NAVY NEWS WEEK 10-2

4 March 2019

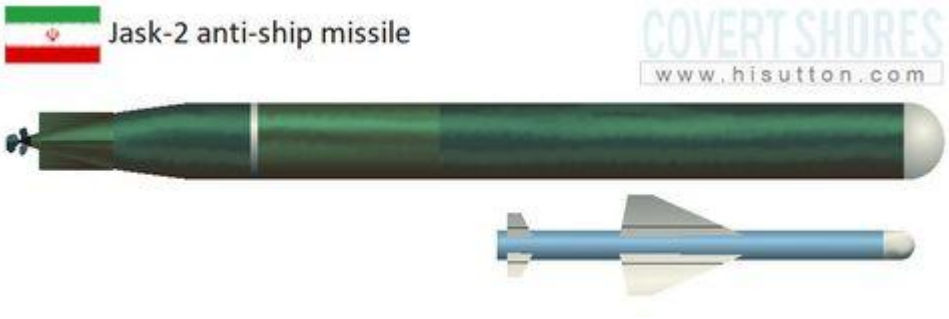
Iran Shows off Unusual Ship-Killing Torpedo/Missile Combination

The system uses a torpedo to launch an anti-ship missile.

By Kyle Mizokami
Feb 28, 2019

-Getty Images

Footage of a new Iranian missile that can be launched from a submarine appears to be genuine, according to an authority on submarines and submarine-launched weapons. The new ship-killer is designed to leave a submarine encapsulated in a torpedo. The missile then separates from the torpedo, homing in on enemy ships. The new missile, called Jask-2, is just over ten feet long with a range of only 19 miles. It's an Iranian copy of a Chinese missile called C-704 that's designed to be carried by Iranian Ghadir-class midget submarines (above). According to submarine authority H.I. Sutton, author of the *Covert Shores* undersea warfare blog, the missile is launched in a somewhat unusual manner. "*For submarine-launched missiles like Harpoon and Exocet, the capsule is expelled from the submarine and rises to the surface where the end comes off and the missile motor is ignited*," Sutton explained to Popular Mechanics. "*Jask-2 is unique because the capsule has its own motor.*"



H.I. Sutton/Covert Shores

He continues: "*Initial analysis suggested that some of the footage showed a normal torpedo being launched, with the submarine only partly submerged. This is in fact the Jask-2 capsule, which is unique in having its own torpedo motor. The motor is very short-ranged, in the region of a few hundred yards. So it's not to give it greater range. One theory is that the motor allows the weapon capsule to swim out of submarine torpedo tubes because Iranian midget submarines are not equipped with a means to eject an unpowered capsule.*" Although they're small and often denigrated for their capability, midget submarines are still a serious threat to surface ships. In 2010, the South Korean corvette *Cheonan* was ambushed and sunk by a North Korean midget sub firing a torpedo. Sutton says, "*Midget submarines carrying normal torpedoes are probably still a greater threat than the new missile because they can sink even large ships, as the Korean* Cheonan *incident showed. But the Jask-2 adds a new dimension to the threat.*" Iranian naval forces, both the Iranian Navy and the Revolutionary Guards, train to close the Straits of Hormuz, and are therefore close to shipping traffic and U.S. Navy vessels. A submarine-launched missile fits neatly into this plan, expanding the underwater threat. *"Iranian midget submarines would likely spend a lot of time bobbing around on the surface attempting to blend in to fishing fleets,"* Sutton explained, "*then submerge and shoot when a target comes into view.*" **Source: https://www.popularmechanics.com**

Littoral Combat Ship USS *Charleston* Commissions in South Carolina

By: Ben Werner
March 3, 2019 2:14 PM

The Littoral Combat Ship **USS *Charleston* (LCS-18)** officially joined the fleet during a Saturday commissioning ceremony in downtown Charleston, S.C. "***USS* Charleston** *is proof of what the teamwork of all of our people — civilian, contractor and military — can accomplish together*," Secretary of the Navy Richard V. Spencer said in a statement. "*This ship will extend the maneuverability and lethality of our fleet to confront the many challenges of a complex world, from maintaining the sea lanes to countering instability to maintaining our edge against renewed great power competition*." The Independence-class ***Charleston*** is the 16th LCS to join the fleet and is scheduled to be homeported in San Diego, Calif.

Secretary of the Navy Richard V. Spencer delivers his remarks during the commissioning ceremony of **USS *Charleston* (LCS-18)** on March 2, 2019. US Navy Photo

The Navy plans to build 34 LCS before shifting to its surface combatant priority, the future frigate program, USNI News previously reported. The Navy still has one LCS contract to award. Work building the LCS is divided among two prime contractors – Austal USA who builds the Independence variants, and Lockheed Martin, the builder of the Freedom-class variants. Austal is either in the process of constructing or working on the pre-production of 10 more LCS, according to the service. ***Charleston*** is the fifth ship named for the South Carolina city. Former Charleston Mayor Joe Riley and his wife Charlotte are the ship's sponsor. "*The sea is history*," Charleston Mayor John T. Tecklenburg said during the ceremony. "*Nowhere will you find a people who understand those words more fully than the people of Charleston*." **Source: https://news.usni.org**

Navy Issues Draft RFP for FFG(X) Next-Generation Frigate

By: Sam LaGrone
March 2, 2019 8:31 AM • Updated: March 3, 2019 4:30 PM

Artist's rendering of the Austal USA FFG(X) bid from SNA 2019. Austal USA Image

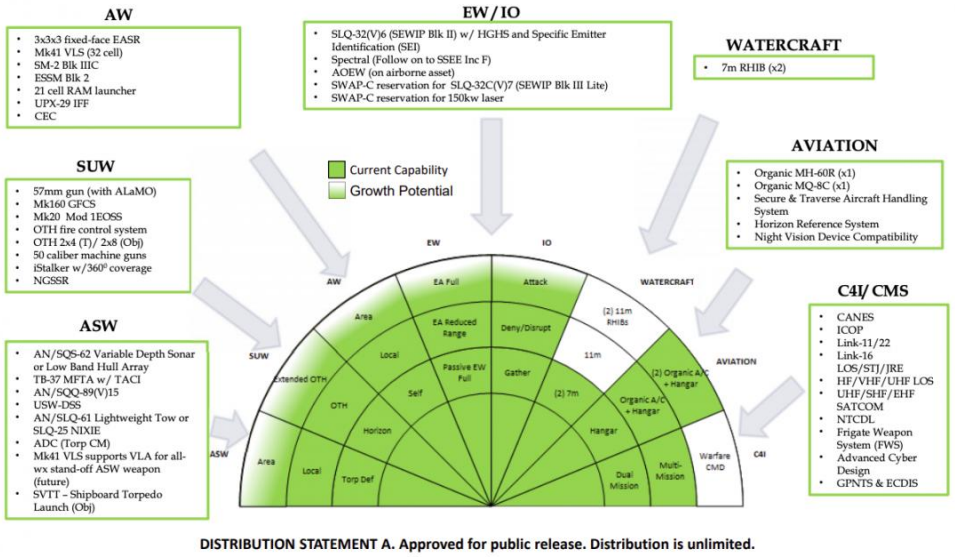
The Navy has issued a draft request for proposal to design and build its planned class of 20 next-generation guided-missile frigates (FFG(X)).

CLIN	DESCRIPTION	DELIVERY DATE
0100	SHIP #1	Estimated Delivery 72 months after contract award
0200	SHIP #2	Estimated Delivery 68 months after option exercise
0300	SHIP #3	Estimated Delivery 66 months after option exercise
0400	SHIP #4	Estimated Delivery 71 months after option exercise
0500	SHIP #5	Estimated Delivery 65 months after option exercise
0600	SHIP #6	Estimated Delivery 70 months after option exercise
0700	SHIP #7	Estimated Delivery 64 months after option exercise
0800	SHIP #8	Estimated Delivery 69 months after option exercise
0900	SHIP #9	Estimated Delivery 63 months after option exercise
1000	SHIP #10	Estimated Delivery 68 months after option exercise

Draft RFP Contract Option Schedule

Posted late Friday, the detailed design and construction RFP draft will serve as a practice run for shipbuilders to pitch their designs for the small surface combatants that are set to follow on the two classes of Littoral Combat Ships currently in production. The document lays out a schedule to produce 10 ships — a lead ship that would deliver 72 months after contract award and options for nine follow-ons hulls. Later this year, the Navy plans to issue a final detailed design and construction RFP with the contract

to be awarded in 2020. Submissions for the work have to be based on an existing U.S. or allied hull currently in service as part of an ongoing rapid acquisition scheme for the class. Friday's draft follows the Navy's award last year of five development contracts to shipbuilders to refine an existing parent hull design to serve as a basis for the frigate. Huntington Ingalls Industries, Austal USA, Lockheed Martin, Fincantieri Marine and General Dynamics Bath Iron Works were awarded $15 million each last year to refine their own frigate parent designs.While the five shipbuilders have worked with the Navy to refine the designs, the competition for the upcoming detailed design and construction contract will be open to any competitor that meets the requirements for a pitch based on a mature parent design, the Navy said earlier this year. As to price, earlier this year the service gave an updated range for what the follow-on ships could cost based on work down through the development contracts. "*That $950 (million) was the threshold; $800 million is the objective*," frigate program manager with Program Executive Office Unmanned and Small Combatants Regan Campbell said in January at the Surface Navy Association symposium. "*We started closer to the $950; we are trending to very close to the $800 now. We have taken some very significant costs out of the average follow units. Lead ship? I won't give you a number, but it is reflected in the president's budget, which you will see shortly*." The Navy is holding an unclassified industry day on March 19 and contract submissions for the draft are due by April 1.



Proposed Government Furnished Equipment for FFG(X)

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In the summary of the draft RFP, the Navy sets out a vision for the new class that cast the FFG(X)s in a role as a major sensor node in an emerging integrated Navy tactical battle network. "*As part of the Navy's Distributed Maritime Operations Concept, the FFG(X) small surface combatant will expand blue force sensor and weapon influence to enhance the overall fleet tactical picture while challenging adversary intelligence, surveillance, reconnaissance, and tracking efforts*," read the summary of the effort posted on FedBizOpps. "*FFG(X) will also contribute to the Navy the nation needs by relieving large surface combatants from the stress of routine duties during operations other than war*." In January, the service laid out in more detail the baseline capabilities for the planned class that include:

- A fixed-face Raytheon Enterprise Air Surveillance Radar (EASR) that will serve as the primary air search radar.
- At least 32 Mark 41 Vertical Launch System cells that could field Standard Missile 2 Block IIICs or RIM-162 Evolved SeaSparrow Missiles (ESSM) and a planned vertically launched anti-submarine warfare weapon.
- COMBATSS-21 Combat Management System based on the Aegis Combat System.
- Cooperative Engagement Capability (CEC) datalink that would allow the frigate to share targeting information with other ships and aircraft.
- Space, weight and cooling for 8 to 16 Over-the-Horizon Anti-Ship Cruise Missiles
- An aviation detachment that includes an MH-60R Seahawk helicopter and an MQ-8C Firescout Unmanned Aerial Vehicle.
- AN/SQQ-89(V)15 Surface Ship Anti-Submarine Warfare (ASW) Combat System
- AN/SQS-62 Variable Depth Sonar.
- SLQ-32(V)6 Surface Electronic Warfare Improvement Program (SEWIP) Block 2 electronic warfare suite with allowances to include SEWIP Block 3 Lite in the future.
- Space, weight and cooling reservation for a 150-kilowatt laser.

While the Navy hasn't been explicit about the connection, the inclusion of the high-bandwidth datalinks on FFG(X) hint at an important role for the class to provide command and control and targeting information to the Navy's emerging family of unmanned surface vehicles. **Source: https://news.usni.org**

AN/AQS-20C Sonar System Completes Developmental Testing

Posted: February 28, 2019 12:21 PM
PANAMA CITY, Fla. —

The Navy completed developmental testing for the AN/AQS-20C mine-hunting sonar system at Naval Surface Warfare Center, Panama City Division (NSWC PCD), on Feb. 26, the Program Executive Office Unmanned and Small Combatants Public Affairs announced in a Feb. 27 release. The AQS-20C is the next generation of the AN/AQS-20 system designed to be incorporated into the Littoral Combat Ship Mine Countermeasures Mission Package. The system consists of four sonar arrays: two side-looking arrays, a gap-filler sonar array and a forward-looking sonar array, all providing simultaneous detection, localization and classification of bottom mines, close-tethered moored mines and volume-moored mines. The system delivers high-definition images of bottom mines, providing the operator with both range and contrast data that combine to form a three-dimensional image during post-mission analysis to aid in mine identification. Developmental testing verifies that a system's design meets all technical specifications and that all contract requirements have been met. During testing, the Raytheon-developed towed sonar sensor conducted 12 underway missions in various operational modes and at different depths at four separate NSWC PCD test ranges. The missions were conducted aboard the test vessel M/V Patriot. The AQS-20C will be integrated with and deployed from the Mine Countermeasures Unmanned Surface Vehicle (MCM USV), a long-endurance, semi-autonomous, diesel-powered, all-aluminum surface craft that supports the employment of various mine countermeasure payloads. The MCM USV can be launched and recovered by the LCS, from other vessels of opportunity or from shore sites to provide minesweeping, mine-hunting and mine neutralization capabilities. The MCM USV is undergoing developmental testing as a component of the Unmanned Influence Sweep System at the South Florida Test Facility in Fort Lauderdale, Fla. Test results will undergo scoring and performance assessment, leading up to a final developmental testing report that is expected to be finished this spring. Findings from this report will be used for future performance improvements of the system. **Source: http://seapowermagazine.org**

Turkey launched its largest maritime drill, the Blue Homeland

March News 2019 Navy Naval Maritime Defense Industry
Posted On Friday, 01 March 2019 16:35
On February 27, Turkey launched the largest maritime drill of its history, testing its war fighting capabilities in the Black Sea, the Aegean Sea, and in the eastern Mediterranean simultaneously. The drill will end on March 8 and totalises 103 military vessels and thousands of soldiers.

Turkish naval ships during maritime drill (Picture source : AA photo)

Dubbed "**Mavi Vatan**," or "**the Blue Homeland**," the maritime drill will last from February 27 to March 8 and will see the participation of 103 military vessels and thousands of soldiers, conducting operations in 462,000 square meters in three seas surrounding the country (i.e. the Black Sea, the Aegean Sea, and the eastern Mediterranean). According to Turkey's Anadolu news agency, the naval vessels taking part will include destroyers, frigates, corvettes, assault boats, submarines, mine hunting vessels, patrol boats and as well as 20 fighter jets, military helicopters and drones. While the drill was reported to have been planned six months in advance in line with NATO rules and regulations, it comes during heightened tensions in the Aegean and eastern Mediterranean. According to Dr. Hay Eytan Cohen Yanarocak, Turkey expert at the Jerusalem Institute for Strategy and Security, "*one of the most important aspects of this drill is the utilization of Turkey's self-produced weapons. For instance the UAVs - 'Bayraktar' and 'Anka' - 'Milgem (National Warship) corvettes,' 'Atak' helicopter, 'Cirit' missile... all these can be considered as a signal for the US that Turkey is seeking to put an end to its dependency.*" Greek media have reported that the drill is taking place amid plans by Ankara to dispatch a second drilling ship to areas around the divided island of Cyprus later this week after Turkey's Foreign Minister Mevlut Cavusoglu said the country would begin drilling for oil and gas near Cyprus in the near future.

Source: http://www.navyrecognition.com

Pentagon Plan to Sideline Carrier Truman Will Net Just $17M in FY 2020

By: Sam LaGrone
February 28, 2019 5:52 PM • Updated: February 28, 2019 7:02 PM

A Pentagon budget plan to sideline an aircraft carrier, rather than refuel it, and redirect money for other defense priorities would save just $16.9 million in Fiscal Year 2020, USNI News has learned.

USS *Harry S. Truman* (CVN-75) conducts a strait transit. Truman is currently deployed as part of an ongoing rotation of U.S. forces supporting maritime security operations in international waters around the globe on April 27, 2018. US Navy Photo

That money in the next fiscal year is the first of the estimated $5.5 billion Pentagon officials are intending to zero out over the next several years for the planned refueling and complex overhaul of **USS *Harry S. Truman* (CVN-75),** several sources familiar with the plan confirmed to USNI News on Thursday. Last year's budget documents show the Navy had planned on investing $1.5 billion from 2020 and 2023 to begin planning the ***Truman*** overhaul. The planned $16.9 million ***Truman*** line-item in FY 2020 would have gone to Huntington Ingalls Industries' Newport News Shipbuilding yard in Virginia for early planning work and advanced procurement, according to the FY 2019 budget submission. Instead of the mid-life refueling, the Office of the Secretary of Defense has directed the Navy to route the money into newer emerging capabilities like armed unmanned naval systems and would ultimately cut *Truman*'s service life in half, several sources familiar with the intent of the move told USNI News on Thursday. Taking ***Truman*** out of the fleet would bring the operational carrier force down from its legally mandated total of 11 to 10. The most recent Navy force structure assessment called for an increase in the carrier fleet to 12 flattops. On Wednesday, *The Washington Post* included the detail of the Pentagon canceling the overhaul in an opinion piece about acting Defense Secretary Patrick Shanahan's, stating that the decision to cut a carrier from the force was Shanahan's compromise to go along with a recent two-carrier contract, which the opinion piece stated the acting secretary opposed. "*Shanahan opposed buying the carriers in internal debates, but facing opposition, he settled for a compromise: The Navy will shelve plans to rehab one of its midlife carriers*," read the piece. USNI News confirmed the account was largely accurate from multiple sources familiar with the conversations. Spokesmen with OSD and the Navy told USNI News on Thursday that they could not comment on the FY 2020 budget ahead of the submission to Congress. As of Thursday, USNI News understands the budget will be rolled out in mid-March. In late January, *Jane's Defence Weekly* reported that OSD was considering a delay in the ***Truman*** RCOH to direct funds to more modern weapon systems and left open the possibility that the RCOH would only be delayed and not abandoned altogether. However, several sources told USNI News on Thursday that the complexities and difficulties in the process of moving the spent fuel out of the carrier and refueling it would likely mean that if *Truman* missed the RCOH window, the carrier would cease to be operationally relevant. While the cost of the overhaul is $5.5 billion, decommissioning the carrier and removing the nuclear fuel could cost around $2.5 billion, according to a report in *Defense Daily* from 2014 that discussed a similar budget negotiation surrounding the **USS *George Washington* (CVN-73)** RCOH. The move has already drawn the ire of pro-carrier members of Congress. "*Keeping refueling and complex overhauls on schedule and advanced procurement funded properly is critical to meeting combatant commander's demand for carrier strike groups*," Rep. Rob Wittman (R-Va.), the ranking member of the House Armed Services seapower and projections forces subcommittee, told USNI News in a Thursday statement. "*We have made a significant investment in these ships, and I am perplexed why anyone would consider taking the cornerstone of the United States Naval Force and allowing it to atrophy."* Cancelling the RCOH for ***Truman*** is the latest attempt for Pentagon leaders to find cost savings in curtailing the mid-life overhaul of Nimitz-class carriers. Costing billions and lasting four years, the refuelling of the carrier's two reactors and the down-to-the-bulkhead overhaul has been targeted for cuts over the last 20 years. In 2014, the Navy fought to keep $7 billion in then-year dollars in the FYDP to overhaul ***George Washington***, which was at risk due to sequestration limits as part of the Budget Control Act of 2011. That total included the cost of the refueling, the cost of manning and operating the carrier air wing and continuing to buy aircraft for the air wing. Ultimately, Congress found an additional $800 million to keep the ***Washington*** RCOH on track in FY 2015, as well as the remaining funding in the long term, and preserved the air wing. It's unclear if the new Pentagon plan would also cut an air wing. Given how small a sum OSD intends to zero out in FY 2020, the likelihood of Congress inserting the funds to keep the process moving forward is high, USNI News understands. **Source: https://news.usni.org**

This is one way to get more funds out of the budget.

GE Marine awarded contract to supply engines for Indian P17A frigates

March News 2019 Navy Naval Maritime Defense Industry

Posted On Friday, 01 March 2019 14:41

GE Marine will provide gas turbine auxiliary equipment for the LM2500 engines that will power the Indian Navy's new P17A frigates. This contract is with India-based Mazagon Dock Shipbuilders Limited (MDL) and Garden Reach Shipbuilders and Engineers Limited (GRSE), GE reported last week at the Aero India trade exhibition.

Indian Navy P17-class frigate ***Satpura*** **(F-48)** transits the Indian Ocean during **Exercise Malabar 2012** (Picture source : U.S. Navy / 3rd class Christopher Farrington)

Under the contract, GE will provide gas turbine auxiliary equipment for seven ships to support the 14 LM2500 engines previously supplied under a separate contract. Auxiliary equipment and services will include: gas turbine controller, intakes and uptakes, firefighting equipment, water wash, start skid, fuel forwarding and field service support to shipyards. Electric starters for the gas turbines also will be included in the auxiliary equipment contract; these starters weigh 6,500 pounds less and offer a >70% volume reduction over hydraulic starters. Each P17A frigate will be powered by two GE LM2500 marine gas turbines and two diesel engines in a combined diesel or gas turbine configuration. Hindustan Aeronautics Limited (HAL) Industrial and Marine Gas Turbine division, Bangalore, India, is assembling the LM2500 gas turbines in-country under license from GE. "*GE is proud to provide the auxiliary equipment for the Indian Navy's P17A frigates. As one of the world's leading manufacturers of marine propulsion products, GE can deliver a reliable, fully-integrated gas turbine solution that is customized to suit and support the requirements of the Indian Navy*," said Vishal Wanchoo, President and CEO, GE South Asia. "*GE will also handle the design work for the P17A's gas turbine auxiliary system and gas turbine fuel supply system and will provide training to the shipyards and Indian Navy for these systems*," added Wanchoo. GE's in-country partner HAL has already delivered 11 LM2500 gas turbines to the Indian Navy, including those that power three P17 frigates ***Shivalik, Satpura*** and ***Sahyadri*** launched in April 2003, June 2004, and May 2005, respectively. Separately, four GE LM2500 gas turbines will power India's first indigenously built P71 aircraft carrier; it was launched in August 2013. Worldwide there are more than 1,200 GE LM2500 marine gas turbines logging over 16 million hours for 33 navies. GE provides 97% of the United States Navy's propulsion gas turbines, proven at sea with >99% reliability and >98% availability. The company's global installed base and nine licensed depots worldwide ensure operability and support either on-shore or afloat. With GE's split casing compressor and power turbine design, in-situ maintenance is allowed making gas turbine removals unnecessary; navies save millions of dollars a year and weeks/months of ship unavailability.

Source: http://www.navyrecognition.com

This may well pave the way to order more engines in order to complete the Russian frugates being bought without engines, due to the Ukraine-fiasco.

Navy, Experts Make Case For More Than 12 Columbia-Class Boomers

By: Ben Werner
February 28, 2019 7:07 AM

An undated artist's rendering of the planned Columbia-class submarine. Naval Sea Systems Command Image

To maintain a credible nuclear threat, the U.S. needs at least 12 Columbia-class ballistic missile submarines, says the Navy's director of undersea warfare. The first Columbia-class SSBN submarine is not expected to join the fleet until 2027, but Navy officials and analysts are already making the case to extend the program of record beyond what is currently envisioned to be a fleet of 12 SSBNs."*If you look at the nuclear posture review, the number is really at least 12*," Rear Adm. John Tammen (OPNAV N97) said during a Tuesday panel discussion with experts at the Heritage Foundation. The Navy's best chance to secure funding from Capitol Hill hinges on bringing down the cost-per-sub while proving the platform's utility, agreed the experts joining Tammen on the panel. Speaking with Tammen were Bryan Clark a Senior Fellow, Center for Strategic and Budgetary Assessments, James Acton a Senior Fellow and Co-Director for Nuclear Policy Program, Carnegie Endowment for

International Peace, and Thomas Callender a Senior Research Fellow for Defense Programs at The Heritage Foundation. The current SSBNs, the Ohio-class ballistic missile submarines, are nearing the end of their expected lifespan. Building the Columbia class to replace the Ohio class is the Navy's top priority, and the Chief of Naval Operations Adm. John Richardson wants the Columbia class in the fleet as soon as possible, Tammen said. By design, SSBNs are intended to move silently into position and the ballistic missiles they carry are supposed to be undetected. However, the deterrent is brittle and Russia and China are sinking a lot of resources into improving their submarine-hunting capabilities, Clark said. "*You have a bunch of eggs in a basket; if you take out that submarine, you've eliminated all of those weapons all at once*," Clark said. "*That makes it very important that we have not just one submarine out there being our sea-based deterrent but a number of submarines*." A more immediate threat facing the Columbia-class submarines is the program's ability to survive the congressional appropriations process. The Columbia-class submarines are relatively expensive, costing about $6 billion each, Clark said. There's a lot of pressure to try to reduce those costs. The entire program is expected to cost about $102 billion, according to an October 2018 Congressional Research Service report. "*You see a lot of discussion on the Hill with the new Democratic majority that they want to look at nuclear modernization as an area to try to achieve savings that could be applied to other areas of the military or other uses*," Clark said. House Armed Services Committee Chairman Rep. Adam Smith (D-Wash.) has in the past questioned the need to devote large sums of money to the nuclear deterrent. In September, speaking the Defense News Conference, Smith suggested the reducing spending on the nation's nuclear arsenal could free up funding for other programs. Having a fleet of 12 Columbia-class submarines is central to the platform's effectiveness as a nuclear deterrent, Clark said. The Navy expects its SSBNs to be operational about 70 percent of the time. Eight Columbia-class submarines will be operational if the Navy puts one on patrol in the Pacific and in the Atlantic, plus two or three spares acting as both decoys and backups in case they are needed. The remaining four subs – 25 percent of the Columbia-class – would be undergoing maintenance or training. While the Columbia-class' existence will serve as a deterrent to U.S. rivals, the submarines are not the best tool the president has to send signals adversaries, according to Acton. Bombers are likely the best way to send a signal to a nation to follow international norms. Intercontinental ballistic missiles (ICBMs) located on static pads offer the worst means of signalling a possible foe. "*Given the budget pressures, if the goal is really to keep the force's 12 SSBNs, and like I said, I'm certainly not against that in principle, it seems to me the tradeoff is most likely to be with the ICBM force and form a kind of long-term budgetary perspective. Deciding to think about and make those tradeoffs now is almost most certainly a lot more cost-effective than being forced to make them 10 or 20 years from now*," Acton said. Ideally, the workforce will be able to speed up submarine production and reduce costs as the builders become more familiar with the design. Tammen expects the production to continue after completing the last Columbia submarine, even if the follow-on submarines are not used to carry nuclear weapons. The payload area can be adapted for a variety of missions, he said. The Navy started considering converting the SSBN production into a guided missile submarine (SSGN) production line in 2017 when Vice Adm. Bill Merz, Tammen's predecessor as OPNAV N97, started developing a Tactical Submarine Evolution Plan, USNI News previously reported. The idea, which Tammen and the Navy embrace, is to keep the production lines running by building SSGNs. This way, when it's time to replace the Columbia class with a new SSBN, the industrial base will already be working on large submarines, instead of having to start the building process from scratch. "*The 30-year shipbuilding plan shows that we are going to continue serial production of a large-volume submarine*," Tammen said.

Source: https://news.usni.org

Thyssenkrupp to supply final design of Type 31e frigates for Royal Navy

March News 2019 Navy Naval Maritime Defense Industry

Posted On Friday, 01 March 2019 12:48

As part of the tender process for the introduction of the new British Type 31e frigate generation, thyssenkrupp Marine Systems is one of the selected suppliers in the final design and offer phase in a consortium led by ATLAS ELEKTRONIK UK. This consortium includes ATLAS ELEKTRONIK GmbH, British shipyards Harland & Wolff and Ferguson Marine Engineering.

BAE Systems' Type 31e "Leander" design (Picture source : BA**E Systems)**

Dr. Rolf Wirtz, CEO of thyssenkrupp Marine Systems: "*We are proud to have reached the decisive design phase for the Type 31e frigates. Based on our proven MEKO A-200 ships, we will offer the Royal Navy a multi-purpose frigate based on our many years of experience in developing high performance, modular naval vessels. The proposed ship design is already in operation with two navies and is unique in its comprehensive modularity and expandability*." With the support of thyssenkrupp Marine Systems, the ships will be manufactured by Harland & Wolff in Belfast and Ferguson Marine Engineering in Glasgow – the highest added value at the sites mentioned and in the entire

local supply industry is guaranteed. The Type 31e program is considered one of the most important in the Royal Navy's comprehensive future capabilities program. The MOD wants the first ship delivered in 2023.

Source: http://www.navyrecognition.com

Indian DAC approved procurement of 3 cadet training ship for Indian Navy

March News 2019 Navy Naval Maritime Defense Industry

Posted On Friday, 01 March 2019 11:09

During the meeting of the acquisition body, chaired by Defence Minister Nirmala Sitharaman, that took place in Delhi on Feb 27, India's Defence Acquisition Council (DAC) has granted approval for the procurement of three cadet training ships for the Indian Navy.

Picture of one cadet training ship (Picture source : Indian Navy)

The cadet training ships would be utilised to provide basic sea training for officer cadets including women officer under-trainees. The ships would also be capable of undertaking hospital ship duties, providing Humanitarian Assistance and Disaster Relief (HADR), undertaking Search and Rescue (SAR) missions and Non-Combatant Evacuation Operations.

Source: http://www.navyrecognition.com

Russian Navy combat capabilities stabilize at 2016 level

Naval Technology

Posted On Friday, 01 March 2019 14:09

Mil.Press Flotprom online publication published a regular annual rating of Russian and US Navy capabilities. Although 2018 was generally productive for the Russian Navy which received seven warships, its position against the US Navy deteriorated. The publication said Russian Navy capabilities comprised 45 percent of the US Navy in 2018. A year before they comprised 47% and in 2016 - 45, in 2015 - 44, in 2014 -52, in 2013 - 45, and in 2012 - 42.

Landing ship of project Project 11711 ***Ivan Gren*** during trials in the Baltic (Picture source : Alex Akentyev)

Last year was generally successful for the national shipbuilding industry against 2017 when the Navy received only two warships and an icebreaker. In April 2018, the Northern fleet received the lead ***Elbrus*** supply vessel of project 23120. On June 1, the ***Vyshny Volochek*** corvette of project 21631 became operational in the Black Sea fleet. Later in the month, St. Andrew's flag was hoisted on the lead ***Ivan Gren*** big amphibious assault ship of project 11711 and on the ***Ivan Khurs*** communications vessel of project 18280. A month later, the Navy received the lead ***Admiral Gorshkov*** guided missile frigate of project 22350. In December 2018, the ***Orekhovo-Zuevo*** corvette of project 21631, the ***Vasily Bykov*** lead corvette of project 22160, the ***Gromky*** corvette of project 20380 and the lead Karakurt-class ***Mytishchy*** corvette of project 22800 joined the Navy. The buildup was expected to improve the Russian Navy positons in the rating, but they fell 2 percent because most of the new warships, except for the ***Admiral Gorshkov***, were corvettes and brown-water warships. In the meantime, US shipbuilders produced two Arleigh Burke-class destroyers last year and two Virginia-class nuclear submarines. This year is unlikely to change the trend. Big orders of the Navy comprise the second ***Admiral Kasatonov*** frigate of project 22350 and the first Kazan upgraded SSGN of project 885M. The rest are corvettes and brown-water ships. The US shipbuilders annually produce 2-3 Arleigh Burke-class destroyers and the same number of Virginia-class submarines. Besides, in 2019 the US Navy received the second Zumwalt-class destroyer, the ***Michael Monsoor.*** There is also the US program to build LCS-class brown-water warships which produces at least three units a year. The publication

has been studying the strength of the world navies for over ten years. Combat capabilities mean a generalized parity indicator showing the ratio of the strength and combat might of the Russian Navy against the biggest world navy of the United States. China has been reinforcing its navy of late, but Beijing keeps secret its shipbuilding program which makes it impossible to objectively estimate combat capabilities of its navy. FlotProm counts operational warships without those in reserve or in a long (over 3 years) overhaul. Conditional "*weight*" coefficients have been designed to compare the Russian and US navies. Only open data are used. **Source: http://www.navyrecognition.com**

Thales to develop air warfare mission suite for new Dutch, Belgian frigates

The Netherlands Defence Materiel Organisation (DMO) has contracted Thales to develop a new anti-air warfare system, dubbed the Above Water Warfare System (AWWS), which will be used on the new generation of frigates to be built for the Netherlands and Belgium.

Photo: Thales

The current multi-purpose (M) frigates in service with the two navies will be replaced as they are reaching the end of their lifecycle. A new generation of M-frigates is scheduled to start entering service in 2024. Although their primary role will be anti-submarine warfare, the new frigates must be able to independently defend themselves as well as nearby units against air and surface threats. For this purpose, they will be equipped with AWWS, a new system that will continuously generate the best solution to counter incoming threats. It will consist of a new generation of sensors, coupled with intelligent software that continuously calculates which actions are best suited to tackle each threat detected by radar and other sensors in the right manner. This maximizes the chance of survival, while the crew stays in control. AWWS will use the fully digital dual-band X/S radar suite: an integral combination of active phased array radar (APAR) and Sea Master 400 radar technologies. Prior to the AWWS contract, the Dutch defense ministry initiated advanced research into this technology with DMO, TNO and Thales more than ten years ago. This resulted in an agreement for a "*technology demonstrator*". The technology demonstrator will eventually be installed at a shore-based test site for tests and trials. "*For many decades, the naval building cluster, knowledge institutes and defense have been supplying modern and technologically advanced products in what we call the Triple Helix. These products are essential for our national security*," Arie-Jan de Waard, director, DMO. "*It is great we are taking an important step for this priority with the development of the AWWS project with Thales*." **Source: https://navaltoday.com**

South Korea's blue-water naval strategy

By **Andrew Tunnicliffe**
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Analysis
South Korea's Navy has announced that it will push to create a task fleet capable of broader-range operations beyond its shores, in another show of its desire to build blue-water capabilities. Andrew Tunnicliffe talks to analysts about the drivers behind this investment.

USS *George Washington* and South Korean destroyer **ROKS *Sejong the Great*** participate in a trilateral event. Credit US Navy.

There's change afoot on Asian seas and you don't have to look hard to find it. You'd be forgiven, however, for thinking that change is being entirely led by the People's Republic of China. It's fair to say the country, and its naval forces, are ambitious, but so too are its regional neighbours. Among them, Australia has embarked on a hugely significant regeneration and re-capitalising of its naval force. Japan is also considering the naval capabilities it has and might need in the future – something that has never

been thought likely since World War II. The Japanese Maritime Self Defence Force is said to be on the verge of an order for up to 100 F-35B fighter jets to be stationed on its helicopter-carrying destroyers. "*It's ever clearer that it's a very congested, as well as contested, environment. Everyone is enhancing their capabilities*," says Nick Childs, fellow and senior naval analyst with the International Institute for Strategic Studies. "*Around the region a lot is going on*." This, in part, is why South Korea has stepped up its longstanding blue-water strategy.

South Korea's blue-water fleet

In October 2018 South Korea announced plans to establish a task fleet comprising three squadrons, including its 7,600 ton Aegis destroyers. "*The task fleet will contribute to securing maritime traffic routes and ensuring the free maritime operations and safety of our citizens through the expansion of our operational areas into far seas*," the South Korean Navy said. Reporting on the news, many outlets singled the unprecedented growth of China's naval capabilities, coupled with the country's growing naval ambitions to assert itself as a major player in the region, as the leading reason behind South Korea's move. However, there is more to it than that, argues Childs. "*South Korea clearly sees itself as a significant maritime player in the region, and to some extent beyond… But other navies and maritime forces, particularly the most significant regional players, have also been developing their capabilities*," he says. There is an element of adjustment taking place.

The US-Asia alliance

Since the inauguration of President Trump in 2017, the Asia-Pacific region has been left somewhat unsure of the long-held role the US will play there. The US Navy is still among those with the largest presence there but the scaling back of joint regional military exercises, a somewhat improved relationship with North Korea (at least at the time of writing), and growing pressure from President Trump on the US's traditional regional allies to shoulder their share of the military burden have left many to question the future of the US as a stabilising force in the region. "*I think there is some element of concern among the US's partners as to what to make of the signals coming out of Washington, in particular the White House*," says Childs. However, he believes US commitments to the region stand firm with the US appearing to be intent on remaining a major player, regardless of what it says on occasion. It is, perhaps, the result of actions taken by the US and North Korea that have enabled the South to reaffirm its intention to create blue-water capability, which dates back to the late 1990s. The highly desired and increasingly positive approach to inter-Korean rapprochement has meant Seoul has the opportunity to extend its vision further afield. "*The issue, in large, for South Korea has been having to balance its aspirations against concerns closer to home*," says Childs. "*The extent to which worries about North Korea, and therefore the costal littoral waters ebb and flow, appear to be ebbing slightly because of the desire and efforts to have a better relationship with the North*." However, history teaches us to take little, if anything, for granted when it comes to the North-South relations.

Fixed wing capability

The South Korean task fleet, which is expected to be operational by the middle of the next decade, will be complemented by the creation of an aviation command the South Korean Navy said. "The *envisioned aviation command, that will run maritime patrol aircraft and choppers, will ensure the completeness of various maritime aviation operations*," says Childs. Some of this stated intent means the US will continue to be a major player in the region, with South Korea mooted to be considering equipping its ships with the F-35B variant and P-8 Poseidon patrol aircraft. As a result, South Koreas long-term ambitions are "*somewhat dependant*" on its North American partner. "*The interesting question is, do South Korea's naval ambitions seriously involve having a fixed wing aviation capability at sea; would the F-35B be onboard the Aegis?*" asks Childs. With Japan looking likely to place an order for the aircraft, the US operating them in the region, and China's advances, both onshore and at sea, the proposition clearly has appeal. "*It must be a tempting prospect of South Korea if it can get US agreement to add that capability to its forces. That would significantly increase the South Korean Navy's ability to operate independently, at range, which is part of having a blue-water capability*." The region is in a state of flux, with shifting dynamics and growing uncertainties. But one thing will likely keep a lid on potential dangers, says Childs. Trade is an important factor all parties have to consider, regardless of strategic military aspirations. "*Because everyone has a significant stake in maintaining trade, particularly maritime trade, that will be a significant deterrent to anyone really pushing very hard to provoke*." But, he warns, although trade focusses the mind, both regional and international, there is always the risk of miscalculation.

The Asian military spending surge

There does appear to be a turning of the tide across Asia, with major players looking to bolster their fleets on land, at sea and in the air. According to the Australian Government's 2016 Defence White Paper, annual regional defence spending stood at AU$439bn, more than double what it was at the beginning of the century, and AU$53bn more than that of Europe. According to Jane's Defence Budgets by IHS Markit, the region will be the largest spender on weapons by 2029, outspending even North America. Whilst AU$200b on of that is spent annually by China, according to Australian Government figures, others are stepping up their game, too. Today China is the largest shipbuilder in the world, having commissioned more than 30 vessels between 2013 and 2016. According to an editorial by Robert Ross of Boston College in Lawfare, at the current rate China could have as many as 430 surface ships and 100 submarines within the next 15 years. It's the underwater battlespace that could prove to be the next frontier, according to Childs. "*There is a lot of discussion about the extent to which the undersea water space is evolving, including potential advance in detection capabilities, networked autonomous systems, and the like*," he says. "*The extent to which they will fundamentally change the underwater battlespace remains uncertain. A bit like precision missiles for surface forces, it could have an effect on the tactical ways in*

which you employ your underwater capabilities in the future." So the future for the region remains uncertain. A vague US foreign policy, China's huge military spending programme, the often volatile posturing of South Korea's neighbour to the North, and ever-quickening technological advances do, however, mean one thing. The arms race will continue in all but name, meaning South Korean strategy-makers will have a lot to think about.

Source: https://www.naval-technology.com