

Final Resting Place of USS Hornet CV-8 Located in South Pacific

SEATTLE – Wreckage of the World War II aircraft carrier USS Hornet rests on the floor of the South Pacific Ocean around the Solomon Islands, 5,400 meters (nearly 17,500 feet) below the surface as discovered last month by the expedition crew of Paul G. Allen's Research Vessel (R/V) Petrel, the Navy's website said in a Feb. 12 post.

Hornet was best known for its part in the fateful Doolittle Raid that was launched in April of 1942, which was the first airborne attack of Japanese homeland targets including Tokyo. Led by U.S. Army Lt. Col. James Doolittle, all of the 16 B-25 planes that were launched from Hornet were unable to land at their designated airstrip in China, but the raid provided a boost to American morale, and put Japan on alert about our covert air capabilities.

In June, Hornet was one of three American carriers that surprised and sunk four Japanese carriers at Midway, turning the tide of war in the Pacific.

The ship was sunk during the exceptionally vicious Battle of Santa Cruz Island that started Oct. 25, 1943. Hornet proved an especially determined ship over the next 24 hours. Enduring a relentless, coordinated attack by Japanese dive-bombers and torpedo planes, her crew was ultimately forced to abandon the ship due to damage and resulting fires. She then defied American efforts to scuttle her with 16 torpedoes and 369 rounds of 5-inch shells. When Japanese forces approached shortly thereafter and fired four torpedoes from two Japanese destroyers late in the evening of Oct. 26, Hornet finally succumbed and slipped beneath the surface. She lost 111 Sailors from her crew of nearly 2,200.

"With the loss of Hornet and serious damage to Enterprise, the

Battle of Santa Cruz was a Japanese victory, but at an extremely high cost," said retired Rear Admiral Samuel Cox, director of Naval History and Heritage Command. "About half the Japanese aircraft engaged were shot down by greatly improved U.S. Navy anti-aircraft defenses. As a result, the Japanese carriers did not engage again in battle for almost another two years."

"Naval aviation came of age in World War II and American Sailors today continue to look to and draw inspiration from the fighting spirit of ships and crews like USS Hornet (CV 8)," Vice Chief of Naval Operations Adm. Bill Moran added. "Although her service was short-lived, it was meteoric.

"In the dark days following the Japanese surprise attack on Pearl Harbor, she and the Doolittle Raiders were the first Americans to punch back at Japan, giving hope to the nation and the world when things looked bleakest," Moran said. "She was there when the American Navy turned the tide in the Pacific at the Battle of Midway, and she was there when America started the long drive to Tokyo in the Solomon Islands. Mortally wounded during the vicious campaign at Guadalcanal and abandoned after all attempts to save her failed, she was finally sent below by the Japanese destroyers Akigumo and Makigumo.

"As America's Navy once again takes to the sea in an uncertain world, Hornet's discovery offers the American Sailor a timeless reminder of what courage, grit and commitment truly look like," Moran continued. "We'd be wise as a nation to take a long, hard look. I'd also like to thank the crew of Petrel for their dedication in finding and honoring her sacrifice."

The discovery of Hornet was made during R/V Petrel's first mission of 2019 after relocating from the Philippine Sea to the Solomon Islands to spend winter months in this arena. Operating out of Guadalcanal, the area is rich in history and prominence in terms of naval engagements.

"We had Hornet on our list of WWII warships that we wanted to locate because of its place in history as an aircraft carrier that saw many pivotal moments in naval battles," said Robert

Kraft, director of subsea operations for Vulcan. “Paul Allen was particularly interested in historically significant and capital ships, so this mission and discovery honor his legacy.”

The 10-person expedition team on the 250-foot R/V Petrel was able to locate Hornet’s position by piecing together data from national and naval archives that included official deck logs and action reports from other ships engaged in the battle. Positions and sightings from nine other U.S. warships in the area were plotted on a chart to generate the starting point for the search grid.

In the case of Hornet, she was discovered on the first dive mission of Petrel’s autonomous underwater vehicle and confirmed by video footage from the remotely operated vehicle, both pieces of equipment rated to dive down to 6,000 meters.

Ports Association Calls For Increasing Multimodal Project Funding, Eligibility

ALEXANDRIA, Va. – In written and oral testimony tomorrow (Feb. 13) before a hearing of the U.S. Senate Commerce, Science and Transportation Committee, the American Association of Port Authorities (AAPA) – the unified and recognized voice of America’s seaports – will say that nowhere in the country are there such stark examples of unmet infrastructure needs than in America’s ports, and in the land- and water-side transportation connections to them, the AAPA said in a Feb. 12 release.

“During the past six decades, there’ve been eight evolutions of the containership, resulting in ships today having

capacities of 18,000 TEUs and beyond, while our country has relied upon essentially the same infrastructure to accommodate and facilitate an astronomical growth in freight volumes," says AAPA Chairman William D. Friedman, chief executive officer of the Cleveland-Cuyahoga County Port Authority, who will testify before the Senate Commerce, Science and Transportation Committee. "Clearly, multimodal project funding levels and multimodal project eligibilities need to be improved."

Friedman will note that, in 2018, AAPA issued an infrastructure report in which its U.S. member port authorities identified more than \$20 billion in multimodal funding needs over the next decade. "A top priority for the port industry continues to be multimodal funding."

To aid with finding solutions to the multimodal funding and project eligibility dilemma, among AAPA's FAST Act reauthorization recommendations are that:

- All freight program funding be 100 percent multimodal (verses being mode-specific).
- The multimodal cap on U.S. Department of Transportation INFRA (Infrastructure for Rebuilding America) grants and formula funding be lifted.
- A maritime supply chain title be included in the next USDOT reauthorization bill that recognizes the evolving supply chain needs of the multimodal freight network.
- Funding to support freight infrastructure improvements come from a gas tax increase, a Vehicle Miles Traveled program, and/or some concept of a 1 percent charge on the domestic cost of freight movement (i.e., a "waybill fee").
- The financing fee for federal Rail Rehabilitation Innovation Financing loans be removed.

Further noting that AAPA's 2019 freight infrastructure report, The State of Freight IV, identified nearly \$4 billion in port security funding needs over the next decade, Mr. Friedman adds, "We need to invest in port infrastructure and we need to secure it."

The Senate Commerce, Science and Transportation Committee

hearing, titled America's Infrastructure Needs: Keeping Pace with a Growing Economy, follows a similar U.S. House Transportation and Infrastructure Committee hearing on Feb. 7, titled The Cost of Doing Nothing: Why Investing in Our Nation's Infrastructure Cannot Wait, in which AAPA is preparing written testimony that will include information on the association's long-term funding solution for harbor maintenance.

Future LCS USS Cincinnati Completes Acceptance Trials

MOBILE, Ala. – The future USS Cincinnati (LCS 20) successfully concluded acceptance trials in the Gulf of Mexico Feb. 8, following a series of in-port and underway demonstrations for the Navy's Board of Inspection and Survey, the Program Executive Office-Unmanned and Small Combatants said in a Feb. 12 release.

Acceptance trials are the last significant milestone before the ship is delivered to the Navy, which is planned for this summer. During trials, the Navy conducted comprehensive tests of the Independence-variant littoral combat ship (LCS) to demonstrate the performance of the propulsion plant, ship-handling and auxiliary systems.

"I can't say enough about the positive results achieved by the Navy and industry team during these acceptance trials of the future USS Cincinnati," said Capt. Mike Taylor, LCS program manager. "She's well into her journey to be delivered to the Navy this summer and will provide needed and cost-effective warfighting capability to the fleet and the nation."

Following delivery and commissioning, Cincinnati will join her nine sister ships already homeported in San Diego, USS Independence (LCS 2), USS Coronado (LCS 4), USS Jackson (LCS 6), USS Montgomery (LCS 8), USS Gabrielle Giffords (LCS 10), USS Omaha (LCS 12), USS Manchester (LCS 14), the future USS Tulsa (LCS 16) and the future USS Charleston (LCS 18).

Four more Independence-variant ships are under construction at Austal USA in Mobile. Final assembly is well underway on the future USS Kansas City (LCS 22) and Oakland (LCS 24). Modules for the future USS Mobile (LCS 26) are under construction in the module manufacturing facility and construction on the future USS Savannah (LCS 28) commenced last summer. Additionally, Austal is preparing for construction of the future USS Canberra (LCS 30), Santa Barbara (LCS 32), Augusta (LCS 34), Kingsville (LCS 36) and Pierre (LCS 38).

LCS is a highly maneuverable, lethal and adaptable ship designed to support focused mine countermeasures, anti-submarine warfare and surface warfare missions. The Independence-variant LCS integrates new technology and capability to affordably support current and future mission capability, from deep water to the littorals.

LCS is now the second-largest surface ship class in production. In 2018, five LCSs were delivered to the Fleet and three will be delivered in 2019 – a pace not seen since the 1990s.

Coast Guard Interdicts 24

Migrants off Mona Island, Puerto Rico

SAN JUAN, Puerto Rico – The crew of the Coast Guard Cutter Tahoma (WPC-908) repatriated 20 of 24 Dominican migrants to a Dominican Republic Navy vessel Feb. 11 just off Samana, Dominican Republic, following the interdiction of a makeshift boat Feb. 9, approximately five nautical miles west of Mona Island, Puerto Rico, the Coast Guard 7th District said in a Feb. 11 release.

Four men among the interdicted migrants are facing possible federal prosecution by the U.S. Attorney's Office for the District of Puerto Rico for illegally attempting to reenter the United States.

Since October 2018, Coast Guard, federal and Puerto Rico law enforcement partners have interdicted at least 969 migrants and stopped several narcotics smuggling attempts throughout the Sector San Juan area of responsibility.

"Despite challenging conditions, the Coast Guard crews involved in this event utilized their training and expertise to successfully rescue all 24 people from the unseaworthy vessel," said Lt. Cmdr. Matthew Haddad, Sector San Juan chief of enforcement. "These illegal maritime migration voyages are extremely dangerous and put the safety of those onboard in great jeopardy. The Coast Guard, in conjunction with our partners, remain poised to intercept these smuggling events in an effort to prevent the unnecessary loss of life."

The crew of a Coast Guard HC-144 Ocean Sentry aircraft from Air Station Miami, while on a routine patrol of the Mona Passage, detected a 22-foot makeshift wooden boat late Friday night with an undetermined number of passengers aboard transiting towards Puerto Rico. The migrants were continuously

bailing out water to prevent their vessel from sinking.

The Coast Guard Cutter Joseph Tezanos (WPC-118) diverted and interdicted the migrant vessel Saturday morning, when the crew embarked all 24 migrants, 20 men and four women, and destroyed the migrant boat as a hazard to navigation. Afterwards, the migrants were embarked aboard Coast Guard Cutter Richard Dixon (WPC-1113) and then to the Coast Guard Tahoma (WMEC-908) for their repatriation. The crew of the Tahoma completed the transfer of the four detained migrants Sunday to Border Patrol agents in Mayaguez, Puerto Rico.

Following at-sea interdictions, illegal migrants stopped are repatriated to their country of origin or returned to their place of departure. In some cases, those migrants found to have a criminal history with possible connection to smuggling operations are turned over to law enforcement authorities for further prosecution by the Department of Justice. Once aboard a Coast Guard cutter, all migrants receive food, water, shelter and basic medical attention.

The Joseph Tezanos and Richard Dixon are 154-foot fast response cutters homeported in San Juan, Puerto Rico, while the Tahoma is a 270-foot medium endurance cutter based out of Portsmouth Naval Shipyard in Kittery, Maine. The new Offshore Patrol Cutter will eventually replace Tahoma and other ships in its

class, which will be able to carry out Coast Guard missions with greater endurance and interoperability with military and federal partners.

LPD 17 Flight II Program Moves the Navy Forward With Common Rail Fuel Injection

WASHINGTON – The next generation LPD 17 Flight II Class amphibious transport

dock ships are moving forward in Main Propulsion Diesel Engine (MPDE) efficiency by installing the common rail fuel injection system on the ship's FM Colt-Pielstick PC2.5 Sequentially Turbocharged (STC) engine, the Naval Sea Systems Command said in a Feb. 8 release. This technically advanced system replaces the existing mechanical fuel delivery system and is expected to yield significant lifecycle cost savings due to reduced fuel usage and maintenance costs.

"We made the right decision to incorporate reduced fuel consumption, reduced emissions, less maintenance and improved reliability into our next generation of amphibious ships," said Capt. Brian Metcalf, LPD 17 class program manager for Program Executive Office (PEO) Ships. "Innovation should be driven into all levels of design, and this is just one example of NAVSEA's culture of affordability mission."

The project began in 2015 with discussions between PEO Ships, NAVSEA's engineering and ship lifecycle management directorates, and Naval Surface Warfare Center Philadelphia Division (NSWCPD), who is serving as technical lead for the contract. Fairbanks Morse engineers collaborated with MAN Diesel and NSWCPD to develop the prototype, which was tested on a future USS Fort Lauderdale (LPD-28) engine.

Upon completion of testing, the common rail fuel injection components were removed and the mechanical fuel injection components were re-installed and retested prior to shipment. Prototype testing on the factory

engines demonstrated fuel savings across the Navy operating envelope, and an emission-reducing engine operating profile was also developed.

The future USS Richard M. McCool Jr. (LPD 29), currently under construction at Huntington Ingalls Industries Shipyard in Pascagoula, Mississippi, will be the first of many amphibious ships delivered to the Navy with common rail fuel injection MPDEs.

Sea Hunter MDUSV Reaches New Milestone for Autonomy

RESTON, Va. – The Office of Naval Research’s (ONR) Medium Displacement Unmanned Surface Vessel (MDUSV), Sea Hunter, became the first ship to successfully autonomously navigate from San Diego to Pearl Harbor, Hawaii, and back without a single crew member onboard, except very short-duration boardings by personnel from an escort vessel to check electrical and propulsion systems, the ship’s builder, Leidos, said in a Jan. 31 release.

Leidos designed and built the 132-foot-long Trimaran, Sea Hunter, an autonomous, unmanned vessel capable of traveling for long periods of time and executing a variety of missions at a fraction of the cost of a manned ship. This recent achievement is part of an extended test phase, which has been ongoing since the end of 2016.

“The Sea Hunter program is leading the world in unmanned, fully autonomous naval ship design and production,” said Gerry Fasano, Leidos Defense Group president. “The recent long-range mission is the first of its kind and demonstrates to the U.S.

Navy that autonomy technology is ready to move from the developmental and experimental stages to advanced mission testing.”

Sea Hunter will continue long duration and mission package testing throughout 2019. ONR awarded Leidos a potential \$43.5 million contract to develop Sea Hunter II, which is currently under construction in Mississippi. The sister ship will be evolved based upon lessons learned during the first Sea Hunter build, evolving mission requirements and further development of autonomy enhancements.

“Our talented team of engineers, scientists and analytical experts have decades of experience that will allow us to deliver a second highly autonomous vessel designed to keep our servicemen and women safe while monitoring the maritime environment,” said Fasano. “We’re excited to showcase our unique and innovative capabilities for a program of great national significance.”

No Injuries as Two U.S. Navy Vessels Involved in Minor Mishap Off East Coast

NORFOLK, Va. – No personnel were injured when a U.S. Navy guided-missile cruiser and dry cargo ship made contact during an underway replenishment off the southeastern coast of the United States, Feb. 5, the U.S. Fleet Forces Command Public Affairs said in a release of the same date.

USS Leyte Gulf (CG 55) and USNS Robert E. Peary (T-AKE 5) were able to safely operate after the incident. Damage will be

assessed when the ships pull into port.

The ships had been conducting a replenishment-at-sea when the sterns touched at approximately 4 p.m. EST. U.S. Fleet Forces Command and Military Sealift Command will thoroughly investigate this incident.

The ships were conducting operations in conjunction with the Abraham Lincoln Carrier Strike Group.

L3 ASV Delivers Data-Gathering Autonomous Vessel to the Royal Navy

PORTCHESTER, England – L3 ASV has successfully delivered a long-endurance autonomous vessel known as the C-Enduro to the Royal Navy, the company said in a Feb. 5 release. The C-Enduro will be used for military data gathering trials by the Mine Countermeasures and Hydrographic Capability (MHC) program as the Navy seeks to exploit autonomous technology.

“We are proud to support the Royal Navy in their plans to explore the uses of marine autonomy as they continue to invest in new and exciting technology,” said Vince Dobbin, sales and marketing director for L3 ASV. “This vessel is an evolution of our existing C-Enduro product range and provides the unique capability to collect a variety of data during any one mission over extended periods.”

The 4.8-meter autonomous vessel is equipped with 10 sensors combining scientific and hydrographic survey equipment. The vessel operates using L3 ASV’s proprietary control system,

ASView, and is fitted with L3 ASV's advanced autonomy package, ensuring situational awareness and smart path planning. ASView enables a range of autonomous control modes, including line following, station-keeping and geofencing.

"The different ways in which the C-Enduro can be operated will allow the Navy to test and develop the ability of an autonomous unmanned surface vessel to effectively gather important hydrographic data and potentially form part of a future capability to be delivered by the MHC program," said Alex du Pre, MHC Team Lead at Defence Equipment and Support.

This project marks the fourth delivery of a C-Enduro vessel, and previous successful missions include an 11-day over-the-horizon marine science mission north of Scotland for the National Oceanography Centre.

Coast Guard Interdicts 25 Migrants Off Mona Island, Puerto Rico

SAN JUAN, Puerto Rico – The crew of the Coast Guard Cutter Joseph Napier (WPC-1115) repatriated 22 of 25 Dominican migrants to a Dominican Republic Navy vessel Feb. 4, following the interdiction of a makeshift boat Feb. 2, approximately 20 nautical miles northwest of Mona Island, Puerto Rico, the Coast Guard 7th District said in a February release.

Three of the interdicted migrants are facing possible federal prosecution by the U.S. Attorney's Office for the District of Puerto Rico for illegally attempting to re-enter the United States.

The Coast Guard and federal and Commonwealth of Puerto Rico law enforcement partners have interdicted more than 400 migrants and stopped several narcotics smuggling attempts since October of 2018.

“The migrants were attempting to make the transit across an ocean passage in a vessel that was inherently unsafe due to overloading, missing all required safety equipment, and operating without navigation lights,” said Lt. John Schulz, cutter Joseph Napier commanding officer. “Many lives are lost each year by these types of ventures and are a direct threat to the people who attempt the voyage. Each person saved is a testament to how critical the Coast Guard and our partner agencies efforts are to ensuring that there is not a unnecessary loss of life in the waters surrounding Puerto Rico.”

The crew of a Coast Guard HC-144 Ocean Sentry aircraft from Air Station Miami, while on a routine patrol of the Mona Passage, detected a 35-foot makeshift boat Friday night with an undetermined number of passengers aboard transiting towards Puerto Rico.

The Coast Guard Cutter Joseph Napier was diverted and interdicted the migrant vessel Saturday morning embarking all 25 Dominican migrants, 24 men and a woman.

Following at-sea interdictions, illegal migrants that are stopped are repatriated to their country of origin or returned to their place of departure. In some cases, those migrants found to have a criminal history with possible connection to smuggling operations are turned over to law enforcement authorities for further prosecution by the Department of Justice. Once aboard a Coast Guard cutter, all migrants receive food, water, shelter and basic medical attention.

The Joseph Napier is a 154-foot fast response cutter homeported in San Juan, Puerto Rico.

Navy Successfully Conducts SPY-6 AMDR Ballistic Missile Test

KAUAI, Hawaii – The U.S. Navy’s AN/SPY-6(V)1 Air and Missile Defense Radar (AMDR) successfully tracked a ballistic missile target, Jan. 31, the Naval Sea Systems Command said in a Feb. 5 release.

The short-range ballistic missile target was launched from the Pacific Missile Range Facility. An AN/SPY-6(V)1 AMDR searched for, detected and maintained track on the target as predicted. The flight test, designated Vigilant Nemesis, is the final developmental test in a series of ballistic missile defense flight tests for the AN/SPY-6(V)1 AMDR.

“The radar performed exactly as predicted. This completes our rigorous developmental test program to support the on-time delivery of the Navy’s newest Flight III destroyer,” said Capt. Seiko Okano, major program manager for Above Water Sensors, Program Executive Office-Integrated Warfare Systems (PEO IWS).

Based on preliminary data, the test successfully met its primary objectives. Program officials will continue to evaluate system performance based upon telemetry and other data obtained during the test.

Integrated air and missile defense testing commenced in March of 2017 with the successful completion of the first live ballistic missile flight test mission for the AN/SPY-6(V)1 radar named Vigilant Hunter. Vigilant Nemesis was the capstone ballistic missile test for the AN/SPY-6(V)1 AMDR and the 15th

live ballistic missile test for the radar's development phase.