American Submariners Inc.
4370 Twain Ave.
San Diego, CA 92120-3404

The Silent Sentinel

FEBRUARY 2013

Our Creed and Purpose

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

In addition to perpetuating the memory of departed shipmates, we shall provide a way for all Submariners to gather for the mutual benefit and enjoyment. Our common heritage as Submariners shall be Strengthened by camaraderie. We support a strong U.S. Submarine Force.

The organization will engage in various projects and deeds that will bring about the perpetual remembrance of those shipmates who have given the supreme sacrifice. The organization will also endeavor to educate all third parties it comes in contact with about the services our submarine brothers performed and how their sacrifices made possible the freedom and lifestyle we enjoy today.

ATTENTION ALL HANDS

At our next meeting, February 12, we will be voting for new officers for the coming year. The offices we will vote on are: Junior Vice and Secretary. The only problem we have is that we don't have a candidate for Junior Vice. (Bill Earl (Sr Vice) and Dave Ball (Treasurer) have volunteered to continue in their current positions.) We will vote for Base Commander next year. Step up and volunteer for one of these offices. (You know how to volunteer!) We need your help to keep our Base going.

Charlie Marin
Membership Chairman

U.S. Submarine Veterans
San Diego Base

Base Commander
Bob Bissonnette
1525 Walbollen Street
Spring Valley, CA 91977
(H) 619-644-8993
(CELL) 619-251-7095
RBisson250@aol.com

Membership -- Change of Address
Ray Ferbrache
2955 lloyd St.
San Diego, CA 92117
arayz@san.rr.com
619-972-4474

Treasurer
David Ball
3804 Wildwood Road
San Diego, CA 92107-3750
619-225-0304
davidball@cox.net

Senior Vice Commander
Bill Earl
2251 Vancouver Ave
San Diego, CA 92104-5350
619-2804053
dinkysan@yahoo.com

Newsletter Editor
Mike HYMAN
3639 Midway Drive, B-320
San Diego, CA 92110-5254
(619) 223-9344
stamps@fortunesofwar.com

Assistant Editor / Photographer
Jack Kane
619-602-1801
jkane32@cox.net

Junior Vice Commander
Jim Bilka
563 Broadway, Apt 62
El Cajon, CA
92021
619-277-5758
sashanman@yahoo.com

Base Storekeeper
Phil Richeson
Phillip92071@aol.com
619-922-3230

Chief of the Boat/Middle East Liason
Fred Fomby
858-735-0026

Secretary
Manny Burciaga
8406 Alado Place
El Cajon, CA 92021-2003
619-921-5877
MannyBurciaga@pointloma.edu

Chaplain
John (Jack) Lester
6531 Cowles Mtn. Blvd.
San Diego, Ca. 92119
619-469-8805
lanabjack@cox.net

Assistant Chaplain
Russ Mohedano
8709 Dallas St.
La Mesa, Ca. 91942
619-697-5029
moecowboy@cox.net

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
1525 Walbollen St.
Spring Valley, CA 91977-3748

USSVI Base Commander
c/o VFW Post 3787
4370 Twain Ave.
San Diego, CA 92120-3404

*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*

FEBURARY Meeting

Our monthly meeting is held on the second Tuesday of the month at VFW Post 3787, 4370 Twain Ave., San Diego. Our next meeting will be on 12 February, 2013. 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
Al Strunk

Submarine Losses in January

Originally Compiled by C J Glassford

STURGEON (SS 25) - Duty Section on Board
Battery Explosion, on 15 Jan 1916, In New York Navy Yard:
" 4 MEN LOST "

S – 34 (SS 139) - 43 Men on Board
Accidental Signal Cartridge Explosion, on 11 Jan 1934:
" 1 MAN LOST "

S – 26 (SS 131) - 46 Men on Board
Sunk, on 24 Jan 1942, After Collision with USS (PC460),
In the Gulf of Panama:
" 43 MEN LOST, 3 SURVIVORS "

ARGONAUT (SS 166) - 105 Men on Board

Sunk, on 10 Jan 1943, By Japanese Aircraft and Destroyers, Southeast of New Britain, in Solomon Sea:
" ALL HANDS LOST "

S – 36 (SS 141) - 45 Men on Board

Scuttled, on 20 Jan 1943, After running aground, In Makassar Straits:
" NO LOSS OF LIFE "

SCORPION (SS 278) - 76 Men on Board:

Probably Sunk, on 15 Janauary 1944, by Japanese Mine, in the Yellow or East China Sea:
" ALL HANDS LOST "

SWORDFISH (SS 193) - 89 Men on Board:

Possibly Sunk, on 9 Jan1945, by Japanese Coastal Defense Vessel or Mine, Off Okinawa :
" ALL HANDS LOST "

SAN FRANCISCO (SSN 711) - 127 Men on Board:

Struck a Sea Mount, on 8 Jan 2005, while Traveling Submerged at High Speed, South of Guam :
" 1 MAN LOST " – " 23 MEN INJURED "

Minutes for Submarine Veterans San Diego, 8 January 2013
1900 – Meeting of the Submarine Veterans Inc., San Diego Base was called to order by Base Commander BoBBissonette.

Conducted Opening Exercises:
Reading of Our Creed:
Pledge of Allegiance:
Chaplin Lead in Prayer:
Conducted Tolling of the Boats:
Observed a moment of Silent Prayer:
Junior Vice Commander recognized past E-Board members, Past Officers and guest present.
Secretary posted the sailing list – 30 members and one guest present.
Treasurer's report: Treasurer submitted his report.

Call for Committee Reports:
Chaplain Binnacle List: Al Strunk and Ed Farley. Please let the Chaplin know if any other members should be on the Binnacle list.
Parade Committee: La Mesa Flag Day Parade
Membership Committee: 313 members, Pay your dues or national will drop you.
Scholarship Committee: Applications due 15 Mar.
Storekeeper: We have some items here and patches can be ordered. Let me know if you would like to order anything special.
Breakfast Committee: Next Subvet breakfast will be 30Jun 2013, at 0800 to 1200.
We have lowered the cost of breakfast back to 6 dollars. The next food handler's classwill be announced later.
Election Committee: All officer positions are open except for the Base Commander.
Float Committee:
1930 – Base Commander called for a Break….
1940 – Base Commander called meeting to order.

Old Business
Float and trailer
Newsletter printing: the printer has been retired. We will be printing a limited number of copies.
Elections
Unfinished Business
Float repairs: It was decided not repair the float but to build a new float and get a new trailer.

New Business
Budget

Good of the Order:
Old Timers Luncheon on 22 March
Submarine Birthday Ball on 23 March

Sailing List:

Jim Bilka	David Ball	Jack Lester
Phillip Richeson	PhillRicheson	Jim Harer
Charlie Marin	Bill Earl	Sergio Frost
Gerry Palermo	Bob Farrell	Jack L. Addington
Paul Hitchcock	Larry Dore	Joel Elkam
David Kauppinen	MertWeltzien	Bob Coates
Bob Bissonnette	Bud Rollison	Michael Hyman
William R. Johnson	Tom Polen	David Welch
Ed Welch	Glenn Gerbrand	Jack Kane
Robert E. Chapman	Ray Ferbrache	Dennis Mortensen
Richard A. Smith		

Current News

"Plataginet, I will; and like thee, Nero,
Play on the lute, beholding the towns burn" (Henry VI, Shakespeare)

Navy Secretary calls impending defense cuts 'mindless'
Kcpq.com, Feb. 7

SEATTLE — If Congress does not come up with a budget agreement soon, big spending cuts will begin in March, including heavy reductions to the military. The so-called "sequestration" will hit the state of Washington, which has a big military presence.

Navy Secretary Ray Mabus, who visited Seattle Thursday, had a pretty blunt word for the impeding military cuts, which could total $9 billion for his department alone in 2013. He called them "mindless."

He's warning Congress and the country that real damage will be done.

"We will be a less-ready service," Mabus said.

Cuts will include key areas such as training and maintenance.

"It threatens us now, but it threatens in the future," he said. "You saw a good example of what can happen yesterday when the secretary of defense announced that the (USS Harry S.) Truman (aircraft carrier) and her strike group would be delayed going to Central Command."

Mabus said the Navy is willing to do some belt-tightening, but it should be less severe and less arbitrary.

"We get no say in how money is allocated," he said. "It's just sliced off."

Gov. Jay Inslee echoed the Navy secretary's warning about the sequester.

"These accidental, random cuts are not the way to do budgets," Inslee said.

Inslee joined Mabus in a ceremony Thursday honoring the country's newest attack submarine, which will be named for the Evergreen State.

"We really are very profoundly hopeful that we don't name this boat the USS Washington and then two weeks later sequester dollars so that we have layoffs here in the state of Washington," Inslee said. "That is not a result that is acceptable."

The USS Washington is the first Navy vessel to be named after the state since World War II. The sub will go into service in 2016. There is no Pentagon commitment yet about whether it will be stationed in the state.

Japan and China: Tensions Mounting
The Diplomat, Feb. 6

On Tuesday, Japan's Defense Ministry reported that a Chinese frigate "illuminated" a Japanese destroyer with its fire-control radar near the embattled Senkaku/Diaoyu Islands. Lighting up an adversary ship or aircraft designates it as a target for missiles or guns, and thus constitutes a prelude to firing on that adversary.

The latest incident came after Tokyo publicly contemplated empowering Air Self-Defense Force pilots to fire warning shots in the vicinity of Chinese aircraft overflying the islets or adjoining waters. Which came on the heels of repeated encounters between the Japan Coast Guard and ships from China's maritime enforcement services. Tokyo also disclosed that a Chinese frigate illuminated one of its helicopters last month.

Chilling stuff.

The back-and-forth between the rival sea powers will feel at once familiar and unfamiliar to any mariner of a certain, ahem, vintage. The U.S. Navy and Soviet Navy played more than their share of hair-raising games during the Cold War — particularly in the 1970s and 1980s, once Fleet Admiral Sergei Gorshkov's progeny had matured into a peer competitor of the American fleet.

It was far from unusual for U.S. and Soviet warplanes, surface combatants, and especially submarines to target or maneuver around one another at close quarters. There were a variety of reasons for doing so that had little to do with indulging one's inner Maverick and Goose. For instance, goading an opponent into taking defensive measures revealed something about the tactics he would deploy in wartime. Such encounters also furnished an invaluable opportunity to collect information about the rival navy's sensors, electronic countermeasures, and weaponry. Electromagnetic emissions can be recorded and analyzed, with a view toward exposing and exploiting weaknesses. Tactical advantages can accrue.

And yet the run-ins between JSDF and PLA units feel different from their Cold War predecessors. There was a certain amount of flexibility in U.S.-Soviet brinksmanship, if only because the two sides were playing with each other for tactical reasons rather than competing over fixed geographic objects on the map. There was less to fire passions. Ideological one-upsmanship was commonplace. Being a provocateur was fun. But sovereignty — an arena for Thucydidean motives like fear and honor — wasn't at stake when American and Soviet units met in the nautical commons. Even so, enough near misses took place that Washington and Moscow ultimately felt obliged to negotiate an accord governing incidents at sea.

One hopes warriors on both sides — and their political masters — will exercise discipline in the East China Sea. A deliberate conflict would be bad enough. An inadvertent one that heightened uncertainty, narrowed options, and compressed the decision cycles in Tokyo and Beijing would prove even more parlous.

'More than Submarine vs. Submarine'
By Vice Admiral James R. Fitzgerald, U.S. Navy (Retired), Proceedings, Feb 13

Undersea warfare encompasses a wide array of moving parts. What the Navy needs now is a broader strategy to cover it where none currently exists.

Before beginning a meaningful discussion of defining any undersea warfare investment plan for the future, it's useful to review the approved applicable joint-warfare definitions to ensure we are all speaking the same language.

Undersea warfare is defined in Joint Publication 3-32 as: "(DOD) Operations conducted to establish and maintain control of the underwater environment by denying an opposing force the effective use of underwater systems and weapons. It includes offensive and defensive submarine, antisubmarine, and mine warfare operations. Also called USW. See also antisubmarine warfare; mine warfare."

Antisubmarine warfare is defined in JP 3-32 as: "(DOD, NATO) Operations conducted with the intention of denying the enemy the effective use of submarines. Also called ASW."

Mine warfare is defined in JP 3-15 as: "(DOD) The strategic, operational, and tactical use of mines and mine countermeasures either by emplacing mines to degrade the enemy's capabilities to wage land, air, and maritime warfare or by countering of enemy-emplaced mines to permit friendly maneuver or use of selected land or sea areas. Also called MW."

Why is this important? There is no argument that the submarine is an essential component, and often the only force that can operate in areas where maritime supremacy is not established. 1 Undersea warfare, however, consists of far more than just submarine vs. submarine. By definition, it includes antisubmarine and mine warfare. Any USW investment strategy must include a more holistic approach. It includes a broad range of different capabilities, systems, and platforms, including intelligence, oceanography (knowledge of the environment), surveillance systems, submarines, aircraft, surface ships, networks, and weapons. It is often colloquially described as a "team sport."

Monotony and Intensity

It is not "see the plane, shoot the plane," nor can it be fully automated to let computers do the work. It is a complex form of warfare executed in an uncooperative and unforgiving environment (the ocean) that demands constant vigilance, exhaustive training, and precision teamwork. Even then it is often described by those who have significant experience as more of an art. It is "24/7," monotonous and boring punctuated by periods of intensive operational uncertainty.

While the submarine community has a well-defined strategy and supporting investment plan, a broader undersea-warfare strategy (and supporting investment plan) does not exist. Such a strategy and a general concept of operations, is required for a coherent investment plan, for all else follows. 2 A brief review of the Cold War strategy and concept of operations is illustrative. An outgrowth of the World War II Battle of the Atlantic, the Cold War strategy began with all-source intelligence and ocean surveillance. It was a global, passive acoustics-based barrier strategy, while also supporting investment in a two-tiered ASW escort force, with small numbers of multipurpose destroyers assigned to battle groups and other high-value units and larger numbers of single-purpose destroyer escorts devoted largely to ASW for use in screening mid-ocean convoys.

The Cold War concept of operations was multilayered, consisting of independent, far-forward operations by nuclear-powered fast-attack submarines (SSNs). In peacetime, these would provide intelligence and warning, and in wartime they would constitute the first barrier that Soviet submarines would encounter when they left their bases. Area ASW operations had alternating layers of Navy patrol and reconnaissance aircraft and submarines. Barriers were placed between Soviet homeports and open-ocean patrol areas wherever maritime geography made them possible. Leakage (a reality of all ASW operations) of Soviet submarines through the barriers still required destroyers and task-group air assets to protect those forces so valuable that even limited losses needed to be avoided, such as carrier battle groups. And a sub-strategy was in place of using submarines offensively in forward operations to "hold at risk" Soviet ballistic-missile submarines (SSBNs) in such a way as to divert the Soviet navy, and particularly their best SSNs, away from other more offensive missions—operations in Soviet SSBN bastions. (The concept was to exact considerable attrition as Soviet submarines surged into the North Atlantic shipping lanes, and as they attempted to return to their bases or replenishment predicated on the concept of sending the message to the Soviets that they could not win with the losses they would endure).

The balance of the ASW effort would shift from escort operations to offensive patrol, with escort ships employed as a backup. Early losses to merchant shipping would be accepted on the assumption that the submarine threat would soon become manageable because of steady attrition by the barriers. So it was a mix of offensive, defense-in-depth, force defense, and diversionary operations, but basically an attrition-based strategy. 3

Regional, Not Global

The strategy of today is loosely inferred from such concepts as "Sea Basing" and anti-access/area denial (A2/AD), formerly articulated as "Assured Access," and is different. It is unclear, as in the beginning of the Cold War, whether all source intelligence and ocean surveillance ("cueing") exists to the same degree it did at that time. It is not global in the sense of the Cold War, it is more regional. Advances in submarine quieting (loss, or significant reduction, of stable narrow-band acoustic signatures) have largely negated the previous passive acoustics-based long-range detection and reduced the effectiveness of the systems that relied on those vulnerabilities.

Today's challenge is more like that of the former Soviets in the Cold War breaking out into the North Atlantic. We are now the "aggressors" in the context of attempting "assured access" at a time and place of our choosing, "breaking into" someone else's backyard. And it is still, although unstated, again primarily attrition-based.

Curiously, what is rarely if ever discussed are maintenance of the sea lines of communication and maritime commerce and the potential impact of even the threat of conflict on commercial shipping and the concomitant impact on the world's economies. Today's commercial shipping is very much like that of the commercial airlines—very well coordinated and operated with a "just-in-time" concept of operations. Unlike the maritime shipping industry of World War II, today's shipping industry is a largely flags-of-convenience, independent, entrepreneur-owned and -insured enterprise. A ship not under way or unable to sail is not generating revenue or delivering goods and results in empty shelves or adds to the cost of operation ultimately passed on to the consumer. (In a time of armed conflict, it is easy to foresee that the global economy would break down if risks outweigh gain in the event of an anti-commerce campaign.) Diversion from normal shipping lanes impacts both "just-in-time" and often influences insurance underwriting, also increasing cost. Undersea warfare is not just about A2/AD and/or Sea Basing. It is also about maintaining a national standard of living. The inference here is that any USW strategy must be broader and include maintenance of the sea lines of communication.

At this point, it's useful to segue to related areas: the Navy's vision for the warfare and acquisition policy. That vision is partially articulated as "networking of self-aware, autonomous sensor fields coupled with manned and unmanned kill vehicles [that] will shift ASW from 'platform-intensive' to 'sensor-rich' operations," which was developed under CNO Admiral Vern Clark. 4

Presidential Budget Decision 753 was generated, "risk capital" was identified, and Task Force ASW created to oversee rapid development of appropriate technologies. Significant investment was made, but as of this writing no significant "self-aware, autonomous sensor field" technologies appear to have transitioned to operational use, and, unlike for platforms, there appears to be no good home for off-board systems.

'Spiral Development'

The current acquisition philosophy is defined as "spiral development" and embodies such things as the Acoustic Rapid COTS (commercial off-the-shelf) Insertion (ARCI), Advanced Processor Build (APB) and Advanced Capability Build (ACB) programs/ processes. These programs have changed the way the U.S. Navy, academia, industry, small business, and government laboratories collaborate to develop and field sonar systems.

The APB and ACB teams have broken down the traditional stove-piped programs and the impediments to rapid developments using peer review teams and modern commercial information technology. What has previously taken ten years using the traditional approach can now be completed in just 18 to 36 months, providing an opportunity to perform rapid technology insertion to adapt to a changing threat. As a practical matter, these have yielded significant improvements in reduction of "footprints," insertion and maintenance of current technology, improved maintenance and reliability, and detection. But these programs alone are not enough to address the evolution of the submarine threat, and they remain platform-based.

It is also important to note that perhaps more insidious long-term unintended consequences include that industry has consolidated, so the prior structure where the major USW businesses had profit-and-loss centers no longer exists; USW is not a major or growth segment in either the U.S. or the international market, so interest and intellectual capital follows the money; fewer industry top executives have operational and/or relevant experience in USW, so the appeal is diminished; misunderstandings between USW, ASW, and the submarine business add to the lack of interest/focus at the executive level; and consolidation of shipbuilding and reduction in USW platform acquisition across air, surface, and subsurface in favor of multipurpose or generic missions also plays a role.

There is also the "skin-in-the-game" philosophy that industry must invest internal funds to develop a concept or system, bring it to the Navy to test and evaluate, and if the Navy sees value the service will invest in it. The kicker is that the Navy generally then submits it for competition, yielding little return on investment (ROI) to the developer, a disincentive to industry. It is unclear that the policy makers have ever sat in a bid and proposal or internal research and development industry meeting. Chief executive and financial officers are fond of saying "show me the program" and asking "what is the ROI?" They have a fiduciary responsibility to their stockholders.

On Being Reactive

The current acquisition strategy does not appear to be grounded in a well-thought-out and coordinated undersea warfighting strategy. Rather, it appears to be relying on threat-based analysis and a confederation of platform investment strategies focused on an individual platform community's assessment of needs and requirements as measured against a potential adversary's force structure. Such analysis is reactive and places us a development cycle behind. The reality, therefore, is one of reaction and "backing into a strategy" based on the program objective memorandum (POM) and current platforms.

Further, the current strategy neither challenges nor focuses the Navy, commercial and academic science and technology, and advanced developmental communities. The lack of feedback and gap identification at the operational level provides no opportunity for the exchange between the technologists and the warfighters, with neither forum nor champion. We waste money, time, and the efforts of our best and brightest to deliver things that have limited operational value and forgo the opportunity to provide challenges that have immense value if executed. Said another way, the POM becomes the warfighting strategy and caps innovation—a strategy increasingly based on reaction and cost or price, as opposed to warfighting combat capability and results in chasing the potential threat.

To be fair, many attempts have been made over the past decade plus to create an "ASW Master Plan," a "Roadmap," or something similar. Old hands can identify at least a dozen such attempts as far back as 1988 with the OP-71 ASW Master Plan. The results of these efforts generally end up as academic exercises and are not applied as guiding principles for a broad warfare investment plan, or they simply end up recommending buying the existing program objective. Perhaps this is the natural consequence of an organization that in the past favored platforms over warfare.

Culture Change

What is required is a bold step, a change in culture, and a supporting organization to affect "centralized supervision and coordination of all Antisubmarine Warfare planning, programming and appraising, in order to insure an integrated and effective Antisubmarine Warfare effort," and a supporting ASW Systems Project Office. 5 Old hands will also recognize this as the implementing notice for the establishment of Office of Antisubmarine Warfare Programs, OP-95, and the latter as PM-4, Director of ASW Project Office (OP-951/PM-4). The real threat is technology, not someone's force structure. The motto should be that once used for the F-14: "Anytime, Baby."

The Navy, however, appears to appreciate the need and has taken an important first step. It has recently designated the Commander, Submarine Forces as the lead for all undersea capabilities, whether on submarines, aircraft, surface ships, or in information-dominance systems, and is to be consulted on the development of all programs and investments for the undersea domain. This duty includes developing operating concepts and doctrine for undersea operations.

OP-95 was established for the right reasons—the technological advances in submarine warfare, in those days including nuclear-powered submarines and the submarine-launched missile. It was not established to address a potential adversary's force structure. The parallels are clear today in the advent of much quieter diesel-electric, air-independent, and significantly advanced nuclear-powered submarines, the proliferation of submarine-launched ballistic and cruise missiles, and wake-homing torpedoes.

Globalization has "flattened" the globe, "which requires us to run faster in order to stay in place." 6 Advanced technology is no longer the domain and advantage of a relative few. Rather, it is essentially available to anyone with an Internet connection. That this organization was effective can be demonstrated by the list of accomplishments, some of which include: a "new small torpedo," Mk-46; ASROC [antisubmarine rocket], SUBROC [antisubmarine missile], a new ASW torpedo, Mk-48; "A-NEW," systems and engineering approach to future ASW aircraft; AUTEC [Atlantic Undersea Test and Evaluation Center]; the DASH drone ASW helicopter; Sea Hawk, systems engineering and integration applied to the design of a new surface ship, ultimately the FF-1052 class; the AN/SQS-26 sonar, forerunner of the current 53C series; and the AN/BQQ-2 sonar later installed on SSNs are among the

numerous achievements. 7 Of course, the argument can be made that every warfare area should have similar OPNAV staff organizations. Perhaps they should to provide more focus on warfighting/combat balance and less on budget.

'More Impetuous, Less Tenacious'

The history of World War II is well known and the warfighting economy of Japan was essentially starved by our submarines. Historically, submarines are much more effective in anti-commence than in ASW or anti-military. An interesting article appeared in a 1952 Proceedings by Atsushi Oi, a staff officer of the Japanese Grand Escort Command Headquarters from its creation to disbandment, from November 1943 through August 1945. It was titled: "Why Japan's Anti-Submarine Warfare Failed." He felt it was his "duty" to explain: "In a nutshell, Japan failed in anti-submarine warfare largely because her navy disregarded the importance of the problem." He stated that "at the bottom of their naval tradition, there was a problem of racial temperament. Compared with the Europeans the Japanese are generally said to be more impetuous and less tenacious. They preferred colorful and offensive fighting to monotonous and defensive warfare. A/S warfare were not jobs welcomed by the Japanese naval men." 8

The U.S. Navy was guilty of the same temperament in the buildup to the first years of World War II. Admiral Ernest J. King et al. essentially did the same thing in emphasizing aircraft carriers, destroyers, and amphibious ships at the expense of the destroyer escorts and ASW-capable aircraft.

Are we more impetuous and less tenacious? Do we prefer the more "colorful and offensive" over the "monotonous and defensive?" Has the allure of strike and ballistic-missile defense overcome our need for more of a balance of capabilities? Are we vulnerable to "Those who cannot remember the past are condemned to repeat it?" 9

1. "Maritime Supremacy" (DOD): That degree of maritime superiority wherein the opposing force is incapable of effective interference. Source: JP 3-32.

2. "Concept of Operations" (DOD): A verbal or graphic statement that clearly and concisely expresses what the joint force commander intends to accomplish and how it will be done using available resources. The concept is designed to give an overall picture of the operation. (Also called commander's concept or CONOPS.)Source: JP 5-0.

3. For a more complete discussion of the Cold War ASW strategy, see Owen R. Cote Jr., The Third Battle: Innovation in The Navy's Silent Cold War Struggle With Soviet Submarines , Newport Paper #16, U.S. Naval War College Press, 2003.

4. "Task Force ASW: Anti-Submarine Warfare Concept of Operations for the 21st Century." Undated.

5. OPNAV NOTICE 5430, OP-09B83, Ser. 3030P09B8, 17 February 1964.

6. Thomas L. Friedman, The World Is Flat (New York: Farrar, Straus & Giroux, 2005).

7. Fact Sheet Anti-Submarine Warfare, 17 September 1964.

8. Atsuchi Oi, "Why Japan's Anti-Submarine Warfare Failed, U.S. Naval Institute Proceedings , vol. 78, no. 6, June 1952.

9. George Santayana, Reason in Common Sense , "The Life of Reason," vol. 1 (Mineola, NY: Dover Publications, 1980).

Iran's 'Show' Of Force: Loud But Not So Clear
Associated Press, Feb. 5

DUBAI, United Arab Emirates – In years past, keeping track of Iran's claims of military and technological advances was relatively easy: Wait until early February and watch the parades and announcements in the buildup to celebrations marking the Islamic Revolution. Now, with the strategic stakes ever higher, Iranian officials are boasting louder, pressing harder and leaving questions about how much is real.

The reasons for the flood of self-described achievements touch on the various pressures bearing down on Iran, including Western sanctions and the threats of possible military action if diplomacy cannot solve the standoff over Tehran's nuclear program. It also highlights the learning curve of Internet-age showmanship from a country that acknowledges the economic pain inflicted by sanctions - which could tighten further on Wednesday - but claims it has the tools to bounce back stronger.

Since January alone, Iran has showcased a steady stream of purported advances that have been met with varying degrees of skepticism.

They include another domestically made surveillance drone, claims of a monkey sent into space on a successful roundtrip mission, a supersonic air tunnel and a compact, single-seat warplane described as a radar-evading jet fighter. President Mahmoud Ahmadinejad said the aircraft shows Iran can "conquer scientific peaks."

As if those headlines weren't enough, Ahmadinejad on Monday volunteered himself to be country's first astronaut aboard an Iranian-launched rocket if its space program eventually moves to manned flight.

The reaction included a mocking quip by U.S. Sen. John McCain. Meanwhile, aerospace experts and others, including the State Department, have raised doubts about last week's claim of the monkey flight because of apparent inconsistencies in the Iranian photos of the animal before and after flight.

Despite the questions, there are elements of serious statecraft behind the increasing scope and speed of the Iranian announcements of progress in science and defense.

In Tehran's view, each unveiling serves as a counterpunch to Western sanctions over Iran's nuclear program. The broad message from Iran is that the economic pressures may be hitting hard at the moment, but it cannot slow the priority projects of the ruling system such as aerospace, military technology and uranium enrichment.

"Whenever Iran introduces new technological developments, it's intended to show the failure of Western sanctions," said Heshmatollah Falahatpisheh, a political affairs professor at Tehran's Allameh University. "It's like an official announcement that the sanctions can only go so far."

That's because the pinch is already too much for officials to ignore. Iranian authorities - at first reluctant to put any figures on the economic hit - have acknowledged that revenue from oil and gas exports have dropped by 45 percent due to the sanctions, which also strike at Iran's ability to access international banking networks. Iran's currency, the rial, lost nearly 40 percent of its value in 2012 alone, putting its decline over three years at 350 percent.

New U.S. measures expected to take effect Wednesday asks buyers of Iranian oil - now mostly big Asian economies such as China and India - not to pay Iran directly, depriving Tehran of badly needed foreign currency. The oil money would instead remain in the countries for Iran to purchase local products for import.

Still, Supreme Leader Ayatollah Khamenei and others have stood steadfast to their claims that Iran can ride it out, which also suggests the country will bring the same tough-minded negotiating positions to the table later this month when nuclear talks with world powers resume.

Iranian officials have even tried to portray sanctions as an indirect bonus that has driven domestic innovation and industrial self-sufficiency. It's part of Iran's wider goals to be seen as the Islamic world's hub for technology and political independence - a theme promoted heavily last year when Iran took the helm of the Non-Aligned Movement, a Cold War holdover that Tehran seeks to turn into a counterweight to Western power.

"We are conveying the message that technology is not just the property of the West," said Ismali Kowsari, a member of the Iranian parliament's influential Committee on National Security and Foreign Policy. "We're telling other countries they can stand on their feet and achieve things as well."

And unlike even a few years ago, Iran now has more than a dozen official and semiofficial media outlets - including English and Arabic language services - to release reports on purported breakthroughs or advances.

Yet the new policy also leaves many questions open about whether Iran's claims can be backed up.

Experts in cyber-technology have raised serious doubts about Iran's plans to create its own Internet that would be independent of the one the rest of the world uses. There have also been no independent reviews or shared war games that would permit examination of the purported new, domestically produced additions to its arsenal, which include submarines, sophisticated drones and the "stealth" fighter displayed on Sunday.

"A hoax intended for the Iranian people," concluded Tal Inbar, head of Space and UAV research at The Fisher Institute for Air and Space Strategic Studies, an institute founded by the Israel Air Force Association.

"It is a mock up and a very crude and unrealistic one," he said after examining images from Iranian media. "You can clearly see that is made out of fiber glass and that it lacks any logic in the aerodynamics design ... It lacks any modern avionics and instruments found in a real aircraft."

Dubai-based security analyst Theodore Karasik sees a "Potemkin Village" aspect to Iran's military and technology claims, but he said dismissing Iran's expanding know-how is a mistake.

Iran has shown it has the foundations for spacefaring expertise by putting satellites into orbit, and its longtime connections with countries such as North Korea and Russia have given it the backbone for a formidable missile program capable of reaching Israel and U.S. bases in the region.

Iranian naval power also appears on the rise, with recent drills near the Strait of Hormuz - the tanker route for one-fifth of the world's crude oil. Warships have traveled into the Mediterranean twice since 2011 in a clear signal to Israel that Iran's military is not just confined to its own neighborhood.

"What Iran parades out as advances is mostly to reinforce the public idea they have an indigenous program and are capable of protecting the Islamic Republic," said Karasik, a regional security expert at the Dubai-based Institute for Near East and Gulf Military Analysis. "But it's not all just a show and Iran does have some credible power. It's just really hard to tell which is which."

Observers should expect more claims in the week ahead, as Iranian officials build up toward the Feb. 11, anniversary of the 1979 Islamic Revolution with a so-called "10 Days of Dawn."

On Monday, as part of the ceremonies, military officials unveiled an upgraded version of Iran's Zolfaqar tank that is billed as a rival to Russia's T-72s, one of the mainstays of Moscow's army.

Increasingly, though, the patriotic themes and claims of advancements must compete with the hardship and uncertainty generated by the West's economic squeeze.

"To the people of Iran, much like everywhere else, economic problems take priority," said Meir Javedanfar, an Iranian-born analyst based in Israel. "How can the people of Iran be impressed when there are reports the Iranian government has not allocated sufficient funds to import medicine?"

Another US Navy submarine arrives amid unsolved Tubbataha grounding
Bulatlat.com, Feb. 6

MANILA – The problem with the grounded US Navy ship is still ongoing, and many questions as to why it had sailed there in the first place and what will happen to it and the reef are still unanswered, yet, here comes another US military ship, a nuclear-powered submarine, docking in Subic Bay, Zambales, the former US military base shuttered by popular demand in 1992. The docking, as expected, drew protests.

"The presence of a US nuclear-powered ship at Subic clearly violates the nuclear- free provision of the 1987 Philippine Constitution as well as Art. II sec. 7, which requires an independent foreign policy that prioritizes national interest," said Bayan Muna Partylist Rep. Neri Colmenares.

The USS Cheyenne is described by the US Pacific Command as a Los Angeles-class nuclear attack submarine capable of launching Tomahawk missiles, which are long- range rockets that can be armed with nuclear warheads. In fact, it is being described as one of the most capable nuclear attack submarines in the world today. For Malacañang to grant it a diplomatic pass to enter Philippine waters and dock at Subic Bay, is viewed by various groups as "callous."

Malacañang justifies this by saying that it merely a "nuclear-powered" ship and, thus, not covered by the prohibition of the 1987 Constitution against the entry and stockpiling of nuclear weapons.

"Aquino's callous permission for and defense of the entry of this nuclear-powered submarine into our country shows the world just how unthinking his obedience to the US is," said Elmer "Bong" Labog, chairman of Kilusang Mayo Uno, in a statement. As the USS Cheyenne is also headed to the same path taken by the USS Guardian, critics such as the KMU now ask: "What is the US up to this time?"

"Every American warship that docks in the Philippines reduces the country to a military outpost of the US in the Asia-Pacific region and likewise reveals the farcical claims of Philippine sovereignty by the puppet Philippine government," the CPP said in a statement. They warned that the rising number of US naval vessels that dock and patrol in Philippine seas increases as well the possibility of more environmental damage such as the destruction of the Tubbataha corals and the reported dumping of human and toxic waste off the coast of Subic last year.
In 2012, US ships made 197 port calls in the Philippines, while some 444 American aircraft were cleared for landing in the country's airports, the Department of Foreign Affairs said. It represented a more than four- fold increase from the recorded arrivals in 2010 and 2011.

Navy Cuts Fleet Goal to 306 Ships
Navytimes.com, Feb. 4

The Navy has revised its overall fleet size requirement from 313 to 306 ships — a modest downscaling that reflects modified operational requirements and is not the result of the ongoing budget crisis.

One of the key changes is a reduction in the long-standing 55-ship littoral combat ship (LCS) requirement to 52 ships — a decrease, the Navy said, resulting from a lessening of the presence requirement to support U.S. Africa Command.

The changes are reflected in congressionally mandated report sent Thursday to key lawmakers.

The fleet reduction modifies the 313-ship number established in 2005. Navy leaders in recent years have called that figure "about 313 ships," reflecting several assessments that moved the number up or down, but until now have not settled into a figure officials were willing to declare.

"A 306-ship force structure represents the minimum level of capability and capacity to meet projected threats and support the 2012 Defense Strategic Guidance," Navy spokeswoman Lt. Courtney Hillson said. "Our operational tempo over the past year reaffirms our need for a minimum of 306 ships. That said, we need to have the right mix of ships in terms of their capabilities that are ready to meet combatant commander demands."

The new number is not intended as a hard figure the fleet will grow to and then maintain. Rather, it is an overall combat force structure requirement, around which actual numbers are expected to rise or fall.

The fleet has 288 ships, up from a low in May 2007 of 275 ships. The count fell below 300 in August 2003.

Other key changes in the requirements from 2010, when the Navy last spelled out its fleet, are:

• A reduction of large surface combatants — cruisers and destroyers — from 94 to 88 ships, directly related to plans to move four ballistic-missile defense destroyers from the East Coast to form a forward-deployed naval force based at Rota, Spain. The Navy previously noted 10 ships were needed to meet the rotational requirement in the Mediterranean region.

• Elimination of the four-ship guided-missile submarine requirement, known as SSGNs. The Navy said in its report that should the need continue, the ships could be replaced by Virginia-class submarines "with an enhanced strike capability."

• Adding one T-AGOS surveillance ship "for sustained operations and crisis response in the Pacific."

• Adding six ships for the two newly revamped maritime prepositioning squadrons, including two mobile landing platforms and two afloat forward staging base ships.

One Capitol Hill source observed that the new fleet requirement, seen in the context of the contentious budget environment, might be more problematic than possible.

"This comes at a time when we have to start asking whether any plan in the 300-plus range is going to be viable in the budget," the source said.
"This could be the last gasp of the 300-something-ship plan, before the Navy, if it has to work under a lower top line, changes it to something clearly below 300."

Cuts To Navy Won't Only Affect Military
Wavy.com, Feb. 4

PORTSMOUTH, Va. – The Navy has been forced to operate at the same levels funded by last year's budget. The cuts set to begin Feb. 15 will be felt not just by shipyard workers but the businesses they frequent as well.

"Not knowing when out last day is going to be [is hard]," BAE Systems employee Sean Streets said. "We might work tomorrow and they might come in and say, 'Well, we got no work for you.'"

Clarine Bradley, owner of Hero's sub shop in Berkley, said shipyard workers make up a large chunk of her customer base.

"It would take 50 percent away of my business from me," Bradley said. "I would have to let some of my employees go because in that way, I wouldn't have the business I have now."

Jessica Sanford with SoNo Auto Sales said shipyard workers make up between 30 and 40 percent of their customer base.

"With the cutbacks and stuff, we're concerned," Sanford said. "We'd like to have them over here and buying cars from SoNo Auto Sales and you know, we don't want to see any cutbacks."
At this point in time, it seems as though the cutbacks are inevitable and the worst is yet to come.

N. Korea Planning Simultaneous Nuclear Tests – Seoul
Rt.com, Feb. 4

North Korea plans to conduct two nuclear tests at once, or in quick succession, South Korea said. The prediction is based on satellite data that allegedly uncovered an uptick in activity at two tunnels at the North's Punggye-ri nuclear test site.

"There is a chance that the southern tunnel is a decoy, but we aren't ruling out that the regime will conduct nuclear tests simultaneously at both tunnels," South Korean newspaper Chosun Ilbo quoted a military source as saying.

Testing multiple devices at the same time could be part of an effort to produce smaller nuclear warheads that could be mounted on missiles, the source said.

Earlier reports suggested the test will take place before February 10 – the start of the Lunar New Year. Other reports have claimed the test will fall on February 16, the birthday of late North Korean leader Kim Jong-il.

The US and South Korea recently launched a joint naval drill in the Sea of Japan, east of the South Korean port city of Pohang, AFP reported. A US nuclear-powered submarine and other warships are taking part in the war games. The three-day military exercises are widely considered by observers to be a warning to Pyongyang.

"The exercise includes at-sea operating training, detecting and tracking a submarine, anti-air and anti-ship live fire training and anti-missile training," Yonhap news agency quoted a military official as saying.

Seoul's chief nuclear envoy, Lim Sung-nam, left for Beijing on Sunday to meet his Chinese colleague as part of last-minute diplomatic efforts to dissuade Pyongyang from another atomic test.

Over the past week, North Korea has issued a series of daily warnings threatening action over the UN sanctions imposed for its launch of a long-range rocket last December. Pyongyang has pledged the "toughest retaliation" if the sanctions are not lifted.

North Korea conducted two previous nuclear tests in 2006 and 2009. In 2012, Pyongyang proclaimed itself a "nuclear state."

The first test was believed to have had an explosive yield of about one kiloton, while the second was twice as powerful. The atomic bomb the US dropped on Hiroshima, Japan, in 1945 had a yield of about 15 kilotons. One kiloton is the equivalent of 1,000 kilograms of TNT explosives.

Russia's New Stealth Corvette to Start Trials
Daijiworld.com, Feb. 5

The crew of new Russian stealth corvette the Boyky will begin trials in March, Baltic Fleet spokesman Capt. 2nd Class Vladimir Matveyev said.

Matveyev said Monday in November 2012 that the Boyky, built by St. Petersburg's Severnaya Verf shipyard for the Russian Navy, has successfully completed main systems tests in its initial sea trials.

He added that the Boyky has moved to the port of Baltiysk in the Kaliningrad Region for second-stage sea trials.

The 20380 class ships, designed by the Almaz naval design bureau, are optimized for anti-submarine and anti-surface warfare and to provide support for land operations. The class incorporates stealth technology, which has considerably reduced its radar and infrared signatures.

The 20380 class can be equipped with Kh-35 anti-ship missiles and 3M54 Klub cruise missiles, Kashtan anti-aircraft gun/missile systems, a main 100-mm gun, two 30-mm close-range air defence guns, and torpedo tubes, according to naval-technology.com.

The Steregushchy class corvette also has a hangar and deck for operation of a Kamov Ka-27 anti-submarine warfare helicopter and is fitted with a Vinyetka-EM towed sonar array.

How the Super Bowl will reach US submarines, remote outposts
Foxnews.com, Jan. 31

Ever wonder how troops serving abroad in remote locations and even underwater might get to watch the Super Bowl?

The very same highly advanced technology used to pass classified drone video feeds will be deployed this Sunday to ensure U.S. troops can see the Super Bowl — - no matter how far away from home they are.

Thousands of remotely deployed U.S. service members will get to watch the action as the San Francisco 49ers, led by quarterback Colin Kaepernick, face Joe Flacco and the Baltimore Ravens at the Mercedes-Benz Superdome in New Orleans.

Thanks to this very advanced technology, U.S. forces will get to see every moment of one of America's greatest sporting tradition — with the exception of the always-hyped Super Bowl commercials, due to contractual rules.

The game will be transmitted to personnel serving on ships and submarines in the Pacific Ocean, Mediterranean and Persian Gulf. Remote outposts in Afghanistan will also receive the transmission.

Forces will be able to watch the action with only a second or two delay caused by the feed hopping a couple of satellites.

The broadcast is the result of a unique media, government and technology partnership with the American Forces Radio and Television Service, Raytheon and the U.S. Air Force.

The system will be "as small as a laptop, and [equipment] the size of a shoebox and umbrella" yet "in other places will be projected onto large screens in hangers" like aircraft carriers out at sea, explained Raytheon Intelligence and Information Systems' chief innovation officer Mark Bigham.

While the Global Broadcast Service (GBS) may be normally used to disseminate video, images and other data, other major sporting events have been broadcast over it as well, including the World Series, NCAA Tournament final four and the National Championship game (Alabama vs. Notre Dame).

Bigham served in the U.S. military, and drawing upon his own experience explained the importance of finding ways to boost morale.

"Stationed overseas, [I] longed for what's going on, to connect back with home. As U.S. forces spread out in different areas all over the world, broadcasting the game is a great way to keep them fired up."

How does GBS work?

Every day, U.S. troops rely on video and data feeds delivered by GBS to stay safe and successfully execute missions.

For more than a decade, the Global Broadcast Service has leveraged commercial direct broadcast satellite technology to allow U.S. warfighters to pass information securely to each other while posted all over the world.

GBS augments government communications systems to deliver both classified and unclassified data and video over both military and commercial satellites. Given there are no cell towers out in the ocean, transmitting data to personnel at sea is a particular challenge.

Sailors rely on satellites to transmit voice, video and email, and Raytheon's Navy Multiband Terminal and its antennas talk to these satellites to receive the data.

The game will be received by a small antenna on masts, transferred to a receiver and then relayed to flat panel screens throughout the ship or submarine.

This technology means admirals, commanders and sailors can not only watch the Super Bowl but also communicate and pass information with one another no matter where they are located on the globe.

NMT is one of three types of terminals Raytheon provides to support the Army, Navy and Air Force. Since 2004, more than 1,700 terminals and 100 Navy shipboard and submarine variants have been installed. The Navy plans to install the terminals on more than 300 more U.S. Navy ships, submarines and shore stations.

The U.S. military's newest Advanced Extremely High Frequency satellites move data more than five times faster than older satellites and all three types of terminals have successfully tested with it.

China to Go Ahead With Naval Exercise Amid East China Sea Island Dispute With Japan
Cbsnews.com, Jan. 30

China said Wednesday that its navy will proceed with a deep-water training exercise amid a continuing spat with Japan over disputed islands in the East China Sea that has sparked regular confrontations between patrol boats from each side.

The Defense Ministry said in a statement that the previously scheduled exercise would take place in the coming days in the Pacific, beyond where the islands are located, and where deep waters are ideal for anti-submarine drills.

The navy, which last year launched China's first aircraft carrier, held seven such drills last year, each involving a half-dozen or more surface ships and an unknown number of submarines. The exercises reflect
China's long-held aspirations to build a navy that can operate far from its shores.

Ships taking part in such exercises before have passed just north of the disputed islands, which lie midway between Taiwan and the Japanese island of Okinawa. Training takes place farther out to sea, although the exact location is not announced.

Separately, the official Xinhua News Agency said three ships — a missile destroyer and two missile frigates — departed from the eastern port of Qingdao on Tuesday for exercises in the western Pacific. Citing unidentified sources, it said the ships would conduct 20 different drills simulating combat, navigation, and law enforcement operations.

Xinhua said the training area would include the Yellow, East China and South China seas, as well as areas north, south and east of Taiwan. Although that comprises a huge swathe of ocean off the Chinese coast, the report did not specifically mention the disputed islands.

Both sides recently have scrambled jet fighters and confronted each other's patrol boats in waters surrounding the uninhabited rocks, known as Diaoyu in China and Senkaku in Japan.

With fears rising over a clash — either accidental or intentional — Japan has in recent weeks launched diplomatic efforts to ease tensions. On Tuesday, China-friendly ex-Prime Minister Tomiichi Murayama met with Chinese Foreign Minister Yang Jiechi for what the ministry described as friendly talks.

China-Japan relations are at a "critical phase," spokesman Hong Lei told reporters at a briefing Wednesday.

"The two sides should ... take a responsible attitude toward history, properly handle the Diaoyu islands issue, and work toward improving and developing China-Japan relations," Hong said.
Although China has called repeatedly for dialogue on the issue, it has yet to send an envoy to Japan or respond to Tokyo's proposal for a summit between their leaders. That is at least in part due to Japan's rejection of Beijing's demand that it recognize that the islands' sovereignty is in dispute.

Navy's Shortfall Means Local Bases Can Expect to Scale Back Repairs
Florida Times-Union, Jan. 29

Faced with budget shortfalls, the Navy plans on canceling 23 scheduled ship overhauls and most scheduled aircraft maintenances that were to take place this year.

The proposed cuts, announced last week by Adm. Jonathan Greenert, chief of naval operations, are nationwide. Looking at the First Coast specifically, the destroyer USS Farragut is the only ship at Mayport Naval Station to potentially have a ship overhaul, or availability, canceled. During an availability a ship is repaired, serviced or modernized.

There are other bases across the country facing the cancelation of more ship availabilities. In Virginia and California, for example, the scheduled repairs and maintenance work of 10 ships could be scratched. But if the availability of the USS Farragut is canceled, that leaves only one other ship — the USS Taylor, a Mayport-based frigate — that will receive repairs and maintenance locally, according to J. Michael Mcgrath, executive director of the Jacksonville Area Ship Repair Association.

"It's only one ship," he said. "But it's half of our work for the year."

The Navy said the measure would save roughly $4 million.

Navy officials also plan on canceling $135 million worth of aircraft maintenance at Jacksonville Naval Air Station. A $22 million program aimed at providing continuous maritime surveillance and complementing the P-8A Poseidons based at Jacksonville NAS would also be deferred.

Greenert outlined the approach in a memo last week to senior officials. It came in response to the budget crisis.

If no appropriation bills are passed by Congress and the government is funded at 2012 levels instead of what was expected for 2013 — a stopgap approach known as "continuing resolution" currently set to expire in March — the Navy has to make up a roughly $4.6 billion shortfall.

In all, through the Southeast region there are $299 million worth of cuts being planned.

There are $1.4 billion worth of cuts scheduled to take place in Virginia, $681 million in California and $339 million in the Pacific northwest, according to the Navy.

The overall plan calls for 10 ships' availabilities at Navy bases in both San Diego and Norfolk to be canceled, along with $433 million worth of aircraft maintenance at six locations.

If Congress passes an appropriation bill by March, the changes are reversible. Still, officials say the cancellations or postponements could create a ripple effect as the Navy would possibly be forced to have ships and aircraft in service that need work done.

"The threat of an extended period of continuing resolution, plus the cuts required by sequestration, would fundamentally alter the Navy's ability to fight, train and maintain our ships, aircraft and other critical equipment," said Rear Adm. John Kirby, the Navy's chief of information. "And it certainly makes us less capable of doing that which the nation expects of us."

McGrath said even if the proposed measures are reversed, the uncertainty complicates the future health of the local shipyard and the economy. People out of work move to other locations for employment. Even if the work comes back, he said, there are issues of finding workers and training them.

"We're hanging on as tight as we can," he said. "This is having a terrible effect on us. But we know the funding right now is just not there."

In January 2012 there were roughly 2,500 local shipyard workers. This month there are 500.

Aside from cutting maintenance and repair endeavors, the Navy is implementing a civilian hiring freeze, scaling back ship operations and aircraft flying hours and laying off more than 1,100 temporary workers. Where those workers would be cut has not yet been determined, according to the Navy.

Greenert's memo also addresses the possibility of sequestration cuts, which will happen automatically if Congress does not act by March.

The Navy said sequestration would lead to furloughs for most civilian employees for 22 days through September, the cancellation of naval operations in and around South America, a reduction of port visits, canceling several submarine deployments and, among other things, scratching Blue Angel shows, including those scheduled for Jacksonville, Tampa and Pensacola.

U.S. Rep. Ander Crenshaw of Jacksonville, a member of the Defense Appropriations Subcommittee, called the budget situation "a serious matter of great concern."

"Difficult decisions are ahead for all agencies, but the stakes couldn't be higher for our men and women in uniform," he said.

Crenshaw called the military bases in the Jacksonville area "central" to national secuity.
"And the regional defense industrial base that supports them helps make our military the world's best," he said. "As the Navy makes contingency plans around unanswered budget questions, my fight on Capitol Hill is against hollowing out our military with drastic military cuts."

South Carolina: New Clues in 1864 Submarine Deaths
New York Times, Jan. 29

Researchers say they may have the final clues in the mystery of the Confederate submarine H. L. Hunley, which never resurfaced after it became the first sub in history to sink an enemy warship. Scientists said Monday that the Hunley was apparently less than 20 feet from the Housatonic, a Union blockade ship, when its crew ignited a torpedo that sank the Housatonic off South Carolina in 1864. That means that the sub may have been close enough for its eight-man crew to be knocked unconscious by the explosion. The discovery was based on a recent examination of the spar, an iron pole on the bow that held the torpedo. For years, historians thought the Hunley was much farther away and had speculated that the crew ran out of air before the sub was able to return to shore. The crew members were found at their seats when the sub was raised in 2000, with no evidence of an attempt to abandon ship.

H.L. Hunley May Have Been Closer to Ship Before Explosion
www.fox10tv.com, Jan. 28

NORTH CHARLESTON-Scientists say the submarine that was the first in history to sink an enemy warship was much closer than thought to a Union ship it sank in 1864.

Scientists announced Monday that 135 pounds of gunpowder was attached to a pole, or spar, at the front of the Confederate submarine H.L. Hunley.

It has been long thought the Hunley attached a torpedo to the bottom of the blockade ship Housatonic and then backed off. But new evidence indicates the Hunley was only about 20 feet away, meaning the concussion from the explosion could have knocked out the crew.
The Housatonic sank, while the Hunley, built in Mobile, Ala., never returned with its eight-man crew. The sub was found off South Carolina in 1995 and raised five years later.

India Flies Submarine-Launched Ballistic Missile
Aviation Week, Jan. 29

NEW DELHI-India has moved a step closer to integrate its nuclear submarines with ballistic missiles after the successful test launch of a medium-range missile from a submerged platform or pontoon in the Bay of Bengal.

The 10-meter tall, nuclear-capable missile was launched from a depth of about 50 meters on Jan. 27, says Defense Research and Development Organization Director General V.K. Saraswat.

"The missile was tested for its full range and met every mission objective," Saraswat says. It rose to an altitude of 12 mi. and reached a distance of nearly 434 mi. before it fell into the Bay of Bengal.

All the parameters of the vehicle were monitored by radar throughout the trajectory and terminal events took place exactly as expected, Saraswat says.

The Submarine-Launched Ballistic Missile (SLBM), designated K-15, was successfully test launched more than a dozen times earlier, but in secret. "This is SLBM's last trial of the development phase," Saraswat says. "With the completion of developmental trials, the process of integrating SLBM with INS Arihant, the indigenously-built nuclear submarine, will commence soon," he says.

According to other scientists, as many as 12 nuclear-capable missiles, each weighing 6 tons, will be integrated with Arihant, which will be powered by an 80-megawatt thermal reactor that employs uranium as fuel and light water as coolant and moderator. The reactor has been integrated with the submarine. Harbor trials are expected to begin in June.

With this test, India has joined an elite group of nations capable of lofting nuclear missiles from air, land and sea, the scientists says.

A.K. Chakrabarty, chief scientist who designed the SLBM and director of the Hyderabad-based Defense Research and Development Laboratory, says the next big challenge will be to test the missile when it is fitted on Arihant in the next few months.

"Development of [the] missile system is an ongoing process. So many other tests are to be done yet," Chakrabarty says. "It is going on in normal course and the continuous success will lead to an early deployment of the weapons system."

Defense Minister A.K. Antony told India's parliament last May that Arihant might enter service in the first half of 2013.

This capability would complete India's nuclear triad, making the country capable of launching missiles from air, land and sea. The triad's other elements are the Agni missile with a range up to 3,106 mi., and the Mirage-2000, Su-30MKI and MiG-29 fighters.
Indian defense scientists are developing another SLBM (K-5) with a range of nearly 1,864 mi.

Taiwan President Presses For U.S. Subs Deal
Agence France-Presse, Jan. 28

TAIPEI — Taiwan urged the United States on Jan. 28 to honor an agreement to supply submarines to replace its current elderly fleet, as a U.S. congressional group visited the island to evaluate defense needs.

President Ma Ying-jeou voiced the desire while meeting the group led by Edward Royce, chairman of the U.S. House Committee on Foreign Affairs.

"The two Guppy-class (submarines) joined the Taiwan force more than 40 years ago, when I was with the navy. Now indeed they are very old and need to be replaced," Ma told his guests.

He was referring to two diesel-electric submarines built in the 1940s, which the U.S. congressmen saw while traveling to the island's southern Tsoying naval base Jan. 27. After being retired by the U.S. navy, the vintage warships were sold to Taiwan in 1973 and have since been used for naval training.

The United States remains the leading arms supplier to Taiwan despite switching diplomatic recognition from Taipei to Beijing in 1979. In April 2001, then-President George W. Bush approved the sale of eight conventional submarines as part of Washington's most comprehensive arms package for the island since 1992. Since then, however, there has been little progress in filling the order.

The United States has not built conventional submarines for more than 40 years, and Germany and Spain reportedly declined to offer their own designs for fear of offending China.

Royce told reporters his group had held talks with Taiwanese admirals about possible ways to remove barriers to the arms deal but did not elaborate.

The Taiwanese navy currently has two other submarines, which are Dutch-built, and these are the only ones that could be deployed in case of war.

Tensions between Taiwan and China have eased markedly since Ma came to power on a platform of strengthening trade links and allowing more Chinese tourists to visit. He was re-elected in January. But Taiwan, which has governed itself since 1949, still sees the need to modernize its armed forces.
China regards the island as part of its territory awaiting reunification, by force if necessary.

Submarine Trends In Asia Pacific: Air-Independent Propulsion A Game Changer? – Analysis
Eurasiareview.com, Jan. 29

While Europe and North America remain key submarine markets, China's ongoing military modernisation coupled with contending international relations in the Asia-Pacific will increasingly drive submarine procurement in the region over the next decade. In 2011, the total submarine market in Asia-Pacific is estimated at US$4.4 billion, and for the next decade, submarine expenditures are projected to US$46 billion.

With changing strategic realities, Asian navies aim to become increasingly flexible, and capable of varying mission profiles: from countering traditional coastal defence missions to protecting sea lanes and communication lines. Simultaneously, submarines are increasingly valuable strategic resource for both electronic and signal intelligence. To enhance the varying operational capabilities, increase submerged endurance and stealth, installing viable Air-independent propulsion systems is thus becoming a strategic necessity.

Advantages of AIP systems

Designed to enhance the performance of modern conventional (diesel-electric) submarines AIP is a key emerging technology that essentially provides a "closed cycle" operation through a low-power electrical source supplementing the battery, which may extend the submarine's underwater endurance up to two weeks or more.

AIP systems close the endurance gap between nuclear and conventional submarines, and mitigate increasing risks of detection caused by advanced anti-submarine warfare technologies – from modern electro-optical systems and surface radars to magnetic sensors, active and passive sonars, and airborne surveillance radars. Advanced AIP technologies thus promise significant operational advantages and tactical flexibility.

In theory, there are four primary AIP designs currently available: (1) closed-cycle diesel engines; (2) closed-cycle steam turbines; (3) Stirling-cycle heat engines with external combustion, and (4) hydrogen-oxygen fuel cells. Each provides a different solution with particular advantages as well as limitations in relation to performance, safety, and cost factors.

Since the early years of the Cold War, while major naval powers shifted to nuclear propulsion, smaller navies – particularly in Europe (Germany, Sweden, Spain, Italy and France) continued to develop and rely on conventional diesel-electric submarine fleets, given their lower cost and operational relevance for coastal defence. Traditionally, however, these submarines were highly vulnerable to various types of sensors – acoustic, visual, thermal and air – particularly when running on engines.

AIP systems in Asian navies

On the other hand, when running on batteries, these submarines became very quiet and difficult to detect, yet their battery capacity, discharge rate, and indiscretion rate (the ratio of diesel running time to total running time) substantially limited their underwater endurance. To overcome these baseline limitations, naval innovation in propulsion technologies over the past two decades has shifted toward AIP systems.

There is a variance, however, in the procurement of AIP systems in select Asian navies. For example, the only AIP steam-turbine system currently available is the French "MESMA" (Module d'Energie Sous-Marine Autonome) module, operational on Pakistan Navy's two Agosta 90-B class submarines.

Swedish-Kockum designed Stirling AIP technology is installed on Singapore Navy's two Archer–class submarines, and Japan's new Soryu-class submarines. The Chinese PLA Navy's Type 041 Yuan and Type 043 Qing class submarines are also reportedly using

Stirling technology. Meanwhile, the Republic of Korea Navy has ordered nine Type 214 submarines with German HDW AIP fuel cell technologies. Three first batch models of the new Son Won-Il class had entered service since 2007, and six second batch models will enter service from 2012.

Limitations and constraints

Notwithstanding the diverse AIP technologies, the overall effectiveness of each system will depend on how well it is integrated with other critical systems that ensure optimal submarine functions: power systems, sensors systems, safety systems, navigation systems, command, control, and communication systems, weapons systems, and climate control systems. In this context, any critical failure of an AIP during a combat mission or contested areas will mitigate survivability factors as well as tactical options.

Indeed, each AIP system design comes with an array of technological limitations, vulnerabilities, and risks, particularly in submerged operations – from the specific acoustic signatures produced by select AIP systems in specific operating regimes, to technical vulnerabilities in storing oxidizer/fuel, as well as their maintenance regime. At the same time, new anti-submarine warfare sensor technologies may provide viable AIP countermeasures.

Ultimately, AIP-related technological innovation and breakthroughs may not guarantee operational success – strategy, operational concepts, tactical development, leadership, training, and morale will continue to play as important role as emerging technologies and their operational capabilities.

Bangladesh announces plans to acquire submarines
Janes.com, Jan. 28

Bangladesh is in negotiations to buy submarines from China, a military official told reporters in Dhaka on 24 January.

The official was speaking after Prime Minister Sheikh Hasina said the country would establish a submarine force to boost its presence in the Bay of Bengal.

"We have made a decision to add submarines with base facilities to Bangladesh's navy very soon to make it a deterrent force," Hasina said in the southern city of Khulna at the commissioning of BNS Padma: a 50.4 m patrol craft that is the largest naval vessel to be built in the country. "We will build a modern three-dimensional navy for future generations that will be capable of facing any challenge."

Hasina's announcement follows a 14 March 2012 ruling by the International Tribunal for the Law of the Sea on the maritime boundary between Bangladesh and Myanmar, which said the border should be based on an equidistant line drawn from base points on the low water lines of the coasts of both countries. The ruling provided "clarity to prospective investors and clarifies Bangladesh's territorial waters, allowing certification of block boundaries", IHS Energy analyst Tom Grieder said at the time.

Sub Commander Relieved of Duty
Early Bird, Jan. 26

The commanding officer of the USS Pasadena was relieved of duty Friday.

Cmdr. Luis Molina, the commanding officer of the Pasadena (SSN 752), was relieved by Rear Adm. Richard Breckenridge, the commander of Submarine Group Two.

The submarine was based in Pearl Harbor, Hawaii, but is assigned to the submarine group in Groton while it is at the Portsmouth Naval Shipyard for maintenance.

The Pasadena has been in Kittery, Maine, since September 2011.

Breckenridge said he was not confident in Molina's ability to effectively lead the Pasadena through its maintenance overhaul. Molina has been reassigned to administrative duties at the naval shipyard. Cmdr. Mark E. Cooper has taken over as the submarine's commanding officer.

US Navy Eyes Silent Running for Nuclear Powered Subs
TG Daily, Jan. 26

One of the most critical aspects of the US military's fleet of submarines is the ability to operate in almost total silence.

When a submarine is submerged under the surface of the ocean, it's obviously difficult to see, but also needs to operate quietly to avoid detection from hostile forces. As such, the US Navy has been working on a new and revolutionary nuclear drive system for its formidable fleet of subs that promises to be more efficient and quieter than systems in use today.

The new nuclear submarine technology is part of the ballistic missile submarine Ohio replacement program. Essentially, the program focuses on a drive system that doesn't need to be refueled for its entire 50-year lifespan. The system also eliminates direct mechanical connections to the drivetrain in an effort to reduce as much excess noise as possible.

Indeed, the submarines will be adopting an unspecified type of electric drive, at least according to

the U.S. Navy's chief weapons buyer Sean Stackley. This is in contrast with the current fleet of ballistic missile submarines, which is equipped with a direct mechanical connection to the props that push the submarine through the water. In the present configuration, the nuclear reactor creates steam that drives turbines, which eventually turns the propellers to push the submarine forward.

Interestingly, the Navy wants to use the power from the reactor to create an electrical grid inside the submarine. Power generated by the reactor would flow into this electrical grid and turn electric motors that would drive the propellers through water. The elimination of that mechanical connection would mean less noise.

Eliminating the mechanical connection would also reportedly free up power that was previously required to propel the ship. Estimates indicate that 75 to 80% of the power a nuclear submarine generates is used specifically for propelling ship. With the above-mentioned paradigm, excess power would be routed to other ship systems. So yes, designing a reactor capable of generating power for 50 years without refueling is definitely a big deal.

"There is investment in the front end in the reactor plant to arrive at a core that will last the life of the boat," said Stackley. "By eliminating that midlife refueling, you effectively get greater operational availability out of the boat."

Wired reports that current mid-life refueling and overhaul costs for the Navy's fleet of nuclear submarines will likely take three years and carry a hefty price tag of billions.

Mabus: First Women Selected for Attack Subs
Navytimes.com, Jan. 24

Mabus' announcement comes the same day that the Pentagon said it planned to lift its policy excluding women from combat positions, a historic shift that potentially opens as many as 34,000 Navy jobs currently closed. These include billets in the riverine forces and Marine Corps units.

Mabus has overseen the integration of women into the sub force and made broadening their opportunities a centerpiece of his tenure.

"The Navy has a long history of inclusion and integration and I am proud we have achieved another important milestone," Mabus said.

The statement makes no mention of whether the Navy SEALs will open to women.
But many of the Navy's closed billets stem from berthing issues, not the combat exclusion rule, such as frigates and coastal patrol craft.

Don't Scrap America's Ballistic Missile Submarines
The Diplomat, Jan. 23

Last week, Bryan McGrath of Information Dissemination made a surprising argument about the U.S. Navy's boomer flotilla. McGrath argued that rather than spend a tremendous amount of money replacing the force (which will reach obsolescence by 2040), the U.S. should seek alternative deterrent options.

This argument comes at an interesting time for world Ballistic Missile Submarines (SSBN) fleets. In the United Kingdom, the battle over the Trident replacement has been fully joined, with many in Labour suggesting that expensive new boomers are a waste of money. At the same time, other SSBN operators have decided to modernize their fleets. The Russians continue to push forward with the Borei-class submarines, while the PLAN has now built up to five of the Type 094 class boomer. India's first SSBN, INS Arihant, will likely enter service in the first half of 2013. Only France, with submarines roughly a decade newer than the UK, is not currently pursuing a substantial revision of its SSBN force.

McGrath's case rests on five points. First, boomers take up a disproportionate share of the shipbuilding budget for the utility they provide. Second, in the modern nuclear environment "survivability" means considerably less than it did in the Cold War. Third, eliminating the boomers might open the door to more effective conventional strike options, including Prompt Global Strike. Fourth, it allows the Navy to concentrate on warfighting and forward presence, rather than strategic deterrence. Finally, if the global political environment changes, we can always build new boomers.

As much as I would like to agree with McGrath's argument, I'm not convinced. I do think that Trident replacement is a waste of resources for the United Kingdom, but then the UK does not play the same kind of global role as the United States. While concerns about boomers crowding out other platforms should be taken seriously, other parts of the triad suffer from similar problems. The U.S. ballistic missile force is aging, although some studies suggest that the basic architecture could remain in place as late as 2075. The bomber force has also grown old, even as the Air Force has increasingly diverted bombers to non-nuclear tasks.

Any option, thus, involves unpleasant decisions. Maintaining all three legs of the triad probably won't be possible. Because long range bombers inherently have dual conventional and nuclear purpose, the United States cannot eliminate the bomber leg in any traditional sense, although it can reduce numbers and certain metrics of readiness. Thus, the choice comes down to the intercontinental ballistic missile (ICBM) force and the submarine-launched ballistic missile (SLBM) force. My own view is that the United States can accept a lower threshold for at sea nuclear deterrence, but this leg should still retain a rump deterrence capability. Survivability concerns may not be what they were, but they are still relevant, and SSBNs have both survivability and flexibility advantages over ICBMs. It isn't accidental that China, India, and Russia are all choosing to develop or upgrade their SSBN capabilities at the same time. Concerns about shipbuilding costs should be remedied by resource transfers between services; if the Air Force no longer operates an ICBM force, then funding can (at least theoretically) shift towards the Navy.

Replacement of the Ohio boats will still be expensive, but circumstances may allow life extension beyond current expectations. The long term answer may not be an entirely new SSBN design, but rather a modified Virginia class boat that could carry ballistic missiles. The Navy has argued that this design would become more expensive than an Ohio replacement, but issues of number and vulnerability may prove more manageable if the option is no boomers at all. No other state in the world can match such a capability, and yet the U.S. presumably feels deterred from launching pre-emptive nuclear attacks on China or Russia. A reduced SSBN force is still the best option for providing a foundational level of nuclear security.
Robert Farley is an assistant professor at the University of Kentucky Patterson School of Diplomacy and International Commerce.

Russia Plans to Sell Multipurpose Submarines Abroad
Russia & India Report, Jan. 23

Rosoboronexport is in continued talks with Italy on the supply of S1000 submarines. However, these boats will not see action in either the Russian or the Italian Navy. Instead, they will be sold exclusively to third-party countries.
Experts at the Rubin Central Design Bureau for Marine Engineering and Italy's Fincantieri completed the conceptual design of the S1000 a few years ago. The submarine was always intended for third-party countries. The Italian shipbuilding company presented a mockup in 2008, at the 21st International Naval Defense and Maritime Exhibition and at the Conference Euronaval 2008.
According to Fincantieri Commercial Director Enrico Bonnetti, "the submarine's architecture has been determined, equipment has been positioned, and an integrated combat system has been designed."
The S1000 is 56-meters long, with an outside hard-hull diameter of 5.5 meters (18 feet), a submerged displacement of around 1100 tons, a maximum depth of more than 250 meters (820 feet), and a top underwater speed of more than 14 knots. The submarine can carry a crew of 16, plus six special operations troops.

The propulsion system includes two diesel generators, a battery, an electric motor and an AIP system with an electrochemical generator. Both Russian- and Italian-made equipment will be installed in equal amounts.
The S1000 non-nuclear submarine is designed for anti-submarine warfare, reconnaissance missions, special operations support and transporting underwater subversive troops. The submarine can perform these tasks both in shallow coastal waters and in deep-sea conditions. Secondary objectives include anti-ship warfare, mining and naval aircraft support.
The Soviet Union — and later Russia — have traditionally sold non-nuclear, diesel-electric submarines abroad.
"Our key product in this global market segment is the Project 636 submarine, which is the current bestseller. But we are also promoting the new Amur-1500 submarine," said Rosoboronexport head Anatoly Isaykin.
"This is not a replacement for Project 636; it is an entirely new submarine that we will be promoting in parallel with Project 636. The Amur-1500 will also be in demand from international buyers, as it will be offered in different versions — including a version with an air-independent propulsion system that is becoming increasingly popular in the naval market," Isaykin said.
He added that sales of naval hardware through Rosoboronexport amounted to 20 percent of total military exports last year and were slightly higher than in 2011.
The Russian navy will soon receive Project 636 submarines, as well.
A keel-laying ceremony for a large diesel-electric Project 636.3 submarine named Stary Oskol was held at the end of last summer, at the Admiralty Shipyard. These submarines are now being built for the Russian navy, after being exported for 20 years.
This submarine is expected to get a version of the new Kalibr missile system (exported as the Club-S) with a range of 1,500 kilometers (932 miles). There is one hitch though: to use this missile complex, a new combat command and control system is needed; its flaws have become one of the reasons behind the delays in building and deploying the Lada-class submarines for Russia's navy.
Project 636 submarines are armed with six torpedo launchers located in the bow; six torpedoes sit in shafts that are automatically reloaded after each launch. The torpedoes can be replaced with 24 mines, two in each launcher. Two torpedo launchers have been designed to fire high-precision, remotely controlled torpedoes. All launchers and their service systems can fire from both periscope and tactical operating depths.
The launchers can be reloaded within 15 seconds.
According to expert assessments, the submarine is low noise and "sees" better underwater than the most widespread American-made, Los Angeles-class submarines.

Borey-Class Nuclear-Powered Ballistic-Missile Submarine Yuri Dolgorukiy will Provide Russia with Effective Nuclear Deterrent
The Voice of Russia Radio, Jan. 22

On January 10th Russia's next-generation 'Borey'-class nuclear-powered ballistic-missile submarine (SSBN) 'Yuri Dolgorukiy' officially entered service with the Russian navy's Northern Fleet.
Professor Thomas Fedyszyn, the Chair of the Europe-Russia Studies Group in the US Naval War College, suggests that the development of 'Boreys' is the first crucial step in Russia's attempts to modernize and revitalize its aging military-industrial complex. As a first move towards modernization, the production of new submarines is likely to encourage construction of other sophisticated machines which will be able to protect Moscow's economic interests in the Arctic.Equipped with the most advanced weaponry, the new submarine will also provide Russia with an effective nuclear deterrence capability. Crucially, while the might of the new submarine cannot be underestimated, the expert argues that for the moment 'Boreys' should not be viewed as Moscow's bid for naval dominance nor a threat to the NATO.
The views and opinions expressed by Prof. Fedyszyn in this article do not necessarily reflect official policies or positions of the United States Naval War College or the United States government.
After years of development and construction Russia's newest submarine has finally entered service with the Russian Navy. The first in its kind, 557 feet long 'Borey'-class submarine 'Yuri Dolgorukiy' is powered by an OK-650B nuclear reactor, has a maximum speed of 25 knots and can dive to more than 1,400 feet below the surface. Built using the most sophisticated technology, the vessel is equipped with 16 Bulava submarine-launched ballistic missiles (SLBM) and six RPK-2 Viyuga cruise missiles, with a 5,000 mile range.
Professor Fedyszyn suggests that such technical and military characteristics make the new submarine an effective nuclear deterrent. According to the expert, "the Borey class will possess characteristics that will more than enable it to perform its mission of open ocean deterrence patrol. Compared to previous Russian-designed SSBNs it will be quieter in the open ocean". As a consequence, "it will be very difficult for anyone to locate the submarine at sea" which will enable "its missile to be a relatively invulnerable second strike weapon: the most 'stabilizing' portion of the nuclear deterrent".
There is a growing controversy, however, over the question of whether Russia will use its new submarines only for the purposes of deterrence. Given the high costs of researching, designing and developing the new SSBN-SLBM combination (which at one point consumed more than one-third of Russia's defense budget), some have been quick to assume that the development of new submarines should be seen as Moscow's attempt to reassert its naval military dominance. Prof. Fedyszyn does not agree with this point of view. In his opinion, the development of the "new class of submarine should not be viewed as a Russian bid for naval dominance, but rather as an initiative to modernize one leg of the Russian nuclear deterrent. Its current Delta Class SSBNs are becoming obsolescent and rarely engage in deterrent patrols. The Borey class will take more SLBMs to sea and will enable Russia to emphasize what Americans feel is the most stable leg of the nuclear deterrent force. This cannot be confused with naval dominance."
Indeed, given that Russia's current naval deterrent capability consists of an aging fleet of pre-1990s submarines, the development of 'Boreys' is a significant step for modernization of Russia's strategic arsenal. Before the new submarine entered into service, only a few Russian SSBNs were available for deployment at any one time, with the remaining vessels either undergoing maintenance or modernization, or in training. As a result, for the past decade, Russian SSBN patrols have occurred intermittently, with lengthy gaps in coverage. After January 10th, however, at least one Russian strategic submarine can be at the sea at any time. When the fleet of 'Boreys' reaches eight submarines by 2020, Russia's navy would be able to conduct around one hundred deterrent patrols a year.
According to Prof. Fedyszyn, "the U.S. is definitely aware of this increased move to reinvigorate the Russian Federation Navy and will observe closely". However, calling it a bid for naval dominance or a precursor to the arms race "would be an exaggeration".
Another debate surrounding the 'Boreys' focuses on the question of whether Russia's decision to build 'Yuri Dolgorukiy' was reinforced by the ongoing conflict between Russia and NATO over the BMD program in Europe. In Prof. Fedyszyn's view, "the Borey-Bulava combination is a plan many years in the making. Any coincidences with current events are just that: coincidences."
Nonetheless, the expert admits that "it is feasible to imagine that Russia envisions this move as a 'counterbalance' " to NATO's BMD.

Prof. Fedyszyn adds, however, that if Russian submarines are upgraded with more long-range cruise missiles, it would be NATO's turn to counterbalance "since war fighting would be emphasized over deterrence". In this sense, it is crucial that Russia maintains an appropriate balance between the deterrent and offensive capabilities of 'Boreys'.
In the meantime, the new submarines will serve not only Moscow's military-strategic goals, but will also be a significant 'push' for Russian construction and development agencies. In this respect, 'Boreys' are likely to inspire Russian scientists toward creation of new naval machinery which will subsequently help to secure Kremlin's economic interests in various parts of the world. According to Prof. Fedyszyn, "navies have historically assisted the economic interests of nations and it would be both appropriate and reasonable that the Russian Federation Navy be used to protect Russia's economic interests in such region as the Arctic". In the near future, the Northern Continent is expected to become the arena of intense struggle for territory and natural resources, and, in this sense, construction of 'Boreys' is a very timely development.
Crucially, however, Russia should not stop on 'Boreys' in its attempts to revitalize its Navy. Echoing the recent claims of President Putin, Prof. Fedyszyn suggests that further major reforms will be required to fully revive the naval complex.

US military wants to hide drones under sea
Presstv.ir, Jan. 22

Hollywood films often show alien ships or giant monsters rising from the ocean depths to threaten humanity's existence. The U.S. military envisions a more realistic scenario of hiding robotic drones, sensors or decoys on the ocean floor so that they can rise to the occasion when needed.

The idea of hiding sneaky spy technologies beneath the waves comes from the U.S. Defense Advanced Research Projects Agency. The agency described its Upward Falling Payloads program as an effort to hide underwater capsules that could be triggered remotely to activate, float to the surface and release their payloads of sensor buoys or even flying drones.

"The concealment of the sea also provides opportunity to surprise maritime targets from below, while its vastness provides opportunity to simultaneously operate across great distances," DARPA said in a broad agency announcement on Jan. 11.

Earth's oceans provide plenty of hiding places for robots to engage in some "cheap stealth" — about 50 percent of the oceans reach depths deeper than 2.5 miles. DARPA's ideal payload would fit within a spherical capsule 17 inches in diameter or a cylinder about 5 inches in diameter and 36 inches in length.

The idea of deploying robots from beneath the waves has some precedent, given how the Navy has tested the launch of flying drones from a submarine's trash chute. By comparison, the Upwards Falling Payloads effort faces the additional challenges of ensuring robotic technologies can hibernate for years under deep-ocean pressure and still obey instantly when the order comes down to activate.

DARPA emphasized that the new program is "specifically not a weapons program" and would have "non-lethal" intent. "But other countries may have a different opinion on the definition of "non-lethal" for robots or drones deployed to carry out surveillance or jam communications."

The new program highlights the U.S. Navy's turn to a growing swarm of robotic ships and flying drones that can supplement traditional warships and aircraft. Recent experiments have included firing missiles from robot boats, deploying drone helicopters such as the MQ-8 Fire Scout to help track pirates or smugglers, and testing the X-47 robot warplane from the deck of an aircraft carrier. DARPA has also funded development of larger robot ships, such as a submarine hunter called the Anti-Submarine Warfare Continuous Trail Unmanned Vessel, which can stay out at sea for up to 90 days.

Eight cited during 'Die-in' at nuclear sub base
Northkitsapherald.com, Jan. 21

BANGOR — Eight people were cited for trespassing Saturday after they entered Naval Base Kitsap — Bangor as part of a "die-in" to oppose war and nuclear weapons.

The eight are members of Ground Zero Center for Nonviolent Action. The event was an activity timed to commemorate the birthday of the late Rev. Dr. Martin Luther King Jr. Cited were Mary Gleystein of Kingston, Lynne Greenwald of Tacoma, Rodney Herold of Seattle, Thomas Hodges of Seattle, Constance Mears of Poulsbo, Taylor Niemy of Bremerton, Michael Siptroth of Belfair, and Carlo Voli of Edmonds. Leonard Eiger of Ground Zero said the group blocked the main gate and staged the "die-in" for more than a half hour. While group members maintained a peaceful vigil on the roadside outside the base entrance, 11 protesters entered the roadway directly in front of the entrance gate. They stretched a banner across the inbound traffic lanes; the banner carried a quote from King: "When scientific power outruns spiritual power, we end up with guided missiles and misguided men." An additional banner read, "Abolish Nuclear Weapons."

Traffic into the main gate was re-routed for approximately a half hour until a Washington State Patrol officer arrived and ordered the protesters to leave the roadway. The protesters then dropped the banners and dropped to the ground to represent, as one protester said, "the horrific result of a nuclear weapon."

Eight of the protesters crossed onto the base before dropping to the ground and were arrested by Navy security personnel who had been observing the vigil. The protesters were taken to a building on the base where they were questioned, processed and released after being issued citations for trespassing. All will receive summons to appear in federal court, Eiger said.

The Trident submarine base at Bangor, just 20 miles from Seattle, contains the largest concentration of operational nuclear weapons in the U.S. According to Ground Zero, each of the eight Trident submarines at Bangor carries up to 24 Trident II (D-5) missiles, each capable of being armed with as many as eight independently targetable thermonuclear warheads. Each nuclear warhead has an explosive force of between 100 and 475 kilotons (up to 30 times the force of the Hiroshima bomb).

Ground Zero holds three scheduled vigils and actions each year in protest of U.S. nuclear weapons policy. The group is currently engaged in legal actions in federal court to halt the Navy's construction of a second explosives handling wharf at Bangor. Ground Zero is also working to de-fund the Navy's plans for a next-generation ballistic missile submarine, estimated to cost $99 billion to build.

Nearly 50 people participated in Ground Zero's annual celebration of King's life. Under the theme "We Are One," the day focused on King's commitment to nonviolence and his opposition to war and nuclear weapons.
The day's activities included a viewing of a video about King's 1967 sermon in opposition to the Vietnam War, followed by a discussion of the sermon's relevance in the context of today's unending wars on Iraq and Afghanistan and the effects on the poor and

disenfranchised. Participants also participated in nonviolence training, education about the Trident nuclear weapons system and the Bangor submarine base, and preparations for the afternoon protest at Bangor.

Losing the anti-submarine warfare race
DefenceIQ, Jan. 16

During the Cold War, Soviet submarines were both nuclear and noisy, detectable with passive sonar and kept at bay by a robust anti-submarine warfare capability in the West.

Time however has moved on and with the transitioning to a post-Afghanistan era, the U.S., and many of her partners and allies, are finding that their navies have neglected its skills in the underwater domain for too long.

China's growing might and its own investment into submarines has driven some movement in the Asia-Pacific region where tensions and disputes surrounding island territories are still commonplace.

In some instances, particularly when training alongside the Australians, the U.S. Navy has been taught a hard lesson about its general lack of aptitude in this domain despite its continued heavy investment into military technology.

Elsewhere in the world, modern diesel-electric submarines have increasingly taken over from nuclear predecessors when it comes to coastal patrols, emitting a much quieter acoustic signature as they blend with commercial shipping lanes, trawlers and tourists, not to mention coral reefs, schools of fish and even varying concentrations of salt.

This means that the increased expansion of diesel subs in the East, along with an equally aggressive investment into cheap mini-submarines, has threatened to outdo superior technologies with a thought towards sheer volume.

Much like some of the anxieties aired over the approach to air superiority, where deployment of fewer but technologically dominant fighters could be overwhelmed by multiple swarms of lower-end adversaries, the situation beneath the waves is proving to be as much of a strategic calculation as it is one of budget, tactics or sensor capability.

Time for action

In March, senior military, academia and industry solution providers are set to convene in London to discuss ways in which to reverse this trend and offer more detail than previously made public about ongoing requirements.

The meeting is all the more significant as it marks the first major conference in the realm of ASW since the Obama administration announced the strategic pivot to the Pacific, the region that sees the most heavily trafficked sea-lane in the world and therefore one of the most complex regions in which to operate.

China is understood to have made a number of submarine acquisitions through 2012 and U.S. intelligence analysis believes that these could be carry and launch nuclear weapons within the next two years.

Some of these purchases have come from Russia, which outfitted China with 12 Kilo-class boats since the 19902 and has, according to the Russian press, has now signed a memorandum of understanding to sell China four Amur-class (Project 677E) diesel electric attack submarines with the possibility of further purchases given China's troubles with its indigenous efforts.

That is not to say that China's own programmes are not advancing quickly, with rumours of new versions of existing boats expected to be in service by 2015.

On its books already are new builds on two types of nuclear-powered submarines – the ballistic missile Jin-class (Type 094) and the attack submarine Shang-class (Type 093) – while diesel-electric attack submarine programmes include the Yuan-class (Type 041 or Type 039) the Song-class (Type 039 or Type 039G).

Of these, some speculative reports are adamant that the 041 and the 043 Qing-class are equipped with advanced air-independent propulsion (AIP), while the new Russian Amur-class may or may not come packaged with the technology.

AIP is an important factor of course, allowing as it does a near silent propulsion and longer submerged time, but this tables a number of complicated options for navies to wade through in order to find the most appropriate solution to their needs, such as hydrogen peroxide systems and closed cycle steam turbines, lengthening production timelines.

Advantages aside, China has been notorious for attempting to fake a number of military technology advances or augment platforms with cosmetic allusions to technology that it does not really possess, leading to some speculation that AIP is not a near-term concern.

Whether true or not, it would be important to remember that even technology considered obsolete can still present a credible threat if forces spend too much time focusing on the power of new age equipment.

The same principle could apply the attention being placed on other potential adversaries below the surface – both North Korea and Iran each have small but capable submarine fleets that although ageing, still present credible threats to key strategic zones.

According to StrategyPage, Iran has an estimated 3 diesel electric submarines, plus 25 mini-submarines, and North Korea owns 20 with a supplementary 50 mini-submarines, all of which can be operated reasonably well on limited skill and experience.

It is no coincidence that multinational forces with shared interests have this year been involved in the largest ever mine countermeasure (MCM) and related operations exercise in the Strait of Hormuz, a chokepoint span of water that strategists believe Iran could try to cut off if beginning hostilities in an attempt to starve oil reserves, of which it has already threatened.

Trials and tribulations

Aside to technology, training in the ASW domain is one major issue that has recently seen mixed fortune.

Despite the huge benefits witnessed by all branches of the military in the advance of virtual simulation training, the underwater environment has struggled to find software accurate enough to closely replicate the complex and unpredictable nature of modern sonar operations, thereby ill-preparing operators in a real-life environment.

However, if trends in software development continue at the rate at which it has in the past decade, analysts believe this shortfall could be surmounted soon, particularly as the existing requirement should incentivise research.

Meanwhile, for the U.S. specifically, its 40 year construction of a $100 million submarine/ASW training range in the waters off the south coast of California was in serious jeopardy as environmental activists pushed for federal legislation to ban sonar operations on the claims that marine life was being negatively impacted.

Fortunately for the Navy, a judge ruled in September that it had emplaced enough procedures to protect local species, such as slowing ships during calving season and traversing critical habitat only during times of high visibility.

No solution has yet been presented that overcomes the many shortfalls of sonar but some solutions to overcoming the noise generated by nuclear submarines are emerging.

Where traditionally water has had be pumped through the system for cooling, other commercial technologies are looking at answering the issue with non-water based cooling in the form of liquid metal, gas or molten salt and in the form of small modular reactors (SMRs) that boast cost-effective and flexible designs.

Yet, even with SMRs signalling a potential greener future, industry is still plagued with those matters of politics and public perception that threatened to derail the testing range, and so testing nuclear-based technology is a minefield in itself.

As the U.S. Navy owns none of its own diesel boats at present, it is also relying on allied forces that do – relying on one time on a leased Swedish Gotland class – to meet them in joint training exercises in order to have any real hope of understanding what the true quirks and capabilities are of such vessels.

The concern is that in its lack of a diesel fleet, the Navy may well be undercutting its ability to counter this technology in theatre, where the only other viable option to date has been to send ships into shared Eastern waters to surreptitiously track regional diesel submarines, including those of the Chinese.

Although smaller diesel submarines are cheaper to build and sound like the best way forward, the U.S. would of course be nailed to the costly prospect of also putting together a new service capability from scratch.

Beyond the sea

Perhaps the biggest problem is that the stealth-like nature of diesel submarines are reflected in the development of programmes worldwide; without knowing exactly what the nature and seriousness of the threat is, the only course of action seems to be to plough as much budget as possible into covering a maximum capability, which is of course a tremendous challenge for ASW programme managers to both balance and justify.

Likewise, it is difficult for navies to say too much about their capabilities in an open forum, being that potential adversaries will also be on the look out for new information.

As such, alongside ASW development, the intelligence war will again be in overdrive – much as it was during the Cold War – and could tip the scales of any future conflict waged in the naval battlespace.

It is arguable therefore that the East has already offered one vital point of ASW education to the world that those developing national programmes may do well to ponder:

"All warfare is based on deception. Hence, when able to attack, we must seem unable; when using our forces, we must seem inactive; when we are near, we must make the enemy believe we are far away; when far away, we must make him believe we are near."

Thus spoke Sun Tzu.

Secret Nuclear Redesign Will Keep U.S. Subs Running Silently for 50 Years
Wired.com, 17 Jan 13

The U.S. Navy is betting the future of its submarine force on a secret and revolutionary nuclear drive system that aspires to be more efficient and quieter than anything under the water today.

The heart of the planned ballistic missile Ohio Replacement (OR) program will be built around a drive that will not need to be refueled for the 50-year life of the boats and cuts out potentially noisy direct mechanical connection to the drive train. In other words, the Navy's next-gen subs could be almost silent, and keep running for a half-century straight.

The Navy's ballistic missile fleet, or boomers, rely on stealth to hide from rival boats, ships and sub-hunting aircraft. The quieter the boat, the harder it is to find. (And these boats are big: the current Ohio boomer is more than a football field and half long displacing 19,000 tons.)

Now the Navy is developing an innovation that attempts to give OR boomers the quietest nuclear engine yet by "going to [an] electric drive," Sean Stackley, the Navy's chief weapons buyer, said in a January interview with the U.S. Naval Institute.

Current boomers have a direct mechanical connection to the props that drive the boat. Steam turbines driven by the nuclear power plant go through a series of mechanical gears that translate the high torque power from the nuclear plant into lower torque energy needed to propel the ship. All of those mechanical connections can generate noise, the bane of the submariner.

Moving forward, the Navy wants to use the power from the reactor to create an elaborate electrical grid inside of the submarine. The reactor power would feed the grid and in turn the electric motors that would drive the boats. Eliminating the mechanical connection would mean less noise under water. The set up would also free up power previously devoted to driving the ship. Currently anywhere from 75 to 80 percent of the power from a nuclear submarine is devoted to driving the ship through the water. Extra power could be routed to other systems like sonars and potentially unmanned underwater vehicles.

This will be the second try for the Navy to use electric drive subs. The service experimented with the technology in the 1960s and 1970s but found the boats equipped with the drives to be underpowered and maintenance heavy.

Unlike other programs, the Navy hasn't gone out of its way to tout the electric drive technology it plans to use for the OR boomers. A 2010 Analysis of Alternatives for the OR program, then known as the SSBN(X), was closely held by the service. Gene Taylor, the chairman of the Seapower subcommittee of the House Armed Services Committee at the time, demanded publicly that Congress get a chance to evaluate the proposal. He lost his 2010 election and the Navy kept specifics mostly quiet.

Among the details they have discussed, in addition to the electric drive, is the development of a new nuclear power plant for the OR boats.

"There is investment in the front end in the reactor plant to arrive at a core that will last the life of the boat," Stackley said.

Now, the Navy's nuclear fleet requires a mid-life refueling and overhaul that can keep a ship or submarine out of commission for almost three years with a cost in the billions.

"By eliminating that midlife refueling, you effectively get greater operational availability out of the boat," Stackley said.

The standard ratio for ballistic missile submarines on patrol to subs in port is about four to one. Currently the navy fields 14 Ohio-class boomers packing 24 Trident II D5 intercontinental ballistic missiles. (The first four Ohios were converted to carry missiles with conventional warheads).

"There are still going to be midlife upgrades but the refueling portion is effectively eliminated which allows us to reduce from today's 14 Ohios to reduce down to 12 Ohio Replacements," Stackley said.

The original Ohio-class builder General Dynamics Electric Boat hasn't built a boomer in more than 20 years and the durability of the drive and the boats to last until 2080 is a tall order.

Added to the pressure is a Pentagon imposed cost cap that reduce the cost of the boat from about $7 to 8 billion down to $4.9 billion. But the Navy will have little margin for error if they want to keep the price tag that low.

The Navy has already delayed work two years as part of its 2013 budget. Currently the first OR boat is scheduled to begin construction in 2021 for a decade-long construction and development process. The super-silent boat is scheduled to make its first patrol in 2031. After that, you may never hear from it again.

If [Australia] Trident is axed, everything will go
The Dumbarton & Vale of Leven reporter, Jan. 18

The MOD will pull out of Faslane if the Trident nuclear deterrent programme is removed in an independent Scotland, the UK Government warned yesterday.

Ministers issued the stark message in response to a report by the Commons Scottish Affairs Committee on the future of Trident, amid fresh fears the removal of Trident submarines from Her Majesty's Naval Base Clyde in an independent Scotland would lead to conventional submarines, minesweepers and training facilities going too.

According to officials, around 25 per cent of the 6,700 workforce live in Dumbarton and the Vale.

Ministers said "there would be no question" the entirety of the submarine enterprise on the Clyde would be relocated if the SNP axed Trident after a Yes vote on independence.

Politicians have warned closure of the base would cause economic devastation in Dumbarton and the Vale, with Jackie Baillie MSP accusing the SNP of having "no concrete plans to mitigate the devastating impact that its policies will have on the economy of our area".

Some 6,700 direct jobs exist at Faslane, along with a further 1,500 posts which are to be created by a centre of excellence in 2022. Labour calculates a further 11,000 people are also indirectly reliant on the base for their livelihoods.

Over £3.5 billion has been invested in the introduction of Vanguard class submarines and the Trident missile programme, on top of associated housing and infrastructure.

And the committee's report said at least the same amount would be required to replicate the programme elsewhere, meaning relocation would be inevitable.

Ministers warned: "Since the collocation benefits would be required in any alternative location, there would be no question but that the entirety of the submarine enterprise on the Clyde would be relocated."

The committee's report said the UK and Scottish governments must fully detail the consequences of the removal of Trident as part of the whole secession agreement as soon as is practical.

Ms Baillie said the Scottish Affairs Committee report confirmed what had been said all along - there are 11,000 jobs dependent on Faslane Naval Base that will go if Scotland separates from the rest of the United Kingdom.

She added: "At a time when there are 30 people chasing every vacancy in West Dunbartonshire, it is ludicrous for the SNP to propose job cuts at Faslane which would effectively kill the local economy.

"There are 11,000 jobs dependent on Faslane Naval Base that will go if Scotland separates from the rest of the United Kingdom.

"The SNP's policies do not stack up. Even now the SNP won't tell us how many submarines and defence ships we would have if Scotland was to become independent. They are even unclear about whether any Scottish Navy, small though it may be, would be based in Rosyth or Faslane."

"This really does prove that we are better and stronger being part of the United Kingdom."

Stuart McMillan, an SNP MSP for the West of Scotland, claimed Faslane would have a bright future as the base for Scotland's conventional naval force.

He said: "It's clear Scottish public opinion and a majority of the members of Scotland's parliament are strongly opposed to nuclear weapons being based in Scotland and only a Yes vote in 2014 can guarantee Trident's removal.

"Faslane has a bright future as the base for Scotland's conventional naval forces with independence, a future free from hosting weapons of mass destruction on the Clyde."

He added: "Over the next six years Scottish taxpayers will spend an average £83m a year to make nuclear warheads. That money would pay for an additional 1,500 service personnel, something which I believe could be invested to secure future employment local people. The millions blown every year on nuclear warheads is unjust and immoral."

Chairman of the Scottish Affairs Committee, Ian Davidson, said the UK and Scottish governments must be more open about what would happen to Faslane in the event of a yes vote to independence.
His committee concluded the coalition should make some contingency plans ahead of the referendum scheduled to be held in the autumn of 2014.

Futuristic Robot Ship Tracks Enemy Submarines
Mashable.com, Jan.16

A U.S. robot ship resembling a Star Wars spacecraft skimming the waves could hunt for enemy submarines within a few years.
The unarmed robot ship, called Anti-Submarine Warfare Continuous Trail Unmanned Vessel (ACTUV), aims to track submarines using laser detectors, radar and sonar. Such steady sea surveillance could protect the U.S. Navy's prize aircraft carriers and other large warships against underwater threats — one of many ways robots can watch the backs of humans on future battlefields.
ACTUV's design has a "trimaran" shape with gull-like "wings" touching the water on either side of the ship's main body, so that it could appear to almost fly over the ocean surface at high speeds. A video released in December 2012 envisions how the robot ship could handle its future tracking missions.
A human pilot could operate the ship remotely until it gets out of harbor, but ACTUV's own robotic brains would take over from there as it patrolled and tracked down submarines.
Sea deployments would ideally last from 60 to 90 days without any humans or maintenance. ACTUV could supposedly survive rough wind and waves approaching near-gale conditions of 32 to 38 mph.

The U.S. Defense Advanced Research Projects Agency (DARPA) awarded $58 million to the Science Applications International Corporation (SAIC) in August 2012 — funding intended for building and testing the ACTUV robot ship. DARPA wants the robot ship to begin sea trials by mid-2015.
NASA's Jet Propulsion Laboratory and Carnegie Mellon University both have a hand in helping create the robot's software brains. SAIC has also enlisted the help of Oregon Iron Works and Christensen Shipyards to work on ship design, construction and propulsion.
Such a robotic submarine hunter would represent one of many tireless robots working for the U.S. Navy in the near future. The Navy previously experimented with ways to launch drones from its own submarines and test-fired missiles from robot boats.
U.S. Navy warships are also poised to deploy swarms of drone helicopters and warplanes from their decks. The Navy has tried out drone helicopters such as the MQ-8 Fire Scout during operations targeting smugglers and pirates from the air. More recently, the X-47 robot warplane the size of a fighter jet underwent its first sea trials aboard a U.S. aircraft carrier in late 2012.
Defense experts have even envisioned the Navy deploying a huge submarine to act as an underwater mother ship for swarms of swimming or flying robots. That scenario came up during war games held by the U.S. Department of Defense's NeXTech workshop series in August 2012.

Message in a bottle follows captain
Cape Times, Jan. 16

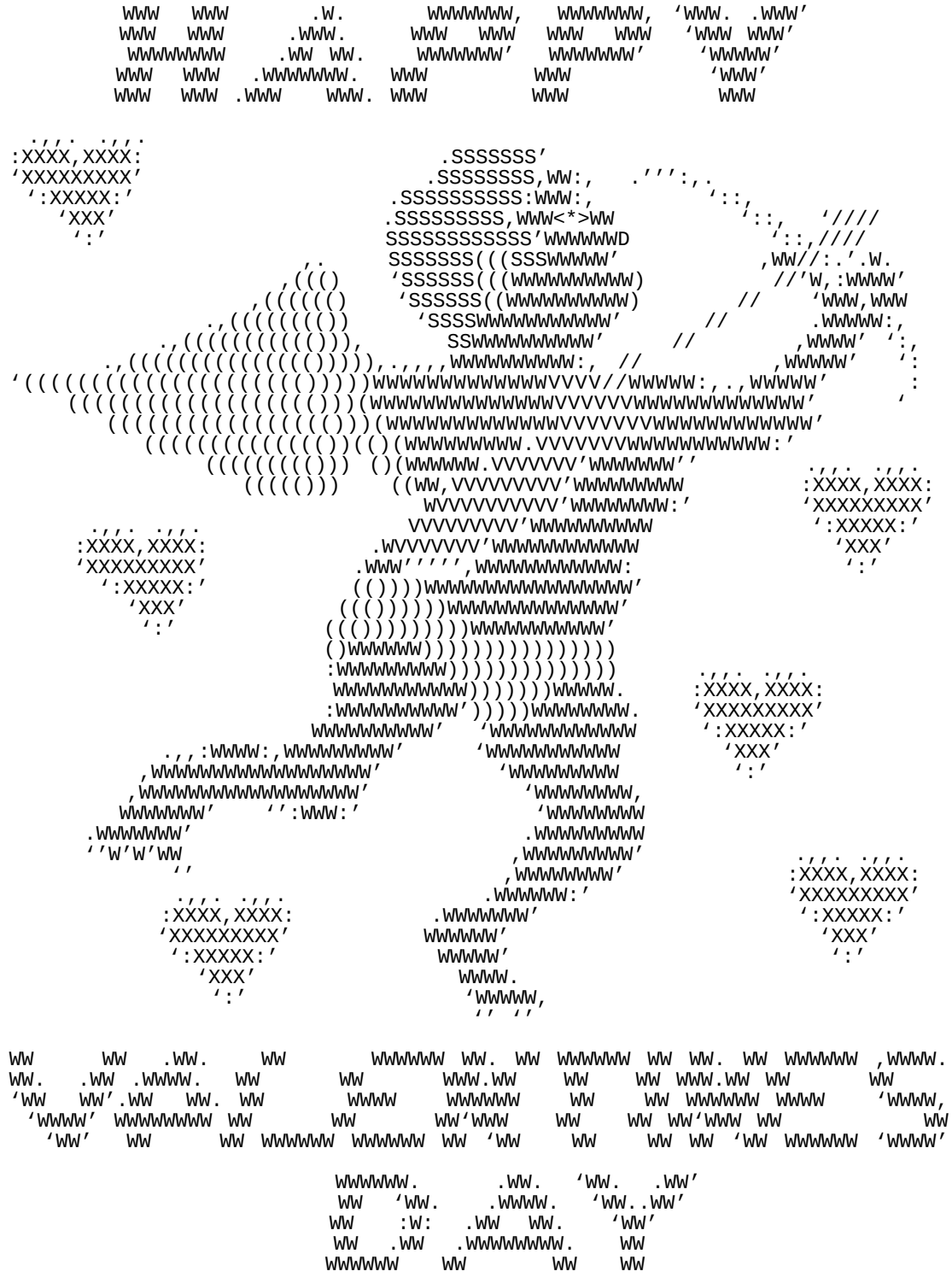
CAPE TOWN-When one thinks of a word to describe the captain of a submarine warship, "romantic" is probably not one that springs to mind.
But Commodore Darren White of the SA Navy is the first to admit he is a romantic. Two years ago, somewhere in the mid Atlantic, he wrote a message, put it in a bottle and threw it overboard, letting his imagination take him to all sorts of exotic places regarding where the bottle could eventually end up.
Never in his wildest dreams, he says, did he imagine the bottle would follow his submarine home, taking two years and at least 1 600 nautical miles to do so. Not quite home, as the submarine SAS Charlotte Maxeke is berthed in the naval dockyard in Simon's Town, but almost there.
The bottle ended up about 20 nautical miles away across False Bay, on the shores of Pringle Bay.
"It's quite extraordinary. I'm still trying to get my head around it," White said on Tuesday. The bottle's trans-Atlantic voyage began on November 27, 2010, when White tossed it into the sea at 40º south and 8º west.
The submarine and other SA Navy warships had been doing exercises with South American navies and were on their way home. Argentina was the host country.
"Argentina is known for its wine and beef, and we made sure we tasted a lot of it. I kept a wine bottle from a function we had while alongside in Argentina. I typed out the message, put a picture of the crew with it and put it in a plastic sleeve in the bottle. Everyone had a good chuckle at me when I threw it overboard."
Fast forward to last Saturday, when Heinz Modricky of Somerset West was walking with his son from Pringle Bay towards Cape Hangklip. There was the usual amount of flotsam and jetsam on the shoreline, but then Modricky noticed the wine bottle with a cork in it and something inside.
"I said to my son: 'Hey look there's a message in the bottle'. I took photographs and then took it out. At first I was a bit disappointed because I thought it was just from Simon's Town, but then I read where it had been dropped off, in the middle of the Atlantic, and I was amazed. It took two years and two months to get here," Modricky said.
The typed message said: "Hello to whoever finds this. I have never done this before so am not sure of the result. Hopefully this bottle remains intact and travels several thousand miles to distant shores. My name is Darren White. I am the captain of the South African Submarine "SAS CHARLOTTE MAXEKE". We are in transit back to South Africa from exercises in Argentina and Uruguay. This bottle was ditched in position 40'00'S 008'55.7W."
White had put an e-mail address, but the blue ink had faded away. Modricky decided to put a post on the 4x4 forum website: "I do not have a contact for Darren. I'm sure he would like his bottle back! Anyone with contacts in the navy?" Someone saw it, contacted the navy and by Saturday evening Modricky had White's cellphone number.
"I'm in my 50s and I have never found a message in a bottle in my life, but when I was in East London in the 60s, I also threw bottles with messages into the sea. I think everyone has a romantic notion about doing that," Modricky said.
White is chuffed that Modricky has agreed to return the bottle. He has photographs the crew took of him throwing the bottle overboard and Modricky's photographs of the bottle. He plans to put these in the submarine's linebook, which records the life and times of the vessel. "Anything could have happened to that bottle. It could have sunk, or been smashed. But it came all this way back. If I stand here at work, I can look across the bay to the spot where it washed up."

US special forces to trial prototype dry submersibles
IHS.com, Jan. 8

US submarine builder General Dynamics Electric Boat has been selected by the US Special Operations Command (USSOCOM) to lead the design and build of a prototype 'dry' submersible for evaluation by the naval special forces community.

The USD44.3 million contract award is intended to provide USSOCOM with one of two User Operational Evaluation System (UOES) craft to support its Dry Combat Submersible Technology Development (DCS TD) programme; Submergence Group had previously been brought under contract in June 2012 for the build of another UOES craft design.

General Dynamics Electric Boat was, alongside Lockheed Martin, Oceaneering International, and L-3 Communications, awarded one of four Dry Combat Submersible-Light (DCS-L) Phase I contracts in April 2012. These initial contracts, concluding in July 2012, funded preliminary concept design activities for a 'dry' swimmer delivery craft.
While details of the DCS-L Broad Agency Announcement have remained restricted, USSOCOM has previously released some outline details of its broad DCS-L requirement. This calls for a free swimming vehicle capable of delivering a sustained top speed of at least 5 kt, a maximum operating depth of at least 200 ft, provision for two pilots, and a minimum four SEALs/objective eight SEALs.



From the Radio Gang of the USS Lafayette, SSBN616(G)

113th Submarine Birthday Ball

The Submariner Family, Our Foundation of Victory

Hilton San Diego Bay Front
Saturday, March 23, 2013

Social hour begins at 4:00 p.m.

Attire:
Full, Dinner Dress Blue, or
Dinner Dress Blue Jacket

$65.00 Per Person

(Cash, Check and Credit Cards Accepted)

PayAnywhere VISA MasterCard DISCOVER AMERICAN EXPRESS

For more information, please contact:

HMCS(SS) Shane Walter (619) 553-7758
MMCS(SS) Brandon Miles (619) 553-8952
ETC(SS) Jared Jones (619) 571-3670

Like us on Facebook U.S. Navy Submarine Birthday Ball, San Diego