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The Silent Sentinel

December 2010

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.

Happy Chanukah, Merry Christmas, and a Healthy and Prosperous New Year to all US Submariners, past and present, and their families.

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San Diego Base

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The Silent Sentinel via Email

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

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

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Would like the SILENT SENTINEL emailed: YES_____ NO_____

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*DUE TO LOGISTICS CONSTRAINTS, ALL INPUTS FOR THE SILENT SENTINEL MUST BE IN MY HAND NO LATER THAN **ONE WEEK** AFTER THE MONTHLY MEETING. IF I DO NOT RECEIVE IT BY THIS TIME, THE ITEM WILL NOT GET IN. NO EXCEPTIONS! MIKE*

December Meeting

Our monthly meetings are held on the second Tuesday of the month at VFW Post 3787, 4370 Twain Ave., San Diego. Our next meeting will be on 14 December, 2010. 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, back at home recuperating.

Submarine Losses in November

Submitted by C J Glassford

ALBACORE (SS 218) - 86 Men on Board:
Possibly Sunk, on 7 November 1944, by Japanese Mine, Off the Northern Tip of Honshu :
" ALL HANDS LOST "

GROWLER (SS 215) - 85 Men on Board:
Probably Sunk, on 8 November 1944, by Japanese Destroyer, Escort Vessel, and Coastal Defense Vessel, Off Mindoro :
" ALL HANDS LOST "

SCAMP (SS 277) - 83 Men on Board:
Sunk, on 11 November 1944, by Japanese Naval Aircraft, and Coast Defense Vessel, in Tokyo Bay Area :
" ALL HANDS LOST "

CORVINA (SS 226) - 82 Men on Board:
Torpedoed and Sunk, on 16 November 1943, by Japanese Submarine, South of Truk :
" ALL HANDS LOST "

SCULPIN (SS 191) - 63 Men on Board:
Damaged, on 19 November 1943, by Japanese Destroyer, and later Scuttled, North of Truk :
" 21 SURVIVED POW CAMP "

CAPELIN (SS 289) - 78 Men on Board:
Sunk, on 23 November 1943, by unknown Causes, Either by Japanese Aircraft, Minelayer, or Japanese Mine in the Northern Celebes, or perhaps a Hull Defect reported "Prior" to Her Departure from Darwin, Australia :
" ALL HANDS LOST "

STOREKEEPER "STILL" NEEDED

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In the last Sentinel, I wrote that on account of my health, it is very difficult to maintain my position as storekeeper. The logistics make it very difficult for me to do the job properly I'll repeat what I then wrote for those of you who just may have missed it.

San Diego Base is still in need of a storekeeper (though we initially had a voluteer, personal challenges--unkown to him before he agreed to take.on the job--have raised their nasty head. Consequnetly, we are still in need of someone to do the job.

I have tried over the last few years to handle this task; however, I am physically unable to do it--frankly, I was physically unable to do it when I first took the task but since no one else volunteered for it at the time, I did so.

A storekeeper's wares requires visibility. Items should be for sale at each meeting, at breakfasts, and at other events as practical.The job is easy. The record keeping is brainless and there is no heavy lifting. Of course, if it is physically hard to be at meetings and at breakfasts (or if you spend as much time in the hospital as you do at home), then this is not the job for you. Other than this, there is no reason why any number of persons in this organziation could not take on the job.

So, do I have a volunteer?

Mike

Membership Report for November, 2010

New Members: Welcome Aboard to our newest member: **Ed Moores**, of El Cajon who qualified on USS Perch (AGSS/SS-31 in 1956, and our newest Life Member, Robert Coates, a member since 2007.

A few new members whose names were not published in previous Sentinels, but who joined since March:

Sergio Frost, of San Diego, who qualified on USS Pomfret (SS 391) in 1963; **Michael Marmon**, of Santee, who qualified on USS Razorback (SS-394) in 1961, Matthew Babb, of Santee, who qualified on USS Honolulu (SSN-718) in 2003, **Michael Cosgrove**of San Diego who qualified on Jackson (SSBN-634) in 1990**,** **Michael Breitner**, of Valley Center who qualified on USS Plunger (SSN-595) in 1978, and—maintaining our WWII Hero membership at 35— **Lino Macaraeg**, of San Diego, who qualified in 1942.

Eternal Patrol: On 11/07/2010, Thomas Matthews ENC(SS) accepted his Eternal Patrol orders in Ewa Beach, Hawaii after a long and painful bout with cancer. Tom signed my Trim and Drain drawing in 1957 aboard Razorback — I'll post a short sea story later. Fair winds and following seas, shipmate.

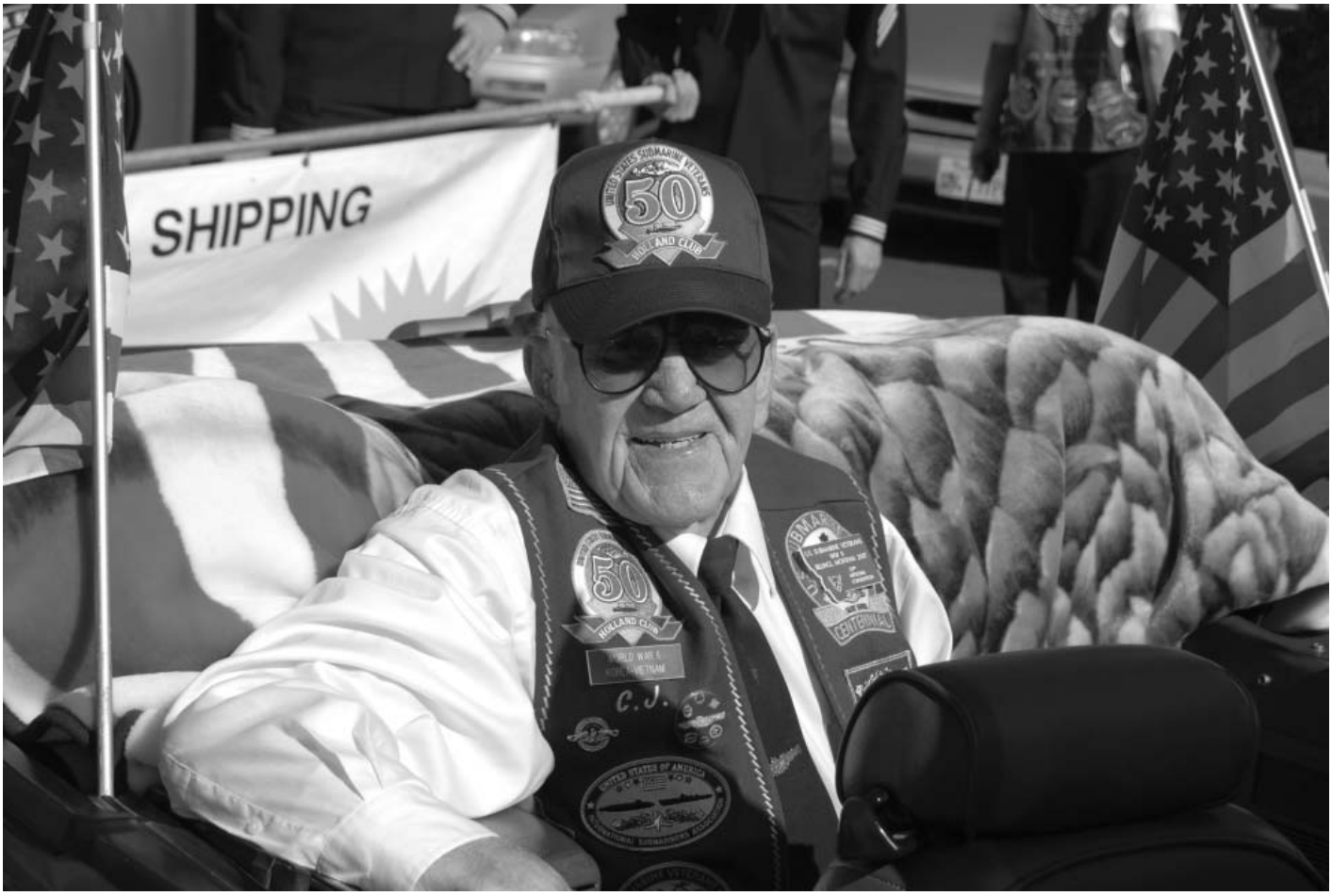
Dues Status: 343 members

Member Notes: I'd like to gruffly state the following: 2010 dues expire December 31, 2010. Grace period 'till Jan 31, 2011. Later than that (Feb 1), you'll be dropped from rolls! However, it is very difficult to be authoritatively gruff when you feel foolish: My foolproof plan was give everybody a heads-up about dues by printing a warning in RED LETTERS above their names, however just before I printed labels for the last issue I deleted a member's name and address, but forgot to delete his dues data, so when he disappeared from the list, everyone else moved up to the previous guy's membership status; yours truely had no clue until Dennis Mortensen called after the mailing had gone out to ask me if listing him as on 'Eternal Patrol' might not be a little premature — everyone after his name on the list had the wrong dues data appended! Sorry!

If you know anyone who has financial (or health) difficulties, let me know, and we'll work something out discretely.
Fraternally,
RonG

Veterans Day 2010

Photos by Jack Kane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REPRESENTATIVE WEST COAST
U.S. PACIFIC FLEET


GHOST OF THE


ARCO ARDM
OUR HANDS PRESERVE

USSVI & USSV WWII JOINT CHRISTMAS PARTY

Come one, Come all to Celebrate Christmas together on 18 Dec, from 1-4pm at the VFW Post 3787 on Train Ave. There will be door prizes and goodies for all. Your choice of Roast Beef or Cornish Hen and with all the fixings. Cost is $20 per person.

Please contact Bob Bissonnette for RSVP at 619-251-7095 (please leave message with phone #) or email at rbisson250@aol.com NLT 14 Dec.

DOD Approves Test Plan For Multibillion-Dollar Nuclear Missile Subs

By Christopher J. Castelli, InsideDefense, 24 November 2010

Months after rejecting a pair of Navy plans for testing and developing new nuclear ballistic missile submarines, the Pentagon has approved one of the multibillion-dollar SSBN(X) program's key strategies.

The Defense Department's operational testing chief approved the program's test-and-evaluation strategy Nov. 12, Capt. Cate Mueller, a spokeswoman for Navy acquisition executive Sean Stackley, told sister publication Inside the Pentagon. Another key document, the program's technology-development strategy, is in the approval process but has not yet been approved, she said.

This year, the department has stood by the Navy's requirement to develop the new SSBN(X) subs while also pressing to reduce the program's mammoth cost. But an internal memo issued this summer shows DOD also privately debated the Navy's plans for testing and developing the program's technology. In a June 1 missive to Stackley, DOD operational testing chief Michael Gilmore refused to approve the service's draft test-and-evaluation strategy and technology-development strategy for SSBN(X).

Gilmore argued that the draft test-and-evaluation strategy "did not contain adequate information to assess the Navy's planned strategy to demonstrate technological maturity for the Stealth Performance and the Coordinated Stern Design development areas." Gilmore also noted that the draft strategy lacked "essential information regarding the technology development and testing strategy of the propulsion plant (including the propulsor), electric plant and electric distribution system and associated submarine support systems located in the submarine's engineering spaces."

Each of these areas, the memo added, "substantially contributes to effective, suitable and survivable submarine operations and affects stealth." These additional development areas must be included in the technology-development strategy, Gilmore wrote, noting "the strategy for testing and assessing their maturity must be included" in the test-and-evaluation strategy. A Navy spokesman said the latest versions of the strategies address these issues.

The SSBN(X) program aims to build replacements for the fleet's aging Ohio-class nuclear missile subs in the 2020s, but the department is already laying the groundwork for that effort. In his Nov. 18 confirmation hearing, Air Force Gen. Robert Kehler, who is slated to lead U.S. Strategic Command, said he is looking forward to working with the Navy to "make sure that we understand and have clarified requirements, and that they are actively moving forward."

Defense Secretary Robert Gates questioned the program's affordability in May, days before launching a broad push to find savings across the department. The Navy had estimated the lead SSBN(X), slated for purchase in 2019, would cost $9 billion, and a dozen would cost $86 billion. The Congressional Budget Office had projected the first sub would cost $13 billion, and a dozen would cost $99 billion, not including $10 billion to $15 billion for research and development.

Speaking Nov. 16 at the Center for American Progress, Pentagon acquisition chief Ashton Carter said he had been presented with estimates of $7 billion per sub, which were unaffordable.

"We wouldn't be able to build any other ships in the Navy," Carter said. "So that's clearly not happening." It would be "nonsensical" to begin an unexecutable program, he noted.

"So we began the process of challenging everything that was driving the cost of that submarine," Carter said. "I mean, sitting down with the submarine design and . . . looking at the factors that are driving the cost: the number of missile tubes, the diameter of the missile tubes, the flank speed of the submarine, the degree of stealth and so forth of the submarine."

Where possible without compromising critical military capabilities, DOD has sought to scale back the submarine's design in the interest of affordability, he said. "And we're en route to a reduction of about 35 percent in the cost of that," Carter noted. "This, in a program whose total cost over the lifetime of the program will be about $200 billion. So this is not a trivial amount of money."

Carter stressed the importance of building up the acquisition workforce, noting DOD is "critically short of people with very specific skills" vital for programs such as SSBN(X).

"These are contracting officers, contracting officer representatives, pricers, systems engineers, shipbuilders and engineers," he said. "And we need those people on our side when it comes time to go back to the SSBN(X). If you don't have anybody who understands submarines, how are you going to design a submarine? How are you going to control the cost of a submarine? How are you going to argue . . . on the taxpayer and warfighter's behalf if you don't know anything about submarines?"

Class Not Ready, 'Silent Arm' Stays In Russia

Sujan Dutta, telegraphindia.com, Nov 29, 2010

New Delhi, Nov. 29: A secretive project for the transfer of a Russian nuclear submarine to the Indian Navy has got delayed after New Delhi complained that Moscow had not trained Indian officers and sailors adequately for the task of operating it.

The Akula-II class, 8,140-tonne submarine, Nerpa, was to be delivered to the Indian Navy by December.

The Indian Navy, whose "silent arm" of submarines is fast depleting, had posted nearly 100 officers and sailors to the Amur shipyard in Siberia, where the Nerpa was built and tested, for more than a year.

Nuclear submarines can stay under water for much longer periods than the conventional diesel-electric submarines in the Indian Navy's fleet. India has coveted nuclear submarines for decades, largely because of China's expanding fleet.

Now the Indian Navy has concluded that its crew in Russia have not been trained well enough to "operationalise" the submarine after the transfer. The submarine is now likely to be accepted only in the middle of next year.

While the Indian defence establishment is miffed with the Russians for inordinate delays in several projects, it is also acutely aware that it cannot source such strategic co-operation from any other country.

This is the second time that the navy will be leasing a nuclear submarine from Russia after the first, the INS Chakra, was returned in 1991 after being in service in India for 10 years. In 2004, India and Russia had signed an agreement (about which officials do not talk in public) that would allow the Nerpa, which is likely to be re-christened INS Chakra, to be with India for 10 years till 2020 under a $650-million programme.

The agreement envisaged that Russia would not only physically sail the submarine to India but would also train the Indian Navy to operate it. Since its last experience with the INS Chakra, the Indian Navy's trained personnel have almost all retired.

Also, the technology of nuclear submarines has undergone a change over the years, necessitating a fresh set of skills to operate them. The Indian Navy was intending to train its officers and sailors on the Nerpa till its own nuclear submarine, the INS Arihant, built with help from the Russians, is operationally ready.

The Arihant was "launched" in 2009 in the naval dockyard in Visakhapatnam but sea trials are yet to begin after its reactors were integrated. It is expected to be operationally ready only in 2013.

The Nerpa has had its share of misfortune. An accident killed 20 Russian sailors while the submarine was being tried in the Sea of Japan. The repairs cost more than $60 million. The accident and the repairs caused the first delay and now the delivery has been re-scheduled.

SpecOp Boat 'Jimmy Carter' Ready to Spy on North Korea

By Spencer Ackerman, Wired, 25 November 2010

It's not the diplomacy-minded former president who is ready to spy, it's the secretive Nuclear Submarine named for him. The surveillance and attack capabilities it's supposed to have could keep the tense situation on the Korean peninsula from spiraling out of control.

In the wake of yesterday's North Korean artillery barrage against a South Korean island, the U.S.S. George Washington is sailing to South Korea to participate in joint exercises.

A statement from the Navy's Seventh Fleet, which patrols the western Pacific, says the drill was planned before the "unprovoked" North Korean attack, but will demonstrate "the strength of the [South Korea]-U.S. Alliance and our commitment to regional stability through deterrence." In other words: to stave off another attack, not to initiate a retaliation.

The George Washington aircraft carrier is equipped with 75 planes and around 6,000 sailors. But it's not coming alone. It's got the destroyers Lassen, Stethem and Fitzgerald with it, and the missile cruiser Cowpens in tow. Rumor also has it that the carrier strike group will link up with another asset in area: The undersea spy known as the Jimmy Carter, which can monitor and potentially thwart North Korean subs that might shadow the American-South Korea exercises.

According to plugged-in naval blogger Raymond Pritchett, word's going around Navy circles that the first surveillance assets that the United States had in the air over yesterday's Korean island battle were drones launched from the Jimmy Carter.

"North Korea couldn't detect the USS Jimmy Carter short of using a minefield, even if they used every sonar in their entire inventory," Galrahn writes. That'll matter in case North Korea decides to launch another torpedo attack from a submarine, as it did in March to sink the South Korean corvette Cheonan.

The Navy doesn't say much about what the Jimmy Carter can do, but the consensus is that it's used for "highly classified missions." Reportedly, it can tap undersea fiber-optic cables, potentially intercepting North Korean commands.

It carries Navy SEALs to slip into enemy ports undetected. And its class of subs have 26-and-a-half-inch-diameter torpedo tubes, wider than the rest of the submarine fleet, in case the Carter has to take out rival ships. "That's a Seawolf, the most powerful attack sub in the world," says Robert Farley, a maritime and international-relations scholar at the University of Kentucky.

All that might be intended to keep the North Koreans from trying something during the exercises, scheduled to run from December 3 through 10. As bellicose as they've been this year, they'd be up against a carrier strike group on the lookout for North Korean aggression.

The North's 10 Yeono-class midget submarines — tiny subs with a crew of only a few sailors designed mostly for firing torpedoes — is "only mildly more capable than the submarines the Nazis were using in 1945," Farley says, but "if there's a nervous or adventurous North Korean sub skipper out there, we could have a real problem."

The real role of the George Washington's carrier strike group is floating diplomacy and deterrence, signaling "the close security cooperation between our two countries, and to underscore the strength of our Alliance and commitment to peace and security in the region," as the White House's account of a phone call between the U.S. and South Korean presidents last night put it.

And the Armed Forces Communications and Electronics Association's influential NightWatch newsletter doubts that North Korea is really preparing for war: It doesn't appear to have issued new military alerts, and it's competing in the Chinese-sponsored Asian Games.

But should its submarines get ready to harass the United States during next month's exercises, chances are the Jimmy Carter will see it first.

Navy Tests Salvage, Recovery System

UPI.com, 22 November 2010

The U.S. Navy's new Saturation Fly-Away Diving System for salvage and recovery operations has undergone its first manned dive.

The Naval Sea Systems Command said the exercise was carried out by the Naval Experimental Diving Unit in Panama City, Fla., and that bell operations will be conducted next week.

The SATS FAD System will provide critical organic saturation diving capability to support Navy salvage and recovery operations around the world. It is designed to support sustained diving operations to depths of 1,000 feet.

The SATS FAD will replace two decommissioned Pigeon-class submarine rescue, which operated to 850 feet.

"This system will allow us to put United States Navy saturation divers on the bottom of the ocean to conduct deep ocean salvage and submarine recovery operations," said Paul McMurtrie, SAT FADS program manager and a retired Navy master diver. "This new asset greatly increases our manned salvage capabilities onto the continental shelf."

SAT FADS supports six saturation divers for a period of 21 days, with an additional nine days of decompression. The system consists of five major components: a main deck decompression chamber, a manned diving bell, the bell handling system, a control van and two auxiliary support equipment vans.

System commissioning will continue through an operational evaluation, series of manned dives pierside and culminate with a 1,000 feet dry saturation dive.

U.S. Navy Creating Robotic Warship To Tirelessly Hunt Submarines

Dvice.com, Nov 23, 2010

When a submarine shows up on the scene, it's a game-changer in terms of naval warfare. Unless a ship has the capabilities to detect a sub — let alone take it out — it's pretty much at the submersible's mercy. With that in mind, the Navy and DARPA are creating a robotic warship that could chase a submarine down to the ends of the Earth.

Known as ACTUVs (which stands for — and take a breath before you say this — Anti-submarine warfare Continuous Trail Unmanned Vessel), the autonomous craft would be equipped with sonar sensors and communication equipment so that it could track a sub and constantly relay its position to friendly vessels and sub-hunters. It would also use its sensors and onboard AI to plot its course so that it steers around other ships, not into them.

This would fill a role that's normally a dangerous one for a fleet, which would employ a faster, smaller vessel such as a frigate to pinpoint a sub using sonar or accompanying aircraft, all the while doing its best to stay out of range of the sub's torpedoes. Once dialed in by a ACTUV, a specialized anti-sub warship such as the USS Port Royale, pictured above, could go in for the kill if needed.

If the submarine did happen to destroy the pursuing ACTUV, it would actually only create more problems for it. Not only would there be no loss of life, the burning wreck would be just as handy in marking the last position of the submersible, meaning it would have to expend more its limited resources in getting out of the area instead of carrying on with its mission.

Brazilian Navy Plans A Fleet Of 20 Subs, Six Nuclear Powered

Merco Press, 22 November 2010

The navy's three decade procurement plan and its program to develop submarines estimates the cost of building the first nuclear powered submarine in 2 billion Euros which already have been earmarked.

The first is always the dearest because of technology transfer and other capacities costs that must be paid to the French DCNS shipyard. However the costs of the following subs to be built in Brazil are estimated by the Brazilian Navy in 550 million US dollars.

President Lula da Silva is scheduled to visit in December the new facilities at the expanded Itaguí shipyard in Rio do Janeiro that will become home of the Brazilian submersibles industry, close to the new submarines base.

Conventional submarines will be built in two lots with a first batch of 15 new ones, of which four of them will be a reformed version of the French Scorpion with an additional 100 tons displacement and five metres longer.

The other five includes the current five submersibles that will be refurbished.

The five include four of the so called Tupi class based on German technology and a Tikuna class, which was developed by the Brazilian navy.

Currently the subs program has an order for four Scoroion under construction in France, a deal closed in 2008. The first one is scheduled to be delivered in the second half of 2016 and the rest in the period extending to 2021.

The Brazilian navy also reported that the Subs Development program means the integration of different branches.

One of them refers to having control over the whole uranium enrichment process to be used in the nuclear reactors: the uranium gas apparently is ready and has begun trials in the town of Iperó.

An estimated 40 tons annually can be produced once the plant begins full production next December. Total investment in the plant so far has been declared at 130 million USD.

Since discovering massive oil deposits offshore making Brazil a global oil and gas power, the country has been obsessed with protecting its resources,

President Lula da Silva launched an ambitious program to update and equip the three services, particularly the navy.

Navigating Underwater Using Spiral Sound

PhysOrg.com, 17 November 2010

With the increased use of underwater robotics in both Navy and commercial applications, underwater navigation becomes more and more important. As researchers attempt to make these vehicles smaller and less expensive, simple systems for the navigation of multiple vehicles become important. A research team from Naval Research Laboratory, the University of Washington, and Naval Surface Warfare Center has developed and tested an underwater navigation system that uses a spiral shaped acoustic wave to determine aspect. The single stationary beacon can provide a navigation signal for any number of underwater vehicles.

Navigation by the satellite Global Positioning System (GPS) has become ubiquitous in modern life. Many people have them in our cars and even in our cell phones. These systems can be accurate to within a few meters. Differential GPS (DGPS), which uses a fixed antenna as a reference, can be accurate to within a centimeter. Unfortunately, GPS signals cannot penetrate the water's surface. Thus, various acoustic and inertial techniques have been developed for underwater navigation. Inertial techniques include accelerometers, like those popular in gaming consoles and gyroscopic compasses that can determine position by judging how the vehicle is moving relative to the earth. One acoustic technique available is known as "long-baseline", which uses the distances to fixed sound sources, determined from the time it takes the sound to reach the receiver, to triangulate to the receiver's position. Another popular acoustic technique called "ultra-short baseline" navigation measures the arrival of a single incoming signal using several hydrophones (underwater microphones) positioned on the same vehicle.

The research team's navigation technique differs from the baseline techniques because the signal coming out of the beacon itself varies with aspect, thus only a single hydrophone is required. Consider the pattern of concentric circles made on the surface of a pond after a pebble is tossed in. Each of these peaks and troughs are known as wave fronts and they travel out from a central source at a fixed speed. Under the water's surface, sound waves can easily be made to form circular wave fronts, analogous to the pebble in the pond. The research team developed ways to produce sound with another type of wave front, a spiral wave front, where, instead of concentric circles, there is one continuous spiral shaped line emanating from the source.

These can be stacked with two sources on top of one another to make a navigational beacon. When the team transmited from both sources at the same time, the signal looks like this. The distance between the circular and spiral wave fronts does not change along a particular direction. Thus, if a hydrophone is placed at some position around the beacon, researchers could determine the aspect angle to the beacon by comparing the arrival of the different wave fronts. This navigation technique is also used by aircraft navigation and is called VOR (VHF Omnidirectional Range). However, VOR uses radio signals rather than sound waves.

Based on this concept, the research team had a beacon built by Thomas Howarth at the Naval Undersea Warfare Center in Newport, Rhode Island. To test the accuracy of the beacon, it was attached it to a dock on a pond about 3 meters below the water's surface at the Naval Surface Warfare Center in Panama City, Florida. A remote controlled (RC) pontoon boat was equipped with a hydrophone below the water's surface to determine aspect from the spiral wave front beacon and a GPS antenna above the surface to determine aspect using DGPS (see figure Experimental Setup). The RC boat was driven around a pond and compared the aspect determination from the spiral wave front beacon to the DGPS result. Using the DGPS data the team was able to put the results into a movie showing the position of the RC boat and using arrows to depict the aspect to the beacon using both the spiral wave front beacon results and the GPS results. Although not as good as the DGPS results, the results were quite accurate giving an error between 5 and 15 degrees across all of the data. The team also tested several different signal processing schemes, some of which worked better in different conditions than others.

The biggest advantage of this system over more traditional baseline techniques is simplicity. A single stationary beacon can be used to navigate any number of remote underwater vehicles. The remote vehicles need only have a single hydrophone available, and can even repurpose one from its sonar or acoustic communications system. With future visions of swarms of underwater vehicles, this can be a huge advantage.

The research team consists of Benjamin Dzikowicz, NRL's Acousitcs Division; Brian Hefner, University of Washington, Applied Physics Laboratory; and Robert Leasko, Naval Surface Warfare Center, Panama City, Florida. The Office of Naval Research provided funding for this research.

Provided by Naval Research Laboratory

Report Warns Of 'Dramatic Increase' In Chinese Anti-Access Capabilities

By Andrew Burt, Defense Daily, 17 November 2010

China has the ability to target nearly every major U.S. air base in East Asia, and its so-called carrier killer missile — now in its final stages of development — could further inhibit U.S. forces in the region, according to a new report from the U.S.-China Economic and Security Review Commission.

The report echoes many of the themes addressed in the Defense Department's August 2010 assessment of China's military modernization, although the commission's report provides greater detail and is more stark in its assessment of the threat the country poses.

The report details the growth of China's missile arsenal and anti-access capabilities, stating that the main implication of China's modernization efforts has been "a dramatic increase in the PLA's ability to inhibit U.S. military operations in the region."

According to the report, "the PLA's current missile force alone may be sufficient to close down U.S. air bases in the region in the event of a conflict between China and the United States." Citing testimony by Jeff Hagen, a senior RAND engineer, the report states that only 30 to 50 missiles would be necessary to "overload and kill air defenses, cover all of the open parking areas with submunitions to destroy aircraft parked there, and crater runways such that aircraft cannot take off or land."

The report also states that China's conventional capabilities can target five of the six main U.S. air bases in East Asia, and that "improvements to the PLA Air Force's bomber fleet soon could allow it to target Guam."

In testimony provided before the commission in May, then-Deputy Under Secretary of the Air Force Bruce Lemkin summed up the capabilities of China's modern missile force. Its missiles, he wrote, "provide China with a dual-pronged capability to strike almost any regional target, to include airfields, ports, ships, military bases, logistics nodes, command and control facilities, and industrial/economic centers."

The report also addresses the much speculated-upon DF-21D missile, also known as the carrier killer for its supposed ability to target aircraft carriers. The commission says China is in the final stages of developing the system. Citing testimony Lt. Col. Mark Stokes provided to the commission in May, the report states that "the manufacturing facilities for the DF-21D were completed in 2009 and that at least one brigade is 'earmarked for initial introduction' of the missile when completed."

Stokes' research indicated that the PLA was readying the missile for deployment in southeastern China, which would "provide the PLA with the ability to strike surface ships in both a Taiwan- and a South China Sea-related contingency."

In his testimony, Hagen wrote that "the root of the issue is the looming mismatch between U.S. basing options in the region and Chinese base attack capabilities. If aircraft carriers near Taiwan and airbases in Japan and South Korea can be attacked . . . operations from more distant locations such as Guam become the only remaining option."

The report's assessments weren't all negative, however. "As in its previous Annual Reports, the Commission sees progress on some issues, notably the environment and Taiwan, but the intensification of a number of troubling trends," it states.

'Scandalous' Submarine Deal Highlighted Ahead Of NATO Summit

Valentina Pop, euobserver.com, Nov 18, 2010

EUOBSERVER / BRUSSELS - Nato leaders are heading to Lisbon for a summit on Friday (19 November) at a time of escalating economic problems in Portugal, due, in part, to a submarine deal, with corruption investigations launched both in Germany and Portugal into the way the deal was made.

US President Barack Obama and his European counterparts are likely to discuss Portugal's economic situation, a White House official said on Wednesday (17 November), as quoted by Reuters. Washington is "fully supportive" of Portugal's efforts to improve its debt situation, said Elizabeth Sherwood-Randall, a Europe expert at the White House National Security Council.

The political support from overseas may however have little impact on jittery markets, which appear to be eyeing Portugal as next in line after a dramatic escalation of Ireland's borrowing costs, which may trigger a Greek-style bail-out in Ireland in the coming days.

Lisbon's borrowing costs doubled to 4.8 percent in less than two weeks, with investment banks such as Brown Brothers Harriman warning clients that "if Ireland gets an aid package, markets are likely to sooner or later push for a deal on Portugal," the Wall Street Journal reports.

With a minority government and an austerity budget passed by a razor-thin margin, Portugal is struggling to shake off market speculation.

Unlike non-Nato Ireland, whose record public-deficit of over 30 percent is mostly due to bailing out banks in the wake of the financial crisis, the Mediterranean country's accounts are also weighed down partly by a controversial submarine deal with Germany that dates back to 2004 but that has to be paid for now.

Signed during at a time when current European Commission chief Jose Manuel Barroso was head of the Portuguese government, the deal worth •1billion is the biggest military purchase in the country's history. Payments for the two German submarines amount to 0.6 percent of the country's gross domestic product (GDP), at a time when the budget deficit reached of 9.3 percent of GDP last year.

According to Portuguese Socialist MEP Ana Gomes, the country's current centre-left premier, Jose Socrates, has been "very vocal" in blaming the submarine purchase for the country's widening deficit and to justify the austerity measures that were adopted last month.

With corruption investigations launched both in Germany and Portugal into the way the deal was made, Ms Gomes has called the deal "scandalous".

"What we don't see is political courage on the part of the EU institutions, notably the European Commission, to actually tackle this question of corruption that is at the root of the current crisis. Corruption in the management of banks, which were not properly regulated and supervised and corruption in the public sector in relation to defence procurements."

With a similar submarine corruption probe involving the same German company (Man Ferrostaal) being investigated in relation to Greece, the first euro-area country that needed a bail-out, Ms Gomes said it is unacceptable that Brussels is not launchig an inquiry into "this European web of corruption."

The Portuguese MEP said she is "disappointed" that her government has not stood up to the German administration and frozen payments until the corruption case is finalised: "It would have been a courageous gesture to show that Portugal is a country whose people are victims of corrupt practices between German and Portuguese officials and companies."