

Navy to Commission Future Littoral Combat Ship Savannah



USS Independence (LCS-2), shown here at Naval Air Station Key West, Florida in 2010. The newest Independence-class littoral combat ship, the future USS Savannah, will be commissioned Feb. 5. *U.S. NAVY*

ARLINGTON, Va. – The Navy will commission the future USS Savannah (LCS 28) as the newest Independence-variant littoral combat ship during a 10:00 a.m. EST ceremony Saturday, Feb. 5, in Brunswick, Georgia, the Defense Department said Feb. 4.

Remarks will be provided by Rep. Earl L. “Buddy” Carter, R-Georgia; Meredith Berger, performing the duties of the undersecretary of the Navy; Vice Adm. Carl Chebi, Commander, Naval Air Systems Command; Van Johnson, mayor of Savannah; Cosby Johnson, mayor of Brunswick; and Larry Ryder, vice

president of Business Development and External Affairs, Austal USA.

The ship's sponsor is Dianne Davison Isakson, wife of the late Johnny Isakson, former senator from Georgia. In a time-honored Navy tradition, Isakson, along with the matron of honor, her daughter Julie Isakson Mitchell, will give the first order to "man our ship and bring her to life."

"The city of Savannah, Georgia, has played an important role in our nation's naval history," said Secretary of the Navy Carlos Del Toro. "I have no doubt the Sailors of USS Savannah will carry on the fighting spirit of this city and will play an important role in the defense of our nation and maritime freedom."

The LCS class consists of two variants, the Freedom and the Independence, designed and built by two industry teams. Lockheed Martin leads the Freedom variant team, or odd-numbered hulls, constructed in Marinette, Wisconsin. Austal USA leads the Independence variant team in Mobile, Alabama for LCS 2 and the subsequent even-numbered hulls.

Savannah is the 14th Independence variant LCS and the sixth ship to bear its name. USS Savannah will homeport at Naval Base San Diego, California.

The ceremony will be live streamed at: [USS Savannah Commissioning](#). The link becomes active approximately 10 minutes prior to the event (9:50 a.m. EST).

CNO Visits Philadelphia Navy Commands; Emphasizes Importance of Columbia-class Submarines



Chief of Naval Operations Adm. Mike Gilday speaks with Sailors assigned to the future USS Lenah H.S. Higbee (DDG 123) at Naval Surface Warfare Center, Philadelphia Division, Feb. 3. *U.S. NAVY / Lt. Rachel Maul*

PHILADELPHIA – Chief of Naval Operations (CNO) Adm. Mike Gilday and Rear Adm. Douglas Perry, director, undersea warfare division, visited Philadelphia-based Navy commands, Feb. 3, the CNO's public affairs office said in a release.

Together, they visited the Naval Foundry and Propeller Center and Naval Surface Warfare Command Center, Philadelphia Division, where Gilday toured the facilities, spoke with

Sailors and Navy civilians, and received updates about Columbia-class submarine construction.

“The impressive cadre of engineers here who are delivering world-class results are a national treasure,” said Gilday. “The work you are doing here is vital to national security, as well as that of our Allies and partners.”

Columbia-class submarines are the Navy’s number one acquisition priority, Gilday added.

“These submarines need to be delivered on time, on budget and ready for the fight – and that’s what we intend to do,” Gilday said. “Working together, we will get them off of the production line and into the fleet where they belong.”

The Columbia-class submarine is the nation’s future sea-based strategic deterrent and will provide the most survivable leg of the Nation’s strategic triad. It replaces the currently serving Ohio-class submarines and must be constructed and delivered beginning in fiscal year 2028 to meet U.S. Strategic Command requirements. These ballistic missile submarines serve as an undetectable launch platform for submarine-launched ballistic missiles and are designed specifically for stealth and the precise delivery of nuclear warheads.

Gilday toured the Naval Sea Systems Command Compatibility Test Facility where he saw the shipboard-representative Columbia Integrated Propulsion System prototypes in operation and the Arleigh Burke-class Land-Based Engineering Site. He also received updates about the developing electrical and propulsion test facility risk-reduction capabilities for newer classes of ships, including the next-generation destroyer (DDG(X)), Constellation-class frigates, and unmanned surface vehicles.

“Fielding greater numbers of more affordable, smaller surface combatants, like the new Constellation-class frigates, allows us to operate in a more distributed manner – both in day-to-

day competition and in high-end combat,” said Gilday. “Because of the work of our systems commands and our partnerships with industry, we will continue to successfully compete and win.”

Throughout the visit Gilday expressed his gratitude for the innovation and dedication Sailors and civilians have shown to keep these manufacturing and testing efforts on track, especially amidst the pandemic.

“To the entire workforce here, you directly support and generate warfighting readiness and have my profound thanks,” said Gilday. “Your hard work and commitment to the Fleet is appreciated, and what you are doing is critical for us to be able to protect our Nation.”

The visit marked Gilday’s first trip to Philadelphia since he assumed his duties as CNO.

NSWCPD’s mission is to provide research, development, test and evaluation, acquisition support, engineering, systems integration, in-service engineering and fleet support with cyber-security, comprehensive logistics and life-cycle savings through commonality for surface and undersea vehicle machinery, ship systems, equipment and material and to execute other responsibilities.

Rear Adm. Okano: Modern Sensors Making Navy Ships ‘Data-Providing Monsters’



Arleigh Burke-class guided-missile destroyer USS Pinckney (DDG 91) transits the South China Sea in July 2021. Surface Electronic Warfare Improvement Program Block 3 is being installed on Pinckney, giving it an electronic attack capability. *U.S. NAVY / Mass Communication Specialist 2nd Class Jeffery L. Southerland*

ARLINGTON, Va. – Sensors on naval platforms are becoming multi-purpose – some even weapons – and are making the U.S. Navy’s surface ships the most data-rich platforms in the Department of Defense as their sensors become part of an analog-to-digital transformation, a senior Navy program executive said.

Noting the amount of data that comes from modern surface-ship sensors, Rear Adm. Seiko Okano, program executive officer – Integrated Warfare Systems, speaking Feb. 3 during the Combat Systems Symposium conducted by the American Society of Naval Engineers, said the amount “is absolutely incredible. ... Our surface ships are the most data-rich platforms ever. ... We are data-providing monsters.”

She noted that each array face of the SPY-6 radar for the Flight III Arleigh Burke guided-missile destroyer (DDG) is producing terabytes per minute of data.

“We’re right now not digesting that to its full capacity,” she said. “We’re doing with that what we did 40 years ago, ... which is why we’ve got to invest in digitizing our fleet and the power of AI/ML [artificial intelligence/machine learning]. There’s so much capability we’ve got to unleash from those sensors alone.

“We’ve shifted to this digital era,” Okano said. “Where before, your hardware and software were really tightly coupled ... now it is all software-programmable. And that’s the world we’re living with SEWIP [Surface Electronic Warfare Improvement Program], Aegis, SPY-6 and our sensors right now, which allows us to change and adapt a lot faster than we ever had before.”

Okano pointed to examples of radars such as the SPS-48 and SPS-49 search radars as single-purpose sensors. The trend now, she said, is “we’re going multi-mission. These sensors are no longer just used for air search or surface search.

“Are we really unleashing the power of what we are putting on board ships?” she asked. “Our infrastructure isn’t one that really we can manipulate that sensor to do whatever we want. We’re already behind the power curve.”

The admiral noted new sensors “are absolutely fantastic and they are only getting more powerful.”

She noted SEWIP Block 3 [SLQ-32(V)7] is being installed on the Arleigh Burke-class DDG USS Pinckney. This SEWIP block has an electronic attack capability.

“Sensors [are] becoming weapon systems,” Okano said. “You’re both sensing and you’ve got a capability to react as well. [That] is the world we’re getting into.”

First MQ-4C Triton with Multi-Intelligence Upgrade Delivered to the Navy



A Northrop Grumman Corp. MQ-4C Triton takes to the skies over the California desert as the Triton low-rate initial production schedule progresses. Known as B8, this is the first production Triton to be upgraded to the multi-intelligence configuration to meet the Navy's critical maritime intelligence, surveillance, reconnaissance and targeting needs. B8 was delivered to Naval Air Station Patuxent River, Maryland, on Feb. 1.

ARLINGTON, Va. – The first production MQ-4C Triton unmanned aerial vehicle to be upgraded to the multi-intelligence configuration was delivered to the U.S. Navy at Naval Air Station Patuxent River, Maryland, on Feb. 1, Northrop Grumman

said in a release.

The MQ-4C's new configuration Integrated Functional Capability Four is designed to bring an enhanced multi-mission sensor capability as part of the Navy's Maritime Intelligence, Surveillance, Reconnaissance and Targeting transition plan.

The Triton, designated B8 by the manufacturer, Northrop Grumman, went through a 30-month modification period to the new configuration.

The two MQ-4Cs currently deployed to Guam for the U.S. 7th Fleet's Task Force 72 by Unmanned Patrol Squadron 19 (VUP-19) as part of the early operational capability deployment are in the baseline IFC-3 configuration.

The Triton in the IFC-4 configuration is designed to complement the Navy's P-8A Poseidon maritime patrol aircraft and eventually will enable the Navy to retire its EP-3E Orion electronic reconnaissance aircraft. The initial operational capability for the Triton will be declared in 2023 when IFC-4-configured Tritons are deployed in one complete orbit. The Navy plans to deploy Triton to five orbits worldwide.

Air-to-Air Missiles Program Office Names Italy as Partner



The Air-to-Air Missiles Program Office has acquired Italy as its 28th Air Intercept Missile 9X international partner.
LOCKHEED MARTIN

PATUXENT RIVER, Md. – The Air-to-Air Missiles Program Office (PMA-259) acquired Italy as its 28th Air Intercept Missile (AIM)-9X international partner Dec. 17, 2021, said Katie Ursitti, a spokesman for the Naval Air Systems Command.

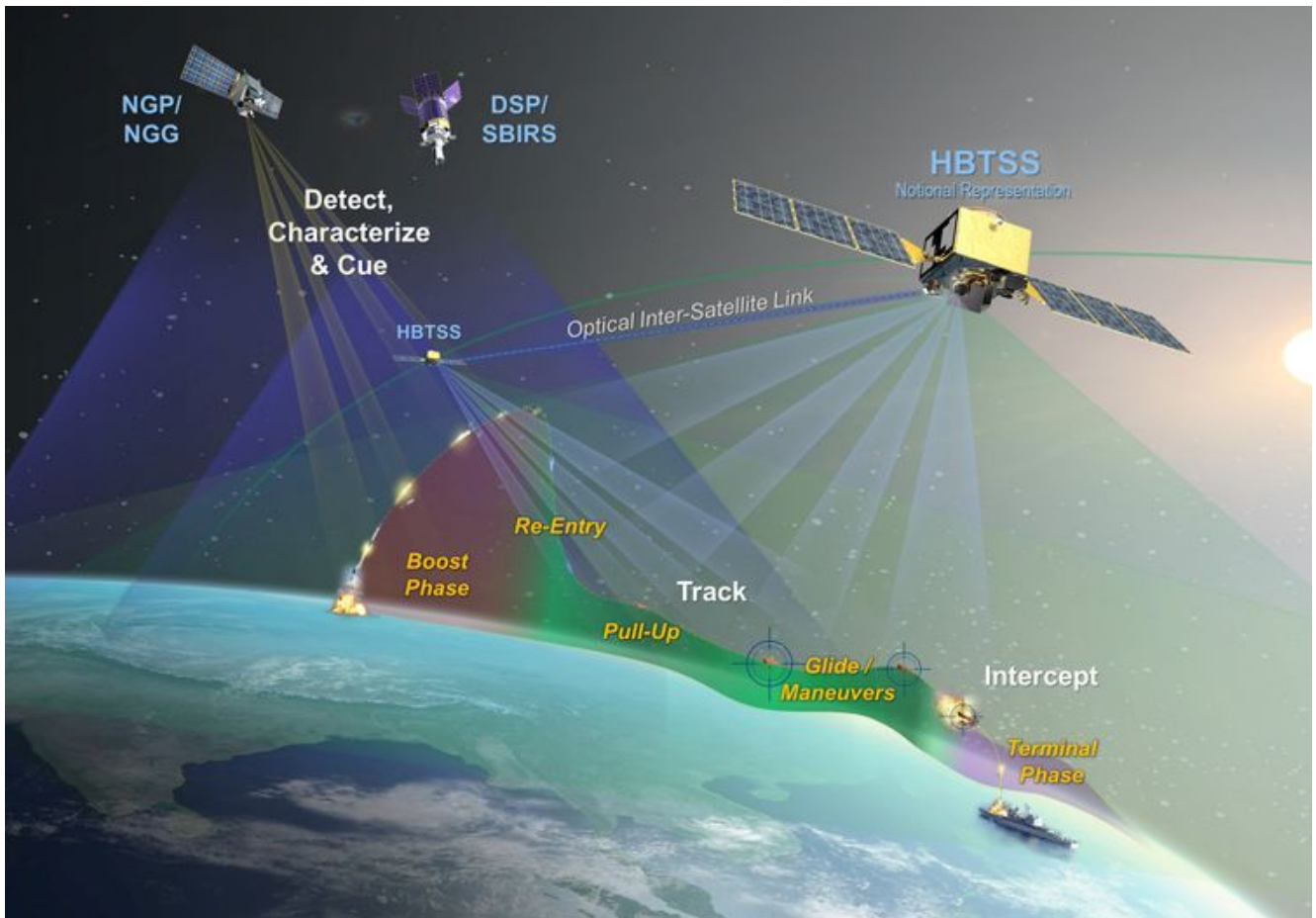
The Italian Embassy in Washington D.C. notified the Navy International Programs Office that the Italian air force accepted and signed the letter of offer and acceptance provided by the U.S. government.

Italian air force officials signed the letter Nov. 19., and shortly after representatives from PMA-259 and Raytheon Missiles & Defense presented the AIM-9X Block II/II+ Classified Capabilities Briefing to Italian headquarters air force staff and F-35 Lightning II pilots.

This LOA consists of a modest quantity of AIM-9X Block II/II+ missiles to complement Italy's F-35 fleet. This procurement will be part of the U. S. Navy's Lot 23 production contract, which will award in 2023 and deliver missiles in 2026.

Additionally, the Italian navy, which also operates the fifth-generation fighter aircraft, has been provided with a separate letter of offer and acceptance for Lot 23 AIM-9X Block II/II+ missiles, and is expected to accept it soon. Italy will receive AIM-9X missiles that will employ the true fifth-generation Block II/II+ capabilities of lock-on-after-launch, data link and surface attack.

Vice Adm. Hill: MDA Pushes Space-Based Sensor for Tracking Hypersonic Missiles for Fleet Defense



A graphic illustrates how Hypersonic and Ballistic Tracking Space Sensor satellites would provide continuous tracking and handoff to enable targeting of enemy missiles launched from land, sea or air. *NORTHROP GRUMMAN*

ARLINGTON, Va. – With hypersonic missiles emerging as a serious threat to U.S. Navy ships, the Missile Defense Agency is focused on the use of a space-based sensor for hypersonic regional defense to provide tracking of both hypersonic and ballistic missiles all the way to hand off to the terminal phase.

The MDA has been designated the Defense Department’s executive agent for defense against hypersonic missiles.

“It’s going to maneuver and come in at a high velocity,” said Vice Adm. Jon Hill, speaking Feb. 2 during the Combat Systems Symposium conducted by the American Society of Naval Engineers, noting the challenge of defeating hypersonic missiles.

Hill said that tracking of a hypersonic missile in flight will

be the job of the Hypersonic and Ballistic Tracking Space Sensor, a satellite with sensors to detect and track hypersonic missiles. Defense against the missiles in the terminal phase would be the job of the ship-based Aegis Combat System and Standard surface-to-air missiles.

Hill said of hypersonic missiles that with existing sensors “we’re seeing them, we’re capturing data, we’re collecting on them, though noting that the U.S. sensors are “not always in the exact right place, because many of them are land-based and stationary because sensors are purpose built for a particular part of the battlespace.

“We have that and the SM-6 missile with its nascent capability to take on a hypersonic [missile],” he said. “We didn’t call it that back when we got the letter from the CNO [chief of naval operations] to go develop this program. But the whole idea was to handle high-speed maneuver. [The SM-6] is really the nation’s only hypersonic defense capability.”

“We can do warning today on hypersonics, so we’re not at zero,” he said.

“We’re going to take those first hypersonic tracking space-based sensors in coordination with the U.S. Space Force and we’re going to get them on in orbit,” he said. “That’s through a competitive process and we’re really excited about that. We did so much risk-reduction on the ground we’re absolutely confident that those sensors are going to deliver what we need when we put them up.”

The admiral said terminal defense is necessary but not sufficient to defeat hypersonic missiles.

“We’re going to leverage space cueing and fire control from space because, to handle maneuvers across the globe, you’ve got to look down” he said. “Field of view is limited from radars and we’re running out of islands to put radars on.

Under the concept, the HBTSS would detect a missile's launch and the separation of the first and second stages of the rocket motors. The satellite's data is continuously relayed and is used to create a track of the hypersonic glide vehicle. The remote track data passed via satellite to an Aegis ship to compute an intercept with a glide-phase interceptor.

Official: Navy Interested in Moving Away from Towed Sensors for USVs



The Mine Countermeasures USV heads out for an operational assessment in this November 2019 photo. *U.S. NAVY*

ARLINGTON, Va. – The use of towed sensors provides a measure of survivability for small unmanned surface vessels but

presents other problems such that the Navy is looking to move away from towed sensors in favor of onboard sensors, a Navy official said.

The Navy is soon to award a production award for the Textron-built Mine Countermeasures USV, equipped with the Unmanned Influence Sweep System, a towed sensor, said George Saroch, director for unmanned surface vessels at Naval Sea Systems Command, speaking Feb. 1 during a panel discussion at the Technology, Systems and Ships Symposium conducted by the American Society of Naval Engineers.

In 2017, Saroch said, the Navy recognized the versatility of the MCM USV and decided to build the boat to handle various payloads, which soon would include the AQS-20 mine-hunting towed sonar and eventually the Barracuda mine-neutralization munition. He sees these as building blocks to a single-sortie detect-to-engage mine countermeasures system.

“So, fundamentally, it’s focused on building a boat, and then we have separate contracts for the payloads,” he said.

The UISS has been through operational testing and shock testing, he said. The MCM USV with the mine-hunting AQS-20C system will be going through developmental and operational test this spring and summer.

Saroch stressed the importance of automatic target recognition as necessary to avoid the expenditure of neutralization charges on objects other than mines.

However, Saroch said the Navy is “very interested in getting away from towing things. You can snag a lot of things when you tow systems, a lesson from the [MH-53E MCM helicopter] community” which often snags objects while towing MCM systems through the water.

“We’re learning that lesson over again about snagging things,” he said, noting that the Navy is trying to move sensors back

aboard the boat, “which brings some other operational capabilities.”

Meier: Ford CVN to Range Widely in the Atlantic for U.S. 2nd Fleet



The aircraft carrier USS Gerald R. Ford (CVN 78) departed Naval Station Norfolk to transit to Newport News Shipyard in support of its planned incremental availability, a six-month period of modernization, maintenance, and repairs, Aug. 20, 2021. *U.S. NAVY / Mass Communication Specialist 1st Class William Spears*

ARLINGTON, Va. – The Navy’s newest aircraft carrier, the USS Gerald R. Ford (CVN 78), will operate all over the North

Atlantic this year when it completes its current shipyard availability, a Navy admiral said, and will operate under the auspices of the U.S. 2nd Fleet.

“Ford is doing amazingly well, coming out of the shipyard her for initial employment,” said Rear Adm. John F. Meier, commander, Naval Air Force Atlantic, speaking Feb. 1 during a panel discussion at the Technology, Systems and Ships Symposium conducted by the American Society of Naval Engineers.

“I think it’s a great opportunity for us to demonstrate the new technology,” Meier said. “We’re going to do that as a service-retained employment, so not part of the normal global force deployment schedule, but we will be working with partners, we’ll be working all over the place as 2nd Fleet takes charge of that carrier and operates with a wide variety of operations up and down the coast, across the Atlantic [and] down in the Caribbean.”

Meier said the Ford’s upcoming operations would be “a really great opportunity to show off that aircraft carriers are in fact extremely maneuverable, upwards of 700 [nautical] miles a day. And robust – most especially robust when you think about the refueled range of the aircraft that fly from them.”

The Ford currently is in a planned incremental availability at Newport News Shipbuilding. All 11 weapon elevators have been certified as of December. Since it began flight operations, it has completed 8,100 catapult launches and the same number of arrested landings, said Rear Adm. Jim Downey, program executive officer for aircraft carriers, also speaking at the event.

Future USS Fort Lauderdale Completes Acceptance Trials



The San Antonio-class amphibious transport dock Fort Lauderdale (LPD 28), which has completed acceptance trials.

HUNTINGTON INGALLS INDUSTRIES

WASHINGTON – The future USS Fort Lauderdale (LPD 28), the Navy's 12th San Antonio class-amphibious transport dock ship, completed acceptance trials Jan. 31, Team Ships Public Affairs said in a release.

Acceptance trials consist of integrated testing to demonstrate the capability of the platform and installed systems across all mission areas to effectively meet its requirements. These demonstrations are used to validate the quality of construction and compliance with Navy specifications and

requirements prior to delivering the craft to the Navy. LPD 28 will now prepare for delivery in a few weeks.

“With the completion of both builder’s and acceptance trials, we are confident that LPD 28 has proven the operational readiness of the vessel and the capabilities it will soon bring to the fleet,” said Capt. Cedric McNeal, program manager, Amphibious Warfare Program Office, Program Executive Office Ships. “The collaboration between the Navy and our industry partners ensures that we’ll have a capable and ready ship for our Sailors.”

The San Antonio-class is designed to support embarking, transporting, and landing Marines and their equipment by conventional or air-cushioned landing craft. The ship’s capabilities are further enhanced by its flight deck and hangar, enabling the ship to operate a variety of Marine Corps helicopters and the Osprey tilt-rotor aircraft. Because of the ships inherent capabilities, they are able to support a variety of amphibious assault, special operations, expeditionary warfare, or disaster relief missions, operating independently or as part of amphibious ready groups, expeditionary strike groups, or joint task forces.

In addition to LPD 28, Huntington Ingalls Industries’ Ingalls Shipbuilding Division is currently in production of the future USS Richard S. McCool (LPD 29) and the future USS Harrisburg (LPD 30), with LPD 31 planned for start of fabrication later this spring. LPD 28 and 29 will serve as transition ships to LPD 30 – the first LPD 17 Flight II ship.

LPD 28 and LPD 29 will incorporate design innovations and cost-reduction strategies based upon lessons learned and improved technologies. The ships will have a more traditional mast in place of the two Advanced Enclosed Mast/Sensors and an updated deckhouse and boat valley design.

Navy Looking to Launch Analysis of Alternatives for SSN(X) Within the Next Year



The Virginia-class submarine USS Minnesota (SSN 783) transits the Thames River toward Naval Submarine Base New London in Groton, Conn., Nov. 26, 2021. U.S. NAVY / Chief Petty Officer Joshua Karsten

ARLINGTON, Va. – The Navy plans to begin a formal Analysis of Alternatives for its next generation nuclear-powered attack submarine, or SSN(X), a senior program official said.

“We are looking at starting an AoA here probably within the next year said Lisa Radocha, executive director of the Navy’s Program Executive Office – Attack Submarines, speaking Jan. 31 on a panel at the Technology, Systems and Ships Symposium

conducted by the American Society of Naval Engineers.

Radocha said the Initial Capabilities Document for the SSN(X) is now under development. Research and development funds for the SSN(X) program are in the fiscal 2022 budget.

She said the SSN(X) design will feature increased speed, an increased horizontal payload, improved acoustic superiority, and higher operational availability.

Radocha pointed out that the period between the delivery of the first Virginia-class SSN and the planned delivery of the first SSN(X) will be four decades. She said one of her concerns is holding onto the engineering and design expertise in the shipbuilding industrial base for the SSN(X) program.

The Virginia-class SSN program will total 48 boats. The technological improvements over the seven blocks of the Virginia SSN will help to reduce risk for the SSN(X) program.

Radocha said her focus is creating an "on-ramp" for the SSN(X) program over the next two fiscal years.

Last August, during the Navy League's Sea-Air-Space Expo, Rear Adm. (now Vice Adm.) Bill Houston, then-director, Undersea Warfare, Division, Office of the Chief of Naval Operations and now commander, Submarine Forces, labeled the SSN(X) as "the ultimate apex predator for the maritime domain."

Houston said the SSN(X) has "got to be faster, carry a significant punch, a bigger payload, a larger salvo rate. It's got to have acoustic superiority and simultaneously we're going to work on operational availability with respect to maintenance and life of the ship."

The admiral explained that the SSN(X) is timed to capitalize on the "very robust" design team for the Columbia-class SSBN when that program is ramping down amid production of the SSBNs.