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





The Silent Sentinel November 2018





Our Creed and Purpose

ares who gave their lives in the pursuit of their duties while serving their country. That their dedication, source of motivation toward greater accomplishments. Pledge loyalty and patriotism to the United.

To perpetuate the memory of our shipmens who gave their lives in the pursuit of their duties while serving their country. That their dedication, deeds, and suprome sacrifice he a constant source of motivation toward greater accomplishments. Pledge loyality and particulate to the United States of America and its Constitution.

In addition to perpetuating the memory of departed shipmens, we shall provide a way for all Submariners to gather for the manual 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 shipmarine who have given be suprome sacrifice. The organization will also endeavor be educate all third parties it comes in contact with about the services our submarine hottlers performed and how their sacrifices made possible the freedom and lifestyle we enjoy today.



U.S. Submarine Veterans San Diego Base

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Parade Chairman

Joel Eikam

Scholarship Chairman

Paul Hitchcock

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 SH ENT SENTINEL amaile	d. VES 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

November 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 *November 13th*. 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 Sultans on Binnacle. Chris is currently at UCSD Medical Center undergoing inpatient radiation and chemo therapy. Marie Tate, wife of WWII Veteran Charlie Tate passed away. Hadara Hyman, wife of Michael Hyman, in hospital for second hip replacement surgery within a month's time.

Submarine Losses in November

Originally Compiled by C J Glassford



USS Albacore (SS-218)

Lost on Nov 7, 1944 with the loss of 85 men when she was sunk off northern Hokkaido. Winner of two Presidential Unit Citations, Albacore was on her eleventh war patrol and struck a mine while running submerged near a Japanese patrol craft that had detected her.

USS Growler (SS-215)

Lost on Nov 8, 1944 with the loss of 86 men when she was sunk in the South China Sea. Winner of two Navy Unit Commendations, Growler was on her 12th war patrol, and was lost while attacking a convoy, probably as a result of a depth charge attack or victim of a circular run by one of her own torpedoes.

USS Scamp (SS-277)

Probably sunk on November 16, 1944 with the loss of 83 men near Tokyo Bay. On her 8th war patrol, she may have been damaged by a mine and was trailing oil, which helped Japanese coast defense vessels locate and destroy her with depth charges.

USS Corvina (SS-226)

Lost on Nov 16, 1943 with the loss of 82 men when she was sunk just south of Truk. Corvina was on her 1st war patrol and appears she was lost to the torpedoes of a Japanese submarine.

USS Sculpin (SS-191)

Lost on Nov 19, 1943 with the loss of 43 men near Truk. Severely damaged by depth charges after attacking an enemy convoy, Sculpin continued to fight on the surface. When the captain was killed, the crew abandoned ship and scuttled Sculpin, 41 men were taken prisoner but only 21 survived the war. Among those not abandoning ship was CAPT Cromwell, aboard as a potential wolfpack commander, he rode the Sculpin down, fearing that vital information in his possession might be compromised under torture. For this, CAPT Cromwell was posthumously awarded the Congressional Medal of Honor.



San Diego Base, United States Submarine Veterans Inc. Minutes of Meeting - 9 October 2018 At VFW Hall, 4370 Twain Avenue, San Diego CA 92120

1910 - Base Commander Warren Branges called the meeting to order.

Conducted Opening Exercises - Pledge of Allegiance lead by Chief of the Boat Bob Bissonnette

Chief of the Boat Bob Bissonnette lead the opening prayer.

Chief of the Boat Bob Bissonnette conducted Tolling of the Boats for boats lost in the month of August.

Junior Vice Commander Manny Burciaga recognized Past Commanders, dignitaries and guests.

Base Secretary Jack Kane announced 19 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 September will be published in the Sentinel. Those minutes were accepted as presented in print at each table.

Base Commander Warren Branges called for Committee Reports

Binnacle List - Base Commander Warren Branges reported Chris Sultans on Binnacle. Chris is currently at UCSD Medical Center undergoing inpatient radiation and chemo therapy. Marie Tate, wife of WWII Veteran Charlie Tate passed away.

Parade Committee - Chairman Jack Kane announced the next parade is San Diego Veterans Day Celebration on Saturday 10 November 2018. Parade starts at 1100.

Membership Committee - Chairman Ray Febrache. No Report. Ray not in attendance

Scholarship Committee - Committee Chairman Paul Hitchcock. No Report.

Storekeeper - Paul Hitchcock. Final SK Turnover and inventory will be done soon. We have 2019 Calendars. 90 North Patches are now being sold thru E-bay as well as thru the Base Store.

Breakfast Committee - Chair Base Commander Warren Branges. The last Breakfast netted \$292.98. The next Breakfast will be 30 December 2018.

52 Boat Memorial - Chair Base Commander Warren Branges- The next All Flags Day will be 11 November 2018 (Veterans Day). We will put up flags at 0700 and take them down at 1600. We will do a special Flag and Wreath Ceremony in conjunction with the Point Loma Association at 0900, 7 December 2018. COSUBRON ELEVEN and CO Naval Base Point Loma will be guest speakers. Flags will be retrieved at 1600.

Float Committee - Base Commander Warren Branges for Chair David Kauppinen. We are looking for a new home for the float. Contact the Base Commander if you have any ideas. The Base RV parking will close in November.

Eagle Scout Program - Co Chairs Nihil Smith and Glenn Gerbrand. NO Report

1938 - Base Commander called for a break, 50/50 Raffle held.

1950 - Unfinished Business

Chirstmas Party. Will be held at VFW Hall on Twain on 8 December 2018. Tickets are on Sale now. See the Base Commander. If you have anything to donate for Door Prizes see the COB, Bob Bissonnette.

Chula Vista Veterans Walk on 3 November. We will not be participating in the walk this year.

East County Field Trip. - Seventeen Members and 7 Guests attended the meeting/dedication at Terry Ulmer's Mopac Park on 15 September. Former Congressman Duncan Hunter made some remarks and KUSI Channel 9 covered the event. A motion was made and passed to invite Terry and his wife to the Christmas Party and present him some Submarine Memorabilia.

National USSVI Elections - Voting closes 2359 on 10 October. You can still vote online today and tomorrow.

2009 - New Business

Float Storage. We will need a new storage location for the float. The RV Storage at Point Loma will close in November. If you any ideas, solutions for storage please contact the Base Commander.

2019 Base Functions. We are scheduling next year's recurring events as follows: 2019 Christmas Party for 14 December. 2019 Subvets Picnic for 13 July. 2019 Budget and Calendar Review will be done late November or Early December.

2016 - Good of the Order

Scamp Base Presentation to Colley O'Gorman will be held on 27 October at Big Jim's 395 Restaurant.

Veteran Videos - Julie Biewer will be doing video interviews with Submarine Veterans the next view months. If you are interested in doing a video for your family and friends see Julie after the meeting.

2019 Memorial Day and Old Timers Luncheon. We currently do a Tolling of the Bells at three ceremonies very close to each other each year. We are looking at spreading these out. We are looking at the possibility of moving the Memorial Day Ceremony to 52 Boat Memorial rather than at Roncador. We have several things to work out before we could move the ceremony. We will need to make sure we can get adequate Insurance Coverage and a permit from the City, Other things that will be looked at are conflicts with other events at Liberty Station, possible sponsorship by other organizations, etc.

2018 NATIONAL CONVENTION will be the Caribbean Cruise from Fort Lauderdale October 27 - November 3, 2018. Information and registration forms at the National Website (http://ussviconvention.org/2018/). 506 members are signed up. The following boats will hold reunions on the cruise: SS-241 Chivo, SS-484 Odax, SSN-585 Skipjack, and SSBN-619 Andrew Jackson. Len Heiselt (Scamp Base) will not be able to attend due to illness. He has one ticket available for the cruise. See the Base Commander if you are interested in purchasing Len's ticket.

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.

The Meeting was adjourned at 2025

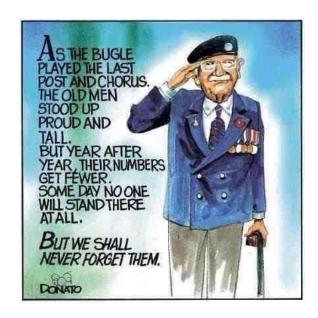
/s/ Jack E. Kane
Jack Kane, Secretary
Sailing List for 9 October 2018

Members
David Ball
Bob Bissonnette
Warren Branges
Matt Baumann
Manny Burciaga
Mike Cosgrove
Scott Debenham
Nicholas Dirkx

Bill Earl
Joel Eikam
Bob Farrell
Fred Fomby
Paul Hitchcock
Jack Kane
Joe Peluso
Phillip J. Richeson
Chris Stafford

Russ Stoddard John Zinich

Guests
Steve Johnson
Julie Biewer



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. The date is March 19, 1943. Whale is in the Marianas. "The Rag" No. 4

TENTH EDITION

MARCH 18, 1943

Worry is a thin stream of fear trickling through the mind. If encouraged, it cuts a channel into which all other thoughts are drained.

Arthur Somers Roche.....

....Flail on the Whale.....
Moon-haze flooded the ocean,
Confusion rulad the ship.
The look-outs spotted some japs
The radar showed not a pip.

They rang up rapid persuit, Four engines proved only too few.

A quarter gasket manned the soound gear,

And couldn't pick up the sound of a screw.

Then 4 to 8 in the morning, With all four bent on the main.

A wind-jammer was sighted persuing....

"Ye Gods!" the exec. yelled I think she's going to gain.

At "Clear the bridge and lookouts below",

They all started to disemba-

Four of 'em jammed in a hatchway, "Say fellers that's a hellova place to parak.

They were supposed to level off at a 100

But at that level she'd just started to fall When a scream came out of the

pump room

My God! there's a hole in the wall.

After all the hustle and bustle, At last came peace and quite. We were batting the breeze to each other of what we would do to the Japs in a fight.

.. The pay-day kid.. Did or didn't this radar come equiped with or without a pip?

What MoMMic whos enitials are JONESA, is seen sleeping in every one's bunk, other than his own? He could be a good SHIPMATE by giving his bunk to some one who isn't fortunate enough to have one.

Was it or wasn't it? is it or isn't it? Who saw what? At what time, where? Could it have been a hallucination brought on by sun shine and fresh air? Or could it have been the revival of the Flying Dutchmann? But the boys are to be congratulated regardless of the exsisting doubt. It is only quick action such as this that has kept the WHALE safe in enemy waters for so long.

CONGRATULATIONS are extended to MURDAUGH Gm2c for having sighted the enemy ship last night. He has been fortunate enough to win the first leg on the captains cup and a carton or cigarettes. Let's keep up the good work fellows.

Far, into that mysteriously Oriental southeast, rising high above the shimmering palms, placid lagoons and gentle roll of the Pacific lies Saipan. Saipan----that all important mandated possesion of Nippon.

From periscope, one can clearly make out the stacks, masts and funnels of several large ships of varied description, saftly concealed from the open sea, and the maurauding activities of the terror

or the deep, the submarine.
Just over the horizen from Saipan, lurking furtivally yet gracefully blending with the tropical colors of the crystal clear stoll, swims the mighty Whale in a never ending search for the enemy.

And so, -----Another day goes by, and still the big fish of Nippon refuse the lure.

... The Editor

Quite recently, the RAG, made the statment that negotiations between Saipan shipping, and the U.S. S. WHALE, would open within three days. This statment was made two days ago. Bo----dear readers, we the staff of the Rag still have another day of grace before you can start throwing things.

Current News

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

Dive! Dive! The emerging submarine power players Stephen Kuper, Defence Connect, November 7

 $\underline{https://www.defenceconnect.com.au/maritime-antisub/3120-dive-dive-the-emerging-submarine-power-players}$

As established submarine powers like the US, China, Russia and Japan continue to introduce increasingly potent and diverse submarine capabilities, emerging regional powers like India, Indonesia, Vietnam, Thailand, Singapore and Malaysia are each responding to rising great power submarine rivalry with their own unique platforms and capabilities.

For these nations, potent submarine platforms serve to enhance their broader defence capabilities and some of the natural geo-strategic advantages nations such as Malaysia, Singapore and Vietnam, for example, enjoy.

In Run silent, run deep: Understanding the regional submarine rivalry we took a closer look at the submarine capabilities being introduced or currently in operation with the great powers and regional leaders in Indo-Pacific Asia.

So, what do the capabilities and platforms of the emerging regional players look like? Indian Navy: India currently operates a diverse fleet of submarines, including a nuclear powered attack submarine and a ballistic missile submarine and a growing fleet of diesel-electric powered, attack submarines.

India's submarine fleet is designed to operate in a variety of environments and capacities, ranging from open ocean, blue-water navy and nuclear deterrent roles to littoral patrol and conventional hunter-killer operations.

Attack Submarines (SSN):

Chakra (Akula) Class: India signed a decade-long lease with Russia to operate an Akula Class submarine, with ongoing negotiations to secure a second vessel. As the pinnacle of Soviet attack submarine design, the Akula and its variants vary in size from 8,140 tonnes to 13,800 tonnes submerged with a top speed between 28-35 knots when submerged. The Akula Class were designed to limit the operating and power projection capability of the US Navy's aircraft carriers and associated task groups through overwhelming firepower, including 28 533mm torpedoes, 12 650mm torpedoes, Klibr land-attack cruise missiles and Igla-M surface-to-air missile launcher.

Attack Submarines (SSK):

Shishumar Class: India's oldest conventional submarines, the Shishumar are based on the HDW designed Type 209 submarine. The vessels have a submerged weight of 1,850 tonnes, a submerged speed of 22 knots and range of between 15,000 and 24,000 kilometres. The fleet of four submarines are capable of carrying 14 torpedoes, 24 external, strap-on mines and Harpoon anti-ship missiles.

Sindhughosh (Kilo) Class: The Indian Navy operates a fleet of nine Russian-designed Kilo Class attack submarines. As with their Russian counterparts, the Sindughosh Class are designed to conduct key anti-shipping and anti-submarine operations in littoral waters. The Indian variants have a submerged weight of 3,027 tonnes, a submerged speed of 20 knots and submerged range of about 740 kilometres. The vessels are armed with 533mm torpedoes and up to 24 mines, in lieu of torpedoes.

Kalvari (Scorpene) Class: The next generation of India's conventional attack submarines, the Kalvari Class, is based on the Naval Group Scorpene Class submarines. India plans to operate a fleet of six vessels, with three currently in service and three under construction. Designed with a submerged weight of 1,775 tonnes and submerged speed of 20 knots. Kalvari and her sister vessels have an operational range of 1,020 kilometres submerged and are armed with 18 533mm torpedoes, SM 39 Exocet anti-ship missiles or 30 mines in place of torpedoes.

Ballistic Missile Submarines (SSBN):

Arihant Class: India's first locally designed and built nuclear submarines, the Arihant and her three sisters will provide the sea-based leg of India's nuclear deterrent force. The 6,000-tonne vessels have a submerged speed of 24 knots and are armed with 12 K15 submarine launch ballistic missiles or four K-4 missiles. Additionally, Arihant and her sisters carry approximately 30 533mm torpedoes, cruise missiles or mines.

Indonesian Navy: Indonesia operates a relatively small submarine fleet designed largely for maritime patrol and littoral interdiction across the Indonesian Archipelago.

Attack Submarines (SSK):

Nagapasa and Cakra Class: Indonesia operates five improved versions of the South Korean Chang Bogo Class submarines, based on the HDW Type 209 submarine. The three vessels displace between 1,200 and 1,440 tonnes, have a top submerged speed of 21.5 knots and are armed with 14 533mm torpedoes and Harpoon anti-ship missiles.

Indonesia has long sought an improved submarine capability with discussions around the procurement of Kilo Class submarines from Russia under serious negotiation dating as far back as 2013-14. The nation is currently aiming to operate a fleet of 10-12 submarines. Naval Group has used the Indo Defence 2018 Expo to showcase their Scorpene Class submarines to meet the Indonesian requirement.

Singapore Navy: Singapore's strategic location at the end of the Strait of Malacca requires a robust submarine capability to ensure maritime integrity, interception and submarine deterrent capability. As a result, the nation has invested heavily in developing a potent submarine capability to secure the vital sea-lines of communication (SLOC).

Attack Submarines (SSK):

Challenger Class: The Kockums-designed Challenger Class provided Singapore with their first submarine capability when first introduced in 1995. The Challenger Class are based upon the Swedish Sjoormen Class submarines, which were retired from the Swedish Navy and upgraded prior to transfer to the Singaporean Navy in the mid-1990s. The Challenger Class have a submerged weight of 1,400 tonnes and submerged speed of 20 knots. The remaining two vessels are armed with both 533mm and 400mm torpedoes and were upgraded in the early-2000s to extend the life and ability to operate in tropical environments.

Archer Class: These air independent propulsion (AIP) powered submarines are based upon the Swedish Vastergotland Class vessels, which also served as the basis for Australia's Collins Class submarines. Following an extensive modernisation process in the mid-2000s, both Archer and Swordsman have a submerged weight of 1,500 tonnes and submerged speed of 15 knots. The Archer Class are armed with both 533mm and 400mm torpedoes.

Type 218SG Class: The next generation of Singapore's submarine fleet, the four 218SG vessels will provide a quantum leap in capability offered to the Singaporean Navy. Based on the HDW designed Type 216 vessels presented to Australia as part of the SEA 1000 program, the 218SG vessels will be AIP powered, with a submerged weight of 2,200 tonnes and submerged speed in excess of 15 knots. The first steel was cut in January of 2018, with the four vessels projected to be delivered from 2021 onwards.

Malaysian Navy: Malaysia, like Singapore, has an important geo-strategic location, providing the nation's two submarines with ready access to both the Indian Ocean and the hotly contested South China Sea. As a result of this, the Malaysian government embarked on a modernisation program for its submarine fleet.

Attack Submarines (SSK):

Scorpene Class: The Naval Group Scorpene Class submarines were originally ordered in 2002 have a submerged weight of between 1,565 and 1,870 tonnes and a submerged speed of 20 knots. The vessels are armed with 18 533mm Black Shark heavyweight torpedoes or SM 39 Exocet anti-ship missiles, or 30 mines in place of the typical torpedo armament.

Vietnam People's Navy: As with Singapore and Malaysia, Vietnam's proximity to the South China Sea has seen the nation invest heavily in a credible, highly capable submarine force to counter rising concerns about the growing strength of the Chinese Navy in particular.

Attack Submarines (SSK):

Kilo Class: Vietnam operates a fleet of six, improved Project 636MV variant Russian-designed Kilo Class conventional attack submarines. Like their Russian, Chinese and Indian counterparts, the Vietnamese Kilos are designed to conduct key anti-shipping and anti-submarine operations in littoral waters. The vessels have a submerged weight of between 3,000 and 3,950 tonnes, a submerged speed of 20 knots and submerged range of about 740 kilometres. The vessels are armed with 533mm torpedoes and up to 24 mines, in lieu of torpedoes.

Royal Thai Navy: Thailand's geo-strategic location on the edge of both the Indian Ocean and the South China Sea places growing importance on the development of a credible strategic submarine force, capable of protecting the region's littoral and broader maritime domain in the face of mounting regional submarine competition.

Attack Submarines (SSK):

S26T (Type 039A) Class: The Thai government signed a contract in May 2017 with China to supply three export variant S26T, Type 039A conventional submarines. Like their Chinese counterparts, the Thai submarines are designed to conduct the anti-shipping and anti-submarine operations in littoral waters. The vessels have a submerged weight of 2,250

tonnes, with a top speed of 22 knots and are capable of carrying 18 533mm torpedoes, the YJ-8 anti-ship cruise missile or 36 naval mines.

It is clear that Australia's region is going to be increasingly congested as both great and emerging powers continue to invest heavily in their own submarine capabilities. The growing proliferation of steadily more capable platforms across the nation's northern approaches presents significant challenges for the nation's existing Collins Class submarines in the short-to-medium term and the future submarine force of the future.

Home-developed lithium-ion batteries ready for new 3,000-ton subs (South Korea) Park Sae-jin, Aju Business Daily, 7 November http://www.ajudaily.com/view/20181107111119548

South Korea has finally achieved a technical breakthrough in developing a workable lithium-ion battery for a new generation of home-made submarines. The project, which began in July 2016, involved five research bodies and six companies including Samsung SDI, a top battery maker.

The Defense Acquisition Program Administration (DAPA), a state body controlled by the defense ministry, said Wednesday that lithium-ion batteries have passed its technical readiness assessment for 3,000-ton submarines under construction.

South Korea's first 3,000-ton submarine capable of firing ballistic missiles was unveiled on September 14. The diesel-electric submarine named "Dosan Ahn Chang-ho" can sail at a maximum speed of 37 kilometers per hour with about 50 people aboard. After an operational test and evaluation, it will be delivered to the navy.

Dosan Ahn Chang-ho was installed with lead-acid batteries like conventional submarines which use diesel-electric engines or nuclear power reactors as their main power source. Many shipbuilders preferred lead-acid batteries because they were relatively inexpensive and reliable.

DAPA officials said domestic companies and researchers addressed concerns about lithium-ion batteries, which were once seen as expensive and unstable for submarines, based on South Korea's advanced technology in the production of top-class batteries for electric devices and vehicles.

"Lithium-ion batteries are better in many ways as they take up less space than lead-acid batteries, and they are more power-efficient," a DAPA official told Aju News. "The new batteries have passed tests which simulated harsh situations such as an explosion, the flooding of seawater, fire and extreme temperatures."

Submarines mounted with lithium-ion batteries can stay underwater longer, while those using lead-acid batteries surface regularly to vent poisonous fumes created in the processes of cooling and charging, the official said on condition of anonymity.

"By developing new lithium-ion technology, we are expected to take a leading position in the global submarine industry," DAPA's submarine division head Chung Il-sik said in a statement, adding the new technology would bring a technical ripple effect to shipbuilding and other civilian sectors.

For its submarine project, South Korea has tried hard to localize parts. Dosan Ahn Chang-ho cost about one trillion won (\$892 million) with its localization rate standing at 73 percent.

South Korea has a three-phase project to develop a fleet of submarines. Through the first phase, nine 1,200-ton subs have been built with technical help from Germany. In the second phase, six 1,800-ton hybrid diesel-electric/fuel cell vessels have been built and the third phase calls for the construction of 3,000-ton and 3,600-ton submarines.

New hypothesis on the tragedy that befell Argentina's sub ARA San Juan (Argentina) Staff, Merco Press, November 6

http://en.mercopress.com/2018/11/06/new-hypothesis-on-the-tragedy-that-befell-argentina-s-sub-ara-san-juan

An "operation error" related to a ventilation valve, called 'Eco-19,' could explain the mystery of the tragedy that befell the ARA San Juan, the Argentine submarine that disappeared almost a year ago with 44-crew members on board. The new details emerged in a report currently being prepared by a commission of experts based inside the Argentine Defense Ministry.

An error in the internal ventilation valve could have caused the entry of seawater into the submarine's batteries, leading to a short-circuit and the subsequent production of hydrogen, sources told the Buenos Aires Perfil newspaper.

According to the report, the battery may not have been closed up properly or had some issues functioning, either "mechanical, human or incidental" in nature.

The report is being prepared by submarine experts commissioned by the Ministry, including Navy rear admirals (RE) Adolfo Trama and Alejandro Kenny, and captain (RE) Jorge Bergallo, who is the father of Jorge Ignacio Bergallo, the second commander of ARA San Juan whose life was lost at sea.

However sources close to the investigation told Perfil that even though this is the most likely scenario, others hypotheses are still under consideration.

The report is set to be presented to the Defense Ministry in the upcoming days, and could be made public as soon as the minister Oscar Aguad allows it.

The ARA San Juan, a German-built TR-1700 class submarine, vanished almost one year ago, on November 15, 2017, as it was sailing from the southernmost port of Ushuaia in Tierra del Fuego to the Mar del Plata submersibles base, after a patrol. A search for the vessel, or what remains of it, is ongoing.

Chinese National Who Allegedly Stole US Submarine Technology Faces New Charges Annie Wu, The EpochTimes, November 4

 $\underline{https://www.theepochtimes.com/chinese-national-who-allegedly-stole-us-submarine-technology-faces-new-charges~2707938.html$

A day after the U.S. Department of Justice announced a new initiative to more aggressively pursue cases of Chinese espionage, it announced that prosecutors filed new charges in a previously announced case of a Chinese national seeking to illegally export U.S. military technology to China.

In a Nov. 2 press release, the Justice Department (DOJ) announced that additional charges of smuggling, money laundering, and making false statements to government officials were filed against Qin Shuren, a U.S. permanent resident living in Wellesley, Massachusetts. In June, Qin was arrested for allegedly conspiring to export U.S. antisubmarine warfare devices to a Chinese military research institute, among other charges, according to the DOJ.

>From 2015 to 2016, Qin exported at least 60 hydrophones, devices that can be used to monitor sound underwater, to Northwestern Polytechnical University (NWPU), a military research institute located in the northwestern Chinese city of Xi'an, that's affiliated with the People's Liberation Army, according to a DOJ release.

Qin, 41, transferred more than \$100,000 to U.S. bank accounts from Chinese accounts to facilitate his export scheme, according to court documents.

Because of national security risks, the U.S. Commerce Department requires a company to obtain an export license in order to ship U.S. goods to NWPU, which works with China's military to advance its military capabilities. Prosecutors said that Qin exported the devices to China without obtaining the license, and purposely concealed from a U.S. supplier of hydrophones that NWPU was the recipient.

He was initially charged with conspiracy to commit export violations, visa fraud, and conspiracy to defraud the United States. In total, he faces up to 70 years in prison, in addition to more than \$2 million in fines, according to the DOJ press release.

Such attempts at stealing U.S. military technology for the benefit of the Chinese regime aren't infrequent.

Just this year, the DOJ announced two other cases of smuggling U.S. technology.

In July, a Chinese national pleaded guilty to illegally exporting to China equipment related to "advanced radar, military-grade communications jammers, low-noise amplifiers, and Ka-band space communications." She was able to access the technology through her role providing accounting services for aerospace companies, including U.S. defense contractors, according to the DOJ.

In January, two naturalized U.S. citizens and one Canadian were charged with scheming to export computer chips used in electronic warfare and radar systems. The suspects were Taiwanese and Vietnamese nationals. The three posed as domestic customers seeking to buy the chips from a U.S. company, before exporting them to a Chinese company called Chengdu GaStone Technology Co.

Other times, Chinese academics were the culprits. In 2015, two engineers who first met while studying thin-film bulk acoustic resonator (FBAR) technology at a university in Southern California were charged with economic espionage.

They later worked for U.S. tech firms that specialized in FBAR, and conspired to steal the companies' source code and other vital technologies with applications for military and national defense communications. They planned to share the trade secrets with Tianjin

University in China, before opening a joint venture with the university to mass-produce FBAR equipment for Chinese commercial and military clients, according to the DOJ.

The pattern of Chinese intellectual property theft in the science and tech fields has prompted the United States to shorten the length of visas issued to Chinese graduate students studying in specific fields, such as robotics, aviation, and high-tech manufacturing.

The Chinese regime sees development in those fields as high-priority goals for its manufacturing sector, outlined in its 10-year economic plan, Made in China 2025.

Russia's biggest dry dock has completely sunk and it's debatable if it has anything that could fully replace it anytime in the foreseeable future.

TYLER ROGOWAY @AVIATION_INTEL OCT 30, 2018 6:25 PM EDT

Submitted to the Silent Sentinel by Matthew Baumann

Tyler has been obsessed with all things aviation and military as long as he can remember. He went on to develop the defense-oriented website Foxtrot Alpha and can often be found with a camera around his neck, photographing aircraft and weaponry.

A day after Russia's massive PD-50 drydock suddenly sank underneath the country's only aircraft carrier, the Admiral Kuznetsov, as it was receiving a long-awaited overhaul in frigid Murmansk, just how big a deal this may end up being for the Russian Navy is becoming clearer. The dry dock, which is the largest of its kind in Russian hands, appears to have sunk at first on a steep incline before it disappeared totally beneath the water's surface. Russian officials are now saying that it could be many months before it is raised from the seabed 160 feet below and that doing so would be a very tedious and delicate operation. That's if they decide to salvage it at all.

Regardless, PD-50 services all types of vessels that make up Russia's most powerful fleet, including its largest submarines. So leaving it out of action for years, or even losing it altogether, would be a major hit for the Northern Fleet and the Russian Navy's overall readiness.

The incident supposedly occurred as the result of an electrical interruption during a refloating operation for the Admiral Kuznetsov. The hulking floating apparatus' pumps were stuck on, rapidly filling its ballast tanks. Some 60 people had to escape from the sinking dry dock, many of which ended up in the water. In total, some 70 people were evacuated from the port facility. As it stands now, four people were injured in the process and one remains missing—a senior mechanic. It's worth noting that the near-freezing waters near Kola Bay would give someone just a matter of minutes to get to a dry place before succumbing to hypothermia.

The 82nd Shipbuilding Plant and the PD-50 are situated between Murmansk and Severomorsk. Google Earth

It seems that the accident may not have been a fluke and a criminal investigation into possible safety violations that at least contributed to the mishap is currently underway. A lawsuit also looks all but certain as well, Barents Observer reports:

"It is Rosneft that owns the floating dry dock after it in 2015 acquired the Shipyard No 82 in Roslyakovo. The oil company intends to turn the yard into a base for its offshore Arctic oil operations.

The United Shipbuilding Corporation now says that it intends to sue Rosneft and that the oilmen will have to cover costs related to the repair of the damaged ship."

Although shipyard officials quickly claimed that the carrier was unharmed in the incident and that its refit schedule is left unchanged, other official sources have since said that the ship received a 15 foot by 12 foot gash in its hull near the waterline and that the crane that crashed on its deck potentially did significant damage to exposed mechanical systems. As we mentioned in our previous piece, the fact that there are conflicting reports, one of which seems ridiculously premature, isn't surprising as Russia has a track record of downplaying or not even admitting obvious naval shipyard accidents.

The Kuznetsov is floating, albeit with a crane laying across its deck, and we really don't know exactly the extent of the damage. If there are flooded mechanical spaces, the ship could require extensive and very costly repairs. Maybe most concerning is the fact that there may be nowhere to even make those repairs as PD-50 was the only Russian dry dock that we know of that could handle the country's lone aircraft carrier.

China Is Building More Nuclear-Armed Submarines (China) Kyle Mizokami, Popular Mechanics, 24 October

https://www.popularmechanics.com/military/navy-ships/a24177617/china-is-building-more-nuclear-armed-submarines/

China is building more nuclear-armed submarines to stay one step ahead of the U.S. and other adversaries. That's the assessment from an arms control think tank, which believes China's leaders are leaning toward basing their nuclear weapons at sea to prevent their destruction in a surprise attack. Although China will not likely built more nuclear weapons, it will likely build more submarines to conceal a larger and more effective second strike capability beneath the waves of the Pacific Ocean.

Unlike the United States and Russia, China has a very simple nuclear doctrine: China will not use nuclear weapons first. If you nuke China, China will nuke you back. That's pretty much it.

China doesn't need a whole lot to keep its nuclear policy credible. It has just 250 to 300 nuclear warheads, as opposed to America's 6,450. As long as a handful of these bombs can reach their targets, and could incinerate cities such as Khabarovsk, Los Angeles, St. Petersburg, or Washington D.C., China's adversaries are deterred.

In order to retaliate, however, China's nuclear arsenal must be able to survive a surprise attack. Most of Beijing's nukes are fitted to intercontinental ballistic missiles in protected silos and on mobile launchers. Just 48 of the warheads are fitted to submarine-launched ballistic missiles of the Type 094A, or Jin-class. China has four Jin submarines, each equipped with twelve launch silos for JL-2 ballistic missiles. This ensures that, between refuelings, drydock time, coming or going from patrol areas, the People's Liberation Army Navy can keep at least one submarine on station, nuclear weapons-ready, at all times.

A new report from the Carnegie Center for Global Policy states that Beijing is seeking an unknown number of new nuclear submarines. The exact number is unknown, but the rule of thumb that a nuclear power needs four submarines to keep one on station suggests China would need to double its missile sub fleet from four to eight to see concrete improvements in the number of missiles it keeps at sea.

Where would the new warheads come from? As the article's author Tong Zhao points out, you can't simply take a missile off a DF-31 land-based missile and place it on a JL-2 submarine-based missile. China could remove the warhead and reuse the nuclear material for a new missile, or it may simply decide to process more nuclear material to create more warheads. China voluntarily stopped producing material when it had enough for an estimated 300 warheads, and manufacturing more warhead material would be a huge step back for arms control.

Why would China want to put more nukes at sea? That's a good question. Something is making China's policymakers insecure about their nuclear deterrent. China has concerns that U.S. ballistic missile defenses in Alaska, meant to protect the homeland from a handful of launches from countries such as North Korea and Iran, could be scaled up to stop a Chinese counterattack, giving the U.S. a freer hand in threatening China. More Chinese missiles would fend off such an attempt. The U.S. is also on the verge of building a hundred or more B-21 Raider bombers whose mission would be to hunt mobile missile launchers, where a substantial amount of China's nukes reside. While the U.S. may have good reasons to build such systems, it should also be mindful of their second order effects.







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