



CRASH DIVE BASE Lake Bluff, IL



"To Honor Those Who Serve, Past, Present & Future"

April 2023 Volume 24, Issue 04

Lest We Forget — "The USSVI Submariner's Creed"

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.

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News Brief

- 1. **Next Meeting**: At 1100, third Saturday of each month at the Knollwood Sportsman's Club. Mark your calendars for these upcoming dates:
 - a. **April 15**
 - b. **May 20**
 - c. June 17
- 2. Duty Cook Roster:
 - a. APRIL MAURICE YOUNG
 - b. May Manny Garmendez and Ted Rotzoll
 - c. JUNE CLAY HILL
- 3. April Birthdays: None.
- Recycle books: www.booksforsoldiers.com and Operation Paperback, www.operationpaperback.org, put reading material into the hands of our troops.
- 5. **Cobia Working Parties** Shipmate Greg Miller is leading the charge to replace the decking on the boat. Consider lending a hand.

Crash Dive Meeting Minutes March 18, 2023

- 1) Call to Order 1130
 - a) SOUND Klaxon
 - b) All Rise
 - c) Let us at this time, with a moment of silent prayer, remember our shipmates who made the supreme sacrifice that we may gather here in peace. We dedicate this meeting to our Shipmates on Eternal Patrol, to perpetuate their memories in our lives and to honor our Shipmates on active duty in the service of the first line of defense of our Nation.
 - d) The following submarines were lost during the month of **March**:

USS Perch	(SS-176)	03 Mar 1942
USS	(SS-207)	05 Mar 1943
Grampus		
USS H-1	(SS-28)	12 Mar 1920
USS Triton	(SS-201)	15 Mar 1943
USS Kete	(SS-369)	20 Mar 1945
USS S-4	(SS-23)	25 Mar 1915
USS Tullibee	(SS-284)	26 Mar 1944
USS Trigger	(SS-237)	26 Mar 1945

- e) Invocation
 - i) MS3/SS Roger F. Grell, rest your oar
- f) Pledge of Allegiance
- 2) Attendance:
 - a) Clayton Hill
 - b) Frank Walter, Jr.
 - c) Frank Voznak
 - d) Maurice Young

- e) Glenn Barts
- f) Bret Zacher
- g) Chris Gaines
- h) Ted Rotzell
- i) Herman Mueller
- i) Dave Cornell
- 3) Reports:
 - a) <u>Secretary's Report</u>
 - Email contact with National Museum of the American Sailor
 - b) <u>Treasurer's Report</u>: Total Assets \$20,158.99
 - i) Funds in GLCU: Checking \$1431.61, Savings \$1,093.28
 - ii) Crash Dive Memorial: \$6,084.30; Cobia Drydock: \$11,449.80; Petty Cash: \$100
 - (1) Check disbursed for Cobia Drydock
 - (2) Seeking charitable matching sources
 - (3) Interest report delayed from March
 - (4) \$150 to Wreaths Across America: motioned by Herman, 2nd by Maurice; motion carries.
 - c) Committee Reports
 - i) Newsletter Chris Gaines
 - ii) Membership Chris Gaines
 - iii) <u>Community Outreach</u>— Bret Zacher
 - iv) Hospitality Bret Zacher
 - (1) Club contact updated; Clay has new info
 - v) <u>Webmaster</u> Frank Voznak, Jr.
 - (1) Removing base contact page from website

- vi) <u>Storekeeper</u> Herman Mueller
 - (1) Issue with shirt and hat order: prices raised due to higher cost.
 - (a) Polo shirt example displayed to base. \$22-25ea per polo shirt.
 - (b) Hats expected to be \$15ea; part of each sale to Cobia
- vii) <u>Eagle Scout</u> Ted Rotzoll
 - (1) 6-7 new certificates signed; 4 new Courts of Honor for May
 - (2) Discussion about public display of tattered flag
- 4) Old (Unfinished) Business
 - a) <u>WWII Chicago Memorial: Paver</u> <u>Program</u>
 - Veterans Day 2023 denied by city; Memorial Day May 2024 requested.
 - (1) 52ea 5"x5" spots should be available; order form soon when install date finalized
 - b) Operation Handshake: contact with GLNS
 - i) Sent images of Harry Alvey lockers; awaiting response (metal locker recommended)
 - (1) Number to call for artifact donation: 360-396-4948 (2yrs old; might not work)
- 5) New Business
 - a) Central Region District
 Commanders for 2023-2025: Call for Nominees

- i) Nominations open until 15 April 23; voting from 01 to 30 June.
- b) 2023 Western Region Roundup:
 - Event at the DoubleTree
 Hotel in Sacramento, CA from
 April 27 to April 29, 2023.
 - ii) Open to all submariners, veterans, and active duty alike, are invited.
- Mess Specialist MS3/SS Roger F. Grell(1950-2023) from Marathon City, WI
 - a) Served aboard U.S.S Patrick Henry SSBN-599 (Blue)
 - b) Worked at Marathon Cheese for 33 years
 - Served as a volunteer fire fighter, ushered at the Grand Theater, and most recently was a crossing guard at the elementary school
 - d) Was an active member of the Marathon American Legion Post 469 as part of Honor Guard and liaison with the local Scout troop
- 7) Good of the Order
 - a) Duty Cook
 - i) April Manny
 - ii) May Maurice and Ted
 - iii) June Clay
 - b) 786 Club
 - i) March 1st: speaker at Union League Club
 - (1) New Meeting on 04 April scheduled earlier than usual w/ VADM Darse "Del" Crandall, Top JAG Lawyer

- c) Thresher Memorial: Dave Cornell to present remembrance at April Crash Dive Meeting
- d) Cobia Working Party: arrive prior to 1600 on 16 Apr 23; repairstaging 17-19 Apr 23.
 - i) Follow up heavy lifting gang5-7 May 23
- e) 2023-2024 Submarine Veterans
 Scholarship: expanded to
 vocational training, trade schools
 and apprenticeships. Applications
 open until 15 May 2023
- f) <u>USSVI National Convention in</u> <u>Tucson</u>: 28 Aug to 03 Sep 2023
- g) Illinois Submarine License Plate:
 Passed house; just arrived in
 senate last week. Reach out to
 respective state senators to
 ensure senate bill passes. Calls
 better than emails.
- 8) SOUND Klaxon
 - a) Next Meeting is 15April 2023 @ KSC
- 9) Adjourn 1316

Lost Boats

USS PICKEREL (SS-177) 4/3/43 USS SNOOK (SS-279) 4/8/45 USS THRESHER (SSN-593) 4/10/63 USS GUDGEON (SS-211) 4/18/44 USS GRENADIER(SS-210) 4/22/43

How the new AUKUS sub agreement impacts Beijing's calculus on Taiwan

Sidharth Kaushal, research fellow at the UK-based Royal United Services Institute defense think tank, said AUKUS will likely make a Chinese attack on Taiwan, "decidedly less appealing."

By Tim Martin on March 21, 2023 at 10:38 AM



The crew of the USS Asheville assemble on the casing of the submarine during a visit to HMAS Stirling in Rockingham, Western Australia. (Australian government)

CORRECTION 4/18/2023 at 11:50am ET: The original story misstated a comment from Sidharth Kaushal concerning Astute class submarines hosting vertical launch systems (VLS). He said that the Astute class successor design (SSNR) will have VLS compatibility. This has been corrected.

BELFAST — The recently revealed AUKUS plan, including the development of new SSN AUKUS-class submarines, clearly changes the strategic calculus for the United States, United Kingdom and Australia in the Indo-Pacific. What is less clear, naval analysts tell Breaking Defense, is exactly what impact it will have on China's thinking — especially when it comes to a potential invasion of Taiwan.

China has vowed to "reunify" with Taiwan in defiance of international opposition to such a move and continues to be regarded by the US as its main "pacing challenge," or in the case of the newly released UK <u>Integrated Review Refresh</u>, "an epoch-defining challenge."

Hence, while political leaders have been careful to say <u>AUKUS</u> isn't about China specifically, it's no surprise that the deal — <u>covering plans</u> to sell Australia three US Navy Virginia-class subs in the early 2030s, with a new UK based nuclear sub design entering UK service in the late 2030s and Australian service in the early 2040s — has been viewed through the lens of a potential conflict with Beijing. And in that sense, experts see potential.

Fundamentally, the reason behind Australia opting to embrace the SSN AUKUS design and the expanded partnership with the US and UK is based on an assessment of future military challenges and threats, and a need to "have a submarine that is survivable enough and capable of fast deployments," said Nick Childs, senior fellow for naval forces and maritime security at the International Institute for Strategic Studies (IISS), a UK-based defense and security thinktank.

"In terms of a full-on maritime confrontation between peer competitors and especially when talking about China, one of the most survivable capabilities that will allow you to operate in a contested environment is subsurface assets, particularly nuclear powered submarines," he added. "As the new agreement offers a greater pool of nuclear powered submarines, among a wider pool of operators in the future, not just the US but Australia, and at least a small commitment from the UK to deploy forward in the [Indo-Pacific] region, that must provide some food for thought for military planners in Beijing."

What kind of second-guessing that could impose on planners in China is unclear, analysts said, even as they all agree China *will* have to take the new AUKUS

plan into account. And the first move will, it seems, be a political one.

"We're already seeing China's response. They criticize Australia for doing it, criticize us," Harry Harris, a retired US Navy admiral who led US Pacific Command and later served as ambassador to South Korea, told Breaking Defense. "We'll see their pressure campaign increase on countries like Australia and others who share our values.... And we'll see them ratchet up that pressure.

"At the end of the day we are in a far stronger position because we have allies and partners," Harris said, "and it It shows just how weak the PRC is in terms of their ability to rely on others and help them in their time of need."

Even though the SSN AUKUS subs are not slated to come online for Australia until the early 2040s, Harris pointed out that the basing of US subs in Australian ports and the addition of Virginia-class subs to Australia's arsenal will have a more nearterm impact. "This is not something that's going to happen just in the 2040s — there are parts of it that are already happening," Harris said.

The Taiwan Impact

So much of what happens in the Indo-Pacific revolves around the question of if and when China will try to invade Taiwan. AUKUS is no different — and it is telling that Richard Marles, the Australian defense minister, specified this weekend that there is no commitment on behalf of Canberra to support a US defense of Taiwan.

"Of course not, and nor was one sought," he told <u>The Telegraph Sunday</u>, when asked if the terms of the optimal pathway agreement had been brokered around Australia offering a commitment to the US in return for the deal being signed.

Even with the additional basing aspects to the AUKUS deal, the fact SSN AUKUS won't be active until the early 2040s means they would come online long after the much-ballyhooed "Davidson Window," named after an estimation from former INDOPACOM head Adm. Phil Davidson, who suggested a 2027 timeframe for when China could move on Taiwan.

"His [Davidson's] comments have kind of been abused over the last couple years as he was talking about China developing the capability to be able to invade by that point," said Blake Herzinger, nonresident fellow at the American Enterprise Institute think tank.

RELATED: 'A bloody mess' with 'terrible loss of life': How a China-US conflict over Taiwan could play out

"China is not going to resort to violence immediately if there are other options available, as an attack would be enormously destructive for everyone, probably most so Beijing. Their losses militarily and economically would be incredible."

In Harris' mind, the specifics of AUKUS' impact on Beijing's thinking on Taiwan isn't clear. "I don't know how it'll impact Taiwan. I trust it'll have a deterrent effect," Harris said.

But Sidharth Kaushal, research fellow at the UK-based Royal United Services Institute defense think tank, was more bullish on the deal's impact, saying AUKUS will likely make a Chinese attack on Taiwan, "decidedly less appealing."

Specifically, the SSN AUKUS subs, based on the UK <u>Submersible Ship Nuclear Replacement</u> (SSNR) concept and due to replace Royal Navy Astute-Class SSN's, would make China vulnerable to attacks on "critical amphibious platforms," even in a scenario where Beijing successfully held US surface assets at range through Anti-

Access/Area Denial (A2/AD) capabilities, explained Kaushal.



Royal Australian Navy Collins-class submarines are set to be replaced in the 2040's by a UK designed SSN AUKUS fleet. (Australia DoD)

Set to be integrated with "the best of submarine technology" the US, UK and Australia has to offer, the full range of SSN AUKUS subsystems and weapons have still to be disclosed by defense officials. Kaushal suggested that if the subs are designed with provision for hypersonic weapon launches, they would offer, an "inland deep strike capability," the like of which few other US services or international partners can currently provide outside of strategic bombers.

"That type of capability could be very useful from a targeting perspective, in terms of engaging command nodes or other bits of military hardware if they were identified on a prompt [strike] basis," he added.

The idea that hypersonic missiles could be fitted to SSN AUKUS vessels looks realistic, in Kaushal's estimation, because vertical launch cell systems are part of the SSNR design and the Virginia-class, while the overall size of the new subs would allow "quite a few" of the weapons to be carried. Such a selection is also likely to be influenced by stealth characteristics offered by the missiles and their "relatively survivable" profile.

Though there is still much to determine relating to the SSN AUKUS

design, PLAN subsurface capabilities offer the trilateral alliance cause for optimism. China's "reconnaissance strike complex" has been designed to put enemy surface vessels at "risk" through the networking of satellites and airborne sensors, supported by the DF-21D antiship ballistic missile enabling long range strikes, out to a range of 2,000Km, but its antisubmarine warfare (ASW) capabilities are much less formidable, added Kaushal.

He suggested that China's lack of joint exercises incorporating ASW activities has held it back, while the inadequate noise profile of the Type 93 nuclear-powered attack submarine adds to a subsea capability set inferior to the US and her allies.

"It's an area where the US still enjoys a decisive advantage," said Kaushal.

Harris said that China is well aware of the need for greater ASW capabilities. "I expect them to try and increase [ASW], but I expect them to do that regardless" of the new AUKUS details, he said. "I do think this gives them some impetus, but they can only go so far."

And like Kaushal, Harris says this is an area where the US has a clear advantage right now. "Antisubmarine warfare is both an art and a science. The United States and UK have been at it since, really, World War 1, and certainly throughout the entire Cold War. Australia has been with us also," he noted.

China's subsurface capabilities are set to improve long term however, with a total of 70-75 submarines, up from a current fleet of around 65-66 vessels, due to be constructed and enter service over the next ten years, noted Herzinger.

All that said, he noted that predicting the outcome of a future war is problematic because of complications related to international obligations.

"We're dealing with some hypotheticals regarding military balance issues [in the Indo-Pacific], because there aren't any states that have a treaty obligation to immediately get involved in the defense of Taiwan," Herzinger added.

While a "deterrence balance" might not be impacted by the optimal pathway agreement in light of the new subs still to arrive, near term military balance implications could be much more profound on the basis that nations holding a vested interest in "maintaining the status quo" across the Indo-Pacific region will grow in confidence that the undersea capability advantage over China continues to be reinforced, according to Herzinger.

Colin Clark in Sydney contributed to this report.

Virginia Payload Module to Give Subs More Firepower

4/10/2023

By Josh Luckenbaugh

General Dynamics Electric Boat image

The Navy is augmenting its attack submarine fleet by increasing its capacity to deploy weapons and other key payloads in a potential conflict.

In December, senior Navy leaders, elected officials and industry representatives gathered at General Dynamics Electric Boat's Quonset Point Facility in North Kingstown, Rhode Island, for the keel-laying ceremony for the USS Arizona, the 30th of the service's Virginia-class fast attack submarines.

Once completed, the Arizona will be the first in its class to be equipped with the Virginia Payload Module, a new hull section that will enable the Arizona and subsequent Virginia-class ships to deliver a variety of capabilities such as weapons, vehicles and undersea payloads, according to the Navy.

"The boats in this class are the most advanced attack submarines ever designed. Their stealth, firepower and maneuverability are superior to every other attack submarine force in the world," Rear Adm. Jonathan Rucker, the Navy's program executive officer for attack submarines, said in a press release. "Building, operating and maintaining Arizona and other Virginiaclass subs is crucial to ensuring the Navy's ability to project power in an ever-shifting global threat environment, and to maintaining peace and the free operation of our sea lanes."

The first ship in the class, the USS Virginia, was commissioned in 2004. The first 10 Virginia-class subs — Block 1 and Block 2 of the class — feature 12 Vertical Launch System tubes for firing Tomahawk cruise missiles, a Navy fact file on attack submarines said.

Beginning with Block 3, the Navy redesigned "approximately 20 percent of the ship" to reduce acquisition costs, the fact file said. The redesign included replacing the 12 vertical launch tubes with "two large diameter 87-inch Virginia Payload Tubes, each capable of launching six Tomahawk cruise missiles using Multiple All-up Round Canisters," the file said. The added volume of the tubes provides more payload flexibility while simplifying construction and

reducing acquisition costs, the file stated.

The Navy maintained this design on the Block 4 ships, but starting with the Arizona — the second sub in Block 5 — the Navy introduced the Virginia Payload Module, or VPM, featuring four additional large diameter payload tubes, the fact file said.

"Due to their location, each VPM payload tube is capable of carrying seven Tomahawk cruise missiles adding 28 missiles per" module, the Navy file said. It also "reconstitutes the ability" of the Virginia class to hold dry deck shelters that can launch and recover special operations forces, "and allows the Navy to host additional advanced payloads via multiple ocean interfaces," the file added.

The module is 84 feet long — bringing the total length of the Virginia-class subs up from 377 feet to 461 feet, the Navy file said — and can store and launch "payloads with diameters larger than the 21-inch diameter of a torpedo or Tomahawk missile," a December Congressional Research Service report on Virginia-class sub procurement said. Block 6 of the Virginia class is expected to include the VPM as well, a Navy spokesperson said in an email.

General Dynamics Electric Boat — the prime contractor for the Virginia class — awarded contracts in 2016 to BAE Systems and BWX Technologies for the production of the launch tubes, with BAE Systems winning additional production contracts in 2018 and 2019, per company press releases.

The additional firepower provided by the module "is intended to compensate for a sharp loss in submarine force weapon-carrying capacity that will occur with the retirement in FY2026-FY2028 of the

Navy's four Ohio-class" guided missile submarines, or SSGNs, the Congressional Research Service report said. The Ohio class also includes 14 ballistic missile submarines, or SSBNs, which the Navy will replace with its Columbia-class boats.

Each of the Ohio-class SSGNs — which are 560 feet long, according to a Navy fact file — can carry 154 Tomahawk missiles, "so you'd end up with about four Virginia class Block 5's being equivalent to one [Ohio class]," said Bryan Clark, a senior fellow and director of the Center for Defense Concepts and Technology at the Hudson Institute.

"The idea was ... build 10 Block 5 and then 10 Block 6 Virginia class so that will give us 20 submarines with 40 additional missile tubes, and that will compensate for that loss of missile capacity," he added.

However, due to construction delays on Block 4 and Block 5 Virginia-class subs, there will be a gap between the retirement of the Ohio-class SSGNs and the commissioning of the Virginia-class subs that have the module, Clark said.

Media reports in the spring of 2019 indicated that the two contractors in charge of Virginia-class submarine construction — General Dynamics Electric Boat and Huntington Ingalls Industries — "were experiencing challenges in meeting scheduled delivery times as the Virginia-class program was transitioning from production of two 'regular' Virginia-class boats per year to two VPM-equipped boats per year," the Congressional Research Service report detailed. On the company's quarterly earnings call in February 2022, Huntington Ingalls Industries' then-COO and current

president and CEO Chris Kastner confirmed the company had missed submarine milestones for two Block 4 Virginia-class subs at the end of 2021.

Due to these delays, the Navy will be left "without ... an equivalent undersea missile capacity" to the Ohioclass subs for a time, Clark said. A Department of the Navy Special Acquisition Report from December 2021 projected a November 2028 delivery date for the USS Arizona.

"There's a learning curve, but they will get more efficient at building them after they've built a few," he said. "Both shipbuilders have built a lot of additional infrastructure to support construction of Columbia and the Block 5 Virginia class, [and] that infrastructure is now being brought into the production process."

Compared to previous Virginiaclass subs, those featuring the VPM will require larger crews "in the weapons department to be able to manage the missile tubes," Clark said. The increase in size and weight due to the module will likely lead to maneuverability concerns as well, he added.

The Navy "has performed extensive analysis of the impact of" the VPM on the Virginia-class subs, the Navy spokesperson said. "The expanded volume allowed for additional margin" for systems such as hydraulics and cooling, "with modest impacts to maneuvering and speed," the spokesperson said.

"In terms of ship handling, the Navy expects that this will be, more or less, not a big difference from the Virginia class as it currently exists," Clark said. "But I think everybody who's a submariner anticipates that the ship will handle a lot differently. It'll be heavier, it will probably be slower ... so

there is a concern that potentially these Block 5 and then Block 6 submarines may have more limited operations envelopes, if you will, compared to the previous blocks of Virginia."

The Virginia-class subs with the Virginia Payload Module will likely be used more for patrolling or special operations support missions — similar to the Ohio-class SSGNs — as opposed to "traditional submarine missions" such as gathering intelligence in contested waters, Clark said.

The module could prove particularly useful for supporting special operations forces, he added.

"The Virginia class has lock-in, lock-out chambers, and it's got the ability to carry the dry deck shelter that the swimmer delivery vehicle lives in," Clark said. "The Block 5's will have the ability to carry additional vehicles."

Instead of missiles, special operators could store vehicles or gear in the tubes and retrieve this "specialized equipment" when the mission begins, he said.

The VPM can also deliver unmanned underwater vehicles, a Navy press release said. While the service does have and use these vehicles primarily for mine hunting — and could use them in the future for "undersea warfare" missions — deploying them from the new modules could prove a challenge, Clark said.

"The tubes open on the top of the submarine, so if you have undersea vehicles you want to deploy ... they're going to have to swim out the top, which is not preferred," he said. "You prefer them to be able to swim out horizontally."

As of now, "there are no planned unmanned vehicles being launched from the Virginia Payload Module itself,

however submarines are planned to incorporate a torpedo tube launched variant of the Razorback Unmanned Underwater Vehicle as well as Submarine Launched Unmanned Aerial System," the Navy spokesperson said.

The Navy is more likely to "use these tubes to carry a variety of missiles," Clark said, "because you can deploy unmanned vehicles from lots of other places, whereas you can only deploy weapons from certain missile cells and containers."

Along with Tomahawk missiles, the Navy is interested in deploying hypersonic weapons — systems that can reach Mach 5 or higher, or at least five times the speed of sound — from the module once these capabilities are developed, he said.

Hypersonic weapons have become a top priority for the Defense Department. The Navy is currently working on a hypersonic weapon program called Conventional Prompt Strike, while the Army is developing the Long Range Hypersonic Weapon.

The two services conducted a test of their hypersonic capabilities in October. Both programs "are on track to support the first fielding of a hypersonic capability to the Army in [fiscal year] 2023," a Navy press release said.

Hypersonic weapons are certainly "something that the Navy and Congress and DoD want to try to integrate onto the Virginia class, because I think they see that as the best platform to have a mobile way to deploy that weapon in theater" without having to be "dependent upon host nation support," Clark said.

While the Navy brought up the potential of using the VPM to carry unique systems such as unmanned underwater vehicles, the service is likely

to prioritize carrying Tomahawk missiles, hypersonics and special operations equipment in the module, Clark said.

"I think what they're finding in practice is that it costs a lot of money to put something into a payload module like that, and then we have to probably make some choices," he said.

"Certain payloads end up being most advantageous, and other payloads are nice to have or interesting, but maybe are more experimental and not likely to be the production equipment that we actually put on the ship."

Navy unveils shipbuilding plan: Virginias to replace subs sold to Aussies, but impacts of AUKUS unknown

It was not clear when President Joe Biden and his counterparts announced AUKUS' details whether those subs would be replaced by new Virginia-class boats or SSN(X).

By Justin Katz on April 18, 2023 at 11:36 AM



221014-N-ZZ999-0049 GROTON, Conn. (October 14, 2022) – The Virginia-class USS Oregon (SSN 793) transits the Thames River after returning from routine operations in route to Naval Submarine Base New London in Groton, Conn., Oct. 14. (U.S. Navy photo by Petty Officer 2nd Class Wesley Towner)

WASHINGTON — The Navy's new 30-year shipbuilding plan, unveiled today, shows the US plans to build additional Virginia-class submarines to replace those eventually sold to Australia as part of the AUKUS arrangement, but also leaves open many questions of how that will affect the Navy's other shipbuilding plans and an overburdened industrial base.

"Based on the trilateral agreement announcement of March 2023, the Navy anticipates building additional Virginia class SSNs in the 2030s as replacements for submarines sold to Australia," according to the new plan, a copy of which was provided by the Navy to Breaking Defense while its top leaders testified to the Senate Armed Services Committee about its fiscal 2024 budget request.

President Joe Biden alongside his British and Australian counterparts in March unveiled a multi-phase plan, dubbed the "optimal pathway," that will deliver nuclear-powered submarines to Australia in the 2040s. One of the key steps to the plan includes selling at least three, and up to five, American Virginiaclass subs to Canberra. It was not clear at that time whether the US would replace those boats with new Virginia-class subs or focus on its next-generation sub, SSN(X).

The new shipbuilding plan clears up that ambiguity but is also frank about the fact there are still many uncertainties about what challenges the trilateral security pact, AUKUS, could have on the Navy and the industrial base moving forward.

"The full impact of AUKUS upon the Navy's shipbuilding plan cannot be characterized in this year's report given the conclusion of the March 2023 trilateral agreement coincided with the finalization of this report coupled with additional studies that will continue this

summer," according to the shipbuilding report.

Another uncertainty surrounding this year's shipbuilding plan is a separate Pentagon assessment called the "Battle Force Ship Assessment and Requirement Report," which will not be completed until June 2023. That report's preliminary findings did "not inform" the new shipbuilding plan, but is expected to impact the FY25 shipbuilding plan.

Much of this year's plan is largely a redux of last year's, which lays out three potential three shipbuilding profiles for lawmakers to consider when crafting the Pentagon's budget.

The first two options assume the Navy's budget sees limited growth and result in fleet sizes of either 319 or 328 ships in FY53, the farthest year out projected in the plan. The document also states the limited budget options do "not procure all platforms at the [Navy's] desired rate."

"The primary differences between the baseline PB2024 and alternative 2 is the focus on procuring more SSNs and unmanned vessels within the constrained [table of allowance]," according to the document. "Alternative 2 continues procuring Virginia class submarines along with the future SSN(X) in the out years as opposed to the PB2024 profile, which ceases procurement of Virginia class submarines when SSN(X) begins."

"Alternative 2 also continues to procure DDG 51 [Flight] Ills longer than PB2024, delays the shift to DDG(X), and procures fewer of both," the document continues. "This enables a larger SSN force and procurement of a larger combat logistics force due to savings created by continuing to buy the less expensive SSN and fewer DDG(X)."

The third alternative, which assumes the Navy receives a significantly larger budget in the future years, would result in a fleet of 367 ships in FY53.

"Alternative 3 represents procuring to a larger Navy. This alternative shifts CVNs to 4-year centers and not only shifts to the future SSN(X) and DDG(X) but also procures the platforms at a consistent rate of at least two per year," according to the plan.

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