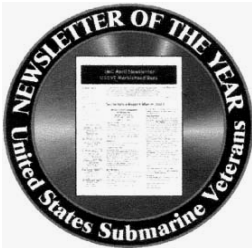


American Submariners Inc.
 4370 Twain Ave.
 San Diego, CA 92120-3404



The Silent Sentinel

June 2013



Our Creed and Purpose

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

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

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

U.S.S. S-3.

General questions for qualification.

S.I. Dimensions!

Tonnage on surface 854 tons
 Tonnage submerged 1,092 "
 Masted character 21 ft. 4 3/4 "
 Extreme " 21 " 10 1/4 "
 Draft light 12 " 9.5 "
 Reserve buoyancy (surface) 238 tons
 Speed on surface 15 knots
 Speed submerged 11 "
 Horse power of engines - 700 H.P. 350 R.P.M.
 Horse power of motor 600 H.P. 250 R.P.M.
 Fuel tank cap. in gal. 17,706 gal.
 Reserve fuel tank cap. 22,370 "

S.II.

Capacity of tanks in tons. 64.48 tons
 Forward main ballast 68.41 "
 Middle " " 58.8 "
 After " " 84.7 "
 (Whisper) Forward trimming 15.37 "
 After " " 7.23 "
 Reserve after trimming 1.07 "
 Auxiliary tank 23.63 "
 Safety " " 16.22 "
 Cigar smoking " " 1.00 "
 Ship's fresh water tanks in gal. 697 gal.
 Battery " " " 927 "

U.S. Submarine Veterans San Diego Base

Base Commander

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

Membership -- Change of Address

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

Treasurer

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

Senior Vice Commander

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

Newsletter Editor

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

Assistant Editor / Photographer

Jack Kane
619-602-1801
jkane32@cox.net

Junior Vice Commander

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

Base Storekeeper

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

Chief of the Boat/Middle East Liason

Fred Fomby
858-735-0026

Secretary

Jack Ferguson
jackmeboy@san.rr.com

Chaplain

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

Assistant Chaplain

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

The Silent Sentinel via Email

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

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

NAME: _____

ADDRESS: _____

CITY/STATE/ZIP: _____

EMAIL: _____

TELEPHONE: _____

Would like the SILENT SENTINEL emailed: YES _____ NO _____

Robert Bissonette
1525 Walbollen St.
Spring Valley, CA 91977-3748

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

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

June 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 June 11, 2013. The post is located one-half block West of Mission Gorge Road, just north of I-8. The meeting begins at 7 p.m. The E-Board meets one hour earlier at 6 p.m.

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

BINNACLE LIST Al Strunk

Submarine Losses in May Originally Compiled by C J Glassford



SQUALUS (SS 192) - 59 Men on Board :
 Foundered, on 23 May 1939, off the Coast of Portsmouth, New Hampshire, Later Salvaged, Raised, Repaired, and
 Recommissioned, USS SAILFISH (SS 192)

* Crew Rescued by First Successful use of Diving Bell
 " 26 MEN LOST - 33 SURVIVORS "

RUNNER (SS 275) - 78 Men on Board :
 Sunk, on 28 May 1943, by Causes Unknown, Possibly a Japanese Mine, or Combined Air and Surface Attacks, off Northeastern
 Honshu, Japan : " ALL HANDS LOST "

LAGARTO (SS 371) - 85 Men on Board :
 Sunk, on 3 May 1945, by Japanese Minelayer, In the Gulf of Siam : " ALL HANDS LOST "

STICKLEBACK (SS 415) - 78 Men on Board :
 Sunk, on 29 May 1958, after Collision with Destroyer Escort Vessel, USS SILVERSTEIN (DE 534) :
 " NO LOSS OF LIFE "

SCORPION (SSN 589) - 99 Men on Board :
 Sank, on 30 May 1968, (USN lists her officially lost on 5 June 1968). Most Probable Cause of loss was Inadvertent Activation of Torpedo
 Battery, Resulting in a Possible. Hot Run and Torpedo Detonation, Off the Coast of the Azores. Theories abound concerning her loss.
 "ALL HANDS LOST

“GUITARRO (SSN 665) - Duty Section on Board :
Sank, on 15 May 1969, Alongside Pier in Navy Shipyard, Vallejo, California, Salvaged and returned to Duty :
“ NO LOSS OF LIFE “

BARBELL (SS 580) - 78 Men on Board :
Heavy Seas, on 1 May 1989, Washes Three Sailors from the Deck of the Submarine, while Operating off Kyushu,
Japan :
“ 2 MEN LOST - 1 MAN RESCUED “



Minutes for Submarine Veterans San Diego, 14 May, 2013

1900 – Meeting of the Submarine Veterans Inc., San Diego Base was called to order by Base Commander, Bob Bissonnette.

Conducted Opening Exercises:

Reading of Our Creed:

Pledge of Allegiance: Lead by Manny Burciaga:

Chaplain Jack Lester Lead us in Prayer:

Conducted Tolling of the boats for May:

Observed a moment of Silent Prayer:

Base Commander recognized past E-Board members, Past Officers and Guests.

Secretary Ferguson announced 33 members and 2 guests (Chris Stafford and W. Joe Sasser) present.

Treasurer Report: None

The Minutes of the 9 April 2013 meeting have been published in the SILENT SENTINEL and were approved.

Call for Committee reports:

Chaplain Binnacle List - Tommy Cox, Jim Harer, Benny Williams, Al Strunk, and Bobby Medina. Chaplain Lester announced that Scott McCollum, Ernest P. Ginzoric Sr., Howard J. Berry, Temple L. Allen, and CDR Thomas J. Bedford Sr. were on eternal patrol.

Parade Committee - Base Commander reminded us of the Ramona Parade, May 18 starting at 1000 with muster at 0900.

Oceanside parade June 29 and Julian on 4th of July.

Membership Committee - Ray Ferbrache announced 304 active members.

Scholarship Committee - Paul Hitchcock stated that one application has been received and two volunteers are needed to verify and approve the applicant. Next year the deadline date will not be extended.

Storekeeper Report - Phill Richeson has patches and car back window dolphin decals.

Breakfast Committee – Fred Fomby will head up the breakfast on June 30 and a volunteer is needed to take on the four breakfast a year task.

Base Commander presented Float Committee certificates of appreciation to Rocky Rockers, Joel Eikam, David Kauppinen, and Ray Ferbrache.

1928 – Base Commander called for a Break.

1945 – Base Commander called meeting to order.

Unfinished Business:

A motion was made, seconded and approved to spend \$300 on float accessories.

A motion was made, seconded, and approved to award \$500 to Wayne Stani, of Tek Assist for use of his shop, his time and efforts and those of his sons, for the excellent production of our new float. He will be invited to next months meeting to receive a certificate of appreciation and the check.

A motion was made, seconded, and approved to contribute \$150 to the refreshments and wreath for the Memorial Day service on 27 May at

1000 on the Sub Base at Pt. Loma. This item will be added to next years budget as it is an annual event. Those attending that need permission to enter the base, should email Ray Ferbrache to be added to the list for entrance at the gate.

The members were reminded of the 2013 National Convention August 25 – September 1 in Rochester, MN.

Thanks to Tim Shaw for the Klaxon repair.

The Base Commander will look into the possibility of an Arizona Base that may want our old float.

New Business:

A motion was made, seconded, and passed to reimburse the Base Commander \$38 for the Power Supply to repair Mike Hyman's computer that is used to produce the Silent Sentinel.

Discussion was held regarding the use, accountability, and possible liability for the electric wheelchair we provide to Veterans.

Good of the Order

In November of 2014 an International gathering of submariners will be held in Fremantle, Australia.

WR District 6 Commander Len Heiselt has requested that his district

bases request their Holland Club members to donate \$1 each, to assist in National Holland Club expenses, as they are not included in the National Organization budget as a free standing group. Chaplain Lester will collect donations for San Diego Base. Donations will be accepted from all members.

Manny Burciaga read a letter of appreciation from the USS Scorpion 45th Anniversary Group for our \$99 donation. They also provided a memorative coin which the E-Board awarded to Manny as a former Scorpion crewmember. Manny will obtain coins for our members if they desire.

Base Commander Bissonnette adjourned the meeting at 2020.

Jack Ferguson, Secretary

Sailing List for May 14, 2013.

Bob Bissonnette	Jack Ferguson	Jack Lester
Phill Richeson	Charlie Marin	Tom Polen
Jack Addington	Bob Farrell	Dick Smith
Ed Farley	Paul Hitchcock	Larry Dore
Joel Eikam	David Kauppinen	Rocky Rockers
Bob (Doc) Coates	Russ Mohedano	Bill Earl
Dennis Mortensen	Manny Burciaga	Fred Fomby
Ray Ferbrache	Bob Chapman	David Lenly
Don Mathiowetz	Mike Hyman	Jack Kane
Warren Branges	Bob Oberting	Bud Rollison
Steve Lamprides	Phillip Richeson	

□

Memorial Day and Fourth of July Missive

Michael Hyman

Niemand ist mehr sklave, als der sich für frei hält, ohne es zu sein ‘He is most truly a slave who thinks himself free without being so’
Goethe

We honor our fallen, never forgetting their sacrifice. This is what we do; this is what is required of we the living. We remember when they died and at times we are reminded of how it happened. But more often than not, we minimize the reason why they died, simply accepting the words, “to keep us free,” without thinking about what this really means.

The concept of freedom means different things to different persons. Look at the following view of a German court’s ruling during the Third Reich era on a man who declined to participate in *Winterhelfwerk* ‘Winter Relief Fund’ (a yearly charity drive in the German Nazi state, even though its propagandists insisted that there was zero unemployment and that homelessness was nonexistent):

He still has notions concerning his own freedom, according to the most vulgar form of free thinking. . . . Freedom to him means the authority to refuse to carry out duties not explicitly prescribed by law, as he, himself sees fit. He has refused to participate in a community undertaking because he wishes to show that no one is able to compel him to do so—a reprehensible abuse of the freedom granted him by the Fuhrer in his reliance on the German spirit (*Zeitschrift für Beamtenrecht* 8 [1937-38], 05, Decision of June 15, 1937).

What specifically should attract our attention in the ruling above is the expression “freedom granted him by the Fuhrer.” Compare this to the ideas expressed in the American *Declaration of Independence* and the *Constitution of the United States*, two of the most unique documents in human history. For from our Founder’s brilliance came the moral postulate that freedom is based on inalienable natural rights—specifically, that all men are created equal, no ifs, ands, or buts about it. It is self evident and not open for discussion. Moreover, all men are endowed by their creator with certain rights that can never be taken away. These include but are not limited to life, liberty, and the pursuit of happiness.

My grandparents understood these concepts better than anyone I’ve ever known. Having survived the Kishenev Pogrom (a Czarist approved, Cossack instituted massacre of Jews in Bessarabia [now Moldavia] in 1903, were you to ask them about American freedom versus Russian, this is what you would hear—albeit in *Yiddish*:

In Russia, Jews had no rights and this often included the right to be alive. But in America, things are different. In America we are granted by the Constitution the same rights as Rockefeller. Yes, there are some people who don’t like us but so what. Here, in America, we have rights established by God, not the Czar. Everyone is equal. The same laws apply to all of us here, even if people hate you—there are no favorites!

Director Steven Spielberg put it so nicely in his movie, *An American Tail*, (a story concerning an early Twentieth-Century family of oppressed Russian mice who immigrate to the United States in order to escape feline despotism): “In America, there aren’t any cats!”

Martin Luther King and other civil rights pioneers maintained the same view as my grandparents. King argued that his natural, creator given, inalienable rights, guaranteed for all Americans by the Constitution, were being violated. He did not argue his case on the basis of skin color, he made it instead on the fact that he is a man, a human being. The court ruled in his favor!

After King’s assassination in 1968, however, things changed. The civil rights movement was hijacked. It became radicalized. No longer was it a struggle for rights as human beings, guaranteed by law under the Constitution; rather, now it became a movement for Black rights, Women’s rights, Chicano rights, Native American rights, homosexual rights, disabled persons rights, and on and on. As a result, truth was now interpreted to be a relative thing. Inalienable natural rights via the Constitution were to no longer be the condition for a free society; rather, the fallacy of unification in the relativism of truth became the new morality. Openness and the relativism that makes it became the only position in the plethora of vacuous claims to truth. It became the only acceptable virtue. The person who knows what he believes and why he believes it now became society’s real danger. The mistakes of the past became meaningless and society’s highest appetite was to produce a mindset of even more openness. Consequently, the person not agreeable to everything now became the enemy. Instinct and intellect were suppressed with the natural soul replaced by an artificial one. Fanaticism was given special rights and attention for its “commitment” and “intensity.” Assaulting the majority became commonplace and acceptable. And here we are!

Over the years it became obvious that the supporters of openness never had a place in their worldview for Constitutional Democracy in the United States of America. As time moves on, it becomes even more obvious that they never will.

German philosopher Friedrich Nietzsche labeled the aristocratic predators who craft society’s laws to their own advantage (and who at the same time are beyond the reach of basic morality) as *das herrliche Raubtier* ‘the magnificent predator’, *die blonde Bestie* ‘the blond beast’. Nietzsche admired the inherent brutality and considered it the foundation of social order. His thoughts were later finessed by another German thinker, Martin Heidegger, who maintained that success was the determining factor for something to be moral. Unlike Nietzsche (extolling those in power with the ability to overcome the restraint of their consciences to murder, steal, rape, lie, and so on), Heidegger extended the argument and insisted that success determined validity and truth. And that this *is* the only morality. For Heidegger, the only immoral act was an unsuccessful one. His philosophy became an integral part of the ideological strata supporting the Nazi worldview.

Today, with wars—physical as well as ideological—raging throughout the globe and with subterranean forces, dedicated to our destruction, running rampant, Nietzsche’s beast has evolved into a monster consisting of various colors, shapes, and formats. It continues to promote the vacuous notion that the end justifies the means. It’s concept of freedom varies from one scenario to the next; and it abhors the thought that all men on the basis of the fact that they are human beings are free, created by their creator with inalienable rights, rather than bits and pieces granted them by the whim of a despot, revocable at a moment’s notice.

When I reflect upon our fallen heroes, it becomes clearer and clearer to me that all of us owe them a great deal. And with our debt comes responsibility. I am reminded of the sentiment expressed by German General *Günther Blumentritt* when he received the news that the Allies had just landed on Normandy Beach. In a state of utter disbelief, he shook his head and uttered: *Jetzt wirklich wirklich auf welcher seite der liebe Gott steht* ‘Now I’d really like to know what side God is on.’

May we Americans, lovers of liberty based on the unalienable rights of men as expressed in the *Declaration of Independence* and the *Constitution*, never feel compelled to repeat Blumentritt’s ominous words.

Current News

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

Civilians at submarine base, technicians with Connecticut National Guard face furloughs

AP, May 28

HARTFORD, Connecticut — About 750 civilian employees at the Navy’s submarine base in Groton and more than 600 technicians working for the Connecticut National Guard are facing furloughs as the Defense Department deals with automatic budget cuts.

The Day of New London reports that 618 National Guard technicians were to receive furlough notices on Tuesday. The group includes human resources and finance specialists, legal clerks and aircraft maintainers.

They will be asked to stay home one day each week for 11 weeks beginning on July 8.

“It’s going to be painful for those 11 weeks,” Col. Steve Gilbert, director of human resources for the Connecticut National Guard, told The Day. “I have to tell people, ‘You’re going to suffer a 20 percent pay reduction,’ and we recognize that for anyone from the top of the scale to the bottom, 20 percent is a significant reduction.”

Gilbert is among those ordered to take the furlough days.

Capt. Marc Denno, the commander of the Navy's sub base, said the civilian furloughs there won't affect the safety and security of the base or services for families, such as day care. He said the base may have to cut the hours at its commissary.

There are about 1,300 civilian Defense Department workers at the base.

"Certainly the loss of work-hours from these dedicated and integral members of the team will impact base efficiency and support effectiveness," he said in a statement.

There are no furloughs planned at the U.S. Coast Guard Academy in New London, but travel to academic and professional seminars has been limited.

Capt. Eric Jones, the assistant superintendent, said the summer training for cadets also will be impacted by the travel restrictions, and commencement did not include the traditional military flyover.

"The Coast Guard Academy has the funding to sustain its programs, just at reduced levels," Jones said in a statement. "Our plan has been to focus on reductions to certain discretionary programs to help mitigate impacts to our workforce and to the training of our future leaders."

Israel's Might Extends to Air, Sea and Land

Jewishvoiceny.com, May 29

Each year, Israel makes strides in a range of domains—from business to medicine to academic scholarship. Yet one area in which Jerusalem has grown rapidly as of late is in its military capacity. More specifically, Israel has made a series of technological acquisitions in 2013 that have greatly improved its ability to deal with the military challenges this century is sure to bring.

In early May, the Jewish Voice reported on Israel's acquisition of its fifth advanced Dolphin-class submarine, the INS Rahav. The submarine—considered one of them most advanced in the world—was unveiled at an official ceremony in the German port city of Kiel in late April. At the time of the transaction, the Israeli Defense Ministry revealed the unprecedented nature of the submarine purchase: It was the most expensive item the IDF has acquired in its history. And the submarines do indeed boast of some impressive capacities: Each is equipped with ten torpedo tubes capable of launching missiles that carry nuclear warheads and can perform a range of other naval missions.

A ceremony celebrating Israel's receipt of the INS Tannin—its fourth Dolphin-class submarine—was held in Germany in 2012, and reflects the rate at which Israel has amplified its military potential.

Prime Minister Benjamin Netanyahu has commented on the significance of these submarine acquisitions.

"These submarines are a strong, strategic tool for the IDF," he said. "The State of Israel is ready to act anytime, anywhere—on land, sea and air—in order to ensure the security of Israel's citizens."

And Israel shows no signs of relenting in its acquisition of these military tools. In February 2013, then-Defense Minister Ehud Barak signed an agreement with Germany for the construction of a sixth Dolphin-class submarine.

Yet only a month prior to its announcement of its acquisition of another submarine this year—in April—Israel announced that it had added another Iron Dome battery to its arsenal of anti-missile defense systems. A fifth unit, one deployed for emergency use in central Israel during the IDF's counterterror Operation Pillar of Defense this past November, had just become fully operational, the Jewish Voice reported at the time. These systems, designed by Rafael, detect and identify rockets and artillery shells as they are launched and gauge their trajectories. If a rocket is detected, the system launches an interceptor missile which, guided by a radar seeker, acquires the target with a special warhead that detonates the threat over a neutral area.

Moreover, at around the same time of this announcement, the U.S. Defense Department stated its intent to sell the Boeing-made KC-135 Stratotanker aerial refueling planes to Israel, the Jewish Voice reported, citing the New York Times. Such technology has been viewed as potentially essential to any proposed Israeli military attack on Iran's nuclear facilities. The refueling planes allow Israeli aircraft to stay in the air for longer periods of time—which is a necessity for any proposed long-range mission, such as a pre-emptive strike on Iran. As part of the deal with the U.S., Israel could also acquire anti-radiation missiles—which can target an enemy's air defense radar signals and destroy those sites—and the tilt-rotor V-22 Osprey, which can take off like a helicopter but fly like an airplane, the New York Times reported at that time.

And Israel's list of technological acquisitions in the first few months of this year extends even further: In late February, Israel Hayom reported that Israel successfully tested the Arrow 3 anti-ballistic missile system—the first flight test for the system's interceptor missile. A joint project of Israel's Defense Ministry and the U.S. Defense Department,

Arrow 3 is considered to be one of the most innovative and revolutionary anti-missile systems in the world. Arrow 3 is further considered to be the central component of the multilayered aerial defense network Israel is generally working on, which includes the aforementioned Iron Dome, "David's Sling," and "Arrow 2" systems.

Intended to bolster Israel's ability to intercept long-range ballistic missiles, Arrow 3 is so advanced that it is capable of intercepting missiles outside the Earth's atmosphere—in space.

Thus, considering its acquisition of the Arrow 3, Iron Dome, submarines, and aerial refueling planes in the first few months of 2013, it is clear that Israel is increasingly strengthening its military capacities.

Russian Pacific Fleet enters the Mediterranean in challenge to West

Worldtribune.com, May 28

For the first time in a decade, a large combat fleet from Russia's Pacific Fleet based in Vladivostok in the Russian Far East is joining other Russian warships in the Mediterranean on a combat patrol.

The mission was apparently prompted by Russia's determined desire to sustain the regime of the Syrian dictator Bashar Assad that is facing imminent collapse in the increasingly destructive civil war.

To deploy large warships thousands of miles away from East Asia to the Middle East demonstrates President Vladimir Putin's resolve to resume Russia's military and strategic glory of the past by challenging the collective military power of the West.

On March 19, a naval flotilla of half a dozen capital ships centered on the large destroyer Admiral Panteleyev set sail from Vladivostok on a long journey to the Mediterranean.

Hydrogen fuel cells used to power new submarine in Germany

Hydrogenfuelnews.com, May 28

New submarine makes use of hydrogen fuel

Germany has been a strong supporter of renewable energy for some time. Most of the country's focus has been on solar energy, with some attention being devoted to hydrogen fuel for the sake of transportation. Germany's interests in renewable energy have largely revolved around its incorporation in the private sector, but the country's military is beginning to show strong interest in clean power, especially when it comes to hydrogen fuel cells. This week, a new non-nuclear submarine has been unveiled in Germany and it is powered by hydrogen fuel.

German Navy continues to focus on hydrogen fuel cells

ThyssenKrupp Marine Systems, a shipbuilder and developer of maritime systems, has developed a new submarine that is powered by an innovative hydrogen fuel cell system. The submarine itself is part of an ongoing project from the German Navy, which is meant to incorporate clean technologies into marine vehicles. The submarine has been named U36 and is the second of its kind to be designed for the German Navy.

Fuel cells could be a valuable energy system for marine purposes

The submarine incorporates much of the technology that has made its predecessors valued tools in the German military. Instead of relying on nuclear energy or other forms of power, however, the U36 relies on hydrogen fuel. Fuel cells are able to produce large amounts of electrical power through the use of hydrogen. Hydrogen itself can be extracted from seawater through the process known as electrolysis. Given the fact that the U36 is a submarine, it will have access to an abundant amount of potential fuel. Moreover, hydrogen fuel cells operate silently, a very valuable quality for submarines.

Hydrogen becoming more popular in the military sector

Hydrogen fuel cells have been growing in popularity within the military industries of several countries. This is because fuel cells are reliable and durable in a variety of environments, making them somewhat ideal renewable power systems. Fuel cells, in particular, have been gaining a great deal of support for their use in transportation.

DM: Iran to Unveil New Home-Made Missiles, Submarine Soon

Fars News Agency, May 29

Iran will unveil new air-based missiles and a new home-made submarine, Vahidi told reporters in Tehran today. He said that the country will also inaugurate a space center soon.

The Iranian Army has recently test-fired different types of newly-developed missiles and torpedoes and tested a large number of its home-made weapons, tools and equipments, including submarines, military ships, artillery, choppers, aircraft, UAVs and air defense and electronic systems, during massive military drills.

In relevant remarks last week, Vahidi announced that the defense ministry will supply large numbers of different types of missiles to the country's Armed Forces and unveil different defense projects in coming days.

He said that the country's latest defense achievements will also go on display in the next few days, including a special space center.

Last week, the defense ministry started mass-production of a highly mobile home-made air-defense system.

The production line of the new system, Herz (Protector) 9, was inaugurated in a special ceremony attended by Vahidi.

Addressing the ceremony, Vahidi said that the system which has been designed and developed by Iranian experts at the Defense Industries Organization is a "sophisticated smart air-defense system and is capable of detecting, identifying and intercepting low-altitude targets through automatic controls".

He said that the system enjoys high mobility and night operation capability and can be connected to the country's integrated air-defense network.

Nuclear Arsenal Subject to Pentagon Cuts, But New Subs May Escape Ax

Govexec.com, May 24

The U.S. nuclear arsenal might be subject to cutbacks by a major budget review under way at the Defense Department, despite enjoying relative protection this year from largely across-the-board sequester spending reductions, a senior Defense official said on Thursday.

"Every part of the program, including nuclear weapons, is being addressed," the official said in an interview, referring to the ongoing Strategic Choices and Management Review led by Deputy Defense Secretary Ashton Carter.

The budget scrub is to advise Chuck Hagel, the defense secretary, by late this month on how best to apportion \$500 billion in congressionally mandated funding reductions over the next decade. If President Obama can convince lawmakers to repeal the 2011 Budget Control Act, lesser but still-substantial cuts would likely be taken in 2014 and beyond.

The senior official — who requested anonymity in this article to address politically and diplomatically sensitive topics — appeared to suggest, though, that the Pentagon intends to keep ballistic missile-armed submarines relatively safe from the cost-cutting ax.

The big-ticket item coming down the pike for modernizing the Navy's aging "boomer" submarines and their Trident D-5 ballistic missiles is the estimated \$90 billion Ohio-class replacement vessel, also dubbed "SSBN(X)."

"For SSBN(X), I don't see viable alternatives to going forward with the program," said the Defense leader, noting the Pentagon had already "made some significant adjustments" to program costs by delaying fielding of the first vessel by two years to 2031. "It's the most important element — it's the central element — of our triad."

That could leave the other two legs of the nuclear delivery arsenal — Air Force bomber aircraft and ICBMs — on the hot seat for reductions.

The service intends to field 80 to 100 new, conventionally armed Long-Range Strike bombers after 2020 that would later be certified for delivering nuclear weapons — though some pundits wonder if the new aircraft might remain conventional-only forever.

The Air Force insists that the bomber must be made dual-capable to help retain flexibility and redundancy in U.S. atomic forces. However, service Secretary Michael Donley acknowledged early this year that sequestration could endanger the timing or details of plans for the new airplane.

After 2030, the Air Force also plans to field a new Ground-Based Strategic Deterrent to replace today's 450 Minuteman 3 ICBMs. Here, too, the Pentagon is eyeing the potential for cutbacks, in the form of a life-extended or upgraded version of the Minuteman 3 rather than a new-design ballistic missile.

For both the ICBM and bomber legs of the triad, "we're looking at how do we sustain that capability and how do we do it at a reasonable cost, including both the delivery systems and the associated warheads and bombs," the senior Defense official told Global Security Newswire.

Speaking at a press conference on Friday, Donley said plans for the future ICBM could be at greater risk than for the next-generation bomber aircraft.

"I think [the spending review] has a little bit more effect on the ICBM side of the force structure, because on the bomber side we already know that we're going ahead with the Long-Range Strike," he told reporters. By contrast, the service is just beginning to weigh how it might replace the Minuteman 3.

Some defense analysts also see the Navy preparing its own "Plan B" for modernizing the nuclear-armed submarines.

The service is developing new strike capacity for its Virginia-class fast attack submarines that could allow the boats to launch ballistic missiles. To date the focus appears to be solely on adding conventionally armed weapons to the submersibles.

However, the “Virginia Payload Module” proposals to modify the current submarine design with a nearly 94-foot center section for ballistic-missile launch tubes appear strikingly similar to an alternative the Navy earlier dismissed for replacing the nuclear-armed Ohio-class submarines.

Some analysts argue the Navy should transition its atomic missiles to a smaller vessel such as the attack submarines at a time when traditional Cold War nuclear threats are receding. The Navy, though, said several years ago that the “humpback” center compartment required for the Virginia-class submarines to carry Trident ballistic missiles would reduce the vessels’ speed, maneuverability and stealth.

No total program cost has been estimated for the proposed Virginia modification, but Navy budget documents show a price tag of nearly \$800 million between 2013 and 2018 alone.

In terms of the size of the nuclear force, some Republicans on Capitol Hill have warned Obama against taking unilateral reductions below levels agreed by the Washington and Moscow in the New START accord, which allows each side 1,550 fielded strategic warheads and 700 fielded delivery vehicles.

They have also threatened to block implementation of the 2011 treaty if the administration does not make good on plans to modernize today’s nuclear warheads and delivery systems.

The senior Defense official this week said the Pentagon’s budget review — nicknamed the “Skimmer” in keeping with its acronym — would not itself address the policy option of nuclear reductions below New START levels.

However, the new assessment is being carried out in the “context” of “existing and pending policy guidance,” the official said in the Pentagon interview.

“Pending” policy guidance would include a document currently sitting at the Oval Office for approval: The so-called “NPR Implementation Study,” which is believed to recommend changes to nuclear doctrine and targeting that could form the basis for a smaller nuclear arsenal numbering 1,100 or fewer warheads.

“The conclusions are with the president,” the senior official said of the implementing study, which was based on findings published in the Pentagon-led 2010 Nuclear Posture Review. “And when he says he has no more questions, and he signs, then we’re done.”

Donley said Obama will make a significant determination in summer 2014 regarding exactly how the New START reductions will be taken.

“The department and the nation’s way forward on this still is dependent on some national-level decisions that the president plans, as I understand, to make next year,” he said at the press briefing.

The bomber, said the outgoing Air Force secretary, “is really independent, in some respects, from the nuclear decisions that are still pending,” because it also has a crucial conventional-attack role.

Meanwhile, plans for a new-design replacement for nuclear-armed submarines appear here to stay.

“As we look at the budgetary and fiscal environment that we’re going to have for the next decade-plus, the department’s going to have to make hard choices,” the senior Defense official said on Thursday. “Sustaining a safe, secure and effective nuclear deterrent is a critical mission. Sustaining the sea-based element ... with the follow-on to Ohio-class is critical for that.”

The official acknowledged there is “still a significant cost” to plans for developing and buying 12 SSBN(X) vessels, despite the planned two-year delay in introducing them into the fleet.

Can the nation afford to build ballistic missile capability into two different families of submarines — the Virginia class and the Ohio-class replacement — during a time of fiscal austerity?

The senior official sounded slightly less committed when it came to the possible introduction of big conventionally tipped missiles for the Virginia attack submarines.

“Preserving our capability as a nation to undertake non-nuclear strikes is also critically important, both for operational capabilities and indeed as we think about our strategy over time to sustain advantage” over possible adversaries, the official said. “Sustaining, if not increasing, our non-nuclear strike capacity even in a time of budgetary austerity is something that the Department needs to at least tee up ... for this and future secretaries.”

Donley said the ongoing review could result in dusting off some previously jettisoned defense procurement alternatives in the interest of curbing spending.

“There are ways to address different aspects of the nuclear enterprise and how to modernize it and how much and on what schedule,” he said on Friday. “We have lots of options for that. There are many programs involved.”

PLA Navy’s Three Fleets Meet In South China Sea For Rare Show Of Force

South China Morning Post, May 27

China’s navy has carried out a rare joint exercise, involving its three fleets, in the South China Sea as regional tensions over territorial disputes mount.

The combined drill was carried out in southern waters by warships, submarines and the naval air force from the People’s Liberation Army’s North Sea, East Sea and South Sea fleets, national broadcaster CCTV reported on Saturday.

Meanwhile, three Chinese marine surveillance ships had monitored and obtained evidence before “expelling” boats manned by Japanese right-wing activists from waters near Diaoyu islands, or Senkakus as they are known in Japan, China’s State Oceanic Administration said yesterday.

Japan’s Foreign Ministry protested to China over the five-hour sailing by three Chinese official ships in the waters, the Kyodo news agency said yesterday. The Kyodo report denied the activists’ ships had been driven away.

Chinese analysts said the South China Sea drill by the three fleets, which finished on Friday, was the first since 2010 when Beijing staged a similar exercise to protest against the involvement of the aircraft carrier USS George Washington in a joint anti-submarine drill with the South Korean navy in the Yellow Sea.

Last week’s PLA Navy drill was intended to send a signal to the U.S. and the Philippines, at a time when the carrier USS Nimitz was in the South China Sea, and amid a standoff between China and the Philippines over the Second Thomas Shoal, or Ayungin as it called in the Philippines, in the disputed Spratly islands.

“The joint military drill also meant to tell the Philippines that Beijing’s tough stance towards them will continue,” said retired PLA Colonel Yue Gang.

Meanwhile, Xinhua reported yesterday that another group of warships with the North Sea Fleet had left their port in Qingdao , Shandong province, for blue-water training in the western North Pacific Ocean.

Chilean Navy Detects Foreign Submarine Off Northern Coast

Santiago Timesy, May 25

Navy confirms presence of one submarine while local media reports claim two may have been detected, including a nuclear-powered US vessel.

In a statement released Thursday, the Chilean Navy confirmed that a squadron performing exercises detected a foreign submarine off the coast of Antofagasta on May 14. The Navy said that the submarine came close to entering the Andean nation’s territorial waters, and was tracked by the squadron until it left the area.

The official response discounts the idea that the submarine belonged to the armed forces of a neighboring country. In accordance with its standard operating procedures, the Navy said it informed officials in nations near the area that the submarine was detected.

Local media reports, however, claim an unnamed, high-level government source confirmed that two submarines were actually detected. One belonged to the United States and the other was a German-built Type 209 submarine. The latter is a diesel-electric submarine built for export by the European country from 1971-2008 and used by seven South American countries, including Chile, Peru and Argentina. Neither of those facts were confirmed by the Navy, whose press release said only one vessel was detected.

An unconfirmed report in local media also said the submarine that accompanied the Type 209 was nuclear-powered. The United States is one of six nations whose navies operate nuclear submarines.

According to some local media reports the submarine, or submarines, did in fact enter Chilean waters, a possible confusion which may be explained by the two different types of maritime claims. Though territorial waters extend 12 nautical miles of a nation’s coast, there is also an exclusive economic zone that extends up to 200 nautical miles. A country has special rights to the resources within that 200-mile zone but it is not part of its sovereign territory. Even in territorial waters, foreign vessels — including submarines — are generally granted “innocent passage” according to the U.N. Convention on the Law of the Sea.

In light of these reports, opposition politicians are calling on the Navy to give a more detailed explanation of the incident.

“This is a very grave thing,” Dep. Jorge Tarud of the left-leaning Party for Democracy (PPD) told 24 Horas. “The entry of nuclear submarines into our territory is prohibited... We have to raise a protest.”

Dep. Ricardo Rincón, a member of the Chamber of Deputies’ National Defense Committee, said the Defense Ministry must publish more information to help clarify what he described as a “tense situation.”

“The northern border is a highly delicate area, and it always has been,” Rincón, a member of the center-left Cristian Democratic (DC) party, told 24 Horas.

U.S.S. Silversides Submarine Museum to open this weekend with brand new exhibit, annual Lost Boat Ceremony and documentary screening

Mlive.com, May 22

MUSKEGON, MI – The U.S.S. Silversides Museum will kick start its season with a new exhibit as well as events commemorating Memorial Day this weekend.

The museum officially opens on May 25, when it unveils its “U.S.S. Flier” exhibit to the public.

The exhibit tells the story of the U.S.S. Flier, a World War II submarine that sank in 1944 after it was struck by a mine in the Balabac Strait in the Philippines. The sub sank, bringing down the 78 men who were inside.

Fourteen men who were out on the decks survived the explosion, but only eight, including Grand Haven native Alvin Jacobson, survived the 17-hour swim to land.

The men then swam to another island, where they encountered the Coastwatchers, a group of sympathetic Filipinos who helped them evade the Japanese until they were picked up by the U.S.S. Redfin.

The exhibit will depict this story through artifacts, video and audio, said Frank Marczak, the museum's executive director.

It will also include recreations of the hut the Coastwatchers used, as well as the U.S.S. Flier's cigarette deck, which was above the water at the time of the explosion, he said.

In addition, the exhibit will explain how the submarine was recovered, using information Jacobson collected and examined before his death in 2008.

"This is kind of the first big exhibit that this board has undertaken," since the museum opened in 2008, Marczak said.

He said the exhibit couldn't have happened without a \$10,000 grant from the Community Foundation for Muskegon County, \$40,000 from the Grand Haven Community Foundation and "generous" donations by private donors.

"It's a pretty big deal," he said.

To celebrate the opening of the U.S.S. Flier exhibit, the museum will offer \$6 tickets all day Saturday. The tickets include museum entry and admission into the U.S.S. Silversides Submarine.

Otherwise, visitors can check out the exhibit and other museum offerings from 10 a.m. to 5:30 p.m. seven days a week throughout the summer.

Museum and submarine admission is \$15 for adults; \$12.50 for those 62 years old and above; \$10.50 for children 5 to 18 years old; and free for those under 4 years old.

The museum will also kick off the season with its annual Lost Boat Ceremony at 11 a.m. on May 26. The event honors World War II submariners who lost their lives during the war.

This year's keynote speaker will be Vice Admiral Albert H. Konetzi, Jr., who served as deputy commander of the U.S. Atlantic Fleet. State Sen. Geoff Hansen, R-Hart, will also attend and speak at the event.

Later that day, the museum will also host two screenings of the documentary "Honor Flight: One Last Mission" in conjunction with Harbor Hospice and Muskegon Community College.

The film follows four World War II veterans and the people who help them visit the Washington, D.C., memorial that was created for them in 2004 through a program called Honor Flight, which flies veterans to the memorial.

Marczak said the film was emotional and moving.

Spain spent \$680 million on submarine that 'can't resurface'

Rt.com, May 22

Spanish engineers, who already spent some \$680 million on designing the new generation S-80 class submarine, say it is a major "technical innovation." There is just one problem the calculations show – if submerged into water, it may never come up again.

The Spanish media has been furiously discussing the errors made by the state-owned Navantia construction company, which has spent about a third of the huge \$2.2 billion budget only to produce an 'overweight' submarine that is not able to float.

Spain's Ministry of Defense has confirmed that Navantia detected "deviations" in the new submarine's design, thus delaying its March 2015 scheduled launch for one or two years.

Navantia said an excess weight of up to 100 tons has been added to the sub during construction, and the company may have to redesign the whole craft.

The excess weight may result in significant problem in the craft's buoyancy and severely affect its ability to submerge and resurface from depth, the local media explained.

To ensure the submarine does not sink, Navantia considers lengthening its hull in order to re-balance the weight, infodefensa.com said, citing sources.

But each extra meter of the sub will reportedly cost the austerity-stricken state more than 7.5 million (\$9.7 million).

Spain's opposition party United Left has mocked the submarine development in parliament and demanded explanations.

The Ministry of Defense downplayed the clamor, saying adjustments and delays in such complex technological projects are "within normality." The ministry is now "studying the scope of the problem to determine its impact in terms of time and money" and is considering "various alternatives."

A delegation from the local College of Industrial Engineers in Murcia region on Tuesday visited the Navantia facilities and spoke in support of the company's engineers "facing unprecedented technological solutions," La Verdad said. Navantia's "technical innovation" is an even more challenging task, given that the plant has to build "four submarines simultaneously," said the Dean of the College Andres Ortuno.

While the Spanish state is waiting for the four S-80 class submarines to be modified and completed, it will only have two submarines in service – and may have to spend 30 million (\$38.8 million) to repair the aging S-74 Tramontana.

The unexpected costs come at a time when Spain's Ministry of Defense has seen its budget cut by some 30 per cent as part of austerity measures.

Navy tests anti-torpedo defense
United Press International, June 7

WASHINGTON, June 7 (UPI) — The U.S. Navy's Surface Ship Torpedo Defense System has completed its first carrier-borne end-to-end sea trials, the Navy announced.

The trials were conducted Thursday by the carrier USS George H.W. Bush.

"These tests are a culmination of a very focused effort by the Navy including the program office, Bush's crew, Norfolk Naval Shipyard and our academic and industrial partners," said Capt. Moises DelToro, the Navy's Undersea Defensive Warfare Systems program manager. "With all seven of our shots doing what they are designed and built to do, it validates our work and significantly enhances our current capabilities."

The Surface Ship Torpedo Defense uses the Torpedo Warning System to track and classify torpedo threats and hard-kill capability of the Countermeasure Anti-Torpedo, which is basically an encapsulated miniature torpedo.

Pennsylvania State University Applied Research Laboratory is developing the Countermeasure Anti-Torpedo. During four days of tests seven torpedo-like targets were successfully engaged by Countermeasure Anti-Torpedoes, The Navy said. "It is gratifying to have these tests go so well," said Rear Adm. David Johnson, program executive officer, Submarines, whose portfolio includes the Undersea Defensive Warfare Systems Program Office. "The engineering involved to detect a hostile torpedo, process its direction, speed [and] depth, and then engage it with a carrier-launched Countermeasure Anti-Torpedo is impressive. I am confident that the fleet will be pleased with the results."

Discovery of World War II sub wreck brings closure to death of Dover veteran
Foster's Daily Democrat, June 10

DOVER — Seventy years ago, a Dover mother was given a letter from a Lieutenant Commander.

He was sending his condolences for the loss of her son, who died in a submarine accident during World War II.

Her son, Frederick P. Graziani, Jr., was an athlete and graduate of Dover High School, according to a Foster's Daily Democrat article from July of 1943 about the incident.

He was a first class petty officer in the United States Navy's submarine service.

He was also the first Dover sailor to lose his life in action in World War II, according to the article.

Lieutenant Commander Edward E. Shelby wrote in the letter, "Although at the present time nothing is known as to the cause of the accident, I can tell you that the loss of the ship with so many of her fine crew, all who were below decks, was practically instantaneous and that none of the men spent any time in suffering nor in despairing wait for rescue."

The letter said the location of the submarine, 600 feet below sea level, made it impossible to attempt to recover or rescue the crew. Shelby wrote that the submarine sunk, "somewhere in the Atlantic."

Each spring, the family of Graziani, of 338 Washington Street, visits his memorial plaque on Fourth Street, having no idea what caused the submarine he was on to sink, why it sunk and why he and 41 of his shipmates were never found — until now.

Next week, on June 12, the 70th anniversary of Graziani's death, some questions may be answered and families will have some closure. Sixteen members of Graziani's family, and friends and family of other crew members who died that day, will fly to Key West, Fla., to attend a proper memorial service at the Custom House Museum of the Key West Art and Historical Society, for those who were aboard the Navy submarine USS R-12.

The memorial service comes after documentarists and researchers Christine Dennison and Tim Taylor came across the submarine wreck with a team of explorers just 11 miles off Key West, Fla., in 2010, ending decades of mystery.

With help from Navy permits and research from military museums, Dennison has continued to work to discover why the submarine sank and why the shipmates were never found.

Dennison is the executive producer of a documentary she is putting together about the submarine, entitled "Twice Forgotten." She said in a video online that 47 sailors departed Key West Naval Station on what was supposed to be a routine mission and just five returned. Forty American sailors and two Brazilian officers died just after noon on June 12, 1943.

According to Mike Mone, a nephew of Graziani's who lives in Dover, the surviving shipmates were on the bridge of the torpedo.

It is believed that a flood in the forward battery compartment was the cause of the sinking, but why it flooded is still unknown. According to Mike Mone, it was most likely due to a torpedo tube.

Dennison and her researchers will be diving this summer to confirm why the submarine sunk. According to Mara Mone, a relative of Graziani's, the underwater archaeological find being conducted by Dennison has already provided artifacts.

The submarine is the sixth of 52 submarines lost during World War II that have been discovered, according to Dennison, and according to Mike Mone, R-12 is the most recent discovery.

The submarine was built in the 1910s and made its way from Massachusetts to Hawaii to Connecticut, Pennsylvania, Cuba and to Key West, Fla.

In May of 1943, in Key West, Fla., the submarine was used for training. Shortly after noon on June 12, 1943, R-12 sank.

“It is sad that the submarine went down in 15 seconds and nothing was ever done about it,” Pat Mone, another nephew of Graziani’s, said. “Whereas other submarines, they got the people out of them. That made it twice as sad that nothing was done ... that was it. There was nothing they could do.”

Graziani left Dover and served in the Navy after high school. He was in Pearl Harbor on Dec. 7, 1942, when the Japanese attacked, and was then transferred to the East Coast, to Key West. When R-12 sank, he was 24 years old.

“Even though my uncle died young, he cared deeply about the Dover community and sent a portion of his paycheck home to help build a playground on the Graziani property,” Lucia Kilty McKenzie, a niece of Graziani’s said. “I can remember playing on it as a small child with many other children from around the Dover area.”

This playground, erected with Graziani’s funding, was located at 338 Washington Street in Dover close to the plaque that commemorates him today.

Graziani’s nieces and nephews, Patrick Mone, Daryl Mone, Chuck Mone, Michael Mone, Rosanne Kilty, Lucia (Kilty) Mckenzie, all of Dover, and Maura Mone, of Providence, Rhode Island, Celeste Martel of Barrington, Betty (Mone) Anderson of Madbury, James Anderson of Florida and Joe Mone of New Bedford, Mass. will attend the memorial in Florida on June 12.

Tangled in red tape, India’s submarine fleet sinking Time of India, June 9

NEW DELHI: The navy’s desperate attempts to rescue its sinking underwater combat arm have been dealt a double whammy. First, the ongoing project to construct six Scorpene submarines has been delayed by another 14-18 months, with the first vessel now slated to roll out of Mazagon Dock Limited(MDL) by November 2016 at the earliest.

More worryingly, the new project to construct six advanced stealth submarines, armed with both land-attack missile capabilities and air-independent propulsion for greater underwater endurance, is still stuck in political apathy and bureaucratic red-tape. It has already been examined by three committees after being granted “acceptance of necessity” in November 2007.

The finance ministry has now again returned the file for the over Rs 50,000-crore project, code-named Project-75India, to the defence ministry for clarifications.

“The draft Cabinet Committee on Security (CCS) note for P-75I is simply being tossed around with no resolution in sight. The global tender or RFP (request for proposal) for it can be issued only after the CCS approves the file,” said a source.

Even if the P-75I tender is floated today, it will take at least three years to ink the contract with the selected foreign collaborator, and another seven to eight years after that for the first submarine to be built.

With the over Rs 23,000 crore Scorpene (P-75) project already running four years behind the original 2012-17 induction schedule, alarms bells are now ringing. The navy is making do with just 14 aging conventional diesel-electric submarines — 10 Russian Kilo-class and four German HDW ones — which are to be progressively retired in the coming years despite life-extension refits. China and Pakistan, meanwhile, are adding muscle to their underwater combat fleets.

Way back in 1999, the CCS approved a 30-year submarine-building plan, which envisaged induction of 12 new submarines by 2012, followed by another dozen by 2030. But the government’s inability to plan and take decisions means the navy is yet to get a single submarine 14 years later.

P-75I is embroiled in a debate over the “selection of Indian shipyards” and the “indigenization level to be achieved”. While two submarines are to be imported, four will be constructed in India.

The navy wants private shipyards to be involved in the project to save time since MDL is overburdened with orders. But the MoD’s defence production department has insisted that three will be built at MDL in Mumbai and one at Hindustan Shipyard in Visakhapatnam.

The Scorpene project, with contracts being inked with French firms in October 2005 has been grossly mismanaged, with huge time and cost overruns. The deal for the ‘MDL procured material packages’, including sensors, propulsion and the likes, with the French firms was signed only last December. The order for heavy-weight torpedoes to arm the submarines is also yet to be placed.

Projections show only five to six of the present 14 Indian submarines will be fully operational by 2020. Even with a few Scorpenes by then, India will remain far short of the minimum 18 conventional submarines required to deter Pakistan and China.

Spain’s £1.75 billion submarine programme is torpedoed after realising near-complete vessel is 70 tonnes too heavy because engineer put decimal point in the wrong place Daily Mail, June 7

A £1.75billion Spanish submarine project has run aground after officials realised that the vessel is more than 70 tonnes too heavy - because an engineer put a decimal point in the wrong place.

A former Spanish official has described the mistake, which has led to fears that the submarine might not resurface if sent to sea, as ‘fatal’.

The Isaac Peral, the first in a new class of diesel electric submarines, was almost complete when the problem was noticed.

Spain will now pay US Navy contractor Electric Boat £9million over three years to assess the issue and carry out the work required to correct it, according to the Spanish Defence Ministry.

Rafael Bardaji, former director of the Office of Strategic Assessment at Spain's Defense Ministry said that officials will review options suggested by Electric Boat.

But he said the preference has been to extend the length of the submarine's hull, perhaps by 5 to 6 meters, to increase buoyancy.

Otherwise, the weight of the 2,200 tonne submarine would have to be reduced, and he said the Spanish Navy would not want to compromise features such as the combat system or an air-independent propulsion system.

Electric Boat, the primary contractor for the U.S. Navy's fleet of nuclear submarines, accepted the contract through a foreign military sales agreement between the American Navy and the Spanish Defense Ministry, the U.S. Naval Sea Systems Command announced this week.

Electric Boat, a division of General Dynamic Corp., has helped other countries with their submarine programs.

It began assisting with development of the Astute-class nuclear attack submarine for the British Royal Navy in 2003, and it is working under another foreign military sales agreement on Australia's Collins class of submarines.

The 233ft long submarine will carry a crew of 32, along with eight special forces troops, and weapons systems for surface and anti-submarine warfare.

The Defense Ministry said technical problems are normal for projects of this scale.

It said in a statement: 'The technology challenges that these programs face during development are much more than simple calculations.

'All the major military programs, especially submarines, have experienced delays and often have required the support of a technology partner.'

Mr Bardaji added: 'Apparently somebody in the calculations made a mistake in the very beginning and nobody paid attention to review the calculations.'

The Isaac Peral, named after a 19th century Spanish submarine designer, is one of four vessels in the class that are in various stages of construction. The country has invested about £1.75billion in the program. The first vessel was scheduled to be delivered in 2015 but the Spanish state-owned shipbuilder, Navantia, has said the weight problems could cause delays of up to two years

Task Force Examines Integrating Enlisted Female Sailor on Subs Navy.mil, June 7

FORT GEORGE G. MEADE, Md. – Commander, Naval Submarine Forces in Norfolk established a flag officer-led task force in May to focus on effectively integrating enlisted women Sailors on board multiple submarine platforms.

Vice Adm. Michael Connor stood up the task force to specifically look at best integration practices for SSBNs, SSGNs, and VIRGINIA-class SSNs.

Commander of Submarine Group Two, Rear Adm. Kenneth Perry is leading the task force. The group is charged with developing a comprehensive Plan of Actions and Milestones (POAM) by January 2014.

This POAM will mirror the previous deliberate process used to successfully integrate female officers by including feasibility studies, potential courses of action and candidate timelines. Pending the results, a detailed implementation plan will be presented to the Chief of Naval Operations by March 2015.

Female officers have been successfully integrated on board OHIO-Class SSBNs and SSGNs, and will be integrated onboard VIRGINIA-Class SSNs in fiscal year 2015.

The Navy is working with industry to design the Ohio replacement SSBN to support both officers and enlisted mixed-gender crews..

Long-Term Study Suggests Sino-Japanese Tensions Likely To Increase Interview with Michael Swaine Uoichi Kato, Asahi Shimbun, June 7

WASHINGTON – The U.S. military capacity to deter China and assure countries in the Western Pacific could diminish, if China successfully deployed new missiles, submarines and other weapons in those waters.

So says Michael Swaine, a prominent American analyst in Chinese security studies who is a senior associate at the Carnegie Endowment for International Peace.

Swaine led a group of U.S. Asia experts, who together published a long-term study, titled "China's military & the U.S.-Japan alliance in 2030," which he describes, as the first and only unclassified assessment of the future impact of China's growing military power on Japan and the Japan-U.S. alliance.

In an interview with The Asahi Shimbun, Swaine said an "eroding balance" between the United States and China is already happening and that "the United States probably is going to have to accept certain limits on its capacity to operate" in the region over the long term.

He also said a significant reduction in U.S primacy along China's maritime periphery will likely result in movement toward "a more equal leadership position" in Asia between the United States and China.

In contrast, Japan tends to be reactive to the actions of the other two powers, he said, in emphasizing the need for Tokyo to “get serious about how significant a role it wants to play with the United States, not just militarily but politically, in Asia.” Excerpts of the interview follow:

Question: Why did you decide to do this report?

Answer: This report has been several years in the making. And it really came about because of awareness in 2008-09 that Japan was not really showing much of a response, in the security realm, to China’s emergence as a major power.

Public concern was mainly toward North Korea. And yet, we saw that China’s capability to influence the security environment around Japan was growing very much, in light of the accomplishments it’s made regarding Taiwan. It’s put in place military capabilities that are applicable for Japan as well.

Q: So, it was before the emergence of “assertive China” in 2009?

A: It was really before you saw this whole series of events happen, to do with the maritime disputes, the Senkakus/Diaoyu, and all that. But we thought we needed to really have a better handle on how China is affecting Japan and the alliance with the United States. We saw a need for a longer-term assessment of Japan’s ability and willingness to respond to China’s growing capabilities on the military front. Here we saw a lot of limitations. So, that was one reason.

And then the other reason was the general sense that China’s emergence as a regional power, from a security point of view, is really all about the Western Pacific. It’s not about challenging the United States as a global military power. And Japan is a major power and a key U.S. ally in that part of the world, Northeast Asia.

Q: So what are the headlines, or the main findings of the study?

A: I would think an appropriate headline is, “A Major, Long-Term Study Says Sino-Japanese Tensions Will Increase,” or “Challenges to the Alliance Will Grow,” something that plays off of the current Senkaku thing and says, basically, “We’re likely going to have more of this. It’s going to, probably, get worse, absent any major policy moves to defuse the situation.” We think that the likelihood of further types of tensions, coming out of China’s military development, and the political process that is involved, on all sides, is likely to produce more motives for miscalculation and for crises. But we’re not predicting China and Japan are going to start a war over the Senkakus. We think the real problem is going to be about managing perceptions of changing power.

China’s presence and capabilities, in the Western Pacific, are almost certainly going to go up. The ability of the United States to deal with those may not be well served by continuing the current strategy, which is one of U.S. naval primacy or predominance, in the Western Pacific. That is what this report calls into question.

Q: You are saying that it’s not sustainable?

A: It’s problematic. In its current form, it probably is not sustainable. But we hedge a little bit about this in the report, because it depends a lot on the U.S. power. And it depends a lot on the Chinese situation. The other main factor, of course, is Japan’s response. As I suggested, what led us into this study was not just China’s emergence, which is obvious; it was also the real limits that exist within Japan on its capacity and its willingness, even in spite of the current Senkaku issue, to actually “step up to the plate” to become a more active security actor in the Western Pacific, outside of defense of the home islands, and specifically to provide more effective support for the U.S. role in nearby areas. That still remains very much a question, as does the issue of exactly what sort of U.S. security role in the region would best provide future stability.

Q: Out of six future regional security scenarios you present in the report, you think “eroding balance” is what is actually happening now and will likely continue over the next 15 to 20 years?

A: “Eroding balance” is basically what looks to be occurring, not just on the military level but also with regard to civilian, paramilitary capabilities, such as the China Maritime Surveillance (CMS) force. I mean, most of these incidents with China are incidents with CMS vessels and fishing boats. They’re not military incidents per se.

Q: If “eroding balance” is the most likely future scenario, are you saying that the U.S. strategic rebalance is not going to work?

A: I don’t want to say, “It’s not going to work.” It’s going to be very much challenged.

Q: Why?

A: Because, I’m not sure that the United States has the capacity to engage in what it would call serious rebalancing in the security sense. That is to say, whether it has enough capacity to sustain its past military advantages in China’s maritime periphery from the first island chain to right up to China’s 12-mile limit.

Q: The other likely scenario you list is “limited conflict.” What is it?

A: It’s not an all-out war, or even small-scale military conflict, but rather a situation in which U.S. primacy near Japan is seen to erode significantly, with an increased chance of severe confrontations with China based upon a crisis like Senkaku, that gets out of hand. In other words, the Chinese government, because of a perception of a shifting military balance in the region, is likely to take more risks than it would otherwise do, in pursuing its position in this area or other areas, including possibly greater efforts to intimidate Japan or other countries, based upon a preponderance of military power. That’s actually the thing that people in the Ministry of Defense of Japan worry more about; a gradual accretion of Chinese leverage, that flows, in part, from their military, but that is exerted in a range of areas, political, economic, you name it, and that Beijing, basically, out-maneuvers Japan in the region, so that Japan feels on the defensive, and isn’t really able to protect its interests well enough.

Q: What does your report say about the future of China?

A: We lay out a series of possible trajectories for China, the most likely being one in which China maintains at least moderate levels of economic growth, something closer to 7, 8 percent, but still enough to fund significant amounts of military development, particularly near Japan.

We also assume that there's going to be increasing difficulty in dealing with domestic problems, social inequality, pollution, and all these things that are going to require more complex debates about certain policy issues. It's likely that you're going to see continued Chinese military developments. The question will become, "How high, in what area?" Under the most likely trajectories for China, it will have a greater capacity to be present in the air and waters around Japan to do things, and that could increase the likelihood of accidents, miscalculations, you name it, again absent significant security assurances.

Q: And Japan?

A: What it says about Japan, I think, is that Japan itself has to work harder with the United States to make certain fundamental assessments about its long-term strategy. It has to really get serious about how significant a role it wants to play, with the United States, not just militarily but politically in Asia. And the question is; is there a strategy that it can develop that will ensure a maximum posture, position, for Japan in this situation that reflects its interest in productive and stable relations with both Washington and Beijing? Japan doesn't really engage in that kind of strategic thinking, as I see it. It tends to be reactive. It tends to be highly driven by domestic politics. And it tends to be much driven by what the United States thinks.

I think there has to be a larger assessment about where you want the region to go, longer term, with Japan and the alliance continuing. And it means reassessing some of the fundamental assessments about how the U.S.-Japan alliance operates and what it serves. And that means the Guidelines for Japan-U.S. Defense Cooperation, diplomatic and political coordination, efforts to try to develop a multilateral security assurance sort of security structure that goes outside the limits of the bilateral alliance. All of those issues, I think, are important.

Q: What does the report say about the United States, in 20 or 30 years down the road?

A: It says that it's more likely than not that the United States is going to avoid the worst-case scenarios we examine, including, withdrawal, hollowing out, and a truly major decline in the economy. The United States will have some version of a very decent capacity to operate, still, as a major power in the Western Pacific. It might not be able to operate as the kind of dominant power it had been in the past, and this report suggests that the United States will likely need to make some serious choices about the kind of power relationship with China it thinks is going to be sustainable in the region over time. Does that require a more fundamental reassessment about how it operates militarily and politically, within the first island chain in particular? Because the Chinese are not going to indefinitely accept the past level of U.S. predominance, up to the 12-mile limit, that the United States has enjoyed, and they will likely have a much greater capacity to challenge that predominance. And the question is how you adjust to that situation. It doesn't necessarily mean you get into a zero-sum competition, but it does mean that the United States probably is going to have to accept certain limits on its capacity to operate, in some ways, and in order to make that less destabilizing, that means it has to have a larger strategy in place, in dealing with the Chinese, and with other countries in the region that can reassure others that this is not going to happen at the expense of security.

A big, underlying, question on the military level is, "Is it realistic to assume that the U.S. aircraft carriers can continue to play the dominant role in the Western Pacific, for American power?" I mean, the report suggests that carriers are not going to be able to function and operate as freely as they could have in the past, if China fields an effective anti-ship ballistic missile (ASBM) system, with a lot of launchers, and it has a significant number of submarines operating in the Western Pacific. The capacity of the United States to use its carriers to reassure Japan and others, and to deter the Chinese, could very well diminish.

What do you do if that's the case? Do you continue to operate them anyway? Or do you transition to some other kind of strategy?

Some people believe that ballistic missile defense simply cannot work well enough to protect U.S. naval and air bases in Yokosuka and Kadena, against a Chinese missile barrage. So, how do you conceive of that alternative? I mean, is it Guam?

But the Chinese now want to range Guam with their missiles. In the report, we discuss alternatives to the current U.S. posture, including a so-called mutual denial concept that envisions a more balanced power distribution in the Western Pacific in which the U.S. continues to operate forward but without a reliance on carriers; you use submarines and smaller vessels. And you use a lot of interruption sort of things, the different – cyber and other things, to try to disrupt China's military systems. But, you don't stress forward operations on the surface under this strategy because you can't, because missile defenses for forward air and naval bases are probably not going to be as effective as people think they will be. This concept is more oriented toward selective and long-range area denial than it is toward controlling the ocean and projecting force onto the Chinese mainland. We also discuss an approach that is based on a reduced level of U.S. primacy and forward presence

Q: What kind of leadership structure are you contemplating in the Asia-Pacific? Is it still the U.S. primacy?

A: Fifteen to 20 years down the road, I think it will have to be some significant modification of the past U.S.-dominated structure, in the sense that it's going to have to be a more equal leadership position in the region, between the United States and China.

Q: But if it's equal, it's not the primacy of the United States any more.

A: I guess you could say there are different levels of primacy. There is an outright level of primacy, where you can operate with impunity, and everybody knows it, and you're very strong, very capable, in a whole range of areas. Then there's what I would call "lesser levels of primacy," where you have limited ability to ensure certain outcomes in different areas, but if you had a major threat that required the use of military, you still have enough confidence that you would ultimately prevail, even though the costs may be higher.

Q: Which level of primacy does the current U.S. rebalance aim at?

A: I think the current rebalance still orients toward the former, i.e., a clear level of predominance across the Western Pacific.

Q: What do you think about China's "New Type of Major Power Relations"? Is it compatible with the U.S. rebalance?

A: I think it's a slogan, right now. I don't think people know for sure what exactly it means. I think it's another way of emphasizing that China wants to seek a relationship with the United States that maximizes cooperative ventures, minimizes competitive dimensions in the military sphere, and gets away from this kind of zero-sum thinking. Washington has generally responded positively but cautiously to the concept, because it remains undefined.

Q: The report talks about strategic distrust between China and the United States as being likely to continue. Why?

A: Several reasons. Some of them historical, going back to the history of Sino-U.S. relations and the history of Sino-Western relations. So, fears and concerns about containment, about the West really not having a desire to see China succeed, and to undermine China's development. And that even extends to the point of being suspicious that the U.S. government ultimately would like to see regime change. Now, you also have a fundamental difference in the political systems between the two countries. That doesn't obstruct basic cooperation on a whole range of issues, but it does sustain a level of suspicion, and that suspicion has become much deeper since the Tiananmen incident of 1989.

A second basis for continued strategic suspicion is the simple fact that China's future orientation and its future political relationship to Asia, if not beyond, still remain somewhat uncertain. You don't know exactly what role China wants to play.

Q: So, what should the China policy of the Obama administration's second term be?

A: Well, I think there should be a very clear message sent by both sides, largely, probably, through a summit visit between Obama and Xi Jinping, that reaffirms the basis of the relationship, reaffirms the strong commitment of both sides, to peacefully resolving issues in Asia and with each other, reaffirms their commitment to dealing with common problems, and a desire to really try and work out what this new "New Type of Major Powers Relations" concept is.

Q: For the current tension over the Senkakus between Japan and China who is responsible?

A: I think both sides have responsibility. I think Japanese government mishandled it by how it messaged the purchase of the islands. But more importantly, there were probably other possible alternatives to purchasing that could have occurred.

And then China is to blame for the way it handled its response. I think it over-responded, overreacted. Senior members of the Chinese Foreign Ministry used provocative, inflammatory rhetoric, linking Japanese behavior with the right-wing movement in Japan, which in turn was linked to the possibility of a resurgence of Japanese militarism as in the 1930s. I mean, the latter is ridiculous.

Q: What should Japan do, then?

A: I think Japan has to find a way to acknowledge the existence of contention over these issues, without compromising on its basic sovereignty stance, if only to say, "We acknowledge that other people don't agree that these are, in fact, ours. The fact that they disagree with us indicates that, from their perspective, there is a dispute." The alternative is to establish a process whereby the two sides fall into a type of behavior that is restrained, and both sides tacitly restrain themselves from allowing people to land, from allowing government ships and aircraft to go in there as frequently, from allowing the press spokesperson making an announcement whenever somebody does something. You just begin to place it on a lower profile.

No more vehicle decals - Get ready to rip that sticker off your windshield Navy Times, June 3

Effective July 1, all bases that fall under Navy Installations Command are no longer requiring vehicle decals. The news came via a fleetwide message issued May 29. The decals, only in use stateside, have become a security threat and a liability, officials say. They've already been eliminated at Air Force and Army bases.

The Marine Corps is still hashing out its plan to do so.

With the Navy only weeks away from implementing its policy, here's what you need to know:

Why they're going away. In the U.S., post-9/11, decals present problems for base security. They are easily counterfeited, for one. Also, some sailors sell their cars to civilians and don't remove the stickers, said Ray Salamy, deputy program director for anti-terrorism at Navy Installations Command. "Decals posed a Trojan horse for us," he said. As a bonus, cutting decals will save \$750,000 annually.

Surprise vehicle checks. The real purpose of decals, installation officials said, was to ensure compliance with state requirements such as registration and insurance. So with decals gone, how will they do this? Salamy said bases will rely on random checks, similar to drunken driving checkpoints. Command authorized inspections such as these are not new, but you may see more of them with decals eliminated.

What do you do on July 1? The Navy recommends sailors remove decals on this day to reduce the chances your vehicle will be targeted by a criminal or terrorist attack. The identifying decals aren't supposed to be used to determine gate entry, so removing them should not result in longer waits at the gate, Salamy said. The military has required 100 percent ID-card checks since the Sept. 11, 2001, terrorist attacks, and the decal is not a substitute. If in practice, your sentries are waving lots of cars through the gate based on decals, that's a violation of policy and may be worth reporting, Salamy said, as it's a compromise of security.

Officer salutes. Commissioned officers will continue to be saluted under the new policy. Once an ID card is checked, a sentry will "render the proper salute, assuming traffic conditions and force protection conditions permit," installation officials state on a list of frequently asked questions. You can read them at www.cnic.navy.mil. You are also able to submit your own questions.

More changes. By July, the Navy expects to go operational with several automatic gates installed at Northwest Navy installations, Salamy said. The new gates are not intended to eliminate sentries, but will be a "low-man concept." They should free those sentries still on-site to focus on other things than ID cards, Salamy said. For example, scrutinizing passengers or vehicle contents.

Russia to send nuclear submarines to southern seas
Alexei Anishchuk, Reuters, June 1

Russia plans to resume nuclear submarine patrols in the southern seas after a hiatus of more than 20 years following the break-up of the Soviet Union, Itar-Tass news agency reported on Saturday, in another example of efforts to revive Moscow's military.

The plan to send Borei-class submarines, designed to carry 16 long-range nuclear missiles, to the southern hemisphere follows President Vladimir Putin's decision in March to deploy a naval unit in the Mediterranean Sea on a permanent basis starting this year.

"The revival of nuclear submarine patrols will allow us to fulfill the tasks of strategic deterrence not only across the North Pole but also the South Pole," state-run Itar-Tass cited an unnamed official in the military General Staff as saying.

The official said the patrols would be phased in over several years. The Yuri Dolgoruky, the first of eight Borei-class submarines that Russia hopes to launch by 2020, entered service this year.

Putin has stressed the importance of a strong and agile military since returning to the presidency last May. In 13 years in power, he has often cited external threats when talking of the need for a reliable armed forces and Russian political unity.

Fears of a nuclear confrontation between Russia and the United States has eased in recent years, and the Cold War-era foes signed a landmark treaty in 2010 setting lower limits on the size of their long-range nuclear arsenals.

But the limited numbers of warheads and delivery vehicles such as submarines that they committed to under the New START treaty are still enough to devastate the world. Putin has made clear Russia will continue to upgrade its arsenal.

Russia's land-launched Intercontinental Ballistic Missiles (ICBMs) would fly over the northern part of the globe, as would those fired from submarines in the northern hemisphere.

Both the Borei-class submarines and the Bulava ballistic missiles they carry were designed in the 1990s, when the science and defense industries were severely underfunded.

Russia sees the Bulava as the backbone of its future nuclear deterrence, but the program has been set back by several botched launches over the past few years.

Elbit to Construct a Submarine Base in Haifa Israel Defense, June 2

Preparations for the reception of the Israeli Navy's new Dolphin submarines are entering high gear: Elbit Systems has won a project for constructing the 'Polygon' - the name given to the new anchorage intended for the submarines at the port of Haifa.

The construction of the Polygon is a tremendous project, one that is required in light of the progression of the submarine's construction in German shipyards. Israel has acquired three new Dolphin submarines, which will join the three submarines it already possesses. According to foreign publications, the submarine can carry missiles with nuclear warheads.

The first two new submarines are slated to arrive to Israel over the course of the next two years. Israeli Navy teams have begun the reception processes in Germany.

The construction of the 'Polygon' is expected to take place in several stages. Elbit Systems is the chief contractor for the large-scale project. The Israeli company Bynet will be responsible for constructing the base's communication layout. The communication equipment will be provided by Cisco and the storage equipment will be provided by NetApp.

House Defense Appropriators Slash Obama's DoD Budget Request John T. Bennett, Defense News, June 4

WASHINGTON — A U.S. House panel dominated by pro-military Republicans has approved a 2014 spending bill that would give the Pentagon more than \$3 billion less than President Barack Obama is seeking.

The House Appropriations defense subcommittee is proposing a \$512.5 billion base Pentagon budget, \$3.4 billion smaller than Obama's request.

Like the House Armed Services Committee's 2014 Pentagon policy bill, the Appropriations subcommittee's bill simply ignores sequestration, which mandates about \$50 billion in national defense cuts next fiscal year.

A senior House aide said Monday that committees are obligated to budget to the House Budget Committee's annual spending resolution. Released by the lower chamber earlier this year, that budget measure would slightly inflate Pentagon spending while cutting from other parts of the federal budget.

The \$512.5 billion is \$5.1 billion smaller than the pre-sequestration amount the Pentagon received for this fiscal year. But after the mandatory cuts for 2013 are factored in, the subcommittee's funding level would be just over \$28 billion larger than the post-sequester Pentagon 2013 budget.

The same aide acknowledged Monday that, by budgeting to a level so much above sequester levels, lawmakers are operating in a "fantasy world." Like Obama, lawmakers are presenting Pentagon budget plans that could be implemented sequester-free, after Congress and the president strike a sequester-canceling "grand bargain" fiscal deal this summer.

There has been little progress so far, however, on that kind of sweeping pact.

House Appropriations Chairman Rep. Hal Rogers, R-Ky., said in a statement that the subcommittee “provides the funding necessary to advance our missions abroad, to prepare and equip our troops, and to ensure readiness and effectiveness of our military so that they can successfully face any threat to our land.”

The subcommittee is slated to mark up its 2014 defense appropriations bill on Wednesday morning. The full panel could mark up the bill next week.

“I have always maintained that this Subcommittee would not adversely impact the readiness of our military,” House Appropriations Defense subcommittee Chairman Rep. Bill Young, R-Fla., said in the same statement. “We have kept that commitment, as well as our commitment to the brave men and women, and their families, who selflessly serve our country.”

The subcommittee’s legislation mirrors the HASC’s authorization bill by proposing just over \$85 billion in war funding, a \$5 billion increase over Obama’s request.

“This funding will provide the needed resources for our troops in the field, including funding for personnel requirements, operational needs, the purchase of new aircraft to replace combat losses, combat vehicle safety modifications, and maintenance of facilities and equipment,” states a subcommittee summary of the bill.

The HAC-D bill would slice the Obama administration’s military procurement request by \$750 million, proposing \$98.4 billion to buy combat platforms, spare parts and other items.

Defense analysts of all political stripes have warned sequestration and mounting military personnel bills are poised to cause massive procurement cuts. To that end, the House subcommittee is proposing \$2 billion less than the enacted 2013 procurement level.

On Monday, during an event on Capitol Hill, former White House budget official Gordon Adams warned the ongoing downturn in U.S. defense spending will be “lopsided” unless infrastructure and personnel reforms are made.

In fact, unless such reforms are enacted soon, Adams — one of 25 defense analysts who signed a recent letter to senior lawmakers and top Pentagon brass on the subject — predicts “funds for forces and procurement [will] dry up.”

On specific weapon programs, the subcommittee proposes “\$15 billion to procure eight Navy ships, including fully funding two SSN-774 attack submarines; \$5.1 billion for 29 F-35 aircraft; [and] \$1.9 billion for 21 EA-18G Growlers.”

It also calls for “\$2.2 billion for 73 UH-60 Blackhawk and 37 MH-60S/R helicopters; \$1.5 billion for the National Guard and Reserve Equipment Account; \$1.8 billion for five Evolved Expendable Launch Vehicles; [and] \$1.5 billion for 18 C-130J variants.”

The Appropriations defense subcommittee also proposes spending \$220 million on Israel’s Iron Dome missile shield, which has been credited with stopping missiles fired at Israeli towns by the Hamas organization.

Another typical target for cuts when annual defense budgets come down are research-and-development coffers, a place the subcommittee turned to shrink the Obama request.

The panel is proposing \$66.4 billion for R&D in 2014, \$1.1 billion less than Obama sought and \$3.5 billion less than enacted for this fiscal year.

That \$66.4 billion would cover R&D work on the F-35 fighter, KC-46A tanker aircraft, P8-A anti-submarine/anti-surface warfare aircraft, a new bomber aircraft, the Broad Area Maritime Surveillance remotely piloted aircraft, a new ballistic-missile submarine and other high-profile programs.

The legislation also reflects Young’s practice of having staff scrub the Pentagon budget to identify things that could be cut, allowing those dollars to be used for other priorities.

“The bill reflects common-sense decisions to save taxpayer dollars where possible in areas that will not affect the safety or success of our troops and missions,” states the panel’s summary. “Some of these reductions include: \$1 billion in anticipated excess funding; \$437 million for the proposed civilian pay raise; and \$2.1 billion in savings from rescissions of unused prior-year funding.”

Draft House Bill Would Rescind \$3 Billion In Prior-Year Weapons InsideDefense.com, June 4

The House Appropriations defense subcommittee wants to rescind \$3 billion in funding previously allocated to Pentagon weapons-modernization accounts, cuts that would be imposed as part of a fiscal year 2014 defense spending bill that would also trim the Pentagon’s request for new weapons spending by \$1.8 billion.

According to a draft of the bill released today by the subcommittee, the panel would require the forfeiture of prior-year funds — including hundreds of billions of FY-13 dollars appropriated in April — that the subcommittee says are no longer needed. Some of the larger proposed bill-payers include \$1.4 billion in the ships modernization operations and sustainment account and a combined \$556 million from Defense Department research, development test and evaluation accounts.

“The bill reflects common-sense decisions to save taxpayer dollars where possible in areas that will not affect the safety or success of our troops and missions,” the subcommittee said in a press release.

The draft bill provides DOD \$512.5 billion for the Pentagon’s base budget in FY-14, excluding the military construction spending that is handled by a separate appropriations subcommittee. This amount is \$5.1 billion less than the enacted FY-13 defense budget and \$3.4 billion less than what the Pentagon requested.

Depending on the category of spending, the Pentagon has between one and five years to obligate funds appropriated in a fiscal year. For shipbuilding and military construction projects, the Defense Department has five years to put funds on contract, while weapon system procurement funding can be carried over for three years before it expires. Research and development funds are good for two years.

The draft bill would rescind funding appropriated in FY-11, FY-12 and FY-13, with most of the rescissions coming from FY-13. It does not identify which projects would forfeit funds.

In total, aircraft procurement would be cut by \$558 million, including \$443 million from the Air Force and \$115 million from the Navy, according to the draft bill. The catchall procurement accounts, which fund a wide variety of projects, would give up \$115 million, including \$12.6 million from the Marine Corps' "other" procurement account; \$38.9 million from Air Force "other" procurement; and \$72.7 million from defense-wide procurement.

The Navy's ship construction and conversion account would lose \$68 million. The national defense sealift fund would have \$42 million in prior year funds revoked, according to the draft bill.

Also slated for rescissions: Air Force missile procurement (\$70 million) and Navy weapons procurement (\$5 million).

Proposed cuts to research and development funding include \$380.8 million for the Army, \$49.3 million for the Navy, \$115 million for the Air Force, and \$213 million for defense-wide accounts.

The draft bill, according to the subcommittee statement, would provide a total of \$98.4 billion for procurement, \$2 billion below the FY-13 enacted level and \$750 million below DOD's request. "The bill includes \$15 billion to procure eight Navy ships, including fully funding two SSN-774 Attack Submarines; \$5.1 billion for 29 F-35 aircraft; \$1.9 billion for 21 EA-18G Growlers; \$2.2 billion for 73 UH-60 Blackhawk and 37 MH-60S/R helicopters; \$1.5 billion for the National Guard and Reserve Equipment Account; \$1.8 billion for five Evolved Expendable Launch Vehicles; \$1.5 billion for 18 C-130J variants; and \$220 million for the Israeli Cooperative Program - Iron Dome," the statement reads.

The research and development portion of the bill includes \$66.4 billion in funding, \$3.5 billion less than the FY-13 enacted level and \$1.1 billion below the Pentagon's request.

"Included in this funding is continued research and development of the F-35 Joint Strike Fighter, the KC-46A tanker program, the P-8A Poseidon, the new Air Force bomber program, the Broad Area Maritime Surveillance (BAMS) Unmanned Aerial Vehicle, the Navy's Future Unmanned Carrier-based Strike System, the Ohio-class submarine replacement, the Army and Marine Corps Joint Light Tactical Vehicle, the Army Ground Combat Vehicle, the Israeli Cooperative Programs, and other important development programs," the statement reads. — Jason Sherman #####

Military Construction-VA Spending Bill Advanced by House By Anne L. Kim, CQ Roll Call The House on Wednesday passed a fiscal 2014 spending bill to fund military construction and veterans programs after adopting amendments to address the backlog of veterans' disability claims.

The chamber passed the bill (HR 2216), the first fiscal 2014 appropriations measure to be advanced by the House, by a vote of 421-4. Programs funded by the legislation would get a total of \$157.8 billion for the upcoming fiscal year; \$73.3 billion would be discretionary spending, with \$84.5 billion in mandatory funds.

Before passing the measure, the House gave voice vote approval to an amendment from Jack Kingston, R-Ga., that would cut the pay of Veterans Affairs Department officials by 25 percent unless the number of disability compensation claims older than 125 days is reduced at least 40 percent by July 2014.

Kingston said that despite Congress increasing money in recent years for the VA to move to an electronic system for health records and disability claims, the department has a backlog of more than 865,000 such claims, with most of them pending for more than 125 days.

Fellow Georgian Sanford D. Bishop Jr., the top Democrat on the panel with jurisdiction over the bill, said that while the backlog is "absolutely unacceptable," the proposal was "unnecessarily punitive." He argued that provisions already in the bill would help the department achieve its goal of eliminating the backlog by 2015.

The panel rejected 192-231 an amendment by Steve King, R-Iowa, that would bar funds from being used to implement local prevailing-wage requirements for federal construction contractors under the 1931 labor law known as the Davis-Bacon Act.

Throughout the day Tuesday, lawmakers blasted the department for allowing the backlog to continue, describing the problem as "disgraceful" and "shameful."

The underlying measure would provide more than \$290 million to help the VA meet its goal of eliminating the claims backlog by 2015, providing funds for its paperless claims-processing system and the digital scanning of medical and benefit records. It also would direct increased monthly reporting requirements.

The measure initially proposed withholding the bulk of the money for an electronic medical records system until the Government Accountability Office confirms that it has been integrated into a single system for both the VA and Defense departments. Under that wording, Congress would have needed to approve the Defense Department and VA's timeline and spending plan for the program.

The House gave voice vote approval to a John Culberson, R-Texas, amendment that would replace the medical records provisions with language to bar funding for the medical records system unless it is outlined in a joint strategic plan specified in the bill.

Culberson said the amendment was intended to allow more time for several defense and veterans panels to agree on what language to include in their own measures, adding that lawmakers are tired of the delays in deploying the integrated electronic health system.

"This has to be solved immediately," he said.

The House also gave voice vote approval to an amendment by Jon Runyan, R-N.J., that would bar funding for a new round of base realignments and closures.

The House rejected 170-254 a James P. Moran, D-Va., proposal that would remove a section of the bill that would bar funding to construct, renovate or expand facilities to house Guantánamo Bay detainees in the United States.

Top-Line Figures

The discretionary total in the bill would be \$1.4 billion less than President Barack Obama requested but \$1.4 billion more than the fiscal 2013 enacted level and \$2.4 billion more than the post-sequestration level, according to the Appropriations Committee. The discretionary total includes \$54.5 billion in advance funding for VA medical programs that has already been appropriated. The measure also would provide \$55.6 billion in advance fiscal 2015 funding for these programs.

Veterans programs would see a boost in funding from the enacted levels for the current year, while military construction would see a decrease.

As part of the rule to allow for consideration of both the Military Construction-VA appropriations bill and Homeland Security spending measure (HR 2217), the House also agreed to allow enforcement in the chamber of a House-passed fiscal 2014 budget resolution until Congress adopts a final budget. Both the House and Senate have passed their own budget resolutions (H Con Res 25; S Con Res 8), but lawmakers have not negotiated a final measure.

DoD Document Sheds First Clear Light On AirSea Battle: Warfare Unfettered Breaking Defense, June 3

Like the Holy Trinity or the designated hitter rule, the concept known as AirSea Battle has been much discussed but little understood. The Defense Department released an official and unclassified summary of the concept for the first time this evening on a Navy website. AirSea Battle would break down longstanding barriers: barriers to cooperation among the four armed services, barriers separating domains of conflict like submarine warfare and cyberspace, and, most problematically, barriers that have kept past crises from escalating to greater destruction and even, ultimately, to nuclear war.

Over a decade ago, Chinese military theorists started talking about “unrestricted warfare.” AirSea Battle is unrestricted warfare, American style. It’s central to a Pacific nightmare scenario with China, to reopening the Persian Gulf if it were blockaded by Iran, and to waging interservice budget battles in Washington. It’s been dissected by thinktanks, criticized by Sinophile strategists, and alternately envied and imitated by the Army. Yet unlike its acknowledged inspiration, the Army-Air Force concept of AirLand Battle against the Soviet Union, AirSea Battle remains more vague than vivid. Part of the problem is so much of it is classified, part is that the idea is still evolving, but some of the blame must fall on the Air Force and Navy, the concept’s chief proponents, who have never articulated it all that well in public – that is, until now:

Back in September, Rep. Randy Forbes, an advocate of AirSea Battle and chairman of the House armed Services seapower and emerging forces subcommittee, wrote an op-ed for us urging the services to come out with “an unclassified version of the AirSea Battle concept.” Nine months after Forbes’s entreaty and almost four years after then-Secretary of Defense Bob Gates officially tasked the Air Force and Navy – joined belatedly by the Army and Marines – to develop the AirSea Battle idea, we finally have an unclassified explanation of what it actually is. Better yet, with some context and a little parsing of military jargon (which we’ll try to do here), this summary is remarkably lucid.

Start with the basics. AirSea Battle began as, and remains, an attempt to solve the operational problem known in clunky Pentagon jargon as Anti-Access/Area Denial or (even worse) A2/AD. In essence, anti-access is how an enemy keeps U.S. forces out of a region altogether, area denial is how they bog us down once we get there, but the two inevitably overlap.

Adversaries have obviously tried to keep us out and bog us down before. The new danger, however, is that technologies that were once an American monopoly are now proliferating to China and then onwards to anyone who can buy weapons from China, which is basically anybody who’s got the cash. So after decades of U.S. forces being able to fly, sail, and drive more or less anywhere they wanted (even roadside bombs, for all the casualties they inflict, never actually stopped us moving around Afghanistan or Iraq), we increasingly have to worry about sophisticated weapons that can reach out and touch us at long range, from “a new generation of cruise, ballistic, air-to-air, and surface-to-air missiles” (in the summary’s words) to anti-satellite and cyber attacks.

That said, the summary goes on, “even low-technology capabilities, such as rudimentary sea mines, fast-attack small craft, or shorter range artillery and missile systems” can keep us from stopping aggression “in certain scenarios” which they decline to name. (One much-discussed example, though, would be an Iranian attempt to close the Strait of Hormuz to oil shipping). But it’s the high-tech threats, especially ballistic missiles and cyberattacks, that worry strategists most, not only because they could keep the U.S. from intervening in a regional crisis but because they could enable an enemy to strike the United States itself. As the summary warns, “even the U.S. homeland cannot be considered a sanctuary.”

What the new document makes clear, in a way it has not been clear before (at least to me), is how the U.S. military intends to respond. In essence, if an enemy can now reach out and touch us in ways and at distances they never could before, we’re going to find all sorts of ways to reach out and touch them back.

The document describes this as a “cross-domain” “attack in depth” using “both kinetic and non-kinetic means.” In plain English, this means we won’t just sit back and defend ourselves. We won’t just try to shoot down enemy missiles after they launch, block

cyberattacks once they're already underway, or jam sensors that are already scanning us, although all those defensive activities are certainly necessary. Nor will we just respond tit-for-tat, with our airplanes shooting down the airplanes that attack us, our ships shooting at their ships, our cyberwarriors hacking theirs, although such "symmetrical" forms of fighting remain important, too.

Instead, we'll throw all sorts of wrenches into the enemy war machine at every possible point, what the top officers of the Air Force and Navy, Gen. Mark Welsh and Adm. Jonathan Greenert, called in an article they co-wrote "breaking the kill chain." Of course you should try to shoot down the enemy missile once it's launched. But it's much better to blow up the launcher before it actually launches, or to blind the radar that's trying to find you, or, best of all, crash the enemy communications network that is orchestrating the attack in the first place, whether by blowing up their headquarters, jamming their wireless datalinks, or hacking their computers. Instead of trying to shoot down an enemy satellite, just bomb the ground control station to which it's transmitting data, or better yet hack into that data stream to feed the enemy false information.

Instead of fighting fire with fire, in other words, throw water on it, or sand. As the summary puts it, "cyber or undersea operations can be used to defeat air defense systems, air forces can be used to eliminate submarine or mine maritime threats, or space assets can be used to disrupt adversary command and control."

Here's where it gets difficult, of course. All these capabilities answer to different commanders in the theater. Back home, they are all organized, trained, and equipped by four different armed services, each one further subdivided into its own stovepiped fiefdoms.

Overcoming these barriers even partially has been a decades-long struggle for what the military calls jointness. It took 20 years, for example, just to get Air Force and Navy aircraft to work properly together. Back in the 1991 Gulf War couriers had to fly the strike plans between airbases ashore and carriers at sea because the two services' transmission systems were not compatible. Since the 1980s debacles of Desert One and Grenada, which prompted Congress to pass the 1986 Goldwater-Nichols Act over the objections of Defense Secretary Caspar Weinberger and Navy Secretary John Lehman, there has been tremendous progress.

In the current conflict, Army and Marine ground troops have worked together closely in Afghanistan, and Air Force and Navy planes provided close air support to both. But that's still a long way from, for example, a Navy pilot over the West Pacific needing an enemy radar shut down in a hurry and getting an Army signals officer at the National Security Agency in Fort Meade, Maryland to hack into it for him, on demand in a life or death situation. Yet that seems to be precisely the kind of thing that AirSea Battle envisions.

"The purpose of ASB is not to simply conduct operations more jointly," the summary says sweepingly. "Commanders, whether defending or attacking, must have ready access to capabilities, no matter what domain they reside in or which commander owns them." (The staggeringly infelicitous term the document uses to describe this concept is "networked, integrated forces capable of attack-in-depth to disrupt, destroy and defeat adversary forces (NIA/D3).") Let's all pray that one never catches on; anti-access/area denial is bad enough).

That kind of intimate cooperation can't be imposed by the joint theater commanders on their own, and it needs more than just better communications networks. It requires, instead, new "procedures [and] authorities" to let those operational commanders reach across traditional lines of jurisdiction and bring in capabilities they need. (The document doesn't say, but such changes would require new Pentagon policies and perhaps new laws, developments we'll be watching for and writing about).

This new jointness also must reach all the way back into the core of the armed services' jurisdictions, into how troops are trained, units organized, and equipment developed and procured. The services need "mutually developed capability gaps" – i.e. a shared official analysis of the problem – and "integrated solution sets" – i.e. a shared official program to solve it. That kind of coordination would require changes in how the services train to fight and could affect every defense contract for items more complex than combat boots.

As awe-inspiring as the ensuing turf wars will be, however, they're not nearly as scary as the real wars. Tit-for-tat, unimaginative "symmetrical" combat – my planes dogfight your planes, my subs hunt your subs – is not a particularly effective way of winning conflicts. But it is at least modestly effective at controlling escalation. Both sides know, more or less, what to expect: If we do X, the other guy will probably do Y or Z, and Z is pretty bad, so maybe we don't want to do X, after all.

Predictable, symmetrical responses are a big part of why the Cuban Missile Crisis, for example, did not lead to war. The Soviets put missiles in Cuba, and the Joint Chiefs of Staff advised bombing the missile sites, but Kennedy realized Russians would strike back. So instead we used our ships to stop their ships that were trying to bring more missiles in. It was a near-run thing, but it worked, and no one got blown up. Conversely, using new weapons and tactics can provoke people to retaliate in ways you don't expect. The Germans thought a proportionate response to the Royal Navy's blockade of German ports would be for U-boats to sink every ship bound for Britain, including neutral ones, but Woodrow Wilson disagreed, which is why the U.S. ended up entering World War I.

In the future AirSea Battle, that "cross-domain attack in depth using both kinetic and non-kinetic means" makes the old rulebook irrelevant. If, during some crisis over Taiwan or the Japanese-held Senkaku Islands, for example, missile launchers on the Chinese coast threaten our ships in the Western Pacific, the Chinese would certainly expect us to try to shoot down any missiles when and if they're actually launched. But if a missile launcher is about to fire on our ships and we preemptively bomb it, is that proportional use of force or irresponsible escalation? If we strike a missile site on the Chinese mainland to protect our ships, should we expect the Chinese to retaliate against our Pacific Fleet or against Los Angeles?

Or what if, instead, we neutralize the missile threat before it ever launches, let's say by hacking the Chinese satellite in orbit that spots our ships or the Chinese computers in Beijing that coordinate the attack? Does such a cyber-offensive count as an escalatory, inflammatory threat against the core of their national command-and-control system? Or, since nobody got hurt and nothing blew up, is

it not even an act of war? If you want a chance of keeping a conflict from escalating, each side had better understand what the other considers escalation – and the fight for cyberspace has, by some measures, already begun.

It is unnervingly unclear how thoroughly the people working on AirSea Battle have thought this out. Admittedly, they're only four years into it, and it took us much longer to work out nuclear deterrence in the Cold War.

"The argument goes both ways," wrote one Navy officer, who's read the classified version of the concept, in an email exchange with me today. "[You can argue either] because we are more capable (with ASB), we have a better deterrent and can avoid conflicts, or, because we are more capable, the adversary is forced to resort to nuclear weapons sooner."

"The ASB concept assumes nuclear deterrence holds (which I know some think is a poor assumption)," the officer acknowledged. That means hard thinking about the risks of escalation "may not be as prominent in ASB discussions as some would like."

None of this is to say that AirSea Battle is a bad idea, or inherently escalatory, or even primarily about fighting China. "The Concept is not an operational plan or strategy for a specific region or adversary," the summary insists, as Pentagon officials have for years. When I asked Rep. Forbes and his staff about escalation, they agreed: "Air-Sea Battle is a limited operational concept; it is not a doctrine, a military strategy, or a warfighting plan" against any particular country, Forbes responded in an emailed statement.

While people may laugh behind their hands at these denials, there is some truth in them. We do need to think about fighting China, because the People's Liberation Army is the forcing function, the cutting-edge example of an anti-access/area denial threat. But while it is unlikely we will ever go to war with China, it is very likely we will have to fight someone, somewhere who has imitated China and even bought their equipment and learned from Hezbollah's battles with Israel. It's similar to how we fought Soviet-equipped armies in Iraq and Vietnam without ever fighting the Soviets themselves. We put tanks and planes and missiles in Western Europe, organized according to the AirLand Battle doctrine, not to provoke the Soviet Union into attacking but to deter it.

The ideal for AirSea Battle would likewise be to deter conflict, not to escalate it. "As for escalation, the potential is there in any conflict, but I don't see the ASB concept as directly affecting the chances either way," the officer went on. "The sensitive game of 'know your enemy,' strategic posturing and messaging, and calculated risk-taking still apply as always."

To play that game, of course, it helps for both sides to know the rules, which is precisely why official documents like this one matter. They don't just lay out AirSea Battle for the benefit of Washington pundits. A key audience for this document is the Chinese political and military leaders. It helps inform Iranian, North Korean, and other foreign policymakers as well.

"The ongoing confusion about the actual scope of ASB is exactly why it is so important for DoD to carefully articulate the limited nature of this concept," Rep. Forbes told me. "I have consistently argued that the success of ASB will depend not just on its implementation within the Department of Defense, but also our ability to effectively communicate its true intent to both allies and adversaries alike."

ANOTHER MOMENT IN THE WORLD OF INSANITY [Mike H., Editor]

Iranian students to attend int'l underwater robot competition in US

www.abna.ir, June 3

A team of Iranian students will take part the US international underwater robot challenge, Remotely Operated underwater Vehicle (ROV) in Seattle. (Ahlul Bayt News Agency) - Islamic Azad University students at Ize Branch, Khuzestan Province, southwestern Iran, sent their documents for the tournament last March. Their requests for joining the match were later accepted by the US submarine training center.

The matches scheduled to be held in Washington will run on June 20-22, to be attended by NASA, the world's large oil companies as well as rivals from the US, Britain, Russia, China, Hong Kong, Singapore and Thailand.

The students are the only representatives of Iran in the event.

The university's students have also managed to build underwater robots locally. The equipments required for construction of the robot were formerly imported from other countries, but now they are built locally.

Underwater robots can be used in oil, dam-building and digging industries.

Iran Plans to Start New Missiles and Submarine in Near Future

Sara Rajabova, Azernews.az, May 31

Iran plans to unveil new missiles and a submarine in the near future.

Iranian Defense Minister Brigadier General Ahmad Vahidi announced on May 29 that the ministry will unveil a series of new missiles and a submarine manufactured by the country's experts and engineers in the near future, Fars news agency reported.

He also said that the country will also inaugurate a space center soon.

The Iranian Army has recently test-fired different types of newly-developed missiles and torpedoes and tested a large number of its home-made weapons, tools and equipments, including submarines, military ships, artillery, choppers, aircraft, UAVs and air defense and electronic systems, during massive military drills.

Last week, Vahidi announced that the defense ministry will supply large numbers of different types of missiles to the country's Armed Forces and unveil different defense projects in coming days.

He said that the country's latest defense achievements will also go on display in the next few days, including a special space center.

Earlier, the Iranian Defense ministry has inaugurated a facility destined for mass production of a new air-defense system.

The new system, Herz9 (Protector) which has been designed and developed by Iranian experts at the Defense Industries Organization is capable of detecting, identifying and intercepting low-altitude targets through automatic controls.

According to the reports, the system enjoys high mobility and night operation capability and can be connected to the country's integrated air-defense network.

Besides, Iran has unveiled its first domestically developed minesweeping system.

Iran is now among a few countries possessing the technology to defuse and clear naval mines, the Iranian commander said on the sidelines of the ongoing minesweeping drill in the country's southern waters where the new system was launched.

China nuclear stockpile grows as India matches Pakistan rise

China, India and Pakistan bolstered their stockpiles as they added an estimated 10 warheads each to their inventories

Livemint.com, June 4

Updated: Tue, Jun 04 2013. 12 32 AM IST

London: China, which has the world's second-largest military budget behind the US, expanded its nuclear-weapons arsenal last year, with India and Pakistan also bolstering their stockpiles, a research institute said.

The three added an estimated 10 warheads each to their inventories, with China's arsenal now reaching 250 devices, the Stockholm International Peace Research Institute (Sipri) said on Monday in releasing a new yearbook. Pakistan holds 100 to 120 units and India 90 to 110, while North Korea may have as many as eight warheads with an uncertain operational status, it said.

As efforts have intensified among nuclear states to curb the proliferation of the weapons, the international focus has shifted to stopping Iran from joining the ranks. At the same time, the US and others are working to update even if not expand their warheads and the ability to deliver them.

"The long-term modernization programmes underway in these states suggest that nuclear weapons are still a marker of international status and power," said Shannon Kile, a senior researcher at the organization. "All are making qualitative improvements."

In Iran, which the US and European countries are trying to block from gaining such weapons, "we are seeing a steady expansion in the scope and also the pace of its nuclear programme", Kile said.

Shrinking arsenal

The global nuclear weapon arsenals shrank to about 17,265 warheads at the start of the year from 19,000 a year earlier as the US and Russia continue eliminating them under bilateral arms control agreements, Sipri said. Russia retains the largest inventory, with 8,500 warheads, ahead of 7,700 held by the US.

Russia and the US have embarked on large renewal programmes, Kile said. Both countries have committed to developing new long-range bombers to replace aging aircraft.

"Russia is moving to a smaller force, but a more capable force," Kile said.

The US, with the world's largest defence budget, is set to spend \$214 billion in the next decade on related activities, he said. "The irony is that with President Obama's Prague address in 2009 calling for the gradual elimination of nuclear weapons, in fact the US is determined to retain its triad of nuclear forces for the indefinite future," Kile said in reference to the mix of long-range bombers, missiles, and submarine-launched capabilities the Pentagon maintains.

French nukes

China, too, is pursuing a "qualitative" improvement of its inventory, Kile said. US spending, including on long-range conventional strike capabilities, is driving China to make its own missiles more mobile and harder to attack, he said.

"We have always kept our nuclear capability at the lowest level commensurate with the need for national security," China foreign ministry spokesman Hong Lei said at a briefing in Beijing on Monday. "China hopes the outside world does not make groundless speculation about China's limited nuclear capability."

India is similarly working on expanding its capabilities to use nuclear weapons through new ballistic missiles in development. "With India we see the gradual expansion of its longer-range ballistic missile capabilities which are not really targeted at Pakistan but rather at China," Kile said.

The French nuclear warhead inventory, the world's third largest, remained unchanged at 300 units with the UK also maintaining a level stockpile at 225 devices. Israel, which has never publicly acknowledged its stockpile, is estimated to remain at 80 warheads, Sipri said.

"There was an extraordinary number of tests of nuclear-capable launch systems conducted in 2012," Kile said. "That really is a good indicator of the commitment of all of these countries to modernize or expand their arsenals."

China Ramps Up Maritime Strategy South China Morning Post, June 4

The People's Liberation Army has ramped up China's maritime strategy with the weekend's confirmation of PLA Navy operations within the 200 nautical mile exclusive economic zone (EEZ) around a U.S. territory, mainland analysts say. They say it marks China's acceptance of international norms in maritime affairs, while others view it as increasing its challenge to other powers in the region.

Mainland experts on the international law of the sea said the move suggested a significant change in China's maritime strategy and development policy, while some defence analysts said the missions ordered by Beijing significantly raised the likelihood of a confrontation between China and other regional powers.

Some analysts said the policy, revealed at the Shangri-La Dialogue in Singapore at the weekend, also belied China's repeated protestations that its intent was purely peaceful.

"At meetings like the Shangri-La Dialogue, China is always trying to explain that it is focused on moving forward in a peaceful way, but I don't think it has changed its military policy at all," said Masayuki Masuda, a China expert at Japan's National Institute of Defence Studies.

It is assumed the territory is the Pacific island of Guam, an important outpost for the U.S. military in the western Pacific, and that the waters around Hawaii and along the West Coast of the United States are still too distant for operations by the PLA Navy. China and the U.S. have struggled to agree on rules for operating on the high seas amid rising tensions across the region as China's military strength grows. The other assumption, according to some analysts in the region, is that China is using her fleet of submarines to enter the U.S. EEZ.

In the past month, Japan has detected three foreign submarines near the Okinawa Islands. Japanese officials say they know the nationality of the vessels and have made diplomatic representations to that government.

Beijing has long complained about U.S. warships exercising their right of passage through China's EEZ. The decision to exercise the same right in America's backyard is an indication to Washington that Beijing now has the capability to do so.

A professor of international relations at Tokyo's Meiji University, Go Ito, said China's position was hypocritical because it thought of its 200 nautical mile EEZ as its "exclusive political zone and its territory."

But Zhao Yadan, a maritime expert with Shanghai University of Political Science and Law, said it was a significant development in China's maritime policy and suggested "Beijing is moving towards international norms ... That says that Beijing is accepting the international norms, which emphasise the right of free navigation on the high seas," Zhao said.

Ni Lexiong, director of the university's Institute of Maritime Strategy and National Defence Policy, said it reflected Chinese leaders' "changing concept of maritime affairs following the rapid development of China's maritime industry and rising strength of its naval force in the past decade."

Ito said Japan had been watching the PLA Navy carefully for some time and he believed China would use its submarines to expand the scope of its activities in the Pacific. "The potential for a confrontation is serious," he said.

Meanwhile, General Qi Jianguo, deputy chief of the general staff of the PLA, told the Shangri-La Dialogue at the weekend that Beijing would like to "put aside" maritime territorial disputes and resolve differences through dialogue.

New Coveralls On the Way For At-sea Sailors Mark D. Faram, Navytimes.com, May 30

Nearly six months after revelations the Navy Working Uniform Type I would "burn robustly" and melt when exposed to fire, fleet leaders have put the Navy on the path to issuing all sailors fire-retardant clothing while afloat.

Adm. Bill Gortney, commander of U.S. Fleet Forces Command, and Adm. Cecil Haney, commander of U.S. Pacific Fleet, announced Thursday a three-part plan that includes issuing two new fire-retardant coveralls, the first within nine months and a longer-term solution over the next three years.

"Safety is integral to every duty our men and women perform and this is something we can do to help protect them in rare cases where a fire may break out aboard a ship," Gortney said in a release.

The first new coverall, the release said, will take its design from the existing standard-issue coverall, but will be made with the fire-retardant fabric already worn by sailors working in repair lockers.

Similar to the NWU Type Is, standard coveralls offer no fire protection and are made of a poly-cotton blend that would also melt, exacerbating sailor injuries in the event of a fire.

This new interim coverall would be used only by surface forces and for carrier crews except those on the flight deck who have their own FR gear. Coverall variants such as the "electrical coveralls" worn by electricians and "engineering coveralls" worn in main propulsion spaces are still authorized.

Submariners will continue to use the issue polyester and cotton coveralls for now as they have "low-lint" requirements.

The final part of the plan, expected to last three years, is to develop a new fire-retardant coverall that meets the needs of all communities in a joint effort between the Navy Exchange and the Defense Logistics Agency. The release says this coverall would be fire retardant, provide "arc flash protection and contains low lint levels."

Fleet officials, in a news release, said they would “make available as organizational clothing” the new coverall, but stopped short of saying its wear would be required.

The release also didn’t say whether commands would have to cover the additional costs of issuing the new coveralls.

This announcement comes midway through an effort examining fire risks for sailors at sea. A working group tasked with examining organizational clothing recently wrapped its investigation, and this coverall initiative was born from it. A second working group, now underway, is looking specifically at the NWU.

Effective immediately, fleet leaders are trying to better educate sailors to what the fire risks are while afloat, and to minimize injuries.

Your chance to sound off

Fleet leaders have been talking for months about fire risk, but we want to hear from you.

Do you think this coverall plan is the right way forward? Should the Navy develop and pay for two new coveralls?

As for the NWU, do you think it should remain a shipboard uniform or be allowed only at shore commands? Or would you like to see a new, fire-retardant version of the Type Is made for shipboard use?

Send your comments to reporter Mark D. Faram at mfaram@navytimes.com. Your comments could appear in an upcoming issue of Navy Times.

No Longer Unthinkable: Should US Ready For ‘Limited’ Nuclear War? Sydney J. Freedberg Jr., Breaking Defense, May 30

FORCE ASSOCIATION HQ: For more than 60 years, most Americans have thought of nuclear weapons as an all-or-nothing game. The only way to win is not to play at all, we believed, because any use of nukes will lead to Armageddon. That may no longer be the game our opposition is playing. As nuclear weapons proliferate to places that might not share our reluctance to use them in small numbers, however, the US military may face a “second nuclear age” of retail Armageddon for which it is utterly unprepared.

Outside the US, both established and emerging nuclear powers increasingly see nuclear weapons as weapons that can be used in a controlled, limited, and strategically useful fashion, said Barry Watts, an analyst with the Center for Strategic and Budgetary Assessments, arguably the Pentagon’s favorite thinktank. The Cold War “firebreaks” between conventional and nuclear conflict are breaking down, he wrote in a recent report. Russia has not only developed new, relatively low-yield tactical nukes but also routinely wargamed their use to stop both NATO and Chinese conventional forces should they overrun Moscow’s feeble post-Soviet military, Watts said this morning at the headquarters of the Air Force Association. Pakistan is likewise developing tactical nukes to stop India’s much larger military. Iran seeks nuclear weapons not only to offset Israel’s but to deter and, in the last resort, fend off an American attempt to perform “regime change” in Tehran the way we did in Baghdad. The US Air Force and Navy concept of “AirSea Battle” in the Western Pacific could entail strikes on the Chinese mainland that might provoke a nuclear response.

It’s precisely because US conventional power is so overwhelming that the temptation to turn to nuclear weapons to redress the balance is so irresistible. Ten years ago, the Iraqis sidestepped American dominance in the middle of the spectrum of conflict – regular warfare with tanks, planes, and precision-guided non-nuclear weapons – by going low and waging guerrilla warfare, for which the US proved painfully unprepared. In the future, nuclear proliferation means more and more countries will have the option to sidestep US conventional power by going high and staging a “limited” nuclear attack, for which we aren’t really prepared either. Indeed, some countries, notably a nuclear Iran with its terrorist proxies and North Korea with its criminal ties and special operations forces, could outflank America’s conventional military from both sides at once.

So, could the US military keep going after losing an Army brigade or a Navy aircraft carrier to a tactical nuclear strike? “I don’t think we’ve thought about continuing to do conventional operations in an environment in which some nuclear weapons have been used, [not] since the Cold War,” Watts told me after his talk. “You’ve got to have equipment that continues to work in that environment, and, in general, we don’t.”

For example, one of the ways the Army economized on its new “Nett Warrior” communications gear for foot troops was to scrap the requirement for its circuit to survive the electromagnetic pulse, or EMP, from a nuclear detonation, which can spread far below the lethal blast and radiation effects: Such shortcuts make sense for Afghanistan and Iraq, but not for Korea.

“So there are a lot of things you might want to invest in, to put it mildly,” said Watts.

One particularly controversial suggestion Watts offered is for the US to invest in new tactical nuclear weapons of its own. Currently, Watts argued, if an enemy attacks with a relatively low-yield atomic bomb, America’s choices for a response are limited to conventional strikes or thermonuclear weapons, with very little in between.

“The problem is most of the warheads we’ve retained... are huge weapons,” Watts said. “The ones on the [submarine-launched Trident missiles are 450 kilotons.” The Air Force’s B-61 warhead is small enough to fit in the new F-35 Joint Strike Fighter, and its yield can be “dialed down” to as low as an 0.3 kiloton yield, but the B-61 is a 60-year-old design that’s been out of production for years, although old bombs have been modernized. Said Watts, “Congress’s absolute prohibition about developing new warheads... makes it very difficult for us to have credible nuclear weapons that could be used in a limited way, not at the Armageddon level.”

Adversaries are less likely to be deterred by America’s nuclear arsenal if they decide we won’t strike back with our big bombs in response to a limited, low-yield nuclear attack on US troops. It’s even less credible the US will retaliate massively if the adversary stages the nuclear strike on its own soil as a last-ditch defense against “regime change,” as Russia has wargamed and as Iran is no doubt tempted to do. Least credible of is US nuclear retaliation for a nuclear attack that doesn’t actually kill anyone: An enemy with even modest space capability can detonate a nuclear warhead high in the atmosphere, where it will generate a high-altitude electromagnetic

pulse (or HEMP) that disrupts the electronics on which the US military depends without actually taking any lives. (Congress has held hearings on electromagnetic pulse in the past, albeit focused on threats to the American homeland rather than US forces abroad, but legislative interest has waned since the 2012 defeat of Maryland Rep. Roscoe Bartlett, the Hill's foremost hawk on EMP).

Whether it's morality or lack of suitable weapons that holds the US back from retaliating to a limited nuclear attack in kind, the American military at least needs to plan for how to take an atomic hit and keep on going. "You may end up fighting a nuclear/EMP environment even though you're not using those kinds of weapons yourselves," Watts said.

Watts is less worried about the threat of nuclear terrorism than he is about nation-states. He doubts Iranian mullahs, for example, would trust even their favorite proxies, Hezbollah, with a nuclear weapon. But he's skeptical of the conventional wisdom that the Chinese have sworn never to use nuclear weapons except in response to a nuclear attack on them.

"If you start digging into the literature [by Chinese strategists], they say all the politically correct things in the front of the book about how we're not going to use nuclear weapons first," Watts said. As you read more deeply, however, he found an unnerving willingness to consider nuclear detonations to generate EMP, for example, under the special circumstances of what Chinese doctrine called "local high-tech warfare under informationalized conditions."

Such special circumstances might well arise in a Western Pacific war, perhaps triggered by a Sino-Japanese clash over the Senkaku Islands, in which the US came to an ally's defense by waging a long-range AirSea Battle. In theory, both sides could swear off strikes on each other's homelands and try to limit the fighting to the air and sea. But there's one big problem: While America's main weapons for a naval battle are ships, submarines and aircraft launched from carriers at sea, China's naval arsenal depends heavily on long-range sensors and missiles based on land. The US would either have to take shots from Beijing's best weapons without responding or escalate to an attack on China's coastal provinces.

Watts did not discuss this topic in detail, but another strategist at the discussion did. "The issue is escalation... if you cross the Chinese coastline," said Peter Wilson, a national security consultant. "How do you keep the war regional?" Even if the US strike causes no Chinese casualties – for example, a precision missile or even cyber attack that shut down China's power grid – "the reply may be a HEMP shot over Hawaii."

"We've gotten very used to bombing countries, going downtown and working our will" from Baghdad to Belgrade, Wilson said. When the target has nuclear weapons, however, even using America's fading conventional superiority starts looking a lot more dangerous.

WWII Sydney Harbour Attack Remembered **Stefanie Menezes, Au.news.yahoo.com, May 31**

A daring Japanese submarine attack on Sydney Harbour that killed 21 young sailors has been remembered as an event that changed Australia's identity.

Nineteen Royal Australian Navy (RAN) and two British Royal Navy personnel died when the converted ferry HMAS Kuttabul was sunk by a Japanese midget submarine just after midnight on June 1, 1942.

The submarine, known as M24, was one of three midget submarines that entered Sydney Harbour that night.

It fired torpedoes at the cruiser USS Chicago but missed and instead hit HMAS Kuttabul.

The submarine then disappeared until 2006, when scuba divers discovered its wreck off a Sydney beach.

The attack will be remembered as a time when war came to Sydney Harbour, Commander Todd Wilson from the RAN told the 71st memorial service at Garden Island in Sydney's east on Friday.

"It was a night in history where the city and nation's perspective that our geographic isolation would protect us was shattered," he said.

RAN Commander Lachlan King's father, Scott King, was one of the remaining survivors from the attack.

"They were just young men, and I think it's important that we remember the sacrifices they made.

"I don't think my father was the free soul that he may otherwise have been had he not had to experience that sort of tragedy," Commander King told AAP.

The ceremony also recognised all six Japanese submariners who died.

"That's an important part of the memorial," Commander King said.

"The reconciliation of our two countries and the fact that with reconciliation, we avoid the necessity for great tragedies as that were experienced here in Sydney Harbour."

