First Modernized Ticonderoga Cruiser Returned to Navy Service

The guided-missile cruiser USS Cowpens in 2014, returning to San Diego following a deployment to the western Pacific. The cruiser just returned to active service after four years in the Cruiser Modification Program. U.S. Navy/Senior Chief Mass Communication Specialist Donnie W. Ryan

ARLINGTON, Va. – The first of seven Ticonderoga-class guided-missile cruisers entered into the Cruiser Modification Program has been returned to the U.S. Navy's fleet for service.

USS Cowpens went through the modification at the NASSCO shipyard in San Diego over the last four years, Capt. Kevin Byrne, the Navy's program manager for surface ship modernization, said Jan. 15 at the Surface Navy Association symposium here.

Under the modification, the major addition is the Baseline 9A upgrade to the Aegis Combat System with ballistic-missile defense (BMD) capability, along with the addition of the SPQ-9B radar, the Navy Integrated Fire Control capability and the SQQ-89(V)15 anti-submarine warfare system and the Multifunction Towed Array. The ship's Combat Information Center is revamped, the superstructure is strengthened and provisions for the embarked MH-60R

helicopters are included,
among other hull, mechanical and electrical improvements.

Also going
through modernization are USS Gettysburg at the BAE Systems yard in Norfolk,
Virginia, and USS Chosin, which soon will be towed to the Vigor shipyard in
Portland, Oregon. USS Cape St. George will follow at Vigor later in 2020, and USS
Vicksburg enters the BAE yard in Norfolk this month. USS Hue City is the next
to be inducted.

The seven
cruisers are part of the 11 that the Navy decided to take out of service for
modernization, but the Navy is keeping four in service for the time being to
maintain a robust BMD force structure.

CNO Wants Larger Slice of Defense Budget to Modernize, Meet China Threat

Chief of Naval Operations Adm. Mike Gilday delivers remarks at the Surface Navy Association’s 32nd National Symposium at the Hyatt Regency Crystal City in Arlington, Virginia. U.S. Navy/Mass Communication Specialist 1st Class Raymond D. Diaz III
ARLINGTON,

Va. — American commerce depends on the seas, and it's the U.S. Navy that secures that economic prosperity, the chief of naval operations said here, arguing for a bigger slice of the Defense Department budget.

"American commerce is maritime commerce. The American economy flows from the sea," Adm. Michael Gilday told an audience Jan. 14 at the Surface Navy Association symposium.

Addressing a ballroom packed with Navy, U.S. Marine Corps and foreign military personnel as well as industry representatives, Gilday reminded them that infrastructure improvements to several ports around the world were funded by the Chinese government, which he said is trying to expand "a network of influence which helps them assert control over an international system we're trying to protect."

https://www.youtube.com/watch?v=YpnrelnN4BE
To meet the challenge of the "great power competition," the Navy needs to grow the fleet's capabilities while it maintains and modernizes existing platforms, Gilday said.

"We need more money. We need more top line," he added.

The current practice of dividing the topline defense budget roughly into thirds for the Army, Navy and Air Force "does not reflect a strategy," according to Gilday.

Just 1% of the total defense budget would give the Navy an additional $7 billion a year for shipbuilding.

> *“American commerce is maritime commerce. The American economy flows from the sea.”*
>
> *Chief of Naval Operations Adm. Michael Gilday*

As an example of Navy funding challenges, the CNO cited the Columbia class submarine program, which he called his highest priority. The Ohio class subs will be 42 years old when they are all retired. In the 1980s, when that program was in full swing, it accounted for about 20% of the shipbuilding budget. Today, the Columbia program accounts for roughly 25% of shipbuilding funding, and it is expected to grow to 32% between fiscal 2022 and 2030.

“Lot of dough,” Gilday said, adding that, in the 1980s, the Navy’s share of the budget was 38%. Now, it’s 34%, he said.

“We, collectively, have to do a better job of making the case [for] what the United States Navy does for our fellow citizens,” he added.

Raytheon’s SPY-6 Radar Family Attracts Foreign Interest as U.S. Navy Readies for Deliveries

ARLINGTON, Va. — Three foreign navies have expressed interest in the U.S. Navy’s Raytheon-built SPY-6 scalable family of shipboard radars as the Navy prepares to take delivery this year of its first shipsets for installation.

Mike Mills, Raytheon’s SPY-6 program director, told *Seapower* in a Jan. 14 interview at the Surface Navy Association convention here that Norway, Singapore and Japan have expressed interest in the radars. He said Raytheon hopes to land its first foreign military sale of the radars in 2020 or 2021.

The SPY-6(V)1 Air and Missile Defense Radar is designed for the Navy’s Flight III Arleigh Burke-class guided-missile destroyers (DDGs) and features 37 radar modular assemblies (RMAs) in fixed arrays. The SPY(V)2 Enterprise Air Search Radar (EASR) is designed for amphibious warfare ships and features nine RMAs in a rotating antenna.

The SPY-6(V)3 EASR, also with nine RMAs but in fixed arrays, is designed for

aircraft
carriers. Another version, the SPY-6(V)4, with 24 RMAs will be back-fit on
Flight IIA Arleigh Burke-class destroyers. The Navy's FFG(X) next-generation
guided-missile frigate also will receive a version of the SPY-6 EASR as
government-furnished equipment.

Mills said that three shipsets – numbers 5, 6 and 7 – were placed on contract by the Navy in March and that a contract for shipsets 8 and 9 was awarded in December. The Navy ordered long-lead-time materials for the EASR radars to be installed on Bougainville (LHA 8) and USS John F. Kennedy (CVN 79). Mills expects the Navy to order the shipsets for those two ships in May or June.

For the backfits to Flight IIA DDGS, Raytheon delivered the technical data package for the 24-RMA assembly to the Navy in October. The Navy plans on installation of the radars on many Flight IIA DDGs.

Raytheon has five AMDR arrays at the company's facility in Andover, Massachusetts, with the first two in ranges for their scans. The company expects to deliver the next four between April and June, with the last one bound for installation of Jack H. Lucas (DDG 125), the first Flight III DDG.

Navy Looks at Expanded Missions for Textron's CUSV

An early variant of the CUSV autonomously conducts maneuvers

on a Potomac River test range near Dahlgren, Virginia, during a demonstration before government, defense contractors and military personnel. U.S. Navy/John Joyce

ARLINGTON. Va. — As Textron's Common Unmanned Surface Vehicle (CUSV) goes through the paces of testing, it is attracting the U.S. Navy's attention for missions beyond minesweeping.

The CUSV, an unmanned boat capable of towing or carrying payloads, is under development for the Navy's Mine Countermeasures USV (MCM USV) program. Designed to tow a mission package for the Unmanned Influence Sweep System, the MCM USV has been tested with Raytheon's AQS-20 and Northrop Grumman's AQS-24 mine-hunting sonars.

The MCM USV has completed developmental test and operational evaluation, Wayne Prender, vice president of Textron Systems, said in an Jan. 14 interview with *Seapower* at the Surface Navy Association convention here. He said the company is expecting a Milestone C decision from the Navy "any day now" that would authorize low-rate initial production.

Textron has built four CUSVs and has expanded its testing in southern Florida to include Panama City as well. The company is working with the Naval Surface Warfare Center at Dahlgren, Virginia, to develop expeditionary and

surface warfare
packages for the CUSV.

In July, a
CUSV was modified with a remote-controlled .50-caliber M2 machine gun and a
Hellfire missile vertical launcher. In this configuration the craft was demonstrated
at Camp Lejeune, North Carolina, in an Advanced Naval Technology Exercise
(ANTX).

The MCM USV
has been tested in operations from an Independence-class littoral combat ship
and from two vessels of opportunity, including an expeditionary base ship and a
foreign-equivalent ship.

Prender said that Textron is continuing to work on the autonomy and mission behaviors of the CUSV.

Navy Awards Lockheed $43 Million for E-2D Electronic Support Measures Upgrade

OWEGO, N.Y. – Lockheed Martin has received
a $43 million contract modification from the U.S. Navy to upgrade to the
AN/ALQ-217 Electronic Support Measures (ESM) system for the E-2D Advanced
Hawkeye, the company said in a release.

This modification increases the scope of the existing E-2D AN/ALQ-217D electronic support measures and provides upgrades to the receiver/processor, active front end and receiver antenna weapons replaceable assemblies.

These upgrades will give the warfighter additional performance in dense littoral and open-ocean environments. The system’s enhanced situational awareness and full autonomy will also reduce operator workload, enable faster reaction time and improve survivability.

“We are pleased to provide an upgraded AN/ALQ-217 ESM system for our U.S. Navy customer,” said Hamid Salim, vice president, Advanced Product Solutions, Lockheed Martin Rotary and Mission Systems. “The additional modifications are critical upgrades for the E-2D Advanced Hawkeye to improve overall performance in a contested battlespace and provide the capability required by today’s warfighter.”

The Lockheed team will deliver several AN/ALQ-217D ESM upgrade kits to support development and test through 2023. This is a 12-month period of performance adjustment from the initial contract award.

The base AN/ALQ-217D contract upgrades include improved combat identification networked-electronic warfare for multiship

geolocation with other carrier air wing aircraft and detection of advanced threat radar systems. In addition, the upgrades further improve the platform’s antennas and active front ends.

Lockheed Martin has been the AN/ALQ-217 ESM supplier on the E-2D Advanced Hawkeye program since 1999. Most of the work will be performed in Owego, New York, and is expected to be completed by September 2023.

Raytheon, Major Tool and Machine Team Up on SPY-6 Radars

WASHINGTON, D.C. –
Raytheon has signed an
exclusive teaming agreement with Major Tool & Machine Inc. to develop array
structures for the U.S. Navy’s SPY-6 radar program when it transitions from
low-rate initial production to hardware production and sustainment, Raytheon
said in a Jan. 14 release.

SPY-6 is a family of next-generation, integrated air and missile defense radars that is being installed on more than 50 ships across seven Navy ship classes.

“Major Tool’s array structures will literally serve
as the foundation upon which we build the U.S. Navy’s most advanced radars,”
said Paul Ferraro, vice president of Raytheon’s Seapower Capability Systems

business. “Our team of industry-leading partners is ready to deliver SPY-6’s
unmatched, multimission capability to the surface fleet.”

Since its inception in January 2014, the Raytheon-led SPY-6 program has met all 20 milestones, ahead of or on schedule. The radar has a track record of performance, demonstrating its multimission capabilities against an array of single and multiple, simultaneous targets throughout the Navy’s extensive testing program.

AN/SPY-6(V) remains on schedule for delivery to the first DDG 51 Flight III, the future USS Jack H. Lucas (DDG 125). The first delivery of AN/SPY-6(V)2 to LHA 8, the USS Bougainville, an America-class amphibious assault ship, is on plan for 2021.

L3Harris to Provide Expeditionary UUVs to Navy

FALL RIVER, Mass. – L3Harris Technologies has been selected to provide an unmanned undersea vehicle for expeditionary undersea missions for
U.S. military forces by the U.S. Navy and the Defense Innovation Unit (DIU),
the company said in a Jan. 14 release.

DIU, which accelerates commercial technology to solve national security solutions, awarded the agreement to L3Harris for the Navy’s Next
Generation Small-Class Maritime Expeditionary Mine Countermeasures Unmanned
Undersea Vehicle (MEMUUV) program.

https://www.youtube.com/watch?v=5DcWpCJaxVA
This award includes the delivery and testing of an Iver4-900 PW UUV and two field swappable modular payload sections, including real aperture and synthetic aperture sonars. Additional sensors, swappable battery chemistries and data solutions are included with the prototype system to provide U.S. military forces with a highly capable UUV that can detect, classify, localize and identify targets on the ocean floor and in the water column in support of Expeditionary Mine Countermeasures (ExMCM), Explosive Ordnance Disposal (EOD) and undersea search operations.

“The Iver4 is the culmination of many years of UUV development, customer feedback and application knowledge for military applications,” said Daryl Slocum, vice president and general manager of unmanned maritime systems for L3Harris. “This platform has been custom-built to address the needs of the ExMCM and EOD communities. With its flexible payload, transportable package, extended endurance and high-performance accuracy, the Iver4 is leading the next generation of small class UUVs.”

Lockheed to Deliver 50 C-130Js Via Multiyear III Award

Two KC-130J Super Hercules conduct a ceremonial formation flight for the VMGR-352 75th anniversary above Marine Corps Air Station Miramar, California. U.S. Marine Corps/Lance Cpl. Clare J. McIntire
MARIETTA, Ga. — Lockheed Martin will deliver 50 C-130J Super

Hercules to the U.S. government through a C-130J Multiyear III award, which was finalized by the government on Dec. 27, Lockheed announced Jan. 13.

The Department of Defense awarded more than $1.5 billion in funding for the first 21 C-130J aircraft on the multiyear award. The overall award, worth more than $3 billion, provides Super Hercules aircraft to the U.S. Air Force (24 HC/MC-130Js), Marine Corps (20 KC-130Js) and Coast Guard (options for six HC-130Js). Aircraft purchased through the C-130J Multiyear III award will deliver between 2021 and 2025 and will be built at Lockheed's Marietta, Georgia, facility.

"The C-130J Multiyear III award represents a joint commitment between Lockheed Martin and the U.S. government in delivering proven capability that meets our operators' mission and affordability requirements," said Rod McLean, vice president and general manager of air mobility and maritime missions at Lockheed.

The C-130J is the global standard in tactical airlift, providing a unique mix of versatility and performance to complete any mission. The Super Hercules worldwide fleet has more than 2 million flight hours and is the airlifter of choice for 20 nations.

Four Navy Ships Set for Delivery of Newest SSDS Configuration

A U.S. Marine Corps MV-22 lands aboard the amphibious assault ship USS Boxer (right) while the amphibious dock landing ship USS Harpers Ferry follows. Boxer will be among four ships to receive the newest SSDS configuration this summer. U.S. Navy/Mass Communication Specialist 2nd Class Kyle Carlstrom

ARLINGTON, Va. – Lockheed Martin is on tap to deliver the latest version of the Ship Self-Defense System (SSDS) to four Navy ships this summer, a company official said.

Lockheed Martin was confirmed as the Combat Systems Engineering Agent (CSEA) for the SSDS program on Dec. 13 when a protest to the selection by the previous CSEA was denied, Jim Sheridan, Lockheed's vice president for naval combat and missile defense systems, said in a Jan. 14 briefing to reporters at the Surface Navy Association convention here. The initial bid was made in August 2017.

Sheridan said the major challenge since the resolution of the protest was the tight timeline to make the deliveries by July.

The SSDS Advanced Capability Build 20 (ACB 20) will be delivered to the aircraft USS George Washington (CVN 73), the amphibious assault ship USS Boxer (LHD 4) and the amphibious platform dock ships USS San Antonio (LPD 17) and USS Fort Lauderdale (LPD 28).

SSDS ACB 20 is a combat system that will integrate such systems as the Evolved SeaSparrow Missile Block II system, the SLQ-32 Surface Electronic Warfare Program III system and the Enterprise Air-Search Radar. The upgrade features cybersecurity enhancements and fire-control loop modernization. It also will integrate the Advanced Training Domain.

In addition, the SSDS ACB 10 will be migrated from Hardware Technology Insertion (HTI) 12 to HTI 16 infrastructure.

Sheridan said the selection of the Lockheed Martin as CSEA for the SSDS makes the company the CSEA for aircraft carriers and most surface combatants, the major exception being the Zumwalt-class guided-missile destroyers. The company plans to bid to become the CSEA for the new FFG(X) guided-missile frigate.

Lockheed Martin is adding the SSDS ACB 20 software to its Common Source Library, also inhabited by its Aegis Combat System software.

Leonardo to Build Navy's New Training Helicopter

ROME – Leonardo, through AgustaWestland Philadelphia Corp., has been awarded a contract valued at $176.5 million for the production and delivery of 32 TH-73A helicopters, initial spares, support and dedicated equipment and specific pilot and maintenance training services, the company said in a release.

Work will be mostly performed at Leonardo's Philadelphia facility and is expected to be completed by October 2021.

"On the cusp of celebrating nearly 40 years of operating in Philadelphia, Leonardo is thrilled the U.S. Navy has selected our TH-119-based offer and us as a local and long-term partner," said Alessandro Profumo, Leonardo's CEO. "We are proud to be a core contributor to the future of U.S. defense."

"Today's brilliant news is a ringing endorsement for our solutions setting new industry standards for training," said Gian Piero Cutillo, managing director of Leonardo Helicopters. "We are committed to working with the U.S. Navy to ensure future pilots meet all evolving service requirements."

"Our plan since day one has been to offer the U.S. Navy the training capabilities they asked for, without compromise," said William Hunt, managing director of Leonardo Helicopters Philadelphia. "We are honored to deliver on that promise, build the new fleet in Philadelphia and maintain it from Milton, Florida."