

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



The Silent Sentinel January 2019



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.



Pearl Harbor Day 2018 at the Fifty-Two Boat Memorial

U.S. Submarine Veterans San Diego Base

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Scholarship Chairman
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The Silent Sentinel via Email

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

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

NAME: _____

ADDRESS: _____

CITY/STATE/ZIP: _____

EMAIL: _____

TELEPHONE: _____

Would like the SILENT SENTINEL emailed: YES _____ NO _____

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

Our Next 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 January 8th. 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

Chris Sultana and Hadara Hyman (wife of member, Michael Hyman)

Submarine Losses in January

Originally Compiled by C J Glassford



USS Scorpion: (SS-278) Lost on Jan 5, 1944 with the loss of 77 officers and men in the East China Sea, on her 4th war patrol. It is assumed she was sunk by a mine.

USS Argonaut (SS-166): Lost on Jan 10, 1943 with the loss of 102 officers and men off Rabaul, on her 3rd war patrol. While attacking a convoy, she torpedoed a Jap destroyer who along with 2 other destroyers depth charged her. As she tried to surface, the destroyers sunk her by gun fire.

USS Swordfish (SS-193): Lost on Jan 12, 1945 with the loss of 89 officers and men somewhere near Okinawa, on her 13th war patrol. Probably was lost to a mine.

USS S-36 (SS-141): Lost on Jan 20, 1942 with no loss of life, on her 2nd war patrol. She ran hard aground on a reef and radioed for help. The entire crew was rescued by a Dutch ship after they scuttled her.

USS S-26 (SS-131): Lost on Jan 24, 1942 with the loss of 46 officers and men in the Gulf of Panama, on her 2nd war patrol. She was rammed by the USS PC-460 and sunk within seconds. The CO, XO and one lookout on the bridge, were the only survivors.



San Diego Base, United States Submarine Veterans Inc.
Minutes of Meeting - 11 December 2018
At VFW Hall, 4370 Twain Avenue, San Diego CA 92120

1911 - Base Commander Warren Branges called the meeting to order.

Conducted Opening Exercises - Pledge of Allegiance lead by Past Commander Fred Fomby

Base Commander Warren Branges lead the opening prayer.

Base Commander Warren Branges conducted Tolling of the Boats for boats lost in the month of December.

Base Secretary Jack Kane recognized Past Commanders, dignitaries and guests.

Base Secretary Jack Kane announced 22 members and 2 Guests present.

Base Treasurer Joe Peluso presented the Treasurer's report. A copy of the Report will be filed with these minutes. Minutes of the November meeting were published in the Sentinel. Minutes were adopted with no changes.

Base Commander Warren Branges called for Committee Reports

Binnacle List - Base Commander Warren reported Chris Sultana on Binnacle. David Martinez has volunteered for the Base Chaplain position.

Parade Committee - Chairman Jack Kane announced the next parade is Linda Vista on Saturday, 27 April 2019. We are tentatively scheduled to attend.

Membership Committee - Chairman Ray Febrache. We have 247 members. The National Database is still FUBAR. National is working on fixing it along with working out the bugs on the web site.

Scholarship Committee - Committee Chairman Paul Hitchcock. Scholarship packages are due on 15 April 2019. Storekeeper - Paul Hitchcock. See Paul if you have anything you need to buy. We have 2019 Calendars. Breakfast Committee - Chair Base Commander Warren Branges. The next Breakfast will be 30 December 2018. We need servers. The kitchen will not be renovated until January 2019. We have Breakfasts scheduled for March, June, September and December in 2019.

52 Boat Memorial - Chair Base Commander Warren Branges - The next All Flags Day will be Thursday, 11 April 2018 (U.S. Submarine Force Birthday). We will put up flags at 0700 and take them down at 1700. There are three memorials out for repair.

Float Committee - Chairman David Kauppinen is resigning his Chair on this Committee. David is moving to Arizona. The Point Loma Base RV parking will close soon. We may be able to move the float to new area on base. Base Commander is working on the details.

Eagle Scout Program - Co Chairs Nihil Smith and Glenn Gerbrand. Nihil reported that they have done two Courts of Honor recently. Next Court of Honor is Friday 14 December at the United Methodist Church in San Carlos at 1800. Nihil has setup a camp out and Submarine Tour for Scouts in February.

1920 - Base Commander called for a break. 50/50 Raffle held.

1943 - Unfinished Business

Christmas Party. Was held at VFW Hall on Twain on 8 December 2018. The food was excellent. Terry Ulmer (MOPAR PARK in Alpine) and his wife were Guests of Honor. Terry was presented a framed photo of a 688 Class Boat. Terry invited us to come out his facility sometime next year.

All Flags/Wreath Laying on 7 December 2018. Point Loma Association provided wreaths for each memorial at 52 Boats. COMSUBRON ELEVEN and Commander Naval Base Point Loma gave brief remarks. We laid wreaths and put out flags at 0900. Fund raising efforts covered the costs of the wreaths with some funds left for seed money for next year's ceremony.

Nominating Committee Report - None. Committee Chair Paul Hitchcock reported a deafening silence on the subject. No members have contacted the Committee about running for any of the Base Offices for next year. Base Commander Warren Branges said he will stand for re-election as Base Commander. Nominations from the floor will be taken at the January meeting. Elections will be held in March. The following offices currently have no nominees - Senior Vice Commander, Junior Vice Commander, Treasurer and Secretary. If you are interested in running please let Paul Hitchcock know.

2005 - New Business

Memorial Day and Tolling of the Boats for 2019. A long discussion was entered as to which ceremonies the Base should be supporting next year and what form those ceremonies should take. Topics for discussion were:

Should we have the Memorial Day Ceremony in view of declining attendance

- If yes, should we hold it at Roncador Memorial or move it off base? If at Roncador should we look at modifying the ceremony to be a inclusive of all gave their all or retain our traditional Tolling of the Boats.

- If off Base, where do we move to? 52 Boat Memorial, another venue where access is not restricted as it is at Naval Base Point Loma? Some suggestions were the Chapel at NTC, some accommodation on the Midway, an outdoor ceremony using float at static display at Admiral Robinson Park, etc.

- Should we look at not holding the Memorial Day Ceremony, but rather move it to another day as we currently do 2 or 3

Tolling Ceremonies in late May. Some suggestions were 11 April (Submarine Birthday), VJ Day, and Pearl Harbor Day (along with the Wreath Laying Ceremony).

- Some of the questions to be answered for each of the options above are: Insurance concerns - Who would provide setup/breakdown and cleanup manpower - Are any permits/access lists etc needed - What is target audience at each optional venue - Would be in conflict with any other ceremonies/events.

- This discussion will be continued in January.

2016 - Good of the Order

Out Year Conventions - 2019 will be in Austin TX - 14-20 August 2019. Details are at: <http://ussviconvention.org/2019/>
2020 will be in Tucson and 2121 will be in Orlando at Rosen Shingle Creek.

The Series "Silent Service" is available at olgoat.com.

A DSRV/DSV Deep Submergence Reunion is in the planning stages for 2020 - to be held in San Diego, 25-27 October 2020 at the Bayside Hilton.

Shipmate Mike Cosgrove noted that he and others have taken inspiration from Senator Bob Dole's farewell salute to Former President George H. W. Bush. Mike judiciously salutes co-worker's, friends, etc when warranted. Mike's suggests that a well timed salute is appreciated more than hand-shake or a thank you. Give it try.

David Martinez re-visited the float storage issue. He suggested that SPAWAR may have some space in a secured lot for our use. David will provide the Base Commander with a POC at SPAWAR.

The Meeting was adjourned at 2106

/s/ Jack E. Kane

Jack Kane, Secretary

Sailing List for 11 December 2018

Members

Warren Branges
Matt Baumann
Sean Barrett
Mike Cosgrove
Bill Earl
Joel Eikam
Ed Farley
Bob Farrell

Ray Febrache
Fred Fomby
Paul Hitchcock
Jack Kane
Peter Lary
Greg Paulson
David Martinez
Dennis Mortenson
Joe Peluso

Chris Stafford
Nihil D. Smith
Russ Stoddard
Mert Weltzien
John Zinich

Guests

Jessie Chang Farley
Dick Higgins

**Silent Sentinel
EXCLUSIVE!**



Judith and Gary Murphy have graciously consented to allow the Silent Sentinel to republish their collection of USS Whale, SS-239, ship's newspaper, "THE RAG," from the WW-II era! Gary's father, Rex Murphy, served as Whale's Engineering Officer. The Silent Sentinel will now include a copy of The Rag in each issue. The Murphy's and I hope that you will find it an interesting reading experience.

On the evening of 19 March, *Whale* sighted two large freighters and one torpedo boat or destroyer as escort. Just after daylight the next morning, the submarine finally worked into a favorable attack position; she fired spreads of three torpedoes at each freighter, and hit both. The first target, tentatively identified as *Mogamigawa Maru*, sank rapidly by the stern. The second, a cargo ship resembling *Arizona Maru*, was plagued by several heavy internal explosions following a second torpedo hit. *Whale*, mistaking these secondary explosions for bombs, went deep. Upon discovering her mistake, she started to surface but was greeted by a barrage of depth charges from the escort. *Whale* dove again but again came under attack – this time from the air – when she attempted to return to examine the wreckage. The submarine suffered extensive damage during this attack, which prevented her learning the fate of her targets. This was by far *Whale's* closest escape.. "The Rag" No. 6

THIRTEENTH EDITION

MARCH 21, 1943

THE MOON AFFECTS THE TIDE AND UNTIED.

Once again the Mighty Whale went into battle with banners flying and pennants streaming. Early this morning, the Mighty Whale executed her part of the agreement with the Japanese harbor authorities at Saipan regarding the unloading of Japanese vessels. The action took place further from Saipan than had been anticipated. The successful unloading of these ships, took a little longer than was expected, due to the lack of cooperation on the part of the Nippers.

All hands are to be congratulated and it is hoped that the Hipponese can and will see fit to let the Whale crew handle their unloading in the near future.

As far as the editor can ascertain, the damage was as follows: The boat dove at seven o'clock and started her run. At eight or thereabouts, the first fish was fired followed in quick succession by five others. It is claimed that four of the torpedos reached their destination. As a result of which two ships were sunk, netting a total of approximately 15,000 tons. Shortly after, a brief retaliation in the form of several depth charges was felt although none of them were severe enough to cause any damage.

The Mighty Whale, true to her namesake, sounded and dove to the depth of three hundred and ninety five feet, where she lingered for one hour and forty five minutes. Upon surfacing, the boat started back to the scene of the sinkings. Upon arrival at the scene she was forced to dive again due to the sighting of aircraft. There's no doubt in anyones mind, that there wasn't a plane there.
MORAL: It is wisest not to return to the scene of your crime.

At last the editor of the Rag is able to unfold to you innocent people just whom this malicious character is, named the SHADOW

It is none other than that super stupid individual who stands around all day mumbling in his beard and covering his dog like proboscis with a dirty dish towel. That super stumble bum, that collossus of asgetation----Ladies and Gentleman I give you--That man about the bridge (mostly in the way) one and only in captivity ----- LINDSBACK, commonly known to his more intimate of friends of unscrupelous character as Bussy, the tweet, tweet kid.

'nuff said.....

In the past, that is during the life of the RAG, it has been the policy of the peoples paper to print anything that is worth printing. When we say anything, we mean----- anything.

Only recently, have we had any objections to the type of news that has been presented to you, dear readers. In due time, all of you dopees who here to fore haven't been mentioned in the RAG, can rest assured that you will be. With out a doubt, it is the desire of the staff to print any and all news whether it be scandalous or not. Now you'se brazen husseys will just have to wait your turn. Eventually we'll get around to you. And Now! Your editor is getting somewhat sick or hearing, "Please editor do me first, I've been waiting longest." Patence is a virtue but, after all we cant all be virtuous.

"Cup of coffee, weak," said a customer in Cox's diner. When the mess crook brought forth the decoction, he eyed it critically.

"Well, what'n'ells wrong with it? you said weak, didn't you?"

"Weak, yes," was the reply, "But not helpless."
AND IT DIDN'T HAPPEN ON THE BARGO!
and, her name was Julia.

Current News

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

Navy To Begin Arming Subs With Ship-Killer Missile

Paul McCleary, Breaking Defense, December 18

<https://breakingdefense.com/2018/12/navy-arms-subs-with-ship-killer-missile-harpoon/>

With an eye on China, the Navy will begin arming its attack submarines with ship-killer missiles for the first time in decades. The weapon of choice: an updated model of the decades-old Harpoon.

In a little-noticed announcement posted earlier this month on a government contracting site, the Navy said it was entering into negotiations with Boeing to refurbish and recertify Harpoon anti-ship missiles for Los Angeles-class subs. It's a major shift after decades in which submarines focused on projecting power ashore — stealthily collecting intelligence or launching Tomahawk Land-Attack Missiles (TLAMs) — with their only anti-ship weapons being their rarely-used torpedoes. Driving the change: increasing American anxiety about China's rapidly growing military presence in the Pacific and Indian oceans.

The move comes months after a Harpoon was successfully launched from the USS Olympia submarine during the biannual RIMPAC naval exercise off the coast of Hawaii. It was the first time the missile had been fired from an American submarine since the sub-launched version of Harpoon was retired in 1997.

The test was part of a broader effort across the Navy to rebuild its surface-to-surface warfare prowess at a time when the Chinese Navy has made huge strides to modernize and expand its fleet, and Russia — to a lesser degree — is also modernizing its naval capabilities.

The effort to bring a modernized Harpoon back to the submarine fleet coincides with the delivery of the first Long Range Anti-Ship Missiles (LRASM) to operational Air Force units, a delivery announced Dec. 18. The precision-guided missile is designed to detect and destroy specific targets operating within groups of ships by identifying the target using links to drones or aircraft. An air-launched variant has been successfully tested aboard the Air Force's B-1 bomber on a number of occasions, and it's on schedule to achieve early operational capability on the Navy's F/A-18 Super Hornet in 2019. Contractor Lockheed Martin has also test-fired LRASM from the same Vertical Launch System tubes used on Navy cruisers and destroyers.

Over the last handful of years, the Pentagon has made a concerted effort to get its ship-killing ability back, first under Obama's last Defense Secretary Ash Carter and his deputy Bob Work — part of what they called the Third Offset Strategy — and under Defense Secretary Jim Mattis, whose focus on “lethality” picked up the offset effort under a new tagline.

That work is seen in the award this past May by the Navy for its next over-the-horizon ship killer to the team of Raytheon and Norway-based Kongsberg for the Naval Strike Missile program. The weapon, with a range of about 100 miles (roughly comparable to Harpoon), is destined for the Littoral Combat Ship and the future FFG(X) frigate. Initially worth \$14.8 million, the contract could eventually grow to \$850 million if options are exercised.

The Naval Strike Missile was also fired during RIMPAC, but not by the Navy. The Army launched NSM from the back of a truck parked at the Pacific Missile Range Facility in Hawaii, an experiment in providing land-based anti-ship firepower to support the Navy in future multi-domain operations.

There's also an effort underway to refit surface ships with anti-ship Tomahawk missiles by 2022, some 40 years after a Tomahawk first sunk a ship in testing.

In the South China Sea, American military leadership has been particularly concerned about what the four-star commander in the Pacific called the “great wall of SAMs.” China has built in the critical waterway, having the effect of pushing Chinese offensive capabilities well out past the mainland and China's territorial waters. The militarization of small reefs has had the practical effect of putting commercial shipping and US Navy ships in the region under threat, with the American military scrambling to come up with a response.

That response was dramatically on show during the massive RIMPAC exercise in July, during which the submarine Olympia teamed with allied forces to sink the former Newport-class amphibious ship USS Racine, which went to the bottom after absorbing an international barrage of missiles from planes, subs, ships, and even trucks.

Six Harpoons were fired from U.S. and Australian P-8 Poseidon aircraft, the Singaporean frigate RSS Tenacious, and the Olympia. The exercise was the first time Australia has fired a Harpoon from a P-8. Japan also hit the ship with truck-mounted Type 12 anti-ship missiles, while the Army hit it with its truck-mounted High Mobility Artillery Rocket System (HIMARS). Olympia delivered the coup de grace with a Mark 48 heavy torpedo.

The plan is for UGM-84 Harpoon program is to make a contract award to Boeing in 2019, with the Navy describing the work as “the refurbishment, repair, recertification, upgrade, and reissue of capsules and Encapsulated (ENCAP) Harpoon Block IC (HIC) All Up Rounds (AURs) to HIC, HIG, HII, or HII+ configurations for USN SSN-688 class submarines.”

Neither the Navy or Boeing responded to queries about the program by publication time.

US Navy document paints a bleak picture of fleet's future if hit with 2020 budget cuts

David Larter, Defense News, December 18

<https://www.defensenews.com/naval/2018/12/18/us-navy-document-paints-a-bleak-picture-of-its-future-if-hit-with-2020-budget-cuts/>

Cuts to new ships, aircraft, maintenance and much-needed public shipyard modernization are on deck if Congress can't come to an agreement to avert across-the-board cuts to the defense budget by January of 2020, according to a document submitted to lawmakers Dec. 12.

The document, used by Navy Secretary Richard Spencer at a recent Senate Armed Services readiness subcommittee hearing, shows the potential impact of cuts on various states and congressional districts. And while most of the line items are vague about specific cuts, there are some troubling indications about where the Navy could be looking to take risks, and it's familiar story.

Renovations to naval shipyards could be deferred, part of the 20-year, \$21 billion plan to modernize the public shipyards, the document reads. Furthermore, the Navy is eyeing cuts to ship maintenance availabilities, a move that tends to have a cascading effect, creating delays and degrading the material condition of ships on the waterfront for years into the future.

The Navy is also threatening furloughs and hiring freezes at the public yards, which likewise creates delays and impacts for the maintenance and general readiness of the fleet, which under ideal conditions is challenged to maintain because of the breakneck pace of operations and difficulty keeping maintenance schedules.

At the hearing, Vice Chief of Naval Operations Adm. Bill Moran acknowledged that not just one but three of the Navy's attack submarines has been decertified for dives while awaiting needed maintenance, which prompted a testy exchange with South Dakota Republican Sen. Mike Rounds over how forthright the Navy has been about its needs and how it's using its increasing resources.

The delays are caused by the Navy's prioritizing maintenance and modernization of the Ohio-class ballistic missile submarines, and have been exacerbated by furloughs and work stoppages due to cuts, retirements of aging skilled workers, degraded infrastructure at the public shipyards where nuclear maintenance is conducted, according to previous public statements by Navy leaders.

The document also cited cuts to shipbuilding, weapons and aircraft procurement were all in the cards for a 2020 sequester cut, but was short on specifics. It also mentions cutting the 2020 season of the Blue Angles flight demonstration team.

Moran and Spencer both said that a return to sequester would do damage that would take at least another five years to recover from.

“If we were to go back to those levels again, even though we would probably start to recover, you're talking five years, if you just use the recent last five years as an example,” Moran said.

“The component of time is time you can't get back,” Moran said. “So we lose proficiency, we lose expertise, and we have to recover that by skipping generations of people who miss the opportunity during the time when we didn't have the resources available.”

The Navy would not comment directly on any individual cuts planned for 2020 in case of automatic cuts, which Spencer said would be about a \$26 billion cut across the Department of the Navy.

“[Program Objective Memorandum-20] POM-20 is currently in progress and we will not comment on pre-decisional budgetary matters,” said Navy spokesperson Lt. Lauren Chatmas. “What I can tell you is that anything you may have seen about POM-20 are just options as we strive to find the best balance to support the defense

strategy while also being responsible stewards of taxpayer dollars. This is what the POM process is for — to review all accounts in determining the best balance of investments.”

But indications that the Navy would go after maintenance and shipyard modernization are ominous omens for a fleet that has already seen a healthy amount of neglect in the face of mounting tasking. Because even though the sequestration cuts are across-the-board (even overseas contingency operations funding is affected by the cuts), in 2013 when DoD was hit with sequester Congress gave the services the ability to make decisions about where it was going to take the most risk, said Todd Harrison, a budget analyst with the Center for Strategic and International Studies.

“In 2013, they made the cut but then went back and gave the military huge reprogramming authorities,” Harrison said.

That means that even if the Navy must take a major cut, it’s likely that congress would then hand them the scalpel to do the surgery themselves, if history holds true.

Still, Harrison isn’t betting that the sequester cuts happen. Congress will likely cruise into 2020 under a continuing resolution that holds the budget at 2019 levels and then cut a deal at the last minute, he said.

“It will be close, it will look like we won’t get a deal; and then, at the last moment, Congress will make a deal,” Harrison said.

From attack submarines to spies: US Navy asks more of its underwater fleet

Andrew Tunnicliffe, Naval Technology, December 12

<https://www.naval-technology.com/features/us-nuclear-attack-submarines/>

The US Navy is equipping its nuclear attack submarines with improved navigation and detection technology as well as new sonar, automation and artificial intelligence technologies. This will enable quieter, faster movements in littoral waters where enemy mines, small boats and other threats often operate. Andrew Tunnicliffe takes a look at the future capabilities of the US submarine fleet.

The US Navy has arguably reached a critical juncture with its submarines. Some military analysts have suggested the gradual retirement of the country’s ageing fleet will lead to a lack of vessels, and more importantly firepower, through the next decade.

around 71 submarines in active service the US Navy has the biggest fleet in the world. Next-generation submarines are gradually being rolled out to replace the ageing Los Angeles-class fleet and their mission has been extended in response to new undersea challenges.

The Virginia class: a new generation of submarines

The all-rounder of the US submarine fleet, the Virginia class or SSN-774 which is produced at a rate of two a year, is an attack sub costing in the region of \$2,7bn each. It uses so-called ‘fly-by-wire’ capabilities, artificial intelligence and computed automation which allows it to be positioned in shallow waters and not have to surface. It also means the submarine can actively assist captains in maintaining their position, movements, threat detection, and safety.

“Virginia-class vessels carry out operations such as anti-submarine, anti-surface/ship, and naval special warfare.”

Using real-time analytics, once a human command is given to set factors such as depth and the speed, the technology removes the need for an operator to manually sail. Software controls the submarine’s movement by effecting the hardware to maintain the requirements set by the human commander.

Virginia-class vessels carry out operations such as anti-submarine, strike warfare, covert mine warfare, anti-surface/ship, and naval special warfare. However, it is their recently enhanced anti-detection and intelligence, surveillance, reconnaissance (ISR) capabilities the navy is particularly keen to use.

These capabilities have been enhanced further in the latest Block III iteration, with improved navigation and detection capabilities and the addition of a large aperture bow conformal array sonar system. The system analyses the ping it sends out, determining the size, location, and even contours of threats such as other submarines, ships and anything else which may be hostile.

In April the Navy awarded Lockheed Martin a \$47m contract to upgrade the AN/BLQ-10 electronic warfare system which enables automatic detection, classification, localisation, and identification of potentially hostile radar and communications signals at sea. It will be fitted to a raft of submarine classes, including Virginia, Los Angeles, Seawolf and Ohio, as well as future Columbia-class ballistic missile vessels.

New demands on the US submarine force

Faced with a growing threat from Russian naval forces, and arguably China, the US Navy is ramping up its submarine procurement activity, increasing its fleet, and better using new technologies to allow it to conduct 'spy' operations off the coast of enemy states, in near-peer scenarios.

"The demands on the United States Submarine Force and supporting organisations continue to grow at an unprecedented rate."

Writing in the 'Commander's Intent for the United States Submarine Force and Supporting Organizations' in March, three top US Navy officials said: "The demands on the United States Submarine Force and supporting organisations continue to grow at an unprecedented rate. The threat continues to evolve and expand rapidly in at least three world regions, each posing substantially different operational demands for both high-end warfighting and peacetime operations."

The document emphasised the need for the navy to be ready to confront any threat. "The mission of the US Submarine Force is to execute the mission of the US Navy, in and from the undersea domain. In addition to lending added capacity to naval forces, the submarine force in particular is expected to leverage those special advantages that come with undersea concealment to permit operational, deterrent, and combat effects that the navy and the nation could not otherwise achieve," the report said.

The report emphasised the ability of submarines, particularly US ones, to carry out operations and remain undetected. But does the addition of better surveillance capabilities mean the focus of the US Navy for its submarine fleet is shifting?

Perhaps not: the USS Jimmy Carter, a Seawolf-class submarine originally designed during the Cold War, has been referred to as a "spy sub" for some time. Indeed its service and operations log is secret, or at the very least lacking in detail. However, analysts have surmised about the type of work it does, concluding its likely not the "usual" operations. What it does show, however, is that spy mission aren't new.

The future of US nuclear attack submarines

Speaking to CNN in late 2017, former US representative Randy Forbes said: "Stealth capability is one of the crucial advantages of submarines... the Virginia-class brings capability and capacity that is so crucial as we head into potential peer conflict down the road."

The 'new' mission of the Virginia-class submarine isn't a step back from the attack sub; rather, it's a step into a new future. They are making use of the latest technology, ensuring the attack is more precise, executed more effectively and done so while keeping assets as secure as possible.

Russia and China are both believed to be taking significant steps towards the next generation of attack sub, the US is mindful of that as this strategy suggests.

Pappano Assumes Command of Naval Undersea Warfare Center

NUWC Newport Public Affairs Staff, NAVSEA, December 14

<https://www.navsea.navy.mil/Media/News/SavedNewsModule/Article/1713834/pappano-assumes-command-of-naval-undersea-warfare-center/>

Rear Adm. Scott W. Pappano assumed command of the Naval Undersea Warfare Center (NUWC) on Friday, Dec. 14, in a ceremony at the Washington Navy Yard. Pappano relieved Rear Adm. Moises DelToro III, who retired after serving as the Commander of NUWC since July 2015.

Pappano, a native of Bethlehem, Pennsylvania, most recently served as Director, Comprehensive Test Facility at the Naval Surface Warfare Center Philadelphia Division. A 1989 graduate of the U.S. Naval Academy, Pappano also holds a Master of Science degree in Nuclear Engineering from the Massachusetts Institute of Technology.

At sea, Pappano served on USS City of Corpus Christi (SSN 705), USS Albuquerque (SSN 706), USS Michigan (SSBN 727 Gold), and USS Ohio (SSGN 726). He commanded USS Buffalo (SSN 715) while forward-deployed in Guam.

Assignments ashore include duty in the Commander, Submarine Development Squadron 12 Tactical Action Group; onboard x-Daniel Webster (MTS 626) at Naval Nuclear Power Training Unit Charleston, South Carolina; Military Assistant to the Assistant Secretary of Defense for International Security Policy; and Executive Assistant to the Director, Programming Division (N80) on the Navy Staff.

After selection as an Acquisition Professional, Pappano served in the Special Operations Forces Mobility Program Office (PMS 399); as Executive Assistant to the Commander, Naval Sea Systems Command; and as

Major Program Manager for the Strategic and Attack Submarine Program Office (PMS 392) where he was responsible for in-service submarine maintenance, modernization and inactivation.

*he British Military Wants Aircraft Carriers, F-35s, Submarines and More (UK)
David Axe, National Interest, December 19*

<https://nationalinterest.org/blog/buzz/british-military-wants-aircraft-carriers-f-35s-submarines-and-more-39247>

The British military is struggling to reorganize for a new cold war in Europe. A modest spending boost in 2018 could give planners some hope that budgetary shortfalls -- a perennial problem for the U.K. armed forces -- might not doom the effort.

"After almost three decades of relative international stability, the world has now re-entered a period of persistent and intense state competition," the U.K. Defense Ministry stated in its December 2018 review "Mobilizing, Modernizing & Transforming Defense."

To deter and defeat potential enemies, the study asserted, the British military should be able to deploy a 50,000-person task force including a maritime task group centered on a Queen Elizabeth -class aircraft carrier embarking F-35 stealth fighters, an army division with three brigades, an air force group with combat, transport and surveillance aircraft and a special forces task group.

At the same time, the military must keep at least one nuclear-armed ballistic-missile submarine at sea at all times for strategic deterrence.

But the U.K. armed forces have struggled in recent years to maintain the pool of forces from which the task force and at-sea deterrence would draw. Periodic cuts since the fall of the Soviet Union in 1991 have shrunk the British military roughly by half.

The most recent rounds of cuts starting in 2010 eliminated two aircraft carriers, two amphibious ships, four frigates, an army brigade, more than a third of the army's tanks and artillery and all of the air force's Harrier jump jets and maritime patrol planes. Uniformed manpower dropped by 30,000.

As recently as late 2017, there were rumors that the United Kingdom might try to offset the cost of the country's exit from the European Union by further cutting the military. Army brigades and amphibious ships appeared to be particularly vulnerable.

But funding stabilized at around \$55 billion annually. In 2017 and 2018, the government allocated the armed forces an extra \$2 billion, combined, above planned spending levels, enough to employ 196,000 active and reserve sailors, soldiers, airmen and civilian personnel.

The extra money in part came from a \$13-billion reserve fund for four new Dreadnought-class ballistic-missile submarines that the Navy is developing at a total cost of around \$39 billion, which is nearly as much as the entire British military spends in a year.

Banking on the higher level of spending to continue, officials plan on building and maintaining a fleet including two Queen Elizabeth -class carriers, six Type 26 destroyers, eight Type 26 frigates, five low-cost Type 31 frigates, seven Astute-class attack submarine, 24 patrol vessels, 12 minehunters, five amphibious assault ships and nine logistics ships, together embarking six helicopter squadrons and 48 F-35 stealth fighters.

The army would have two tank brigades, two mechanized brigades, six infantry brigades, a parachute brigade and 15 helicopter and drone squadrons, each with around 15 aircraft.

The air force would possess at least 20 Reaper-style armed drones, seven squadrons of Typhoon fighters each with around a dozen planes and two squadrons of F-35s plus 26 patrol, surveillance and command planes, 44 cargo planes and 14 tankers.

The Defense Ministry plans to complete, in 2019, a formal spending review that could add or subtract forces. The biggest risk is potential cost increases in the ballistic-missile submarine program, according to Malcolm Chalmers, the deputy director of the Royal United Services Institute.

If the cost of the submarines rises, less money will be available for transfer from the sub program's reserve fund. Overall, however, the budgetary news is good for the U.K. Ministry of Defense as it prepares for a new cold war in Europe, Chalmers wrote.

"What is clear is that, because of the additional announcements in the budget, the MoD will no longer have to make the immediate reductions in capability -- cutting regular army personnel numbers, scrapping amphibious ships and so on -- that were being heavily trailed during the earlier phases of the review in late 2017."

China Conducts First Test of New JL-3 Submarine-Launched Ballistic Missile (China)

Ankit Panda, The Diplomat, December 20

<https://thediplomat.com/2018/12/china-conducts-first-test-of-new-jl-3-submarine-launched-ballistic-missile/>

On November 24, the Chinese People's Liberation Army-Navy conducted the first known flight-test of the JL-3 solid-fuel, submarine-launched ballistic missile (SLBM), U.S. government sources with knowledge of the test confirmed to The Diplomat.

The test, which was first reported by the Washington Free Beacon, took place in the Bohai Sea from a modified conventional submarine, the sources said. The Type 096 nuclear ballistic missile submarine (SSBN) remains under construction and is expected to begin sea trials in three to four years.

Chinese authorities have not publicly confirmed the test.

The test on November 24 did not see the JL-3 fly to its full range. The first flight test likely verified the system's proper cold ejection from the submarine-based launch tube. The missile's full range is likely to be in excess of 9,000 kilometers, according to U.S. intelligence estimates.

The JL-3, along with the Type 096, will mark the modernization of China's sea-based nuclear deterrent, which became operational only recently. Currently, Beijing is known to operate at least four, but possibly as many as six, Type 094 SSBNs armed with the JL-2 SLBM—an SLBM based off the land-based DF-31 solid-fuel intercontinental-range ballistic missile.

The JL-3 is expected to offer a considerable range extension over the JL-2, which has been estimated by U.S. military intelligence to possess a range of just over 7,000 kilometers. That means the SSBNs carrying these missiles would be out of range of continental United States-based targets.

The range of the JL-3, meanwhile, would allow Chinese submarines to strike at continental U.S. targets from further away, increasing their survivability by reducing the need to navigate into contested waters in the Western Pacific in a conflict, for example.

"China's four operational JIN-class SSBNs represent China's first credible, seabased nuclear deterrent," the U.S. Department of Defense's 2018 report on Chinese military power noted.

"China's next-generation Type 096 SSBN, reportedly to be armed with the follow-on JL-3 SLBM, will likely begin construction in the early-2020s," it added.

Given the expected life-spans of both the operational Type 094 and the next-generation Type 096, the People's Liberation Army-Navy is likely to operate both types of SSBNs concurrently. All of China's operational Type 094 SSBNs are based at a base near Yulin on Hainan Island in the South China Sea.

The total size of China's planned SSBN force remains uncertain, but it is likely that Beijing will shift its efforts away from the Type 094/JL-2 to the Type 096/JL-3 in the coming years.

China Flight Tests New Submarine-Launched Missile (China)

Bill Gertz, Washington Free Beacon, December 18

<https://freebeacon.com/national-security/china-flight-tests-new-submarine-launched-missile/>

China carried out a flight test of a new submarine-launched ballistic missile last month that will carry multiple nuclear warheads capable of targeting most of the United States, according to American defense officials.

The launch in late November was the first time the Chinese military flight tested the Julong-3, or JL-3 missile that will be deployed with the next generation of ballistic missile submarines, said officials familiar with the test who said it appeared successful. Julong is Chinese for Big Wave.

The test was closely monitored by U.S. intelligence agencies that detected the launch with missile warning satellites.

No additional details of the flight test could be learned. Pentagon spokesmen declined to comment. "The Pentagon will not comment on the intelligence related to Chinese missile tests," said Lt. Col. Chris Logan, one of the spokesmen.

China's missile force announced, without elaborating, that five missile flight tests were conducted between Nov. 20 and 23.

Also, the Liaoning Maritime Safety Administration announced a sea closure zone for "military exercises" in the area surrounding the location near Dalian, China, where the new missile is being developed. The closure took place Nov. 22.

The flight test is a significant milestone for the Chinese strategic nuclear forces buildup—the most lethal component of Beijing's large-scale military modernization program.

In June, Chinese leader Xi Jinping visited a submarine base and announced that nuclear submarines are the country's key weapons systems and being upgraded rapidly.

"As a nation's ultimate instrument, submarines shall see great developments," Xi said. "Our seaborne nuclear forces need to advance by leaps and bounds. We pin our hopes of development and advancement on your era so that our navy and our submarine forces shall have a rapid rise."

Disclosure of the flight test followed internet reports last year that China deployed a Type-032 auxiliary submarine that is the likely test bed for JL-3 launches.

Private sector China analysts who examined photos of the Type-032, now located at a port on the Bohai Sea in northeast China, say the submarine's tower contains missile launch tubes that appear to have been enlarged for JL-3 tests.

The Type-032 was used in the past for tests of the shorter-range JL-2 missile, a variant of the DF-31 land-based missile.

"The extent and full nature of the work conducted is unclear but the imagery is consistent with a modification to the ballistic-missile launch tube or tubes contained within the sail," wrote Joseph Dempsey and Henry Boyd in the Military Balance Blog of the International Institute of Strategic Studies. "Logically, this would suggest plans for the integration of a larger—or at least taller—new ejection system and SLBM."

Dempsey and Boyd stated in August 2017 that the missile testing submarine was moved in February 2017 from its homeport in Xiaopingdao to Dalian Liaoning shipyard, which in the past was the location of China's submarine missile development programs.

The modification of the Type-032 "indicates progress towards a long-expected follow-on SLBM design, potentially designated 'JL-3,'" they said.

A report that same month in the China state-run Keji Ribao, a publication of the State Science and Technology Commission, stated that the existence of JL-3 had not been confirmed by Chinese authorities.

The report stated that Chinese military experts believe the solid-fueled JL-3 will use technologies from the new DF-41 land-based intercontinental missile, and that it will be comparable to the Navy's Trident II D-5 and new Russian Bulava submarine-launched missiles.

"With wide applications of new materials and technologies, the development [of submarine-launched missiles] is accelerating," the report quoted Chinese military commentator Wang Qiang as saying.

The JL-3 will utilize advanced precision guidance technology with anti-jamming capabilities. Its technologies also will include what Wang described as a "photonic-crystal optic-fiber gyroscope" and other guidance know-how described as "terminal boost, stellar guidance, scene matching guidance."

Additionally, the JL-3 will be built with missile defense-penetrating features such as a variable trajectory, a radar-evading stealth warhead, and fast burning rocket motors that seek to reduce the heat signature that is used by U.S. warning satellites to track and target missiles.

Another feature will be advanced water-exit technology that will rely on sensors that optimize interference during underwater ejections from launch tubes.

Rick Fisher, a China military analyst with the International Assessment and Strategy Center, said the JL-3 when fully operation will have a range of between 7,456 miles and 8,700 miles—enough to reach most of the United States from underwater launch areas near Chinese coasts.

"China's testing of the JL-3 SLBM affirms Department of Defense reports starting in 2016 that state a next-generation nuclear ballistic missile submarine (SSBN), usually called the Type-096, will emerge in the early to mid-2020s," said Fisher.

"It is also expected to carry up to 10 multiple independently targetable reentry vehicle (MIRV) warheads," he said. "But what is not known is the number of missiles to be carried by the Type-096 or how many submarines will be built."

China's current sea-based nuclear force includes four Type-094 missile submarines, each outfitted with 16 missiles. Internet reports from China have stated that the future Type-096 will carry up to 24 missiles—similar to numbers at one time carried by Navy Ohio-class missile submarines. Current U.S. missile submarines carry 20 missiles each.

"So it is possible that the Type 096 SSBN could be equipped with hundreds of nuclear warheads," Fisher said.

By contrast, the next generation U.S. missile submarine, the Columbia-class, will carry 16 missiles.

The JL-3 is said by analysts to be a sea-based variant of the road- and rail-mobile DF-41 intercontinental missile that is expected to carry up to 10 warheads per missile.

That missile system is nearing deployment after recent flight tests.

With the new missile subs, "China is headed for a period of rapid buildup in its intercontinental nuclear warhead numbers," Fisher said.

Fisher said the danger will be increased by the growing possibility of offensive nuclear cooperation between China and Russia. "As such, Washington needs to retain the flexibility to increase the number of missiles carried by the future Columbia class SSBN," he said.

Retired Navy Capt. Jim Fanell said if the flight test is confirmed, it would be a sign China is committed to expanding its undersea nuclear delivery capability.

"In the near term, the JL-3 could be used aboard the PLA Navy's Type 094A, a modified JIN-class ballistic missile nuclear submarine (SSBN), with the ultimate goal of being deployed aboard the next generation of PRC SSBNs, the Type 096," Fanell said.

The new Type 096 is expected to be operational by the mid-to-late 2020s.

"Whether aboard the Type 094A or the Type 096, the JL-3 will provide Beijing the ability to target the entirety of the continental United States from bastion patrol stations within the First Island Chain," he said, referring to a line of islands off China's coast stretching from Japan to the South China Sea.

"Given the expected improved quieting of the Type 096 and the up to 10 MIRVs for each of its potential 24 JL-3 missiles, this places an even greater requirement on the U.S. Navy to be able to 'hold at risk' the People's Liberation Army Navy SSBN force," Fanell said.

To "hold at risk" means Navy nuclear attack submarines must be constantly trailing Chinese missile submarines 24 hours a day.

"As such, the United States must commit to increasing its [nuclear attack submarine] force as quickly as possible, along with other elements of the Navy's anti-submarine warfare architecture," Fanell said.

The Pentagon's annual report on the Chinese military states that the current four Type 094 missile submarines represent "China's first credible, sea-based nuclear deterrent."

"China's next-generation Type 096 SSBN, reportedly to be armed with the follow-on JL-3 SLBM, will likely begin construction in the early-2020s," the report said.

"Based on the 40-plus-year service life of China's first generation [nuclear submarines], China will operate its JIN and Type 096 SSBN fleets concurrently," the report said.

A report by the National Air and Space Intelligence Center said deployment of 48 JL-2s on the four submarines has provided China with a significant nuclear strike capability.

"This missile will, for the first time, allow Chinese SSBNs to target portions of the United States from operating areas located near the Chinese coast," the report said.

Vasily Kashin, a military expert with Institute for Far Eastern Studies of the Russian Academy of Sciences, told the state-run Sputnik news outlet that China is building up more advanced missiles and submarines over concerns the current JL-2-equipped submarines are vulnerable to U.S. and Japanese naval forces.

The JL-2 "could be used against U.S. allies and American bases in Asia, but their role in deterrence is minor," Kashin said.

"In order to boost its sea-based strategic nuclear forces, China needs a missile with a range of 11,000-13,000 kilometers, preferably with a multiple, independently targetable reentry vehicle," Kashin said.

The JL-2 experienced a troubled development with long lead times and a number of test failures and delays, including a launch failure that destroyed a test submarine, he said, noting the JL-3 program is expected to be less troubled.

"China will use its experience in missile development to avoid repeating its previous mistakes and speed up the creation of a new missile," Kashin said.

China within the past two years began conducting nuclear missile submarine patrols. The patrols remain shrouded in secrecy over Chinese concerns that any disclosures about its nuclear forces will undermine their deterrence value.

China's military imposes an extremely rigid command structure on all its forces over concerns about the loyalty of field commanders. Thus Beijing's military leaders carefully control the power to launch nuclear missiles for submarine commanders.

Chinese intelligence-gathering vessels also are engaged efforts to develop an acoustic signature library of foreign submarines that can be used for targeting by attack submarines.

A Chinese embassy spokesman did not respond to an email request for comment.

Here are the Weapons China and Russia will use to Threaten US Dominance (China/Russia)

David Brennan, Newsweek, December 18

<https://www.newsweek.com/here-are-future-weapons-will-threaten-america-1262925>

A new government report has shed light on the future weapons that pose the greatest threat to the U.S., and on which adversaries are most likely to one day target Americans.

In a report detailing the most pressing long-term threats to the U.S., the Government Accountability Office (GAO) warned that America's rivals are working hard to develop the latest weapons capable of defeating the U.S. on the battlefield and beyond.

The GAO surveyed 45 government departments to analyze the most pressing national safety concerns. This included organizations across the Department of Defense (DOD), State Department, Department of Homeland Security and the Office of the Director of National Intelligence.

The report notes the greatest threat is posed by China, Russia, Iran and North Korea, all of whom will continue to try and undermine U.S. global influence and prepare for a possible military confrontation with American forces.

Weapons of mass destruction (WMDs)

"An increasing number of actors may gain access to these weapons," the GAO suggested, whether atomic, chemical or biological. Recent years have seen the number of nuclear-capable nations expand to nine, as North Korea defied international sanctions to develop atomic weapons. Though establishing WMD and nuclear programs is extremely difficult and expensive, the GAO noted nations or groups "could steal nuclear materials from existing facilities or develop new types of biological weapons using genetic engineering and synthetic biology."

Electronic warfare

On the modern battlefield, electronic warfare can be just as destructive as a conventional approach. Such systems can be used to disable sensors, communication, navigation, and information systems, leaving an adversary blind and isolated. "These weapons are intended to degrade U.S. capabilities and could restrict situational awareness or may affect military operations," the GAO noted.

U.S. forces in Syria have already reportedly been targeted by Russian electronic warfare systems, while China is believed to be testing electronic weapons deployed to man-made islands in the disputed South China Sea where American ships and aircraft conduct regular patrols.

Hypersonic weapons

Hypersonic weapons—conventional- or nuclear-armed missiles travelling at Mach 5 or higher, i.e. at least five times faster than the speed of sound—are so fast that modern defensive systems are thought to be useless against them.

"China and Russia are pursuing hypersonic weapons because their speed, altitude, and maneuverability may defeat most missile defense systems," the GAO noted, "and they may be used to improve long-range conventional and nuclear strike capabilities."

U.S. officials have warned that America is falling behind in the hypersonic race, and given that no counter-measures currently exist, this technology gap could dramatically alter the balance of military power.

Counterspace weapons

The great power contest may even extend to space. China and Russia are both developing counter-satellite weapons that could knock out vital communications and satellite links for their enemies, despite existing international agreements placing space off-limits for military activity.

The GAO specifically noted China's investment into this ability, warning Beijing "is developing capabilities to conduct large-scale anti-satellite strikes using novel physical, cyber, and electronic warfare means."

Missiles

Non-hypersonic missiles, too, will remain a pivotal area for the U.S. and its rivals. "Adversaries are developing missile technology to attack the United States in novel ways" the GAO explained, including "conventional and nuclear intercontinental ballistic missiles, sea-launched land-attack missiles, and space-based missiles that could orbit the earth."

Meanwhile, President Donald Trump's administration has threatened to withdraw from the Cold-War era Intermediate-Range Nuclear Forces Treaty with Russia, which banned ground-launch missiles with ranges of 310 to 3,417 miles. Repealing the ban could spark a new missile arms race.

Intelligence, surveillance reconnaissance (ISR)

ISR platforms will allow governments to track people and equipment throughout the world in real time with the help of AI, sensors, data analytics, and space-based platforms, the GAO warned.

Their use extends far beyond the front lines, and could allow rival powers to follow political figures, military commanders, industrial targets or even dissidents who have fled abroad to find safe haven. China, Russia, Iran and North Korea are all developing multiple ISR platforms, the GAO noted.

Aircraft

China, Russia and the U.S. are at the forefront of advanced aircraft development. Thus far, only four fifth-generation fighter jets have entered active service—two in the U.S., one in China and one in Russia.

Future stealth aircraft will “fly faster, carry advanced weapons, and achieve greater ranges,” the GAO report explained. “Such aircraft could force U.S. aircraft to operate at farther distances and put more U.S. targets at risk,” the authors added.

Undersea weapons

Stealthy and far-ranging submarines can act as a significant force leveller. As such, Russia is continuing to invest in new submarine technology and tactics to avoid detection by more advanced and numerous U.S. naval assets.

China, meanwhile, is working on “underwater acoustic systems that could coordinate swarm attacks—the use of large quantities of simple and expendable assets to overwhelm opponents—among vehicles and provide greater undersea awareness,” the GAO analysis noted.

“Adversaries could achieve breakthroughs in anti-submarine warfare—such as using AI to locate U.S. submarines—or attack U.S. undersea infrastructure, which could cripple communications,” it added.

Cyber weapons

Cyber weapons could cripple a unit, military base, city or even country from thousands of miles away. They can be used against weapons on the front line or can attack critical infrastructure like power grids and hospitals on the home front.

The U.S., China and Russia have all ploughed huge sums into offensive and defensive cyber capabilities. But the relatively low cost and potential high impact of such attacks means they have become an important part of the armory for smaller nations like Iran, North Korea and Israel.

Spain Accused of Breaching Maritime Laws After Shadowing British Nuclear Submarine as it left Gibraltar on Secret Mission (Spain/UK)

Laurence Dollimore, The Olive Press, December 17

<http://www.theolivepress.es/spain-news/2018/12/17/spain-accused-of-breaching-maritime-laws-after-shadowing-british-nuclear-submarine-as-it-left-gibraltar-on-secret-mission/>

SPAIN has been blasted after it allegedly shadowed a Royal Navy nuclear submarine as it left Gibraltar on a secret mission.

The HMS Talent left the Rock on Friday afternoon but Spain has been accused of breaching maritime regulations by following and tracking it in another vessel.

According to the Sun Online, another Royal Navy boat had to be scrambled and sent to steer the Spanish ship away from the sub.

The incident has been labelled as a ‘clear sabre rattling exercise by Madrid’ over the Gibraltar issue.

A source on Gibraltar told the Sun: “Its outrageous behaviour yet again from Spain.

“Their boat was landside and shouldn’t have been there. It only pulled off once the Royal Navy boat came towards it.”

An MOD spokesperson said: “We never comment on the movements of submarines.”

Oceanographer says US Navy funded his search for 'unsinkable' liner because it provided perfect Cold War cover for his other task - to find two missing US nuclear subs before the Russians

Ariel Zilber, Daily Mail, December 11

<https://www.dailymail.co.uk/news/article-6481699/Explorer-Titanic-says-mission-ruse-trick-Russians.html>

The discovery of the Titanic was initially a mission designed to trick the Soviet Union into thinking that the U.S. military was searching for the doomed ocean liner while it was also looking for two missing nuclear submarines.

The Titanic, the luxury ocean liner which tragically sank to the bottom of the North Atlantic Ocean after colliding into an iceberg on April 15, 1912, was found on the ocean floor by a team led by Robert Ballard in 1985.

Three years before the discovery, Ballard was a naval intelligence officer and oceanographer who was developing his own remote-control underwater vehicle.

But he was running out of money and he needed funding, according to CBS News.

So he asked the Navy's Deputy Chief of Operations Ronald Thunman.

'He said, "All my life I've wanted to go find the Titanic",' Thunman said.

'And I was taken aback by that.

'I said, "Come on, this is a serious, top secret operation. Find the Titanic? That's crazy!"'

Thunman agreed to fund the Titanic expedition on one condition - that Ballard use the money and the time to also locate two nuclear submarines that went missing in the Atlantic in the 1960s.

The Titanic was the luxury ocean liner which tragically sank to the bottom of the North Atlantic Ocean after colliding into an iceberg on April 15, 1912

On April 10, 1963, the USS Thresher sank during deep-diving tests more than 200 miles off the coast of Boston. All 129 crew and shipyard personnel died.

Five years later, 99 crewmen died when their submarine, the USS Scorpion, mysteriously disappeared near the Azores, a Portuguese archipelago some 1,000 miles west of the European continent.

'So, it was a deal - you'll let me do what I want to do, if I do what you want to do,' Ballard said.

The story sounds similar to the plot line from the 1990 film *The Hunt for Red October*, Ballard said, because the Navy didn't want the Russians to know that he was looking for the downed nuclear submarines

It was later learned that Ballard used the Titanic mission as a cover story for a top secret assignment - to locate two missing nuclear submarines. One of them, the USS Thresher, is seen in the above file photo

In 1968, 99 crewmen died when their submarine, the USS Scorpion, mysteriously disappeared near the Azores, a Portuguese archipelago some 1,000 miles west of the European continent. The Scorpion is seen above in Portsmouth, England on May 10, 1960

Ballard said he needed the Titanic story as subterfuge.

'It was very top secret,' Ballard said.

'And so I said, "Well, let's tell the world I am going after the Titanic".'

Ballard managed to find the Thresher and the Scorpion, but it took him longer than expected.

So he only had 12 days left to search for the ruins of the Titanic.

'I learned something from mapping the Scorpion that taught me how to find the Titanic: look for its trail of debris,' Ballard said.

It took him eight days to locate the ship, whereas others searched for nearly two months and didn't find it, Ballard said.

In the final four days before his mission was up, Ballard did underwater filming of the Titanic's wreckage.

Of the estimated 2,400 who sailed on the Titanic when it left port at Southampton for New York City, more than 1,500 died. The remnants of the Titanic are seen above on the floor of the North Atlantic Ocean

He said that his team's mood changed quickly as it got closer to the wreckage site.

'We realized we were dancing on someone's grave, and we were embarrassed,' Ballard said.

'The mood, it was like someone took a wall switch and went click.

'And we became sober, calm, respectful, and we made a promise to never take anything from that ship, and to treat it with great respect.

'You don't go to Gettysburg with a shovel. You don't take belt buckles off the Arizona.'

Of the estimated 2,400 who sailed on the Titanic when it left port at Southampton for New York City, more than 1,500 died.

The ocean liner is the subject of a new exhibit, Titanic: The Untold Story, at National Geographic Museum in Washington, D.C.

Coming Soon: Russian Submarines in the Gulf of Mexico? (Russia)

Michael Peck, The National Interest, December 11

<https://nationalinterest.org/blog/buzz/coming-soon-russian-submarines-gulf-mexico-38442>

Russia's message to the United States: Sail your warships into Russian coastal waters, and we'll send our warships into yours.

That threat comes after a U.S. Navy destroyer sailed into an area of the Sea of Japan, near the Russian port of Vladivostok, that is claimed by Russia. The USS McCampbell conducted a freedom of navigation operation (FONOPS) cruise to demonstrate that the United States does not recognize Russian sovereignty over those waters.

The McCampbell sailed on December 5 "in the vicinity of Peter the Great Bay to challenge Russia's excessive maritime claims and uphold the rights, freedoms, and lawful uses of the sea enjoyed by the United States and other nations," announced the U.S. Pacific Fleet. The Arleigh Burke -class destroyer can carry up to 96 Tomahawk missiles.

While the U.S. Navy did not provide exact details of the McCampbell's route, Russia's Defense Ministry said the destroyer did not come closer than 100 kilometers (62 miles) to Russian territorial waters, and was continually tracked by a Russian destroyer and aircraft. Just which waters were considered Russian territory wasn't clear.

The following day, Russian state news agency TASS published an interview with Igor Korotchenko, the editor-in-chief of Russian magazine Natsionalnaya Oborona (National Defense), which hinted that Russia could return the favor.

"Our submarines, too, might have surfaced suddenly some place in the Gulf of Mexico to shock America," Korotchenko said. "We have the corresponding forces of our submarine fleet there. We do not do that for the simple reason our purpose is not to show off in such a silly way, but to cope with the assigned tasks."

Interestingly, Russia claimed earlier this year that in 2013, its submarines did in fact sail into the Gulf of Mexico without being detected. A Russian submarine officer told Russian media that the subs-allegedly Akula-class nuclear-powered attack submarines armed with Kalibr cruise missiles-came within "missile strike distance from one of the main bases of American submarines." The article hinted that the base in question was the U.S. Navy submarine installation at King's Bay, Georgia, separated by the narrow Florida peninsula from the Gulf of Mexico.

Korotchenko warned that attempts to intimidate Russia were "useless and senseless."

"Russia has conducted a self-sufficient policy of its own and it keeps conducting it," he added. "We defended our interests all along and we continue to do so."

Russia's neighbor Ukraine would say that Moscow has an expansive definition of Russian interests. The USS McCampbell 's show-the-flag mission came after Russia's seizure last month of three Ukrainian warships sailing in the Sea of Azov, which borders the Crimean peninsula (which was annexed by Russia from Ukraine in 2014). Several Ukrainian sailors were injured by Russian fire.

The Sea of Azov is supposed to be shared by Ukraine and Russia. Ukrainian president Petro Poroshenko has called for NATO warships to patrol these waters.

Japan's Navy Seeks Female Sailors for its Submarines (Japan)

Staff, Maritime Executive, December 10

<https://www.maritime-executive.com/article/japan-s-navy-seeks-female-sailors-for-its-submarines>

Japan's Maritime Self Defense Force is making plans to begin recruiting female servicemembers for its submarine force in order to fill gaps in staffing.

According to NHK, the service will begin shipyard work to add separate female-only crew quarters compartments to three submarines sometime next year. Ultimately it aims to have 10 percent of each sub crew filled by female sailors by 2023.

In recent years, Japan's military - technically named the Self-Defense Force (SDF), as Japan's post-WWII constitution prohibits a war-capable standing army - has had difficulty recruiting enough personnel. Japan's birthrate is below replacement: last year it shed about 300,000 out of a total of about 127 million inhabitants. One quarter of the populace is above the age of 65.

This demographic shift means a declining number of qualified applicants for military service. In 1994, there were about 17 million individuals in the potential recruitment pool of 18-to-26-year-olds. Today, that number has fallen to about 11 million, and it is forecast to decline to 8 million by midcentury, according to Reuters. An improving economy with a 2.5 percent unemployment rate also means that more potential recruits are staying in civilian careers - even if for many this means piecing together multiple part-time jobs to make a living.

In response to the population crunch, the SDF has raised the age limit for new recruits to 32 years, up from 26, in hopes of attracting more applicants for enlisted ranks. The service as a whole wants to boost female recruitment by about three percentage points, to bring the fraction of female servicemembers closer to the levels found in other allied military services.




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