego. Bunker Hill's crew successfully tested the ship's new Aegis Weapons System, the Cooperative Engagement Capability (CEC) and SPQ-9B Radar. Successful firing of the Close-in Weapons System (CIWS) Block 1B and the 5"/.62 caliber gun were also completed, the Navy reports. Bunker Hill is the first guided-missile cruiser to receive a complete set of upgrades as part of the Navy's Cruiser Modernization program. Each of the Navy's 22 Ticonderoga-class cruisers is scheduled for modernization over the next 10 years.

...Open Is Key For CG. A key feature of the ship's modernization is the installation of Aegis Open Architecture (AOA) to upgrade the Aegis Weapon System. The AOA upgrade provides the capacity for future combat system growth over the life of the class as well as mission expansion, such as ballistic missile defense, the Navy says. Over the next several years, SEA 21 will manage this structured modernization program to ensure that these ships reach their expected 35-year service life, which is vital for the Navy's goal of a 313-ship fleet. Additional testing will occur over the next several months, and Bunker Hill is projected to rejoin the fleet in early fiscal year 2010, the Navy adds.

Helo Joint Venture. Finmeccanica's AgustaWestland and Tata Sons sign a Memorandum of Understanding (MoU) at Aero India air show for the formation of an Indian joint venture company, which will establish a final assembly line for the AW119 helicopter in India. The joint venture company will be responsible for AW119 final assembly, completion and delivery to customers worldwide while AgustaWestland will retain responsibility for worldwide marketing and sales. The first aircraft is scheduled to be delivered from the new facility in 2011, with production forecast to rise to 30 aircraft per year to meet worldwide demand. It is envisaged that the joint venture company would supply the current Reconnaissance and Surveillance Helicopter program of the Indian Armed Forces, for which AgustaWestland has already proposed the AW119 to be manufactured in India.

Deployment Role. EADS Defence & Security plays a decisive role in the deployment of the SIDM UAV of the French Air Force to Afghanistan. Systeme de Drone MALE (SIDM) "is an autonomous system with an almost around-the-clock endurance, a range of approximately 1,000 kilometers and a very effective sensor suite consisting of electro-optical and infrared, laser designator and an synthetic-aperture imaging radar with ground moving target indicator," Nicolas Chamussy, Senior Vice President for Mission Air Systems in the DS business unit MAS, says in a statement. It was officially taken over by the French customer from the DS Business Unit Military Air Systems at the end of January 2009. The airlift of the SIDM systems—three aerial vehicles with their ground segment—to Bagram is under way. EADS DS also will provide logistics support with an ancillary base on constant alert, and with voluntary personnel in the area. "SIDM and the experience gained from this system will pave the way for the French-German-Spanish Advanced UAV, which will represent the new generation of sophisticated and efficient European UAVs for intelligence, surveillance and reconnaissance missions," Chamussy says.

Marine Support. General Dynamics-Canada will supply spare parts for RG-31 Mk5E vehicles under a \$27.2 million contract modification from Marine Corps Systems Command under the Mine Resistant Ambush Protected (MRAP) program. The parts will be used to support vehicles that were manufactured under a delivery order awarded to GDLS-Canada in July 2008 for 773 RG-31 Mk5E vehicles for the MRAP program. In total, 1,397 General Dynamics RG-31 vehicles have been ordered under the MRAP program.

New Launchers. Lockheed Martin receives a \$31.3 million contract modification to provide additional M299 launchers and related equipment to the Army. The M299 is used aboard a variety of platforms to launch all variants of the Hellfire missile. Under the modification to the \$51.3 million Launcher Bridge 3 contract awarded in 2007, Lockheed Martin will supply an additional 298 M299 helicopter-mounted four-rail missile launchers, 134 launcher electronic assemblies (LEA) and multiple spares. The original contract called for delivery of 430 launchers and 376 LEAs to U.S. and international forces, and it also included multiple spares, engineering services and depot support. Deliveries under the original Bridge 3 contract are currently underway. Lockheed Martin is increasing the rate of production to accommodate the work. With the additional orders, deliveries are scheduled to be completed in 2011.

Comment By Jane's On UK / France Submarine Collision

By Editor Jane's Fighting Ships Commodore Stephen Saunders (Retired), Media Release, Feb. 17, 2009

Editor Jane's Fighting Ships, Commodore Stephen Saunders, (retired), explained, "The reported collision between HMS Vanguard and Le Triomphant in early February is a very serious incident. As far as I am aware, it is the first time that the submarines of two friendly nations have been involved in such an accident. In this case, both submarines appear to have been on 'deterrent patrol' or on passage to or from patrol areas. Both UK and France have operated a Continuous at Sea Deterrence posture for many years."

Saunders continued, "There seem to be three main issues, firstly, procedurally there is a NATO waterspace management organisation, a sort of air-traffic control underwater, which enables national submarine operators to 'deconflict' their submarine

operations. Submarine operations tend to be sensitive with the whereabouts of ballistic-missile submarines the most sensitive of all, but I would have thought it possible to at least arrange to be in different parts of the ocean without compromising operational security. I am unsure to what extent France participates in this scheme. France has not been a member of the NATO military structure since the 1960s but I was under the impression that there is some liaison on these matters.”

“Secondly, why didn’t the submarines detect each other? The modus-operandi of most submarines, particularly ballistic-missile submarines, is to operate stealthily and to proceed undetected. This means operating passively and therefore not transmitting on sonar and making as little noise as possible. A great deal of technical effort has gone into making submarines very quiet by reduction of machinery noise for example. While in parallel much effort has gone into improving the capability of sonars to detect other submarines, detection was clearly made too late or not at all in this case.”

“And finally bad luck, even if two submarines do find themselves in the same area, it is still bad luck to end up in the same place at the same depth and run into each other.”

It is worth noting that submarines are robustly built. USS San Francisco ran into an underwater seamount at high speed in 2005 and survived. In today’s case, two large submarines hit each other, probably at low speed, and the damage, whilst embarrassing, can be repaired.

Saunders concluded, “No doubt there are a number of technical issues to be investigated, but the root of the problem appears to be procedural. These submarines should not have been in the same place at the same time.”

Navy Celebrates 1,000th Patrol Of Trident Subs

Associated Press, Feb. 19, 2009

A coastal Georgia military base is celebrating a milestone for the Navy’s fleet of nuclear-armed submarines - the 1,000th patrol since the first Trident missile sub launched in 1981.

Navy Secretary Donald Winter is scheduled to mark the occasion Thursday with other dignitaries at Kings Bay Naval Submarine Base near St. Marys. Kings Bay is the East Coast port for the Navy’s Trident submarines.

The fleet of 14 Ohio-class submarines was launched during the Cold War as a deterrent to nuclear war. The subs lurk undetected beneath the ocean during 11-week patrols, capable of launching ballistic missiles at targets within 4,000 miles.

The 560-foot submarines carry more than half of the U.S. military’s strategic nuclear warheads.

Plans Underway For The ‘Largest Submarine Ball’ To Celebrate Birthday

By: Lt. Patrick L. Evans, COMSUBGRU2 Public Affairs Officer, The Dolphin, Feb. 19, 2009

For the first time in several years, enlisted and officers will come together to celebrate the birth of the submarine force under a combined Submarine Birthday Ball next month.

The 109th Submarine Birthday Ball will be held at the MGM Grand Premier Ballroom at Foxwoods, March 28. Tickets are \$45 and are on sale now. Individual commands are encouraged to subsidize ticket prices for junior Sailors by using MWR funds

“This is an historic year,” said CMDM(SS) Rafael Perez, Submarine Group Two Command Master Chief. This is the first time in a long time we’re combining enlisted with officers. Socializing outside of work with your peers is extremely fulfilling.

The guest speaker will be Adm. Jonathan W. Greenert, Commander, U. S. Fleet Forces Command. This year’s theme is “From Blueprint to Brilliance: A New Era of Sailors and Maritime Strategy.

“The theme fits what’s going on within the force right now,” said ETCM(SS) Gaylord D. Humphries, Director, Pipeline Technical Training Department (N6) Naval Submarine School, New London. “We’re in a new era with the recent contract to build eight new Virginia-class submarines - one per year this year and next year and two per year from 2011 through 2013.”

These submarines, scheduled to be delivered to the Navy in 2019, are high-tech and tailored to excel in a wide range of warfighting missions. But “technology is nothing without the crew guiding the boats into the future,” said ETCM(SS) Humphries, who’s leading a committee planning the birthday ball.

The ball was last combined in 2004. Bringing enlisted and officers together could attract 2,000 people to attend, which would make it the largest birthday ball within the submarine force, according to ETCM(SS) Humphries.

“We called Pearl Harbor, Norfolk and San Diego, and none came close to 2,000 people. We are the biggest,” he said.

The ball is scheduled to begin with cocktails at 6 p.m. Along with traditional Navy activities, the program will include the Silver Dolphin Demonstration Team and dancing. In addition, Foxwoods is offering special hotel room rates at the MGM Grand and the Grand Pequot Tower for the night of the ball.

Contact your command’s birthday ball representative to find out how to make a reservation.

French Submarine Policies Might Have Contributed To Collision, Ex-British Commander Says

By Eben Harrell, NTL.org, Feb. 18, 2009

The collision between French and British nuclear-armed submarines this month might have been avoided if France had participated in a NATO system that designates ocean areas for submarine patrols, Time magazine reported Monday (see GSN, Feb. 17).

The two boats, Le Triomphant and the HMS Vanguard, reportedly struck each other in part because neither submarine was aware of the other's presence nearby.

"There is a system for operating areas that are reserved for American, British, Norwegian, Dutch and Canadian communities, and if you want to go into someone's area of influence, you tell them what you are doing," said Julian Ferguson, a retired British submarine commander. "But if you are not in the NATO military structure, you don't have to do that."

France, which plans to re-engage in the structure in April, confirmed that it does not tell anyone where it deploys its missile submarines.

"France does not supply any information regarding the position of its nuclear arms or submarines carrying them because France considers its nuclear arsenal the most vital element in its defense capabilities," said navy spokesman Jerome Erulin.

While the assertion that the submarines were unaware of each other might seem improbable, Ferguson said missile boats tend to patrol in certain areas where environmental conditions improve the likelihood of concealment.

"There are oceanographic factors in which you can be on either side of an ocean front where the temperature is slightly different on your side than the others," he said. "Where the gulf stream comes across the Atlantic is a prime point of this. Sometimes these barriers can be quite hard — no sound penetrates at all. And if your business is hiding, then you would hide in that vicinity. There is an added risk that, given the environmental factors, maybe you don't hear another submarine in time to do something about it."

British and French officials held talks beginning in 1994 to improve naval cooperation, but Time could not ascertain whether they resulted in any submarine information sharing.

"The fact that the collision occurred at all indicates that the two allies need to talk more," said nuclear expert Hans Kristensen of the Federation of American Scientists.

US Looks At Naval Pact With China

By Raphael Minder, Financial Times, Feb. 19, 2009

Washington and Beijing are considering a bilateral code of conduct to avoid an accidental sea confrontation, according to the US commander in the Pacific.

Asked at a media briefing in Hong Kong whether the US would consider a deal on the avoidance of incidents at sea, along the lines of one that Washington agreed with Moscow during the cold war, Admiral Timothy J. Keating said: "There are efforts under way to address that issue. They are preliminary, very preliminary."

His comments underline the seriousness with which the US takes China's military development.

Tim Huxley, executive director in Asia for the International Institute for Strategic Studies, said: "Given the Asia-Pacific could become a more dangerous place as China's power expands and the US and others remain significant players there, an agreement along those lines, which would replicate what was in place during the cold war, could be a useful contribution.

"One side's defensive capability can be seen from the other side as offensive. This is a perennial problem when a developing country is modernising its armed forces."

Admiral Keating's comments show that bilateral military dialogue was not seriously disrupted after China suspended some contacts last October over US weapons sales to Taiwan. The dialogue is to resume this month after the first visit by Hillary Clinton, secretary of state, to Beijing.

Admiral Keating said China's military development was going well beyond what Beijing stated in its Defence White Paper. "There are areas that China is pursuing where their stated intentions don't appear to us to align with the developments that we see," he said.

He highlighted China's submarine programme, which has allowed Beijing to deploy about 65 of the 200 submarines operating in his Pacific region of command. "We want to understand why the Chinese feel compelled to develop underwater capability to the extent that they are," he said.

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Bob Bissonette Tries Again!

Right before our Base Commander, Bob Bissonette retired from the Navy, he spent a wonderful six week tour of duty camping on an Arctic ice flow while attached to the Naval Submarine Arctic Laboratory (NSAL).

His picture made the cover of *All Hands Magazine*. Unfortunately, no one could tell it was Bob since he was completely covered in foul weather gear.

Now Bob is trying it again.

Attached to NSAL as a civilian, he had his photo taken at Prudhoe Bay, Alaska on 2 Mar 09.

We award Bob the perseverance medal.

Mike Hyman



Congressional delegation thinks subs are safe in budget

Virginia class has been free of delays, overruns as defense cuts loom *The Day*

By Jennifer Grogan, The Day, March 5, 2009

President Barack Obama has promised to reform the defense budget by scrutinizing the purchase of weapons and cutting wasteful spending, causing some politicians to fear for programs in their states.

Even though the president has not said which programs he will target, members of the Connecticut congressional delegation seem relatively confident that Obama will not change the funding for Virginia-class submarines.

Other programs have been plagued by delays and cost overruns, they say, while these submarines have been delivered on time and under budget.

And Navy officials have already signed a \$14 billion contract with Electric Boat, committing the service to buy the next eight Virginia-class submarines. EB in Groton and the Northrop Grumman Newport News shipyard in Virginia will jointly build one ship per year in 2009 and 2010, and two ships per year from 2011 through 2013.

"We have a lot of ammunition to defend the commitment already made by the Navy to the Virginia-class program," U.S. Rep. Joe Courtney, D-2nd District, said. "It's the success story in Navy shipbuilding."

U.S. Sen. Christopher Dodd, D-Conn., said he would work with the Obama administration to "see this contract to completion and ensure that submarine production meets our national security needs."

For fiscal 2010, Obama has proposed increasing the basic Pentagon budget by 4 percent, to \$533.7 billion, plus \$130 billion for the wars in Iraq and Afghanistan. Defense Secretary Robert M. Gates has said that the fate of some weapons systems will not be decided for several weeks.

Sen. Joseph Lieberman, D-Conn., said it is "very unlikely" that the Virginia-class program will face cuts.

"These boats were designed to defeat the threats our nation faces today and to execute missions that no other platform can duplicate," he said in a statement. "I will work to ensure that this vital part of our country's arsenal is protected in the budget process."

Both EB spokesman Robert Hamilton and Lt. Clay Doss, a Navy spokesman, said it was too early to comment on the budget process since the deliberations are ongoing.

Local submarine officers group to dedicate memorial

By Drew Wichester, The Cape Coral Daily Breeze, March 5, 2009

Not quite forgotten, but not quite celebrated, the men who served as submarine officers have unique and specialized experiences that bond them together under a unifying banner.

Now they will now have their own memorial at ECO Park, located next to the Iwo Jima statue, to honor all past and present submarine sailors.

The memorial, an authentic World War II anchor from a Gato class submarine, stems from the efforts of the Cape Coral Barb Base, a collection of Cape-based former submarine officers.

"Base Commander" Lou Simmons said the group has been working on the memorial for "quite a while," with the anchor nearly turning up out of the blue in someone's backyard.

"We found the anchor in the Cape, but no one knows how it got there," he said. "But this has been a work in progress for about a year."

Compared to the Vietnam vets and Veterans of Foreign Wars organizations in the Cape, if not all of Lee County, Barb Base has had a relatively low-key presence during its 13-year existence.

According to Simmons, the group began in 1996 with five members. Now with more than 70 members, the group is part of a national charter that brings together submarine officers nationwide.

Simmons said it takes a special type of mental toughness to become a submarine officer, though he jokingly said that someone "has to be a little crazy to start with."

"The selection process is tough, not everyone gets in," he said. "You have to be mentally stable ... it's quite an experience."

During its tenure, Barb Base has contributed funds to ROTC programs and scholarships, as well as visiting veterans' hospitals.

Barb Base also burns flags every year at the Coconut Festival, as part of a retirement ceremony. Simmons said Barb Base burns "thousands" of flags each year.

Now the "bunch of old guys," as Simmons described them, will get their moment in the sun with the dedication of the new memorial.

He warned that the ceremony will be short, with Cape Mayor Jim Burch leading the way with a dedication, followed by the color guard and a playing of taps.

"Nobody hears much about us, but we have a pretty good bunch of guys here," Simmons said.

The event is free and open to the public. For more information, call Simmons at 699-6112.

Iodate tablets for residents

Cumbrian Business Gazette (UK), March 6, 2009

TABLETS to combat the effects of radiation are being issued to people in Barrow ahead of the switch on of the reactor of a nuclear submarine.

The reactor switch on is the first in the town for ten years.

Officials from the Health Protection Agency arrived in Barrow yesterday to start doling out tablets and advice to the 91 businesses located within 550 metres of the Devonshire Dock, where the £1.2bn, first of class submarine, Astute, is due to “go atomic” next month.

The potassium iodate tablets are being issued at the rate of two per person at businesses this week, and at 500 homes in areas, including Barrow Island, Hindpool and Vickerstown. Trained nurses will be handing out the tablets.

Dr John Astbury, of the Health Protection Agency, said the chances of the tablets ever being needed were “about one in a million”.

They had been issued throughout the 1990s without any problems occurring and are standard around nuclear installations like power stations.

In the event of an emergency leaflets issued to homes and businesses tell people to tune in to Radio Cumbria and await instructions such as when to take the tablets.

The tablets fill the thyroid gland with a harmless iodine protecting it from the radioactive and potentially cancer-causing iodine that is released in a nuclear leak.

A letter to homes and businesses from NHS Cumbria says an Off Site Emergency Planning and Preparedness Committee had reviewed how members of the public could best be protected “in the highly unlikely event of a nuclear reactor accident at the shipyard”.

It said: “It is known that potassium iodate tablets can provide protection against long-term effects of radiation and so it has been decided that potassium iodate tablets will be supplied to all households such as yours, which are within 550 metres of the BAE Systems Submarine Solutions Wet Dock Quay.”

A letter from BAE also sent to households says: “Nuclear powered submarines have been constructed and tested at the Barrow shipyard for many years.

“The nuclear power plant and associated systems are all designed, built and operated to the highest standards. As a result, there has never been any form of nuclear accident in a Royal Navy submarine and it is highly unlikely that any such event will occur.”

BAE said there was no increased risks from the new Astute class of submarines.

The tablets are also being issued to businesses and residents within two kilometres of the Ramsden Dock basin where the sub will be berthed prior to leaving Barrow this summer. People can get more information at cumbriaalert.info, or from the Environmental Health department at Barrow Town Hall 01229 876444 or the county emergency planning office on 01228 815700.

Ohio-Class SSGNs Prove Worth In Irregular Warfare, Special Operations

Richard R. Burgess, Seapower Magazine, March 1, 2009

This spring, USS Georgia, an Ohio-class nuclear-powered guided-missile submarine (SSGN) will deploy, taking the fourth and newest boat of the class into real-world operations and training exercises in its new configuration. Loaded with scores of Tomahawk cruise missiles and dozens of special operations forces (SOF) personnel, such as Navy SEALs, the SSGN – converted from a ballistic-missile submarine (SSBN) – will quietly and covertly proceed to undisclosed areas of the world, performing missions assigned by combatant commanders and participating in exercises with U.S. and allied joint forces. The SSGN provides the theater commander with a highly capable strike asset and a stealthy launching platform for special operations. Georgia will relieve USS Florida, just as USS Michigan last year relieved USS Ohio, the first of the class to deploy. Ohio deployed for 14 months, an unusually long “cruise” for a Navy ship in recent decades. Deployments of similar durations will become routine, facilitated by the Navy’s practice of operating the submarines with two alternating crews, designated Blue and Gold.

With Capt. Chris Ratliff commanding, Ohio’s Blue Crew departed Bangor, Wash., Oct. 14, 2007, on the class’ first operational deployment. The Blue Crew alternated with the Gold Crew under the command of Capt. Andy Hale, who was succeeded in April 2008 by Capt. Dennis Carpenter.

Ratliff said the submarine conducted four mission periods: three months with the Blue crew, then three with the Gold crew, then four months with the Blue crew and a final four months with the Gold, returning to Bangor Dec. 22, 2008.

Nominally, the Navy schedules SSGNs for 12-month deployments. Because Ohio was ready for deployment a month ahead of schedule, it departed early and extended an additional month to minimize the gap before Michigan’s deployment, Ratliff said.

“We did everything the boat was built to do,” he said. “We proved the worthiness of SSGN to the combatant commander. In specifics, we did several [SOF] real-world missions and exercises. Both crews got to participate in those. “We didn’t launch any Tomahawks, but we did cover theater strike commitments,” Ratliff said. “We certainly deepened the U.S. Navy’s relationship with the allies, specifically the Republic of Korea, Republic of the Philippines and Japan. We contributed significantly to the global war on

terrorism and other theater security objectives.” “The first deployment of USS Ohio [as an SSGN] was a tremendous success and we’re just building on that success with other subsequent deployments,” said Vice Adm. Jay Donnelly, commander of the Navy’s Submarine Force. The four SSGNs were converted by General Dynamics’ Electric Boat from the first four boats of the 18-submarine Ohio class. In each boat, all but two of the 24 tubes designed to accommodate Trident nuclear-tipped missiles were converted with the Multiple All-up-round Canister (MAC), which allows the tubes to house seven Tomahawk missiles, for a maximum of 154 Tomahawks for strike missions.

The MACs can be removed and replaced by gear stowage containers to equip up to 66 SOF personnel. The remaining two tubes – the forward-most – have been converted to lock-in/lock-out chambers that also serve as docking stations for Dry-Deck Shelters or submersibles, such as the Advanced SEAL Delivery System (ASDS). The SSGNs also are equipped with enhanced command-and-control facilities in the form of the Common Submarine Radio Room and the Battle Management Center.

Special Ops “The SSGN is the Navy’s premier irregular warfare platform,” said Donnelly. “It has the capacity and the capability that the combatant commanders need. What we’re finding is there is a great demand for their capabilities in theater.

“It’s because of the size of those ships that we can house all of the SOF personnel with their equipment,” he said. “We can maintain their physical readiness and capabilities because of the size of the ship and all the exercise equipment we put on board. They’ve proven to be very, very useful in theater in the irregular warfare operations that we engage in.”

“What we bring is the ability to do an SOF campaign because of the volume of the submarine, the number of SOF and support forces we can embark and their command-and-control element,” Ratliff said. “Because of the volume of the boat, the special operations forces can stay ready to do their job for an indefinite amount of time. We can stay on station for a very long time and just keep doing the SOF missions over and over again. We’re the only platform that has that SOF campaign capability.”

As part of the conversion, 66 extra bunks were installed, so each SOF member was assigned his own bunk. Ratliff said the SEALs were able to sleep well and had plenty of room to exercise. The SSGN provided ample storage space for their equipment and room to break out the equipment for missions. The SEALs were not given normal submarine on-board crew responsibilities such as damage-control assignments, but maintained their own spaces and “established camaraderie by helping out in the galley on the mess decks,” Ratliff noted. “They had a lot of mission planning work to do that we did with them,” he said. “Of course, when they were doing their mission, they were very busy and very focused. I wouldn’t classify them as just riders at all. They were certainly good shipmates and certainly fully engaged in the mission at hand.”

Ratliff said he had a strong partnership and working relationship with the onboard SOF commander. “There are some fine points once we begin mission execution where responsibilities change, but we’re really working together to ensure the mission is a success,” he said.

“The Navy SEALs [are] a very adaptable group of young guys and they did very well onboard,” he said. “It was just great to have them onboard. I’m sure they were anxious to get their job done, as we all were, but as far as adaptability to the submarine environment, they just did a great job.”

Strike Capability The Tomahawk strike capability of the SSGN is the largest of any Navy warship. “We deployed with 105 Tomahawk missiles, which is a significant proportion of the theater requirement,” Ratliff said. “That’s freeing up destroyers for more efficient execution of their theater ballistic-missile defense mission and the carrier strike group missions. Also, we have freed up attack submarines (SSNs) to do their sea-control missions much more effectively.”

“In each theater,” Donnelly said, “there’s a certain requirement for a number of Tomahawk strike weapons that need to be available for tasking. When an SSGN comes in with the large capacity that those ships have, it does free up the rest of the fleet to redistribute their weapons. We have enabled the destroyers to increase their ballistic-missile defense capabilities as a result of being able to download their Tomahawk missiles.”

The SSGN has significant intelligence, surveillance and reconnaissance (ISR) capabilities, but they are used in support of the SSGN’s SOF mission rather than specific ISR tasking.

Michigan originally was scheduled to deploy with the Navy’s single ASDS, a 60-ton, 65-foot-long submersible designed to deliver SEALs to their mission areas. Just prior to the November deployment, however, the ASDS was damaged by a fire. “We’re still in the investigative process with the [ASDS] fire to determine the full extent of the damage and what our options are for that vehicle,” Donnelly said. “SSGNs are now deploying with two dry-deck shelters installed and that gives them a lot of capability for launching and recovering SEALs with the Swimmer Delivery Vehicle [SDV]. The SDV is not as capable as the ASDS but still provides the SOF community with the capability to transport SEALs underwater.”

Unlike the SSNs and SSBNs, which are commanded by submariners with the rank of commander, the SSGNs are commanded by captains. Ratliff, now assigned as a special assistant for SSGN matters to the commander of Submarine Group Nine and awaiting orders to a post-major-command assignment, served on five SSNs and later commanded Georgia – then an SSBN – for three years before he took command of Ohio as a captain.

Although Georgia as an SSBN and Ohio as an SSGN had many similarities, Ratliff said he considered the designation of the SSGN as a major (captain-level) command appropriate.

“To command Ohio as an SSGN was the most challenging assignment I’ve had in my career,” he said. Ratliff said the SSGN is the “best of both worlds” compared with the distinct SSN and SSBN missions. “We had very exciting, cutting-edge, high-stakes missions. And we get to come home to live in the Pacific Northwest,” he said, speaking of the Bangor, Wash., homeport of Ohio and Michigan. “Of the guys getting ready to go to major command, about one-half of them are listing SSGNs as the No. 1 choice. When I run into old shipmates who are getting ready to go back on sea duty, they’re all talking about asking for SSGN.”

Ratliff said the Navy should advance the SSGN concept to give it greater capability with, for example, unmanned undersea vehicles and perhaps unmanned aerial vehicles.

“If you roll open [the missile tubes], 50 feet deep with a 7-foot interface to the sea, your imagination just wants to take off on the things that we could develop and put on board that submarine,” he said. “Now that we’ve proven that it can do everything that we built it to do, we can start taking it to the next level.

“That wouldn’t be changes to the platform. That would be putting additional things on it that we have the volume to accommodate,” Ratliff said. “I have nothing but praise for the design, building and operations of the SSGN. I think we did it right. We have a very credible way for us to bounce back and forth with the SSGN and the use of payloads.”

Each MAC features seven cells – six for Tomahawks and one for service access, hence no loss of missile capacity.

Electric Boat avoided the temptation to increase capacity – and cost – with the redesigned bow to use all 14 cells for missiles. The Navy required only 12 missile cells. “We potentially could have seven Tomahawks [in each MAC], so we made a conscious decision working with the Navy to minimize the cost and maximize the affordability,” Holmander said.

Electric Boat is acquiring a spare MAC from the SSGN program to demonstrate on its prototype large-diameter tube later this year. Holmander said the redesigned bow “would save \$40 million per ship, an \$800 million program savings” over the 20 Virginia SSNs in Blocks III, IV and V.

“We believe that the savings are accurate, so much so that we’ve built it into our pricing strategy in doing the Block III contracts,” he said. “That’s certainly a testament of our commitment.” Holmander said Electric Boat included more than 100 separate design initiatives that were mature enough for fixed-price proposals in the technical baseline for Block III.

“We’ve had a bunch of additional projects in process that were not mature enough that we see could be potentially incorporated in the future,” he said. “We are actively working with the Navy to figure out what [each project’s] place is in the program, so there could be some additional savings.” The redesigned Block III bow is a major stepping-off point for features being considered for Block IV. The two large-diameter payload tubes on Block III feature hatches that open only on the top of the bow. Electric Boat is looking at modifying the tubes with hatches that also open at the bottom of the hull, called “bottom drop” in company terminology. “We left space envelopes in our design to not preclude being able to do that in the future without snowballing the change into a bunch of other things,” Hesch said. “We are trying to stay with the rest of the fleet on opportunities with payload.”

“We’re also looking at payload systems that would allow us to launch and retrieve payloads from these tubes, consistent with some experimentation that is going on the [Ohio-class SSGN],” said Thomas N. Plante, Electric Boat’s program development manager for the Virginia SSN. Plante said the large-diameter tubes are not as long, but have similar diameters, as the SSGN payload tubes. Electric Boat is looking to leverage the capacity of the large-diameter tubes as potential launchers for unmanned aerial vehicles, unmanned underwater vehicles and special forces payloads, among others. “The other thing we’re focused on is improvement [of the] life-cycle affordability of the class,” he said. “The class design changes that improve [the] affordability of maintaining the ships as we build up the fleet [is] a whole group of ideas and technologies that we’re off to develop.”

With the necessity of keeping the cost of the submarine below \$2 billion to afford two per year, life-cycle affordability improvements can offset the additional cost of new or improved capabilities in the coming production blocks. “Efforts are under way to identify and pursue new technologies and design changes that would enhance the Block IV’s warfighting capabilities while reducing construction and total ownership costs,” said the NAVSEA spokesman. “This early work will focus the program office’s efforts so that it invests in only those areas that provide the best capability at an appropriate cost.

“Specific examples of new technologies include a flexible payload sail, conforal acoustic velocity sensors wide aperture array, payloads that take advantage of the payload tubes that are part of the Block III and future Virginias, and technologies and design modifications that will reduce the submarines’ construction and life-cycle costs,” he said. Plante said Electric Boat is considering modifying the submarine’s sail and adding more sensor capability to it. Some improvements being considered by Electric Boat include using less-expensive composite materials where allowed by the design, thereby reducing or eliminating the need for expensive, exotic materials; developing special tooling and [production] process technology; and minimizing obsolescence of electronics on the submarine with new ideas in installation and testing.

“We continue to develop electric ship technology,” Plante said. “We believe there is a strong business case for replacing hydraulics with electric actuation. It’s not just ‘go change drawings;’ you have to develop the actual technology and make sure that you prove it out and demonstrate it.”

Although the concept of external payloads, such as weapons, is being explored by the Defense Advanced Research Projects Agency, Hesch said that, specifically with regard to Block IV, “we’re not necessarily seeing anything that we can count on in the external payload area.”

“It is premature to discuss opportunities for new technologies and modifications for Block V Virginias without knowing what the Navy will be able to incorporate into the Block IV ships,” the NAVSEA spokesman said.

Electric Boat expects the future blocks to benefit from the economic advances in the Block III program. The multiyear aspect of the Block III contract, when combined with economic order quantity, “allows us to procure the material much more efficiently than what we’ve been able to do in the past,” Holmander said. “It’s really becoming the key ingredient to helping us reach the goal. The multiyear buy has allowed us to work with the vendors and get the material here in time to support the other initiatives we have, like schedule reduction.”

The certainty of multiyear procurement allows vendors to “reduce the cost of risks and lower their price of material,” he said. The schedule reduction mentioned by Holmander is the effort to trim the construction time for a Virginia SSN to 60-63 months, down from 103 months. Electric Boat and Northrop Grumman Shipbuilding have achieved significant progress toward that goal. New Hampshire, one of six Block II boats, was completed in 71 months and delivered in August, eight months ahead of contract schedule.

“By the time we finish off Block II we expect to achieve a 63-month goal,” Holmander said. “We have plans to achieve a 60-month ship by the time we go into a two-per-year production rate.” The increase to two Virginia SSNs per year will require increased work-force levels and bring more stability to the final assembly work force. For example, Holmander expects Electric Boat’s 2,100-strong work force at its Quonset Point, R.I., manufacturing and modular construction facility to increase by several hundred workers by 2011.

The company’s final assembly and test facility in Groton, Conn., currently experiences “peaks and valleys,” he said, because Electric Boat alternates with Northrop Grumman, with each company delivering one submarine every other year. “Going to two per year will allow us to stabilize [our work force] and then further increase our efficiencies once we are in a steady state here,” he said. The Groton facility plans to hire approximately 650 additional personnel to support the program. Northrop Grumman Shipbuilding is ramping up its work force at its Newport, News, Va., shipyard by 700 to 1,000 workers by 2015, for a total of 2,500 to 3,000 in the Virginia program, according to Becky Stewart, the company’s vice president for submarines and fleet support.

U.S. professor recommends Gotland-class submarine

Defense Professionals, March 4, 2009

In the February issue of the respected Armed Forces Journal, Professor Mikan Vego of the US Naval War College proposes that the US Navy complement its force of nuclear submarines with a number of conventional submarines. This proposal derives from expectations that the US nuclear submarine force will be reduced over the next 15 to 20 years, and that conventional submarines are better suited for shallow-water missions, as in the littoral zone off the US coast. It is precisely these zones that are currently subject to the greatest threat, throughout the world.

Professor Vego points to Kockums’ Gotland-class submarine as one of two main candidates in the field of advanced conventional (non-nuclear) submarines. The Gotland class is described as exceptionally manoeuvrable, silent-running, difficult to detect and tough, with the ability to remain submerged for weeks at a time. HMS Gotland also enjoyed considerable success during the two years in which she was leased to the US with a Swedish Navy crew. Her performance gained the attention of naval and industry professionals throughout the world.

Compared with other conventional submarines of similar capabilities, the Gotland class comes with an attractive price tag, notes Professor Vego. According to him, a Gotland-class submarine costs almost 30 percent less than other comparable submarines. And the Gotland class also possesses better stealth characteristics.

Submariner Astronaut returns to Groton

The Dolphin, March 5, 2009

GROTON, Conn. – “It’s an indescribable experience,” said NASA’s first submarine officer astronaut, Navy Captain Stephen G. Bowen, as he relayed the thrill of rocketing into orbit to an assembly of students at the Catherine Kolnaski Magnet School, Wednesday, February 25. “And when the shaking, noise, and the g’s subside and you enter the weightlessness of space, you just want to say, ‘Let’s do that again!’”

Bowen returned to Groton to share his experiences from his first space flight during the STS-126 Endeavour mission, November 14-30, 2008. Bowen made presentations at the elementary school, Naval Submarine Base New London, and the Submarine Force Library and Museum. He also visited with Sailors on the Virginia Class submarine, USS Texas (SSN 775).

A Cohasset, Massachusetts native and a United States Naval Academy graduate in the Class of 1986, Bowen was Executive Officer for Pre-Commissioning Unit Virginia (SSN 774), the first Virginia Class submarine, when he was selected by NASA as a mission specialist in July 2000.

Bowen’s early fascination with space followed his elementary school’s competition to design a postage stamp for the 1975 Apollo-Soyuz space mission, the first joint flight of the U.S. and Soviet space programs.

Engaging the students with a multi-media presentation, Bowen encouraged them to pursue their dreams and apply themselves not only to the subjects that they like at school, but also to those that they like less.

“You never know when outside the box thinking and simple solutions are going to make all the difference,” Bowen said, as he described his space shuttle team’s solution and successful efforts to repair the rotary joints of the International Space Station’s (ISS) solar arrays. “It came down to greasing the rotors with a grease gun.”

Bowen also highlighted the other key objectives of Endeavor’s almost 16-day mission, including expanding the living quarters of the ISS to house 6 member crews by delivering a new bathroom, kitchenette, two bedrooms, an exercise machine, and a water recycling system.

As Bowen explained that maintaining a sufficient water supply at the space station will become even more important once the space shuttles end their service in 2010, his praise for the water recycling system and the scope of its impact became clear to the students in a photograph. The photo depicted two weightless shuttle astronauts each holding a sign, one reading: “yesterday’s

coffee,” and the other: “today’s coffee.” A number of students elicited grimaces and “eewwhhs,” as Bowen noted how the recycling system will collect and purify urine and humidity from the air for re-consumption by the astronauts.

While the young students were captivated by Bowen’s discussions of what they could most relate to, such as how astronauts use the bathroom in space and what are the best freeze dried, pre-packaged foods, presentation attendees at the day’s other events and Sailors aboard Texas were more interested in learning how Bowen’s Submarine Force experience and training translated to NASA and the space program.

“I have to admit,” said Bowen, “from space the view is much better, but the food is certainly much worse than that on a submarine.”

Bowen was able to enjoy the lunch time fare aboard USS Texas before he toured the Virginia Class submarine with the ship’s Commanding Officer, Cmdr. James L. Gray Jr.

Virginia was still in sections when he left the submarine under construction to join NASA.

“I could spend all day here,” Bowen said aboard Texas. “This is really amazing.”

Of course, while some similarities between a submarine and the space shuttle are self-evident, others are only known to submariners, noted Bowen.

“There are a lot of parallels beyond having a metal cylinder as a living environment,” said Bowen. “In getting your Dolphins [earning your submarine qualifications], you realize your importance to the ship and the crew. Everyone depends on each other to live. Being a crew member on a submarine was outstanding preparation.”

During his space flight, Bowen recognized a special submarine and crew. The year 2008 marked the 50th anniversary of NASA and the 50th anniversary of USS Nautilus’ (SSN 571) world-shattering achievement: the first crossing of the North Pole by a ship.

Bowen presented the Submarine Force Museum with a flag from Nautilus that he borrowed to fly in the shuttle and two submariner dolphin pins.

“Astronauts that have gone before me have commented on the spiritual feeling as you look down on the Earth and see continents with no countries, no borders,” said Bowen. “When I looked at Earth, my thoughts turned to two things. First, I noted the amazing amount of water that covers the globe. And second, I thought of the thousands of technicians, builders, and support crew members that had a hand in putting the shuttle into space. Like a submarine and the yard workers at Electric Boat and Newport News shipbuilding, there is a lot that goes into such technological marvels. It’s just amazing.”

That humble demeanor was a hallmark to all who encountered Bowen throughout his day in Groton.

The first submarine officer selected by NASA, Bowen respectfully pointed out that the first submariner in space was former astronaut Michael J. McCulley, who served as an enlisted Sailor in 3 submarines. McCulley would go on to receive a commission as a Navy pilot, join NASA, and pilot the STS-34 mission in 1989.

When SUBASE’s community service partner school Principal Dominick Bassi thanked Bowen, he said: “It’s a true honor and privilege to have this opportunity to meet a real American hero.”

Bowen shook his head at Bassi’s compliment and would use his SUBASE presentation to recognize some other heroes.

Bowen called recently returned Individual Augmentees (IAs) Master-at-Arms Second Class Sheila McLean and Master-at-Arms Second Class George Harrison, both from the SUBASE Security Department, onto the base’s Dealey Center Stage.

McLean and her Military Working Dog Bak returned in February from deployment to Iraq and Harrison returned in January from deployment to Afghanistan. Bowen presented each with American flags that had travelled into space aboard Endeavor and certificates of appreciation for their service.

“You’ve been on the front lines protecting the freedoms of all Americans,” commended Bowen. “I want to thank you for your service and what you do.”

History Revisited - The First Submarines Built in Groton

By Jim Streeter, Interactive Desk, March 4, 2009

While having a coffee at a local restaurant a few weeks ago, I overheard some young men discussing the history of what is now known as the Electric Boat Corporation, referred to by many as “EB.” As they continued their conversation my ears perked when they mentioned that the first submarine built in Groton was the USS Cuttlefish.

On my best behavior and, of course, in a most diplomatic fashion, I introduced myself to the gentlemen and explained that the Cuttlefish was indeed the first submarine built for the United States Navy in Groton, but it was not the first submarine built here. With their interest piqued, I relayed what I knew about the submarines that were built at EB prior to the Cuttlefish.

I explained that “EB” in Groton had its beginning in 1911 when the Electric Boat Company of New Jersey acquired the New London Ship and Engine Company (NELSECO) in Groton to build diesel engines, machinery, and parts for submarines. The NELSECO shipyard was located where the present Electric Boat Corporation is situated.

In 1922 Electric Boat expanded the facilities at the NELSECO yard to assist in overhauling 30 S-Class submarines. The overhauls entailed rebuilding the engines and installing torpedo tubes on the boats.

In November 1924, the Electric Boat Company signed a contract with the government of Peru to build two submarines as well as torpedoes for the South American republic. They also were to construct a naval submarine base in Callao, Peru. The submarines were to be completely constructed at the NELSECO Yard in Groton. The cost to build each of the subs was approximately \$1,220,000 with

an additional cost of about \$260,000 for the torpedoes and associated accessory items, totaling more than \$260,000. More than 500 employees were added to the payroll at the yard as a result of the contract.

The submarines were of the Holland type design. At 200 feet in length and displacing approximately 800 tons, they were somewhat larger than the U.S. Navy's R-type submarine and smaller than the S-type. Each was powered by two NELSECO diesel engines which provided a top speed of 14.5 knots. The vessels had a cruising radius of about 8,000 miles. Both ships were armed with four torpedo tubes and a three-inch .50-caliber gun.

The keels for the submarines, named R-1 and R-2, were both laid on Feb. 25, 1925. Miss Isabel Leguia, the daughter of Peruvian President Augusto B. Leguia, christened the keel of the R1, and Mrs. Clark Woodward, wife of Admiral Woodward, the chief of the American Naval Mission in Peru, christened the R2. Approximately 1,000 guests, including officials from the United States and Peru and employees of the shipyard, attended the ceremony.

On April 29, 1926, the Peruvian Sub R-2 was launched. Mrs. Woodward was unable to attend and Mr. Enriqueta Monge, the wife of the chief of the Peruvian Naval Commission, christened the submarine. No explanation could be found as to why the R-2 was launched prior to the R-1. Incidentally, a bottle of Peruvian wine was used to launch the vessel. More than 1,500 attended the ceremony, and the boat was delivered to the Peruvian government on July 31.

On July 12, 1926, the R-1 was launched. Nearly 2,000 spectators assembled for the ceremony. Mrs. Maria Meyer Ontaneda, wife of the commander of the R-2, christened this vessel. It was delivered on Oct. 4.

The Peruvian government was so pleased with the submarines constructed at the Groton yard that by early December of 1926 another contract was awarded to the Electric Boat Company to have two additional submarines built at NELSECO

The Cuttlefish was launched at the Groton shipyard on Nov. 21, 1933.

France Builds A U-Boat

Strategy Page, March 5, 2009

French submarine builder DCNS is now selling a new coastal boat, the Andrasta class. This is an 855 ton, 153 foot long sub, with a crew of 19 (plus 8 passengers, usually commandos). The boat can stay underwater for up to five days. Surfaced, it can travel up to 5,400 kilometers, at slow (170 kilometers a day) speed. There are sufficient supplies on board to keep the boat out up to 30 days. Most missions are expected to be more like two weeks. The boat has six forward firing torpedo tubes, which can also carry mines or anti-ship missiles. There are no reloads, all the weapons are stored in the torpedo tubes. There is a special chamber for letting divers exit the boat while underwater.

The Andrasta is similar in size to the 769 ton German World War II Type VII boat, which was the most widely used (700 built) sub during the Battle of the Atlantic. The Type VII was longer (220 feet) and thinner, and didn't have all the electronics of the Andrasta, or all the automation. Thus the Type VII had a crew of 50 and carried 14 torpedoes (used in five tubes), plus an 88mm deck gun (and 220 shells). Moreover, the Type VII could only spend about one day underwater, although it had a surfaced range of 15,000 kilometers.

The Andrasta is built to be quiet, and use its powerful passive sonar to detect surface ships or subs, and use its heavy torpedoes to destroy them. The Andrastas cost less than \$200 million each (half the price of most normal size subs), and are attractive boats for nations wanting to use submarines mainly as defensive weapons.

Arctic sovereignty: Another threat runs silent and deep

By Michael Byers, Globe and Mail, March 5, 2009

Russian bombers in international airspace are mostly a distraction. A greater threat to Canadian sovereignty runs silent and deep, in the form of a U.S. submarine that might sail the Northwest Passage this week.

On Saturday, the Los Angeles Times reported on Ice Exercise 2009, a classified mission described by the U.S. Navy as the "testing of submarine operability and war-fighting capability" in the Arctic Ocean. Two nuclear-powered attack submarines, USS Helena and USS Annapolis, will be testing their communications equipment in the waters around and below a research station on the sea ice some 300 kilometres north of Prudhoe Bay, Alaska.

According to the L.A. Times, the Helena recently left its home port of San Diego. We don't know when the other submarine departed for the Arctic. But we do know that the Annapolis is based in Norfolk, Va. - and that's the rub.

There are two obvious routes from Virginia to northern Alaska. The first involves a long detour to the east and north around Greenland, sailing through international waters. The second route involves a 2,000-kilometre shortcut through the Northwest Passage, which Canada claims as "internal waters."

In the case of Israel v. Hamas, two wrongs don't make a right

Mr. Harper, apologize to the 'High Arctic exiles'

Submarines are one of the reasons why the United States claims that the Northwest Passage is an "international strait." Under the law of the sea, submarines may pass through an international strait without surfacing or otherwise alerting the adjacent coastal state or states. In Canadian internal waters, however, Washington must obtain Ottawa's permission for any voyage, whether on the surface or submerged.

It's no secret that U.S. submarines regularly use the Northwest Passage. Inuit hunters see periscopes in Barrow Strait, and a U.S. submariner once confessed to me that he'd sailed through. What isn't clear is whether Canada's permission has been sought and received.

Ironically, total ignorance of the voyages would work in Canada's favour. In international law, a country must show some sense of legal entitlement or obligation before its actions can contribute to establishing a new right.

Still, it seems likely that Canada - an ally of the United States in both NATO and NORAD - has known about at least some of the voyages and simply kept quiet.

On Nov. 6, 1995, then-defence minister David Collenette was asked in the House of Commons about submarines in the Northwest Passage. He replied: "Mr. Speaker, we have a number of bilateral agreements with the United States. One of them provides for the movement of U.S. vessels in Canadian waters upon agreement of such a manoeuvre. ... When the U.S. requires such permission, they let us know that they intend to use our waters and we acquiesce."

Two months later, Mr. Collenette retracted this statement. He wrote: "There is no formal agreement covering the passage of any nation's submarines through Canadian Arctic waters. However, as a country that operates submarines, Canada does receive information on submarine activities from our allies. This information is exchanged for operational and safety reasons with the emphasis on minimizing interference and the possibility of collisions between submerged submarines."

This week's voyage of the Annapolis makes it important that Canadians know which of Mr. Collenette's responses was correct.

We can hope it's the first one, since a bilateral agreement on submarine voyages would likely be modelled on the arrangement concerning icebreakers. The 1988 Arctic Co-operation Agreement specifies that voyages by coast guard icebreakers are "without prejudice" to either country's legal claim.

But if Canada is told about the voyages without being asked for permission, the combination of knowledge and acquiescence could fatally undermine its position.

The key criterion for an international strait is usage by international shipping without the consent of the coastal state. Ottawa's failure to protest against the submarine transits could constitute evidence that - in the corridors of international diplomacy, where it really matters - Canada has already surrendered its claim.

Taking physical action against the submarines is neither necessary nor practical. In international law, protests are sufficient to prevent the protested action from creating a new right.

For the moment, the issue of submarine voyages remains off the table, legally speaking, as long as both governments continue to treat these activities as officially secret. But keeping secrets is becoming ever more difficult in a rapidly warming, increasingly busy Arctic.

The issue of the Northwest Passage cannot be avoided. It's time for both Canada and the United States to stop the shenanigans - and negotiate a comprehensive agreement on shipping in the North.

Ron "Warshot" Smith

Submitted by Gil Raynor, March 2, 2009

There will be a service and interment at Arlington National Cemetery March 17, 2009, for Ron "Warshot" Smith.

Ron was a WWII submariner who served on the USS Seal (SS 183), survived a severe depth charging incident, and received the Purple Heart. He was the author of "Torpedoman," and co-author with Flint Witlock of "Depths of Courage."

The service is open to submariners and others who wish to attend.

A tribute to Ron can be found at this link: <http://www.submarinesailor.com/biography/ronwarshotsmith/warshot.asp>.

Google Earth Exposes UK Secrets

By David Allen, TechWatch.com, March 3, 2009

It just goes to prove that the likes of "James Bond" are no longer required, when all that is required is a quick Google Earth search. It is amazing what can be found.

For instance the Nuclear Crisis HQ in Northwood, the home of the SAS in Herefordshire, GCHQ in Cheltenham, MI6 HQ in London and more worryingly the Faslane Nuclear Submarine base.

These can easily be found by anyone who would want to do so.

The UK military is said to be furious at this, as these bases can easily be located and seen very clearly as a satellite image.

These images show every detail and could help an enemy plan an attack with ease.

Of course we cannot be sure how old these images are, but that is not going to make too much difference.

San Diego Sub Heads For Exercise In Arctic Ocean

By Mike Gleason, 10News.com, Feb. 27, 2009

SAN DIEGO – A San Diego-based nuclear attack submarine, the USS Helena, departed Naval Base Point Loma Friday for a Navy exercise in the Arctic known as ICEX.

The Helena, commanded by Commander Daniel Brunk, will conduct classified testing of submarine operability and war fighting capabilities in Arctic waters, a Navy news release said.

According to the Navy, the exercise will be supported by the Applied Physics Laboratory Ice Station (APLIS) being built on the Arctic Ocean sea ice north of Prudhoe Bay, Alaska.

Officers there will monitor the movement of and communication with USS Helena and a Norfolk-based submarine, USS Annapolis.

The camp consists of a small village, constructed and operated especially for the ICEX by the Applied Physics Laboratory of the University of Washington.

The overall exercise has been planned and will be coordinated by the Navy's Arctic Submarine Laboratory located at Naval Base Point Loma, said LCDR Alli Myrick Ellison, the Public Affairs Officer for Submarine Squadron ELEVEN.

In addition, LCDR Myrick Ellison said, several members of the staff of Submarine Squadron ELEVEN at Naval Base Point Loma will be working at the ice camp in support of the exercise.

Trident submariners conduct strategic deterrence missions

By Gerry J. Gilmore, Airforce News, Feb. 27, 2009

WASHINGTON – Somewhere in the Atlantic Ocean last week, sailors aboard the Trident strategic missile submarine USS Maryland prepared to start a series of underwater practice maneuvers known as “angles and dangles.”

The Maryland's captain, Navy Cmdr. Jeffrey M. Grimes, and his chief of the boat and senior enlisted leader, Master Chief Petty Officer Michael C. McLauchlan, intently observed the actions of the officers and enlisted crew in the control room as the vessel silently tilted downward.

Trident strategic deterrent submarines, nicknamed “Boomers,” carry as many as 24 Trident II D-5 nuclear ballistic missiles.

“We're there on the front line, ready to go,” Commander Grimes said. Important missions, he said, are “happening every day in the deep, blue ocean.”

Tridents are nuclear-powered, Ohio-class submarines. At 560 feet long and 42 feet wide, they are the largest submarines in the U.S. Navy's inventory.

Meanwhile, in the control room, Petty Officer 3rd Class Lamar Johnson, 23, sits calmly at the helmsman's station as he adroitly manipulates the yoke control that adjusts the submarine's depth and direction. At about 400 feet under the waves, the Maryland leveled off, then began ascending.

After the exercise, Petty Officer Johnson, who hails from Chicago, said piloting the Maryland underwater is a matter of “paying attention, making sure you're tracking the gauges.”

Sailors volunteer for submarine duty and are among the top performers across the Navy, Master Chief McLauchlan, a 26-year veteran, said.

“There is a pretty rigid screening process to get a guy to come into the submarine force,” Master Chief McLauchlan said.

New submariners are subject to stringent qualification criteria when they report to their first boat, he said, while submarine veterans experience continued certifications during their careers.

During their first year while assigned to their first submarine, enlisted members are required to earn the coveted silver “dolphins” pin that says they've learned how to function as a team member aboard their boat. Dolphins-pin recipients also must demonstrate knowledge of basic submarine operations, as well as the ability to work as a team member to put out fires and control flooding.

“They kill themselves to try to get those dolphins, because it's very important to them,” Master Chief McLauchlan said of enlisted sailors aboard their first submarine. “And we make it very special when we present them. Once they get those dolphins, it's just the start for more and more for these kids.”

Commissioned officer submariners also must qualify to wear golden dolphins.

About a week earlier, the Maryland's “Gold” crew under Commander Grimes' command embarked on its 53rd patrol from its home port at Naval Submarine Base King's Bay, Ga.

Trident submarines have two crews, called Blue and Gold, which rotate patrols. One crew is at sea for 60 to 90 days, while the other trains ashore. In this way, the vessels can be employed at sea 70 percent of the time, when not undergoing scheduled maintenance in port.

The USS Maryland is “a platform that is undetectable, that cannot be found, and yet, is in constant connection with the national command authorities,” Commander Grimes explained. The submarine, he added, possesses “the stealth and power needed to respond to a global crisis with devastating force.”

The Maryland's crew routinely performs damage control exercises, consisting of flooding and fire scenarios, as well as mock battle and strategic-deterrence drills during its patrols, so that if the real event should ever occur, “we're ready to go,” he said.

As the Maryland's commander, it's important to impart to the crew "how they fit together on the ship as a team," Commander Grimes said.

"They realize the mission is relevant and they feel the importance of their job," he said. "They leave their families at home. They work long hours for me when we have the boat in for refit.

"It's all about the mission," Commander Grimes said, adding that Trident submarine sailors stay in the Navy "because they like what they do, and they are true patriots."

The Navy's attack and strategic-deterrent submarine force "is safe, secure and reliable and ready to perform its mission, 24/7," said Navy Capt. Kevin R. Brenton, who was along for part of the Maryland's patrol and is preparing to take command of Submarine Squadron 20 at King's Bay.

"We couldn't do it without the extraordinary young men that man these submarines," Captain Brenton said. "They're America's best and brightest."

Besides its 160-member crew, the Maryland also was carrying a group of journalists, who early on Feb. 15 had been conveyed by tugboat to the Maryland for a two-day orientation tour. During the journalists' visit, the submarine would be submerged for 24 hours.

A nuclear-powered Trident submarine like the Maryland produces its own drinking water and oxygen, and, therefore can remain submerged nearly indefinitely, Commander Grimes said, needing to surface only to take on food.

The Maryland's lead culinary specialist, Chief Petty Officer Tony L. Thompson, 40, said he and his staff prepare food for about 120 crew members during the course of the day. Submariners, he said, enjoy the best food in the Navy.

"We do all we can to make them comfortable down here," Chief Thompson said of his team's efforts to provide the best meals possible for the Maryland's crew.

Chief Thompson, a 20-year Navy veteran, said he enjoys the "close-knitted" camaraderie that's part of duty aboard submarines such as the Maryland.

"I could walk around and talk to anybody around here," said Chief Thompson, as he enjoyed a plate of prime rib. "Everything is 'one' crew ... because you've got to depend on everybody.

"I'm a cook," Chief Thompson said, "but at the same time, I can go and put out a fire."

Near the end of the journalists' visit, the submarine surfaced to make its rendezvous with the tugboat that would return them to shore.

A cloudless, bright-blue sky stretched across the horizon as Lt. j.g. Eric S. Spurling, Petty Officer 2nd Class Kyle G. Fulmer and Seaman DeAngelo Jackson Adams pulled watch duty on the bridge atop the Maryland's sail panel, or uppermost structure. The day's temperature was unseasonably mild.

Submariners belong to "a real tight community" of sailors who perform a vital, unique mission, said Petty Officer Fulmer, 23, from Dillon, S.C.

"You have to be able to trust everybody with your life. ... Any time, anything could go wrong, and if you're beside it, you have to be ready to act on it," he said.

Seaman Adams, a 21-year-old sailor from Detroit, cracked a sliver of a smile at his machine-gun station as the breeze batted at his orange windbreaker.

He said he loves the sailor's life aboard the Maryland.

"The mission of being out to sea, under water, is just cool, you know?" he said.

Britain's nuclear defence HQ could be under threat from terrorists using Google Earth

By Alex West, The Sun, March 1, 2009

Close-up aerial views of the top-secret Naval base are on the computer program — available for free over the internet.

It even reveals the longitude and latitude of the facility in Faslane, Scotland — home to the UK's Trident-armed nuclear submarine force.

And pictures clearly show two vast Vanguard Class submarines — each capable of carrying 16 nuclear missiles.

Military experts warn that would make it easy for terrorists to launch accurate mortar or rocket attacks.

One told The Sun: "A strike on our nuclear capability would cause untold devastation. Terrorists could have a field day, knowing exactly where to aim strikes to cause the maximum devastation."

As well as HM Naval Base Clyde at Faslane, the program also clearly shows the Trident Special Area, just ten miles away, where nuclear warheads are stored.

And it can be used to pinpoint Britain's nuclear crisis HQ in Northwood, North London, MI6's London offices and the SAS training facility in Hereford.

Satellite pictures show the exact location of SAS sleeping quarters, office blocks, bunkers and parade grounds.

Our source said: "We should be censoring sensitive military sites, not only for the protection of the servicemen and women, but also for the protection of the country."

Military top brass are said to be furious that such sites can be viewed by anyone.

Two years ago the Government demanded Google blot out British bases in Iraq after a terrorist held in Basra was found with a Google Earth map of the Shatt Al-Arab base — home to 1,000 soldiers.

It also agreed to fuzz out the Trident base, the highly-sensitive GCHQ eavesdropping centre in Cheltenham, Gloucs, and the SAS training camp.

But following updates to the Google Earth programme, the locations are visible again.

Target

Last night an MOD spokesman said it struggled to maintain the security of all the UK's sensitive military sites.

He said: "We do everything to protect bases but it's impossible to control all websites providing satellite imagery.

"If people are really determined to target these sites they can find these images and there is nothing we can do to stop them."

A Google spokeswoman said: "We do listen to requests from governments but we don't comment on the details of any of those discussions."

Navy eyeing micro-submarine

By Manoj K Das, ExpressBuzz.com, March 2, 2009

KOCHI: In an effort to strengthen its underwater attack capabilities the Indian Navy is in talks with the Naval Science and Technical Laboratory, Visakhapatnam, to build a micro-submarine for its strategic operations.

The NSTL scientists have put the preliminary design of a vessel on their drawing board. Sources told Express that the micro-submarine will have a carrying capacity of six persons. It will have the endurance of a normal submarine.

"All major navies have a fleet of small submarines. They are used for reconnaissance and intelligence gathering. The same boats are also used for special operations like closeto- shore commando strikes," sources said.

The Indian Navy has asked NSTL scientists to come up with a model similar to the ones used by advanced forces. "A manned microsubmarine has gained strategic relevance in this era of surgical strikes. It won't leave loud signatures that can be heard by enemy sonar or other monitoring mechanisms," sources said.

The project will be a totally indigenous effort. The Defence Ministry wants this to be showcased as a public-private initiative. "We will rope in builders or firms that will play a role in fabricating its parts from the beginning. There are a few names like L&T and Tata who have evinced interest in playing a bigger role in the defence industry," sources said.

The NSTL is expected to finish the design by 2010. The hope is to carry out the first trials by 2015. In another development, the Navy successfully carried out two live trials of super torpedo Varunastra. This torpedo weighs twice as much as the conventional one and has a longer range.

"The two test firings were on target.

Varunastra can accurately kill a big ship anywhere in a radius of 10 km. This being a big weapon, one torpedo can effectively take out a potential threat," sources said adding that the Navy has asked for 100 weapons which will be delivered by the year end.

Automation Kills Submariner Spirit

Strategy Page, March 1, 2009

The Australian Navy has six Collins class subs, which are the core of Australian naval power, and the sailors who serve on these boats are not happy. The Australian admirals are at a loss about what to do. Recently, the navy sent in some psychologists, to discuss the matter with the sailors, and obtain details from the sailors themselves. The results were demoralizing for all concerned. The sailors felt unappreciated and overworked. Half of them were getting out of the navy as soon as their current enlistments were up. Many found the work boring, and felt they spent too much time at sea.

As a result, only enough qualified sailors are available to provide crews for three of the six Collins class subs. Each boat requires a crew of 45 highly trained sailors (eight of them officers.) The initial navy response was to offer large cash bonuses to get existing submarine sailors to stay in the navy, and to attract qualified recruits to serve on subs. This helped a bit, but at the expense of officer morale. The bonuses increased sailors annual pay by up to \$38,000, which meant officers were now making less than many of the men they commanded. Not enough new recruits were attracted. The submarine service has high standards, thus many of those who were interested, were not qualified to undertake the long training courses. The global recession may help, because the Australian economy has been booming, providing many opportunities for the kind of guys who would qualify for the submarine service.

The Collins class boats were built in Australia during the 1990s, and are based on a Swedish design (the Type 471.) At 3,000 tons displacement, the Collins are half the size of the American Los Angeles class nuclear attack subs, but are nearly twice the size of European non-nuclear subs. Australia needed larger boats because of the sheer size of the oceans in the area.

There were a lot of technical problems with the Collins class boats, which the media jumped all over. The design of these subs was novel and ambitious, using a lot of automation. This reduced the crew size to 45, but resulted in a higher workload for the submarine sailors. This is a major reason for the morale problem. Another problem with the small crew was that every one of the sailors had to be pretty sharp to begin with, then required years of training to learn the job, and more responsibility for each sailor as well.

The Australian navy has been suffering from a serious geek shortage for several years now. With a total strength of 13,000, being short a few dozen people in some job categories can have serious repercussions, and that's what happened to the submarine force.

For example, the navy is short about a third of the marine engineering officers it needs. There are less serious shortages in officers specializing in electrical systems and weapons systems. Australian warships have been active in the war on terror, resulting in many crews being away from home for up to six months at a time. There are shortages of both officers and sailors with technical skills.

The situation is further complicated by a booming economy, and big demand for those with engineering degrees, and a few years of experience. This makes it easy for engineering officers to leave the navy and get a higher paying, and more comfortable, civilian job. The navy is responding with cash bonuses, better living and working conditions, and other fringe benefits. But the submarine force cannot have their working conditions improved much. While the subs are of modern design and recent construction, they are still subs. That means not much space or privacy in there.

All Western navies have similar problems, and have applied similar solutions, with some degree of success. U.S. subs have the advantage of being larger (the nuclear propulsion) and with larger crews (nearly three times the size of the Collins class boats). This apparently helps. Other nations have small, modern, diesel-electric boats like the Collins class, but do not send them off on long voyages. Australia can't avoid the long voyages, because Australia is surrounded by large water areas, that require a lot of travel time to traverse. It is boring to transit all of that distance, and that was exactly what the dispirited sailors reported when asked. At the moment, there is no solution in sight. So while Australia can buy modern submarines, they have not yet found a way to obtain crews to operate the boats.

ROAR: Russian Opinion and Analytics Review

By Evgeny Belenkiy, Russia Today, Feb. 27, 2009

This Friday's ROAR offers two pessimistic views on the future of Russia and its relations with the West, and one pessimistic view on the fate of America.

Yahoo StumbleUpon Google Live Technorati Scoop del.icio.us Digg Sphinn Furl Reddit Dmitry Suslov, Deputy Director of Research at the Council for Foreign and Defense, writes in NEZAVISIMAYA GAZETA that the notion of 'pushing the reset button' in Russia-US relations may turn out to be not exactly what it sounds like. He says the wide-spread opinion that the global crisis creates conditions that make the improvement of Russia's relations with the West practically inevitable is wrong, and what we see at the moment is just a break, short or long, in the negative trend.

The academic says that during this break a number of issues painful for Russia, such as missile defense and the expansion of NATO, may well be frozen for a while, and cooperation is possible on other issues, such as Afghanistan. However, no one in the West is ready to discuss President Medvedev's initiative on the new architecture of Euro-Atlantic security. The US, he says, simply ignores the initiative while the nations of Eastern and Central Europe refuse to discuss it, and Western European countries are trying to replace essential parts of the initiative with a cosmetic change of the façades of the existing security mechanisms, against the uselessness of which the original initiative is directed in the first place.

It happens, says the article, because the West is not even willing to discuss the new role of Russia in Europe and in the world, and without such a discussion, resulting in a generally accepted right for Russia to participate in Euro-Atlantic decision-making, there can be no true strategic partnership and there can be no true 'reset' of relations.

In the same paper's weekly supplement NEZAVISIMOE VOENNOE OBOZRENIE (Independent Military Review) Alexandr Khramchikhin of the Institute of Political and Military Analysis writes that the American offer to cut down the number of strategic nuclear weapons to one thousand warheads for each side (the US and Russia) raises a number of totally new problems which have been so far 'hidden' on the far periphery of the disarmament process.

The first among these problems would be the issue of China or, rather, its nuclear arsenal. If the offer is accepted, the arsenal of China will become comparable in size to Russia's and America's. China is not limited by the most detailed arms control treaties because in the past there have been only two nations which had the overwhelming nuclear potential dangerous for the whole world, while all other recognized and unrecognized members of the nuclear club had an insignificant say in the matters of reduction, in total accordance with the sizes of their arsenals.

The new Russia-US treaty, if signed on the conditions offered by the new US administration, would make China the third biggest nuclear power in the world, and on top of that – an additional major concern for Russia because Beijing, Russia's neighbor with which there is a 4.3 thousand-kilometer border, has only about 50 ballistic missiles capable of reaching the US territory while the vast majority of its nuclear warheads are mounted on medium and short-range missiles which can easily hit any spot in Russia. Besides, China is not party to any agreements limiting medium and short range missiles.

Another danger for Russia is represented by US sea-based weapons, first of all cruise missiles which are not included into the 1000 warheads offer, being tactical weapons rather than strategic. However, if the treaty is signed on the US-suggested conditions, their mobility (they can be launched from any spot in the international or territorial waters from a submerged submarine), their numbers (between 3,200 and 3,500 at the moment, to Russia's 100 approximately), easy conversion from nuclear to conventional (US cruise missiles have replaceable warheads while Russian are nuclear-only) and high precision, give the US a total supremacy in first-strike capability and defense against the remaining Russian ballistic nuclear weapons.

On top of that all, says the expert, the Russian Navy's surface ships are not designed for anything but combat at sea. They are not generally capable of fighting shore-based defenses and they definitely cannot serve as launch pads for first strike nuclear weapons, to say nothing of being an effective part of missile defense. US surface ships and submarines can do all that, he says.

The author concludes that during the negotiations the US side may 'sacrifice' its Eastern Europe-based non-operational missile defense elements in exchange for some real concessions on the part of Russia. He says the European sector of American missile defense is heading into the waste bin anyway. The Obama administration is not as terrorism-paranoid as the previous one and thus is more practical and pragmatic about strategic missile defense which can easily and successfully perform without any elements on land in Europe, using just the assets based at sea.

The expert also says that the negative dynamic in the status and numbers of Russia's strategic nuclear weapons shows that Russia is heading towards 1000 warheads anyway, without any international treaties, just by the natural wear of decades-old missiles which are being decommissioned at a rate much faster than that of new missiles being produced. That is the main reason, he says, why Russia cannot reject the American offer which, in his opinion, is actually a face-saving favor.

Mikhail Leontiev, the Editor-in Chief of PROFIL magazine, interviewed by KOMSOMOLSKAYA PRAVDA says that in his opinion the current global economic crisis is, in fact the crisis of the 'parasitic' US economy which is going to cause the total collapse of the US dollar within the next few months.

Leontiev says, after WWII the US, which at the end of the war was already the strongest economy in the world, managed to build a system of global finance based on its own currency. Since then the US economy was slowly turning into a parasite on the body of the world, and that process has caused a permanently growing dollar bubble when the US needed only to emit new dollars to solve most of its problems while other countries used the dollar for their currency reserves.

America became the consumer of the world, says Leontiev, and it was good for such countries as China, which built a mighty economy on US money, and Russia, which, due to US consumerism, enjoyed long periods of high market demand for its oil and gas. However, he continues, no bubble can be inflated indefinitely: at some point it has to burst. The US, he says continues throwing more and more freshly printed money at the crisis, inflating the bubble and bringing it closer to bursting point every day.

Leontiev says, unlike the ills in the economies of other countries, America's disease has no cure apart from the bursting of the bubble. He says the current crisis management practices remind of an attempt to cure alcoholism by large doses of alcohol. He is convinced that the bubble will burst in a few months, maybe three to five months to be exact, and that it will hit everyone, because there is no other global economy in the world besides the US economy. The Chief Editor concludes that in the current crisis Capitalism in its classic form will survive but the parasitic Capitalism of the United States of America will not.

Will Russia Get The Bulava?

By Ilya Kramnik, Russian Information and News Agency, Feb. 27, 2009

MOSCOW – Problems besetting tests of the Bulava – a promising intercontinental ballistic missile for the navy – have long been in the focus of discussion.

Bulava abortive launches are putting at risk the re-equipment of Russia's naval strategic nuclear forces, which badly need replacements for aging Soviet-built missile-carrying submarines and missiles.

Russia has inherited two classes of strategic missile submarines from the Soviet Union. One is Project 667, now represented by six 667BDRM submarines built in the late 1980s and early 1990s, and five older 667BDRs. The other is Project 941, developed as a response to Ohio-class submarines that were designed in the United States.

But, with Russia lagging behind the U.S. in sea-launched solid-propellant missiles, the Soviet rocket proved far heavier: 90 tons against the 32-ton Trident-1 and the 58.5-ton Trident-2. They also differed in dimensions: the R-39 had a length of 16 meters and a diameter of 3.4 meters, while the Trident-2 being 13.4 meters long had a width of 2.11 meters and the Trident-1 was smaller still: 10.3 meters long and 1.8 meters wide.

This difference in size translated into a difference in size between the submarines. The Ohio submarine displaces 24,000 tons under water, while Project 941 submarines approach 50,000 tons, surpassing most battleships and aircraft carriers in this respect.

The operation of submarines of this class, their maintenance and keeping in combat readiness cost the navy a lot of money. So, following some unsuccessful launches of the advanced Bark missile, which was to have replaced R-39 missiles in the silos of Typhoons (the name given in the West to the largest Soviet missile submarine), it was decided to develop a lighter missile, called the Bulava. It is intended for a new submarine of Project 955, which is far smaller than Project 941.

The job of developing the Bulava was given to the Moscow Institute of Heat Engineering (MIET), which specializes in solid-propellant missiles (incidentally, it was MIET that developed Topol and Topol-M missiles). Out of nine Bulava launches, only two were successful.

The most likely causes of failures are production defects plaguing the new missile. Hundreds of components are required to assemble a missile, and all of them are made at different industrial plants, which leave much to be desired in the way of quality.

On the other hand, the Bulava is not the only option. A likely replacement could be the 29RMU Sineva, an upgraded rocket of the R-29 family, a product of the Makeyev Design Bureau.

A way out might be the upgrading of the launched Project 955 parent submarine and the re-engineering of its sister ships still on the ways to use Sineva ballistic missiles. Fortunately, the Sineva's diameter allows it to be used from silos intended for the Bulava. True, the Sineva is a bit longer, which, however, is no insurmountable obstacle.

This arrangement also solves the problem of launching two different types of missiles - according to some sources, the Makeyev Bureau has developed a Sineva version using pop-up techniques from a dry launch tube.

Should this version prove capable of being tested, there is a chance of commissioning the parent Project 955 submarine in 2010 by equipping it with Sineva missiles. The Sineva has another important advantage: the well-oiled machinery of its batch production makes it possible to get off to a quick start without delaying the commissioning of new submarines, thus eliminating any gap that might be left by retiring 667BDR-class submarines.

It will not be long before we know the decision - tests have been scheduled for March. Any misfiring of the Bulava could put an end to its career.

Russia focuses on upgrading its nuclear arsenals

By Vladimir Isachenkov, Associated Press, Feb. 25, 2009

MOSCOW – Modernization of Russia’s strategic nuclear forces is a top priority for the government, a senior Cabinet official said Wednesday.

Deputy Prime Minister Sergei Ivanov said that upgrading ground, sea and air components of the nation’s strategic forces is costly but necessary.

“It’s expensive, it’s very expensive, but there is no other way,” Ivanov told lawmakers in the lower house of parliament. “We will develop and modernize our strategic deterrent forces.”

The Kremlin has welcomed Washington’s stated intention to intensify arms control talks to negotiate a successor to the pivotal 1991 Strategic Arms Reduction Treaty, or START I, which expires in December. But at the same time, Russian officials continue to emphasize the need for modernization of Russian nuclear forces.

Ivanov said last fall that the government budgeted 1.3 trillion rubles (\$36 billion) for weapons purchases this year. The exact figures for spending on each category of weapons, including nuclear forces, were not released.

The military’s modernization efforts have gone slowly, despite Kremlin pledges to revive the nation’s power and global prestige during what had been eight years of economic growth. The Russian military’s weaknesses, such as shortages of precision weapons and modern communications, were spotlighted during its August war with Georgia.

Ivanov told lawmakers Wednesday that other priorities for the military include upgrading the nation’s satellite network, modernizing the military’s information networks and procuring “smart” weapons.

He said the most important program for the air force is the development of a next-generation fighter jet. Officials said that the new jet is to make a maiden flight this year.

The navy should focus on smaller ships, no bigger than frigates or corvettes, Ivanov said. The statement apparently indicated that authorities have ditched the plans for building new aircraft carriers that they discussed before the current financial crisis set in, draining government coffers.

Ivanov said the spending on new weapons planned for this year will not be cut, despite the financial crisis. He pledged that the government will help provide loans to Russian defense enterprises which have suffered from a severe money crunch.

Sergei Chemezov, the head of Russian Technologies state holding company that includes top arms manufacturers, pushed for more support from the state. He warned that about one-third of enterprises in the holding are on the verge of bankruptcy.

Even before the crisis, officials said defense industries were in desperate condition because of old equipment and aging personnel.

Chemezov said Wednesday that about 80 percent of equipment in Russia’s weapons plants is outdated and the average age of their workers is over 50.

“We are nearing an end of safety and survivability margin for the military-industrial complex,” Chemezov told lawmakers.

Experts said that a steady decline of Russian arms industries has swelled production costs and eroded quality, jeopardizing government hopes to boost arms sales. Last year, Algeria returned 15 MiG-29 fighter jets it bought from Russia, complaining of their poor quality.

Some experts said that substandard parts were also the main reason behind a series of test failures of Russia’s prospective Bulava intercontinental ballistic missile.

The missile, intended to equip Russia’s nuclear submarines, has failed in five out of 10 of its test launches, making its deployment prospects uncertain. A new test is tentatively scheduled for March, Russian news reports said.

Serious Sub Collision a ‘Nuclear Nightmare’

‘Less Noise than a Grab’

By Clemens Höges, Spiegel Online (Germany), Feb. 26, 2009

The collision of two strategic nuclear submarines earlier this month shows that the Cold War is still being fought every day in the Atlantic – with the world’s most powerful weapons.

The world is a good and beautiful place, and on the Mull of Kintyre, it seems as peaceful as Paul McCartney described it in his 1970s megahit. Sheep graze on the hills of this peninsula in southwestern Scotland, and the valleys are filled with the scents coming from small distilleries that produce some of Scotland's best whiskey.

But two Saturdays ago, that illusion of peace was shattered when the HMS Vanguard, a British nuclear submarine, limped past the Mull of Kintyre enroute to its home port of Faslane. It quickly became clear that a nuclear catastrophe had almost occurred out at sea – and that it could happen at any time, because the world is, of course, not a peaceful place after all.

There were dents and scratches on the hull of the Vanguard. It had collided in the Atlantic with the French submarine Le Triomphant. The incident was a highly improbable accident, and yet it nonetheless still happened.

The crash revealed that the Cold War is still being waged in the depths of the world's oceans, and that not even allies like Great Britain and France trust each enough to share information about the whereabouts of their most powerful weapons. It also showed that a giant submarine like the Vanguard, with its 16,000 tons of displacement, could conceal itself almost perfectly.

Vanguard and Le Triomphant aren't ordinary attack submarines – they're rare and extremely expensive ballistic missile submarines. The British have four, as do the French, the Americans have 14, the Russians 15, and the Chinese are believed to have three. The hull of the Vanguard, as tall as a four-story building and roughly 150 meters (492 feet) long, contains a nuclear reactor and 16 ballistic missiles armed with nuclear warheads with a combined power more than 300 times greater than that of the atom bomb that destroyed Hiroshima.

"This is a very serious incident," says retired Royal Navy Commodore Stephen Saunders, the editor of the reference book "Jane's Fighting Ships." Experts at a British anti-nuclear organization call the accident a "nuclear nightmare."

Neither the British nor the French are willing to reveal when, where and exactly how it happened. The Triomphant is believed to have collided with the Vanguard while traveling at low speed. The French damaged the sonar dome located under the bow of their submarine. Even though highly sophisticated detection equipment is concealed under the dome, it apparently failed to detect the massive British submarine directly ahead.

Strategic submarines are high-tech weapons with an archaic mission: to exact revenge. And they are built for the day the world comes to an end. No matter how many of an enemy's land-based nuclear warheads they destroy, nuclear powers are hardly likely to track down its strategic submarines. The submarines, for their part, are designed to retaliate with such force that there can be no winners in a nuclear war.

Scientists are constantly coming up with new ways to locate and sink the submarines, but the problem is that none of these methods works reliably. For instance, although special detectors have been developed to detect the imprints such a large steel vessel makes in the earth's magnetic field, many external factors can interfere with the devices.

Infrared receivers can detect the heat generated by a nuclear reactor, but they also mistakenly identify the water being churned up behind a freighter as a submarine. Laser scanning beams cannot penetrate far enough beneath the surface. Bioluminescence detectors detect the light emitted by microbes agitated by a submarine's propellers, but the same microbes also emit light for other reasons.

That leaves sonar. So-called active sonar transmits "ping" noises into the water, and the resulting echo enables the sonar device to compute the location and size of a submarine. However, sound travels far underwater, and a submarine that transmits sound will be the first to reveal its location. This is why strategic nuclear submarines use passive sonar, a system of highly sensitive hydrophones that uses computers to convert underwater sounds into images of the dark depths.

The only problem is that submarines are extremely quiet, thanks to the use of special propellers and sound-insulated engines, and the commanders usually drive their submarines at no more than a walking pace. The super-weapons, says French Defense Minister Hervé Morin, make "less noise than a crab."

Another danger is that the ocean is a structured labyrinth for submarine pilots. Layers of water with different salinity levels mimic horizontal ramps and solid ocean floor, because the layers between them deflect sound. Warm currents build vertical walls in the same way. This creates safe spots in the middle of the ocean into which strategic submarine commanders like to embed their vessels, as well as hidden paths that tend to be used by all submarines.

This is why the British and the Americans coordinate the positions of their submarines. The French, however, keep themselves out of the loop. "France releases no information at all," says a navy spokesman, "because the nuclear arsenal is the absolutely decisive element of defense."

The recent crash, however, could spell an end to this secretiveness – especially now that France will rejoin the NATO military command structure in April.

That leaves the Russians. The 173-meter (567-foot) Dimitry Donskoy, for example, is the world's largest strategic submarine. It has twice the displacement of the Kursk, which sank in 2000, and enough nuclear warheads on board for any conceivable disaster. According to the Russian daily Komsomolskaya Pravda, the Donskoy could "simultaneously destroy dozens of cities like New York, or level half of Afghanistan."

Crisis As Sub Crews Prepare To Abandon Ship

The Australian, Feb. 25, 2009

THE navy's submarine fleet is in danger of becoming unsustainable because of a chronic shortfall of qualified sailors, with almost half of all submariners wanting to leave the navy as soon as possible, according to a confidential Defence report.

A psychological study of the submarine arm, obtained by The Australian, reveals almost half of all submariners intend to abandon the navy as soon as they can, at a time when it is already so short of crews that it can barely put three of its six Collins-class boats to sea.

The report questions the sustainability of the current Collins-class fleet at a time when the Government is preparing plans, revealed in The Australian in 2007, for a future fleet of up to 12 submarines in the forthcoming defence white paper.

It finds that morale has crumbled, with submariners saying they are overworked, underpaid and unappreciated. They feel alienated from the navy.

Officers are bitter about being exempt from the navy's submarine retention bonuses, which has led them to be paid less than the junior sailors they command.

The study found a quarter of the navy's submarine crews suffer chronic sleep deprivation and believe their job of roaming the world's oceans is meaningless.

"The career intentions results raise serious concerns about the sustainability of the submarine fleet," according to the report on a survey of navy submariners by the Defence Force Psychology Organisation.

"With between 34-48 per cent of submarine respondents reporting an intention to leave the navy in the short term the (submarine service) seems to be facing a possible crisis.

"All submarine crews report fairly low levels of commitment to the navy, suggesting many are beginning to lose a sense of esprit de corps with the wider organisation."

The report, written in July last year, was commissioned to gauge attitudes within the submarine service at a time when severe manpower shortages have placed pressure on existing crews.

The recent mining boom in Western Australia caused many technically skilled submariners to leave the navy for better-paid jobs on land.

The navy has tried to attract more submariners by offering \$60,000 bonuses for non-officers who sign on for an extra 18 months and by reducing time spent at sea. But the survey shows these measures have had little impact, with most submariners saying salaries are still not high enough to justify spending so much time away from their home and families.

"The results indicate general agreement amongst submarine crews that their pay and conditions are not sufficient compensation for the work they do," the report says.

The survey of three submarine crews – HMAS Rankin, HMAS Waller and HMAS Collins – found that almost a quarter of them worked an average of 11 hours a day, with a similar amount reporting five hours sleep or less a night.

"These results indicate that up to a quarter of submarine crews appear to be experiencing chronic sleep deprivation," the report says. This affected safety levels and morale.

There were some positive findings, with 60 per cent of crews reporting that they liked the kind of work they did and had faith in their senior officers.

"Respondents reported high levels of teamwork, high confidence in their immediate commanders and a general feeling of being valued and cared for at the unit (submarine) level (but) these positive ratings did not translate into high job satisfaction of higher commitment to the navy," the report says.

It warns there will be an exodus of senior officers - and therefore experience - unless the bonus system is changed to include them.

Montenegro to Give Away Yugoslav-Era Submarines to Serbia and Croatia

BalkanTravellers.com, Feb. 24, 2009

After giving a Tisa submarine to Slovenia, Montenegro plans to give away as gifts one to Croatia and one to Serbia.

"We have four submarines of the same kind and in good faith we want them to become museum pieces. We spoke about that with officials from the submarine associations of Serbia and Slovenia, and we have recently talked to Croatian military officials," Dragan Samardžić, Montenegrin Army CoS, said in Tivat according to the Croatian daily newspaper Slobodna Dalmacija.

"The idea is that four countries received one type of submarine each so that the 911, or Tisa submarine, would stay in Tivat in the future nautical museum Porto in Montenegro, while another three would be sent to Belgrade, Slovenia and Croatia," Samardžić said.

In the 1980s, the Yugoslav Navy built six Tisa submarines, each of which is 18.8 meters long, 2.7 wide and 3.4 meters tall. At the time, it was said that, "in case of war, [the submarines] could reach the shores of Italy and take demolition experts there to secretly create small minefields."

N Korean Military Growing, Seoul Says

'SUBSTANTIAL, NOT SYMBOLIC': The number of Pyongyang's lightly equipped special forces trained to infiltrate South Korea has increased 50 percent to 180,000

Taipei Times, Feb. 24, 2009

North Korea has completed deployment of new medium-range missiles and expanded its military to 1.2 million, South Korea said yesterday, calling the threat from its neighbor "direct and serious."

The intermediate-range missiles can travel up to 3,000km – enough to cover most of Asia – and carry a warhead of up to 650kg, Seoul's 2008 defense white paper said.

The document was published as the North steps up threats against the South and continues apparent preparations to launch its longest-range missile.

“North Korea's developing and reinforcing of conventional weaponry, as well as the weapons of mass destruction like nuclear and missiles, and the frontline deployment of military power are a direct and serious threat to our security,” the document said, using stronger language than in the last paper in 2006.

The paper did not say how many medium-range missiles Pyongyang has “deployed for operational use” since 2007.

‘NEW STRATEGIES’

The paper said the overall size of the military had grown by 20,000 to 1.19 million since 2006, but the number of lightly equipped special forces trained swiftly to infiltrate South Korea had increased 50 percent to 180,000.

“After examining the wars in Iraq and Afghanistan, North Korea appears to have developed new strategies that can complement its shortfalls while reinforcing its strengths,” said Shin Won-sik, deputy for policy planning at the Defense Ministry.

“Their aim appears to blur the line between friend and foe once a conflict erupts,” Yonhap news agency quoted him as saying, suggesting the North would wage guerrilla warfare to compensate for a lack of advanced weaponry.

“North Korea deems it very important to be able to quickly cause disarray among its enemies,” Shin told a briefing.

Pyongyang has expanded the warhead capacity of its short-range missiles by 170kg to 200kg across the board over the past few years, the white paper said.

It had increased the number of its multiple rocket launchers by 300 over two years to about 5,100 and reinforced its submarines.

The paper reiterated a 2006 assessment that North Korea possesses 2,500 to 5,000 tonnes of chemical weapons.

PLUTONIUM

The paper said the North is “presumed” to have secured about 40kg of bomb-making plutonium from reprocessing spent nuclear fuel rods at its Yongbyon reactor on three occasions in the past.

However, it dropped an earlier reference to the presumed manufacture of one or two nuclear bombs – an apparent attempt to deny the North, which carried out an atomic test in 2006, the status of a nuclear power.

Pyongyang is angry with conservative South Korean President Lee Myung-bak, who has scrapped a policy of largely unconditional aid and engagement.

It has canceled all peace accords with Seoul and state media has warned of war.

US and South Korean officials have also said the North is preparing to test-fire its longest-range missile, the Taepodong-2, which has an estimated range of 6,700km, which puts Alaska within striking distance.

Pyongyang first test-fired the Taepodong-2 last year, but it blew up after just 40 seconds.

“North Korea is a substantial, not symbolic, threat to [South Korea],” said Baek Seung-joo of the Korea Institute for Defense Analyses.

“The special warfare forces, if combined with North Korea's chemical weapons, could not only inflict substantial damage on us but also drive South Korea into panic quickly,” he said.

US Secretary of State Hillary Clinton, in strong comments on Friday in Seoul, warned the North to stop provocation and said its war of words with the South would not help it forge a new relationship with Washington.

She said any missile test would breach a UN resolution and urged Pyongyang to comply with a six-nation nuclear disarmament pact.

USSVI Base Meetings Listing

Charleston Base

Date/Time: Thursday, March 12, 2009 at 1900

Location: FRA BRANCH 269, 99 Wisteria Road, Goose Creek, SC 29445

For more info: Contact Base Webmaster, Nick Nichols at webmaster@ussvicb.org or visit the Base website at ussvicb.org.

Northern Virginia (NOVA) Base

Date/Time: Saturday, March 14, 2009 at 1100

Location: American Legion Post #162, 8210 Legion Drive, Lorton, VA 22079

For more info: Please call Base Commander Ray Stone at 703-913-9843 or Vice Base Commander Rob Smallbrock at 703-507-9602 for information. Interested submariners can also visit the base website at <http://www.ussvinova.org/>. This month's guest speaker will be former nuclear electrician Gannon McHale, author of “Stealth Boat, Fighting the Cold War In a Fast Attack Submarine.” That will be followed by the annual Chili-Cook-Off with prizes for the hottest and best overall entries.

Bay State West Base

Date/Time: Sunday, March 15, 2009 at 1400

Location: WWII Club on 50 Conz St., Northampton, MA 01060

For more info: Call Base Commander, Dave Duffié at 413-320-5088. Email dduffie@eo.kollmorgen.com.

Trieste Base

Date/Time: Sunday, March 15, 2009 @ 1500

Location: Carrows Restaurant, 24640 Madison Avenue, Murrieta, CA 92562

For more info: Contact the Base Webmaster, Bob Cox, at webmaster@triestebase.org or visit the Base website at www.triestebase.org.

Base 51

Date/Time: Wednesday, March 18, 2009 at 0730

Location: Elks Lodge, 4100 West Charleston Blvd., Las Vegas, NV

For more info: Contact nick Campanale, Base 51 Secretary, at njcampanale@cox.net.

Tucson Base

Date/Time: Saturday, March 21, 2009 at 1500

Location: CattleTown Steakhouse & Saloon 3141 E. Drexel Tucson AZ 85706

For more info: Contact Bruce Mitchell at 520-648-3855, bruce3mitch@yahoo.com, or via the base website at ussvi_tucson@yahoo.com.

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Submarine Reunion Notices

DSRV 40 Years Of Service Ceremony

Date: March 6, 2009

Location: DSU, Naval Base Coronado, San Diego, CA

For more info: Visit the DSU website at www.dsu.navy.mil or to provide mailing address to LT Tim Householder at timothy.householder@navy.mil for a formal invitation.

USS George Bancroft (SSBN 643)

Dates: April 16-19, 2009

Location: Mission Valley Resort in San Diego, CA (limited number of rooms available at a special rate)

For more info: Visit the association website at <http://www.ssb643.org/>, or call Bill Badalucca at 828-735-0831.

USS Sea Devil (SS 400 & SSN 664)

Date: April 23-26, 2009

Location: Norfolk Hilton, Norfolk, VA

For more info: Visit www.seadevilssn664.org and click on "All Hands." You may also contact Jim Schenk, P.O. Box 476, Morrisville, NY 13408, call (315) 824-3162 or (315) 886-9180, or e-mail at submareener@msn.com

USS Sam Rayburn (SSBN 635)

Date: April 26-30, 2009

Location: Fredericksburg Inn and Suites, Fredericksburg, TX

For more info: Please contact the inn at 1-800-446-0202 or 1-830-997-0202, or through their website, www.fredericksburg-inn.com/ for your reservation. One highlight of this reunion will be the dedication of the SSBN 635 Memorial Plaque at the Walk of Honor at The National Museum of the Pacific War, also known as the Nimitz Museum, in Fredericksburg.

Florida Base Submarine Veterans Joint Convention

Dates: April 29 – May 3, 2009

Location: St. Augustine Beach, FL

For more info: For registration forms and lodging information, please visit <http://www.ussfloridabase.com/>.

USS Scamp (SSN 588)

Dates: May 6-9, 2009

Location: Mt. Pleasant Holiday Inn, Mt. Pleasant, SC, near Charleston

For more info: Visit www.uss-scamp.com and click on "2009 Reunion Plans." You may also contact Lou Minor, 2233 E Boones Trail, Sierra Vista, AZ 85650, call at (520) 732-1750, or e-mail lou@uss-scamp.com.

USS James Madison (SSBN 627)

Dates: July 8-12, 2009

Location: Silverdale Beach Hotel, Bremerton, WA

For more info: Contact Fred Huwe at fchuwe@cheqnet.net or visit www.ussjamesmadison627.com. You may also contact the hotel at 1-800-544-9799 (ask for USS James Madison reunion rates)

USS Carbonero (SS 337)

Date: Sept. 10, 2009 (in conjunction with the annual USSVI Convention)

Location: Town & Country Resort and Convention Center, San Diego, CA

For more info: Look for details in the March newsletter, or contact Dan O'Dwyer, 1108 W. Bloomfield Dr. Inverness, FL 34453, call (352) 341-0316, or e-mail at subvet08@tampabay.rr.com.

USS Charr (SS 328)

Dates: Sept. 17-20, 2009

Location: Crowne Plaza Convention Center, Portland, OR

For more info: Contact Carl Klein, Secretary/Treasurer, 1900 Rollingwood Road, Baltimore, Md., 21228, call at (410) 747-7292, or e-mail at ckleinsr@gmail.com.

USS Lapon (SS 260 & SSN 661)

Dates: Sept. 24-27, 2009

Location: Landmark Resort, Myrtle Beach, SC

For more info: Visit <http://www.ussslapon.com>, or contact reunion coordinator Raymond Zieverink at (803) 324-1414 or lapon.reunion@yahoo.com.

USS Trumpetfish (SS 425)

Dates: Oct. 8-12, 2009

Location: Hyatt Fair Lakes Hotel, Fairfax, VA

For more info: Contact Terry Trump at 843-873-9563 or email: ss425@hotmail.com.

USSVI CONVENTION SPONSOR INFORMATION



2009 United States Submarine Veterans, Inc. National Convention



Contact:

Mike Hacking

2009 USSVI Convention
P.O. Box 420159
San Diego, CA 92142-0159

(858) 495-0562

mrhacking@san.rr.com

September 8 – 12, 2009

Town & Country Resort and Convention Center
San Diego, CA

The 2009 convention in San Diego is being hosted by the San Diego Base and the USS Scamp Base of the United States Submarine Veterans, Inc. (USSVI). USSVI is a fraternal veteran's association whose creed is:

“To perpetuate the memory of our shipmates who gave their lives in the pursuit of 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.”



Joining USSVI in San Diego will be members of the International Submariners Association (who will be holding their 46th International Congress), U.S. World War II Submarine Veterans, and veterans from the Canadian Submariners Association. With the participation of the local military community this convention will be one of the largest gatherings of submariners in history!

We are seeking your support to make this a truly historic occasion. Your donation to the 2009 USSVI Convention will benefit all Submarine Veterans and their families who will be attending this gathering of Submarine Veterans from around the world.



Website: www.ussvisandiego.org/Convention2009/index.htm

The United States Submarine Veterans, Inc. (USSVI - our national organization), the San Diego Base and the USS Scamp Base (hosts of the convention) are 501(c)19 veteran organizations, as designated by the Internal Revenue Service.

LEVELS OF SPONSOR PARTICIPATION



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