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



The Silent Sentinel **MARCH 2015** 





#### **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.

# SUBVETS BREAKFAST AT THE VFW WILL BE HELD ON MARCH 29, 2015. DOORS ARE OPEN FROM 8 A.M. THROUGH NOON

# **U.S. Submarine Veterans**

#### San Diego Base

#### **Base Commander**

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

#### **Senior Vice Commander**

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

#### Junior Vice Commander

Manny Burciaga 8406 Alado Place El Cajon, CA 92021-2003 619-921-5877 mpburcia@co.net

Secretary Jack Ferguson jackmeboy@san.rr.com

#### Membership -- Change of Address

Ray Ferbrache 2955 llovd St. San Diego, CA 92117 arayz@san.rr.com 619-972-4474

#### **Newsletter Editor**

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

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

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

#### The Silent Sentinel via Email

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

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

NAME: ADDRESS: \_\_\_\_\_ CITY/STATE/ZIP: EMAIL: **TELEPHONE:** Would like the SILENT SENTINEL emailed: YES\_\_\_\_\_ NO\_\_\_\_\_ Robert Bissonnette

1525 Walbollen St. Spring Valley, CA 91977-3748 USSVI Base Commander c/o VFW Post 3787 4370 Twain Ave. San Diego, CA 92120-3404

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

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

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

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

## MARCH Meeting

Our monthly 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 10 MARCH, 2015. The post is located one-half block West of Mission Gorge Road, just north of I-8. The meeting begins at 7 p.m. The E-Board meets one hour earlier at 6 p.m.

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

### **BINNACLE LIST**

Ron Gorence, Rocky Rockers, George Koury, Frank Walker, R.C. Thompson, John Grienberger, John Lester, Judith Addington, Frank Gomez, and Debbie Justo (Mother of Fred Fomby) on the binnacle list.

# Submarine Losses in MARCH

Originally Compiled by C J Glassford



USS Perch (SS-176)

Lost on March 3,1942 near Java with no immediate loss of life, while on her 1st war patrol. She survived 2 severe depth chargings in less than 200 feet of water by 3 Japanese destroyers. The crew abandoned ship and scuttled her. Of the 61 officers and men taken prisoner, 55 survived the war and six died as POWs.

USS Grampus (SS-207)

Lost on March 5,1943 with the loss of 71 officers and men, on her 6th war patrol. She was lost in Vella Gulf, sunk after engaging 2 Japanese Destroyers.

USS H-1 (SS-28)

Lost on March 12, 1920 with the loss of 4 men as they tried to swim to shore after grounding on a shoal off Santa Margarita Island, off the coast of Baja California, Mexico. Vestal (AR-4), pulled H-1 off the rocks in the morning of 24 March, only to have her sink 45 minutes later in some 50 feet of water. She was originally named the USS Seawolf before becoming H-1.

#### USS Triton (SS-201)

Lost on March 15,1943 with the loss of 74 men. She was sunk north of the Admiralty Islands during a fight with 3 Japanese Destroyers. Triton was the 1st boat to engage the enemy in December 1941 off Wake Island, sinking 9 ships, 1 submarine and a destroyer.

USS Kete (SS-369)

Lost on March 20,1945 with the loss of 87 officers and men at the end of her 2nd war patrol. Probably sunk near Okinawa, by a Japanese submarine that itself was subsequently lost.

USS F-4 (SS-23)

Lost on March 25, 1915 with the lost of 21 men. She foundered 1.5 miles off of Honolulu when acid corrosion of the lead lining of the battery tank let seawater into the battery compartment, causing loss of control. She was raised in August 1915.

USS Tullibee (SS-284)

Lost on March 26,1944 with the loss of 79 officers and men, on her 4th war patrol. It's believed she was a victim of a circular run by one of her own torpedoes. The lookout was the only survivor and he survived the war as a Japanese prisoner.

USS Trigger (SS-237)

Lost on March 26,1945 with the loss of 89 officers and men, on her 12th war patrol. She was lost during a combined attack by Japanese antisubmarine vessels and aircraft. Trigger ranked 7th in total tonnage sunk and tied for 8th in number of ships sunk.



### Minutes for Submarine Veterans San Diego Base 10 February 2015

1900 – Meeting of the Submarine Veterans Inc, San Diego Base was called to order by Senior Vice Base Commander Bill Earl.

Conducted Opening Exercises:

Pledge of Allegiance by Former Base Commander Fred Fomby.

Chaplain Russ Mohedano lead us in prayer.

Conducted Tolling of the Boats for February.

Observed a moment of Silent Prayer for our lost shipmates.

Recognized past and present E-Board members and Officers present.

Secretary Ferguson announced 30 members present.

The meeting minutes of 13 January 2015 were approved.

Treasurer Ball announced \$19,267.36 in the bank including \$4,024.62 in checking and \$2,789 in the Charlie Marin Memorial Scholarship Fund. A signed copy was given to the Secretary.

Call for Committee Reports:

Chaplain Mohedano announced George Koury, Frank Walker, R.C. Thompson, John Grienberger, Judith Addington, Frank Gomez, and Debbie Justo (Mother of Fred Fomby) on the binnacle list.

Parade Committee: Joel Eikam reported the next parade is Linda Vista on 25 April.

Membership Committee: Ray Ferbrache announced 295 members at present paid up.

Scholarship Committee: Paul Hitchcock reminded the members that April 15 was the deadline for applications to be submitted and that no extension will be granted.

Nomination Committee: Paul Hitchcock posted the list of nominations as Bob Bissonnette Base Commander, Warren Branges as Senior Vice Commander, Jack Lester and Ed Welch as Junior Vice

Commander, David Ball as Treasurer and Jack Kane as Secretary.

Storekeeper Report: Phill Richeson was not present.

#### The Silent Sentinel, MARCH 2015

Breakfast Committee: Warren Branges reported next breakfast will be on 29 March. Volunteers needed. 52 Boat Memorial: Warren Branges announced all new markers are on hand and negotiations are taking place for installation. Dr. Richard Lederer has raised \$800 guest speaking through the Navy Submarine League which has been

donated to San Diego Subvets.

Float Committee: David Kauppinen announced float in drydock and wll be ready for 1st parade.

Senior Vice Base Commander Earls introduced immediate past USSVI National President Michael Bircumshaw who briefed the members on the Reverse Mortgage advantages and his phone number is (951) 775-4549. Michael is willing to help any veteran or friend with further information if desired.

1935 Senior Base Vice Commander called for a break

1957 Called meeting back to order.

Unfinished Business:

The Financial Review Committee consisting of Warren Branges, Manny Burciaga, Russ Mohedano and Treasurer Ball completed their work and submitted a report to the Base Commander. A copy of the report will be retained by the Secretary.

The membership vote on the 2015 budget will take place in March.

The Western Region Round-up in Laughlin is April 26 to May 1.

The Members voted for the 2015 and 2016 E-Board and the following were elected:

Base Commander, Bob Bissonnette

Base Senior Vice Commander, Warren Branges

Base Junior Vice Commander, Jack Lester

Base Treasurer, David Ball

Base Secretary, Jack Kane

New Business:

The members voted to attend a new parade on 2 May called the Fiesta de los Penasquitos at 9a.m. starting at Carrol Canyon High School.

Good of the Order:

David Kauppinen announced Dan Eberhardt and Mike Hyman birthdays this month. He further offered to post member photos to the National Website if they would forward one to him.

Ray Ferbrache proudly reported that his Grandson had been accepted to West Point.

Bill McCormick brought his Dolphin Collection for all to see and asked for any donations they may have to add to the collection.

The meeting was adjourned at 2007. Jack Ferguson, Secretary

#### Sailing List for 10 February 2015

Fred Fomby	Bill Earl	Jack Ferguson
Paul Hitchcock	Jim Harer	David Kauppinen
Ed Farley	Rocky Rockers	David Ball
Joel Eikem	Russ Mohedano	Dennis McCreight
Bob Farrell	Mac McCormick	Michael Hyman
Bud Rollison	Jack Lester	Mike Cosgrove
Jack Kane	Warren Branges	Nihil D. Smith
Seymour Phillips	Mert Weltzien	Peter Lary
Ray Ferbrache	Charles Honsberger	Don Mathiowetz
Michael Bircumshaw	Jessie Taylor	Manny Burciaga

08 Feb 2015

From: Financial Review CommitteeTo: Commander, San Diego Base of USSVISubj: Financial Review

1. The Financial Review Committee, designated by the San Diego Base Executive Board, met on 07 Feb 2015 with the Base Treasurer. The Committee conducted a review of twenty-five percent of the 2013 monthly financial records and supporting documentation (March, June and October); these months were randomly selected. The records and documentation reviewed included the monthly financial report, checking and savings account statements, cash receipts, expense documents and checking account registers. In the absence of any specific USSVI or Base financial review plan or guidance, a "best business practice" approach was followed. No discrepancies were noted.

2. The Committee also reviewed compliance with Article VI, Section 5 (Duties of the Treasurer) of the Base Bylaws (as revised October 2014). Two discrepancies were noted:

a. The monthly financial report presented to the Executive Board and Secretary is electronic and therefore not signed as required by the Bylaws. Recommend the Treasurer begin presenting a signed copy and the Executive Board determine if this requirement should be amended in the future to be consistent with electronic distribution.

b. The monthly financial report is not being published in the Newsletter. The Committee understands the decision to not publish was previously made by the Executive Board; recommend the Bylaws be amended.

Two additional recommendations from the Committee concerning the Bylaws: the Duties of the Treasurer should include the preparation and appropriate distribution of the End of Year Report, and the recently expanded End of Year Report data requirements should be reviewed for Bylaws changes.

3. To facilitate and standardize future financial reviews, the Committee recommends development of a brief financial review plan for San Diego Base. Several examples of financial review and audit guidelines used by various fraternal organizations have been gathered and will be reviewed by the Committee for applicability and utility. If considered useful, the Committee will develop a draft review plan for approval by the Executive Board; the target date for this action is 9 Jun 2015.

Submitted:

en Brange

Tas Mohedano

Russ Mohedano

cc: Base Treasurer File - Financial Review Committee



### **Current News**

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

Cold-Weather Training Critical As Race For Arctic's Natural Resources Heats Up Seth Robson, Stars and Stripes, Mar 4

ANCHORAGE – Alaska was known as Russian America before the Russian Empire sold it to the U.S. government in 1867.

The Russians built their North American colonies to tap into a rich fur-seal trade. When they sold the land for \$7.2 million – after more than a century of occupation – the Russians were under financial duress and in fear of losing the territory in a future conflict with the British, with whom they fought the Crimean War in 1853-56.

Today the financial pressure is back, in the form of falling oil prices and Western sanctions after Russia's annexation of Ukraine's Crimea peninsula, and the quest for arctic resources is growing more intense. These days it's oil and gas, rare earth elements and fisheries that are at stake in the far north.

Russia wasn't the focus of a February meeting of cold weather warfare experts from the U.S. and several allied nations at the Northern Warfare Training Center in Black Rapids, Alaska. But it was hard to ignore the bear in the room during the talks as fighting raged in Ukraine.

"We train our soldiers for potential contingencies," said the center's commandant, Lt. Col. Mark Adams, 45, of West Farmington, Ohio. "That could be Korea ... I hate to use the word Ukraine. Anywhere that is cold."

One of those at the meeting – Steve Gardner, academic director at the Marine Corps Mountain Warfare Training Center in California – pointed out that the Russians were remilitarizing Wrangel Island off the northeast coast of Siberia. A Russian radar installation started operations on the island in October, according to the Alaska Dispatch News.

"That is right across from Alaska," Gardner said.

The Russians are building two arctic infantry brigades, he added. Russian officials said, in 2012, that the brigades, equipped with vehicles for moving troops across snow, would be stationed at Murmansk and Arkhangelsk, near Scandanavia, beginning this year.

By contrast, America's capabilities in the region are in decline.

The U.S. Army is increasing the tempo of cold-weather training for its own troops after more than a decade of desert and urban combat. At the same time, however, it's considering withdrawing the bulk of its forces from Alaska to meet budget targets mandated under the Budget Control Act of 2011, commonly known as sequestration.

Even if they stay in the region, the Army and the Marine Corps lack over-the-snow vehicles needed to fight in the Arctic. Their small unit support vehicles, known as SUSVs, are decades old and on their last legs with no replacements in sight, Gardner said.

"I don't think soldiers from Fort Wainwright have ever gone north to reinforce Prudhoe Bay," he added.

Russia also has the world's largest fleet of ice-breakers, including a half- dozen massive, nuclear-powered vessels. It's used some of them to open new, lucrative trade routes along its northern coast linking ports in Asia and Europe.

"We have zero ice breakers in the U.S. Navy," said Gardner. "There's only one heavy and one medium icebreaker operational with the Coast Guard. Nome (a port town on the Seward Peninsula that lacks road links to most other parts of Alaska) had to have a Russian icebreaker come in recently (to deliver emergency fuel)."

Only a few of the Navy's submarines are capable of breaking through ice, and the capability hasn't been tested since 2011, he said.

Experts don't think there's much chance of outright war in the far north, but there are plenty of reasons to be engaged there, says David Johnson, director of the Center for Advanced Defense Studies in Washington, D.C. and a former Army officer.

The Army has trained in Alaska for decades, but outdoor and cold-weather survival skills are less common among young Americans as more and more people move to cities, he said.

"Some of these skills could be lost if we don't institutionalize them," he said.

Those skills will be needed to maintain a presence in a region where there will be will be increasing competition for natural resources.

"Whether you think the ice cap is growing, shrinking or moving, as nations get more access there will be competition for resources," he said. "We are developing technologies to access those resources."

The competition in the north mirrors what's going on to the south, where China and its neighbors are at odds over rights to oil, gas, fish and minerals beneath the seas. China describes itself as a "near-arctic nation," and in 2013, it gained observer status at the Arctic Council – a forum for nations with claims to the region.

The Arctic is covered by the U.N. Convention on the Law of the Sea – a treaty that the U.S. has yet to ratify – which expands state sovereignty to encompass 200-nautical-mile economic zones. It could potentially make possible claims extending out to the edge of undersea continental shelves. However, the treaty has many ambiguities which could result in overlapping claims and disputes.

Arctic nations, including Russia and the U.S., are aggressively mapping and surveying areas where they believe they have claims, Johnson said.

"Russia is claiming terrain that is based on a ridge that runs right through the middle of the Arctic," he said.

The Russians made that clear in 2007 by planting a flag on the seabed beneath the North Pole. Russian territory accounts for roughly half of all arctic land, and the country is making its case for including wide swaths of seabed as part of its continental shelf.

Trade and air routes through the arctic are also potential sources of conflict, Johnson said.

"It is the shortest distance over the top of the earth," he said. "Control of air and seas is going to be important in the future, especially as technology and climate change make routes more accessible."

Mastery of trade routes has been of vital interest to the U.S. since the Navy went to war with Barbary pirates from North Africa at the dawn of the 19th Century, Johnson said.

"The Arctic is an area of contention and it's going to be more so in the future," he said.

Nuclear Safety Incidents Soar 54% At UK's Clyde Sub Base & Arms Depot Staff, RT News, Mar 3

The number of "nuclear safety events" at Britain's submarine base and warhead depot at the Clyde has drastically soared according to official records that showed 105 incidents in 2013-2014, compared to just 68 in the previous period.

Almost all of the incidents involved the reactors on Trident and other nuclear subs at the Faslane Naval Base, while six involved nuclear weapons stored at Coulport armaments depot.

Ministers were forced to disclose the information after a question in parliament by Angus Robertson from the Scottish National Party (SNP) who leads the party's parliamentary group in Westminster.

Only 45 of the latest incidents were level C events, meaning there was a "moderate potential for future release or exposure, or localized release within a designated radiological controlled area." The remaining 60 were classed as level D defined as "low potential for release - but may contribute towards an adverse trend producing latent conditions." According to the records, the base has not recently suffered from any of the more serious Category A or B safety failures.

#### The Silent Sentinel, MARCH 2015

Overall in the past six years the Clyde naval base suffered nearly 400 "widespread" safety events, according to official records. Twelve of these cases were listed as "Category B" incidents meaning there was an "actual of high" risk of exposure to radiation or that there was a release of radiation which was contained within a submarine or a building.

Robertson, whose party wants the complete removal of nuclear weapons from Scotland, asked the MoD to explain what was being done to improve safety measures especially as construction work is underway for Faslane to house all of Britain's nuclear submarines, some of which are currently in Devonport, Plymouth.

"A near doubling in the number of nuclear safety incidents within a year is totally unacceptable and needs urgent answers from the MoD. It's important to note this doubling has occurred before expansion work at the base for more nuclear submarines is complete," he said.

But the government maintained that the vigorous culture of reporting any incidents as well as putting them in the public domain ensured that there was never any threat to personal or the environment. The details of the incidents were not disclosed, but MoD insisted all of them were "minor issues," such as incorrect labeling or not filling the incorrect form as required by standard procedures.

Chinese Submarines Not As Good As Ours, Says US Navy Official; Expresses Concerns Over South China Sea Activities

Kalyan Kumar, International Business Times, March 2

China's aggressive expansion of its submarine fleet has been commented upon by a U.S defence expert. Vice Admiral Joseph Mulloy, deputy chief of naval operations for capabilities and resources, told the House Armed Services Committee on sea power that China has been expanding the number and geographic areas of operation for its submarines. However, from a quality point of view they are not at par with the U.S submarines.

Mulloy said China is building some "fairly amazing submarines" and has more diesel and nuclear-powered vessels than the United States. However, the Navy admiral played it down by saying that qualitatively they are inferior to the U.S submarines, reports Reuters.

The Navy official also told the panel about China's recent deployment of the submarines. Mulloy said China carried out three deployments in the Indian Ocean and kept its vessels out in the sea for 95 days. "We know they are out experimenting and looking at operating and clearly want to be in this world of advanced submarines," he added.

#### Nuclear Missiles

The U.S. Navy has 71 commissioned submarines and Mulloy said the U.S military does not believe that China carried nuclear missiles on its submarines though it has been producing and testing them for use on the vessels. Recently, Congress was updated by Pentagon about Chinese military build-up, with its 77 principal surface combatant ships, more than 60 submarines, 55 large and medium amphibious ships and 85 missile-equipped small vessels.

#### South China Sea

Meanwhile, Guardian reports the concerns being expressed over China's expanding outposts in the South China Sea for accommodating ships and potential airfields in a bid to exert its sovereignty. James Clapper, Director of U.S Intelligence told Senate Armed Services Committee that land reclamation activities are fuelling tensions between China and its neighbours at the disputed islands and reefs. "Although China is looking for stable ties with the United States it's more willing to accept bilateral and regional tensions in pursuit of its interests, particularly on maritime sovereignty issues," Clapper said. On China's claims in South China based on the so-called nine-dash line as a rough boundary, Clapper called it "exorbitant."

Though the U.S makes no claims on the territory in South China Sea, it pursues a national interest in seeking a peaceful resolution to the disputes because of its strategic importance on world trade. But, China maintains the stand that its territorial claims in South China sea has a historical basis and it objects to the "meddling" by the U.S.

John McCain, the committee's Republican chairman, displayed a commercial satellite imagery that showed the expansion of Chinese-occupied Gaven Reef in the Spratly Islands. McCain said the scale of expansion may lead to Chinese deployment of weaponry like anti-air and other capabilities.

Sputnik International, Feb 23

The US Navy conducted its 155th successful test of the Trident II D5 submarine-based ballistic missile, the missile's manufacturer Lockheed Martin said in a statement.

"These latest test flights demonstrate the reliability of the D5 missile and the readiness of the entire Trident Strategic Weapon System every minute of every day," Mathew Joyce, Lockheed Martin Vice President of Fleet Ballistic Missile Programs said in the statement on Monday. "The Navy program office, the submarine crews and the industry team never rest to ensure the safety, security and performance of this crucial deterrence system."

US Navy Spends \$302Min on Trident Nuclear Missiles - Pentagon Lockheed Martin explained that the test was conducted in the Pacific Ocean on Sunday using special test configuration kits. The Navy regularly conducts unarmed tests of the D5 missile, which is part of the United States' submarine-based Trident nuclear arsenal.

The D5 missile was first deployed on the US Navy's Ohio class submarine and the United Kingdom's Royal Navy Vanguard submarines in 1990. The D5 missile can travel 4,000 miles and carries multiple nuclear warheads.

The submarine-based Trident nuclear ballistic system has been deployed since the 1950s as a key element of the United States' nuclear deterrent posture.

Commentary: Nuclear Dangers: Myth, Reality, Responses Daryl Kimball and Matthew McKinzie, Defense News, Feb 23

North Korea appears to have conducted a test of a missile ejection launcher that helps fire missiles from submarines, South Korean military sources said Friday.

The communist North "tested the ejection launcher from the seashore near the Sinpo South Shipyard on Jan. 23 for missiles that can be fired from submarines," one military source here said, requesting anonymity.

The ejection test last month from the North's northeast coast simulated the initial stage of boosting a missile out of a submarine launch tube, the source said.

According to South Korean and U.S. intelligence officials, the North has been developing a submarine-launched ballistic missile (SLBM) in a move to boost its underwater missile strike capabilities after launching a new 2,500-ton submarine last year.

The North's move appears to be part of its efforts to equip its missiles with miniaturized nuclear bombs, raising further concerns over the North's evolving missile and nuclear threats, say North Korean watchers.

Noting that the objects from the launcher fell into the water after flying some dozen meters during the test, another South Korean military source said he does "not think it was a flight test just as the U.S. media website, Washington Free Beacon, reported earlier this week."

Citing U.S. defense officials, the website reported that Pyongyang had carried out the first flight test of its SLBM last month.

Noting that the North carried out similar land-based tests last year, another South Korean military source said the ejection tests "seem at least partly to show off its SLMB development project." (Yonhap)

Will the U.S. Navy Build an Underwater Aircraft Carrier? Rich Smith, The Motley Fool, Feb. 21

There's an old saying — so old that not even the Internet seems quite certain who said it first — that "generals are always prepared to fight the last war." Luckily, that's not a trap America's admirals are falling into. Instead, they're planning ahead...

...for a day when submarines are aircraft carriers — and vice versa.

Last year, we told you about a new project being run out of DARPA — the Defense Advanced Research Projects Agency — to invent a new weapons system marrying the best attributes of both submarines and aircraft carriers. Dubbed "Hydra" by the agency, this system would be silent (and deadly), and lurk 'neath the oceans like a submarine. Like an aircraft carrier, though, it would be muscular, power-projecting, and capable of attacking multiple targets on land, at sea, and in the air.

So basically, an underwater aircraft carrier. The problem

#### The Silent Sentinel, MARCH 2015

Last month, the Center for Strategic and Budgetary Assessments think tank did some more "forward thinking" along these lines and explained why the Pentagon wants this. On one hand, we already know that America's aircraft carriers are being targeted by adversaries sporting new armaments, such as China's DF-21D "carrier-killer" cruise missile. On the other hand, our submarines, underwater and theoretically insulated from missile threats, have troubles of their own. Writes CSBA:

U.S. defense strategy depends in large part on America's advantage in undersea warfare. Quiet submarines are one of the U.S. military's most viable means of gathering intelligence and projecting power in the face of mounting anti-access/ area-denial (A2/AD) threats ... [But] America's superiority in undersea warfare ... is far from assured. U.S. submarines are the world's quietest, but new detection techniques are emerging that ... may render traditional manned submarine operations far riskier in the future.

Specifically, CSBA worries that tech ranging from cutting-edge laser and LED detection systems to simple "lower frequency" sonar systems than are currently in use could be used to strip American submarines of their cloak of invisibility. And since undetectability is the primary reason to build submarines in the first place...

#### The solution

Now, a basic Virginia-class nuclear fast-attack submarine costs taxpayers upward of \$1.8 billion a pop. Yet as The National Interest magazine puts it, we may be sinking billions of dollars into building vessels destined to become obsolete — "the next battleship," as they put it.

So what does CSBA advise we do to defuse this threat? Basically just what DARPA already is doing: Developing tech to turn submarines into "underwater aircraft carriers." The greatest risk to America's submarines, after all, comes when they leave the vast ocean and swim into the littoral waters off a country's coast. There, they're big fish in a smaller pond — and thus easier to detect.

CSBA argues that submarines can avoid this risk by remaining in deep water, and dispatching drones to perform riskier missions closer to shore — aerial drones, surface drones, and even mini-submarine drones (dubbed UUVs or "unmanned underwater vehicles"). Thus, a submarine would act as an underwater aircraft carrier — and an underwater surface ship carrier, and even an underwater submarine carrier. A submerged "mother ship" carrying a whole arsenal of robotic weapons to deploy wherever they might be needed.

#### What it means to investors

Citing "informal polling ... of multiple security experts," TNI noted that existing technology makes the idea of such underwater aircraft carriers "very feasible." Existing submarines already built by General Dynamics (NYSE: GD) and Huntington Ingalls (NYSE: HII) (America's two nuke boat-builders) could be modified to deploy aerial, floating, and underwater drones. Such modifications would cost money, of course (generating revenues for the contractors). But already, Ohio-class missile submarines are being outfitted with "piggyback" dry-dock shelters capable of deploying UUVs

John P. Craven, Scientist Who Shaped Cold War Spying At Sea, Dies At 90 William J. Broad, New York Times, Feb 19

John P. Craven, a former Navy scientist whose innovations in ocean technology and exploration led to some of the nation's most celebrated feats of espionage, died on Feb. 12 in Hawaii. He was 90.

The cause was complications of Parkinson's disease, his family said.

From 1959 to 1969, as chief scientist of the Special Projects Office, Dr. Craven led the Navy's drive to expand its presence into the crushing depths of the sea. Among other things, he turned submarines into spy machines that could reach down miles to inspect and retrieve lost enemy matériel, including nuclear arms.

Dr. Craven liked to regale friends and journalists with as much of his personal history in the Navy as the nation's secrecy laws would allow, resulting in books and articles that sought to illuminate his Cold War exploits.

"There's a hell of a lot of stuff that went on," he said in an interview in 1993 on the front porch of his home overlooking Honolulu. After all, he added philosophically, "the whole object of life is to adapt."

John Piña Craven was born on Oct. 30, 1924, in Brooklyn, coming from a long line of naval officers on his father's side and a family that reached back to Moorish pirates on his mother's. He graduated from Brooklyn Technical High School and joined the Navy during World War II, serving in Hawaii and earning two battle stars before he was sent to Cornell University for officer training.

After the war, under the G.I. Bill, he studied at the California Institute of Technology and the University of Iowa, where he met his future wife, Dorothy Drakesmith, and received a doctorate in mechanics and hydraulics. Years later he received a law degree from George Washington University and became an expert on seabed legalities.

Dr. Craven's naval career began in 1951, when, as a civilian, he investigated how to improve ships and submarines.

He was promoted quickly after correctly predicting and helping to fix a structural problem with the Navy's first nuclearpowered submarine, the Nautilus.

Dr. Craven was project manager for developing the Polaris, the world's first intercontinental ballistic missile that could be fired from a submerged submarine. It underwent test firing in 1960 and was in service for decades.

The Navy was eager to restore the nation's confidence in its deep-sea abilities after the new attack submarine Thresher sank in 1963 during a test dive east of Boston because of a mechanical failure, taking 129 lives. Officials gave Dr. Craven and his special-projects team leeway to devise a wide range of undersea gear for search, rescue, salvage and gathering intelligence from the sunless depths.

In 1965, he selected the nuclear submarine Halibut for conversion into an innovative spy sub, filling the vessel with electronic, sonic, photographic and video gadgets. Hovering beneath the waves, invisible to adversaries, the sub could lower a long cable heavy with lights, cameras and other gear for deep reconnaissance, recovery and manipulation. It was a technological first that begot a new kind of espionage.

Among the targets were ships, planes and spacecraft lost at sea, as well as functioning equipment, like undersea cables and listening devices. To build support for his top-secret endeavors, Dr. Craven met with senior Pentagon officials, showing them classified photographs of Soviet warheads buried in muck on the seabed.

In March 1968, a rich new target materialized when a Soviet missile submarine bearing code books, encryption gear and nuclear arms sank in the central Pacific. By all accounts, Dr. Craven and the spy sub located the wreckage more than three miles beneath the sea's surface.

That May, the nuclear-powered attack submarine Scorpion vanished in the Atlantic with 99 men on board. Dr. Craven scrutinized recordings from undersea microphones, found evidence of explosions, and drew on his knowledge of math and statistics to pinpoint the spot where the submarine was most likely to have sunk. Search teams discovered the Scorpion's wreckage at a depth of nearly two miles.

The undersea fleet that Dr. Craven helped devise included the Navy's NR-1, a nuclear submarine with crablike claws; the Deep Submergence Rescue Vehicle, a cylindrical craft designed to evacuate up to 24 people at a time from a crippled submarine; and the bathyscaph Trieste, a vessel his team improved, which investigated the sunken Scorpion.

Dr. Craven twice received the Distinguished Civilian Service Award, once from the Navy and once from the Department of Defense.

After Richard M. Nixon won the presidential election in 1968, Dr. Craven, convinced that the new administration would have no room for an outspoken Democrat, left the Navy and took a teaching post at the Massachusetts Institute of Technology. In 1970, lured to Hawaii by its governor, he was named dean of marine programs at the University of Hawaii and the state's marine affairs coordinator.

The spy sub he devised made one of its greatest coups shortly after he left the Navy. In 1971, the Halibut stole into the Sea of Okhotsk north of Japan, found a telecommunications cable used by Soviet nuclear forces and succeeded in tapping its secrets. The mission, code-named Ivy Bells, was so secret that a vast majority of the submarine's sailors had no idea what they had accomplished. The success led to a concealed world of cable-tapping.

In 1974, Dr. Craven founded the Natural Energy Laboratory of Hawaii, a state research center that investigated how to make electricity by exploiting the temperature difference between the Earth's warm surface and cold water from the ocean's depths.

Dr. Craven's naval career has been profiled in several books. He recounted his own story in 2001 in "The Silent War: The Cold War Battle Beneath the Sea." In its prologue, he says he wrote the book to honor men whose sacrifices might otherwise go unacknowledged.

Dr. Craven is survived by Dorothy Drakesmith Craven, his wife of 64 years; a son, David; a daughter, Sarah Craven; and five grandchildren.

Once, at his Hawaiian laboratory, Dr. Craven described an energy project in terms that echoed his own life. "It seemed," he said, "like perpetual motion."

