HII Awarded $2.4 Billion to Build Amphibious Assault Ship LHA 9

The amphibious assault ship USS Tripoli (LHA 7) sails with the amphibious assault ship USS America (LHA 6) during a photo exercise in the Philippine Sea, Sept. 17, 2022. *U.S. MARINE CORPS / Lance Cpl. Christopher Lape*

PASCAGOULA, Miss. – HII's Ingalls Shipbuilding division has been awarded a $2.4 billion U.S. Navy fixed-price-incentive contract for the detail design and construction of amphibious assault ship LHA 9. The award includes options, that if exercised, would bring the cumulative value of the contract to $3.2 billion. Ingalls was awarded the original long-lead-time material contract for the fourth ship in the America (LHA 6) class on April 30, 2020.

"Ingalls shipbuilders are ready to build the Navy's newest LHA," said Ingalls Shipbuilding President Kari Wilkinson. "We understand how important this work is, and consider it an honor to be given the opportunity to deliver this capability

to the fleet. We value our partnership with the Navy and all of our critical supplier partners.”

Construction on LHA 9 is scheduled to begin in December 2022.

Ingalls has a long tradition of building large-deck amphibious ships that are operated by the Navy and Marine Corps. The shipyard has delivered 15 large-decks, including the *Tarawa*-class, LHA 1-5; the *Wasp*-class, LHD 1-8; and most recently the America-class, LHA 6 and LHA 7. The third of the *America*-class, Bougainville (LHA 8), is currently under construction.

The America-class is a multi-functional and versatile ship that is capable of operating in a high density, multi-threat environment as an integral member of an expeditionary strike group, an amphibious task force or an amphibious ready group. LHA 9, like Bougainville, will retain the aviation capability of the America-class design while adding the surface assault capability of a well deck and a larger flight deck configured for F-35B Joint Strike Fighter and MV-22 Osprey aircraft. These large-deck amphibious assault ships also include top-of-the-line medical facilities with full operating suites and triage.

USNS COMFORT Commences Operation Continuing Promise 2022

The hospital ship USNS Comfort departs Naval Station Norfolk for the 2-month Continuing Promise 2022 medical mission to Latin America and the Caribbean. *U.S. NAVY*

MIAMI – Hospital ship USNS Comfort (T-AH 20) departed from Miami after commencing Operation Continuing Promise 2022, Oct. 23, 2022, said Petty Officer 2nd Class Juel Foster of U.S. 4th Fleet Public Affairs said in an Oct. 22 release.

During Comfort's time in Miami, the ship hosted over 200 guests, including distinguished visitors from more than 15 countries and local and national media outlets. Sailors and crewmembers held tours of the ship and participated in press conferences and interviews. To cap it off, the U.S. Fleet Forces Band performed the "Sunday Night Football" theme song for NBC Sports, which aired Sunday afternoon. Among the distinguished visitors were General Laura J. Richardson, U.S. Southern Command combatant commander, and Rear Adm. Doug Sasse, reserve vice commander, U.S. Southern Command/U.S. 4th Fleet.

"Comfort and its supporting partners demonstrate a continued commitment to the Caribbean, Central and South America," said Richardson. "The multinational public, private and

multiservice team working on this 1,000-man hospital ship really demonstrates the power of partnership. It also demonstrates a profound truth that health security is national security."

Since its inauguration in 2007, Continuing Promise's mission has been to utilize trained medical teams to provide care aboard the ship and at land-based medical sites, while working with partner nation medical personnel to increase medical readiness, strengthen partnerships and enhance U.S. Navy and partner nation capabilities to respond to public health disasters and humanitarian crises.

"Continuing Promise 2022 reflects America's commitment to strengthening friendships, partnerships and solidarity with our Caribbean, Central and South American neighbors," said Capt. Bryan Carmichael, commodore of Amphibious Squadron 4. "Medical services are a big part of this mission, but we are also building relationships that will have lasting impacts."

USNS Comfort's current mission will be the 12th Continuing Promise mission conducted in U.S. Southern Command/U.S. 4th Fleet area of responsibility.

U.S. Naval Forces Southern Command/U.S. 4th Fleet supports U.S. Southern Command's joint and combined military operations by employing maritime forces in cooperative maritime security operations to maintain access, enhance interoperability, and build enduring partnerships in order to enhance regional security and promote peace, stability and prosperity in the Caribbean, Central and South American region.

Navy to Merge Mine-Countermeasures Helicopter Squadrons

An MH-53E Sea Dragon helicopter from Helicopter Mine Countermeasures Squadron (HM) 12 participates in a nine-aircraft formation flight alongside HM-14 and HM-15. *U.S. NAVY / Mass Communication Specialist 3rd Class Jesse Schwab*

ARLINGTON, Va. — The Navy plans to deactivate one of its two fleet helicopter mine countermeasures squadrons next year and combine many of its personnel and helicopters with the remaining squadron.

Helicopter Mine Countermeasures Squadron 14 (HM-14), which operates the MH-53E Sea Dragon helicopter from Naval Station Norfolk, Virginia, is scheduled for de-activation effective July 31, 2023, according to a Navy directive.

HM-14's sister squadron, HM-15, also based in Norfolk, will

absorb 102 full-time and 48 reserve enlisted personnel and four full-time and eight reserve officers from HM-14 in order to retain “as much airborne mine countermeasure capability as possible,” the directive said.

The directive used the term “HM-15 MAX” to describe the enlarged squadron.

HM-14 and HM-15 are considered combined Active-Reserve squadrons, with an 80/20 mix of personnel from the two components.

HM-14 maintains a detachment in Pohang, South Korea, in support of the U.S. 7th Fleet, while HM-15 maintains a detachment in Manama, Bahrain in support of the U.S. 5th Fleet.

Another squadron, HM-12, serves as a fleet replacement squadron for the MH-53E fleet.

The Sikorsky-built MH-53E Sea Dragon has two primary missions: airborne mine countermeasures and Navy heavy lift and vertical onboard delivery. The aircraft is a derivative of the CH-53E Super Stallion but is heavier and has a greater fuel capacity and range. Capable of transporting up to 55 troops, the MH-53E can carry a 16-ton payload 50 nautical miles or a 10-ton payload 300 nautical miles. In its primary mission, the MH-53E can tow a variety of mine countermeasures systems, including the Mk105 magnetic minesweeping sled, the AQS-24A side-scan sonar and the Mk103 mechanical minesweeping system. Mission duration can exceed four hours.

The Navy plans to keep the MH-53E in service at least until 2025.

Bahrain Leads Unmanned Exercise for Multinational Task Force

A U.S. Navy Saildrone Explorer unmanned surface vessel operates with patrol coastal ships USS Hurricane (PC 3) and USS Chinook (PC 9) from the United States, UK Royal Navy ships RFA Cardigan Bay (L3009) and HMS Bangor (M109), Royal Bahrain Naval Force ships RBNS Al-Manama and RBNS Al-Fateh, and HMS Khalid from the Royal Saudi Navy in the Arabian Gulf, Oct. 26. *U.S. ARMY / Spc. Noah Martin*

MANAMA, Bahrain – A multinational naval task force led by Bahrain conducted a one-day training drill in the Arabian Gulf, Oct. 26, featuring the use of unmanned systems and artificial intelligence alongside seven crewed ships, Combined Maritime Forces Public Affairs said in an Oct. 27 release.

Naval forces from Bahrain, Saudi Arabia, the United Kingdom and the United States participated in support of Bahrain-led

Combined Task Force (CTF) 152, one of four task forces organized under the Combined Maritime Forces. The naval drill enhanced interoperability in integrating new unmanned technologies to monitor regional waters.

“It is so valuable to get these opportunities to really test how our forces from across different nations can work together with the uncrewed systems,” said Royal Bahrain Naval Force Capt. Rashed Al-Ameen, commander of CTF 152. “It helps us better understand how to work with each other to boost regional security.”

Three U.S. Navy Saildrone Explorer unmanned surface vessels operated with USS Hurricane (PC 3) and USS Chinook (PC 9) from the United States, UK Royal Navy ships RFA Cardigan Bay (L3009) and HMS Bangor (M109), Royal Bahrain Naval Force ships RBNS Al-Manama and RBNS Al-Fateh and HMS Khalid from the Royal Saudi Navy.

CTF 152 led the exercise while embarked aboard Cardigan Bay, as the ship sailed in international waters off the coast of Saudi Arabia. This is the latest drill involving unmanned systems in the Arabian Gulf since the United Kingdom and United States completed a similar bilateral naval exercise Oct. 7.

During both maneuvers, unmanned and artificial intelligence systems operated in conjunction with crewed ships and naval command centers ashore in Bahrain. Sensors from the unmanned vessels were able to locate and identify training aides in the water and relay visual depictions to the command centers.

Established in 2004, CTF 152 oversees maritime security operations in the Arabian Gulf for Combined Maritime Forces. Bahrain assumed command of CTF 152 from Kuwait in August.

Combined Maritime Forces is the world’s largest multinational naval partnership and includes 34 member-nations whose forces operate in the Red Sea, Gulf of Aden, Northern Arabian Sea,

Gulf of Oman, Arabian Gulf and Indian Ocean. CMF is headquartered in Bahrain with U.S. Naval Forces Central Command and U.S. 5th Fleet.

Navy and Army Conduct Second Hypersonics Flight Campaign

The Zumwalt-class guided-missile destroyer USS Michael Monsoor (DDG 1001) sails in formation during Rim of the Pacific (RIMPAC) 2022. *U.S. NAVY / Mass Communication Specialist 3rd Class Aleksandr Freutel*

WASHINGTON – The Navy Strategic Systems Programs (SSP) and the Army Hypersonic Project Office (AHPO) successfully conducted the second High Operational Tempo for Hypersonics flight campaign on Oct. 26 at 2:30pm EST, the U.S. Navy Strategic Systems Programs Office public affair office said in a

release.

This flight campaign was executed by Sandia National Laboratories (SNL) from the National Aeronautics and Space Administration (NASA) Wallops Flight Facility. This test will be used to inform the development of the Navy's Conventional Prompt Strike (CPS) and the Army's Long Range Hypersonic Weapon offensive hypersonic strike capability. The CPS and AHPO programs are on track to support the first fielding of a hypersonic capability to the Army in fiscal 2023. The Missile Defense Agency (MDA) took part in the campaign to gather data for its work developing systems that will defend against hypersonic weapons.

One precision sounding rocket launch was conducted containing hypersonic experiments from partners, including CPS, MDA, AHPO, the Joint Hypersonic Transition Office, SNL, Johns Hopkins University/Applied Physics Laboratory, MITRE, Oak Ridge National Laboratory and several defense contractors. A second sounding rocket will be launched this week to complete the campaign. These rockets contained experimental payloads that provided data on the performance of materials and systems in a realistic hypersonic environment.

During weapon system development, precision sounding rocket launches fill a critical gap between ground testing and full system flight testing. These launches allow for frequent and regular flight testing opportunities to support rapid maturation of offensive and defensive hypersonic technologies. The data collected from the latest sounding rocket campaign will drive warfighting capability improvements for both Navy and Army to ensure continued battlefield dominance.

The CPS Program, the lead for the common hypersonic missile design and development, has implemented a weapon system development plan that includes a series of recurring Technology Insertion points that will ensure the United States offensive hypersonic capability continues to evolve and

enhance beyond the initial capabilities fielded to the first Army Battery. The Technology Insertion process will allow for the routine incorporation of new capabilities and system improvements, as they become available, in order to rapidly maximize the warfighting capability delivered to our Soldiers and Sailors. The frequency and affordability of the sounding rocket launches allows for the Navy and Army Programs to mature these technologies prior to finalizing the weapon system design. For example, the October 2021 inaugural High Operational Tempo for Hypersonics flight campaign demonstrated a capability that was deemed sufficiently mature to pursue its incorporation in the next Technology Insertion.

This test is a vital step in the development of a Navy-designed common hypersonic missile, consisting of a Common Hypersonic Glide Body and booster, which will be fielded by both the Navy and Army with individual weapon systems and launchers tailored for launch from sea or land. The Navy and Army will continue to work in close collaboration to leverage joint testing opportunities.

Delivering hypersonic weapons is one of the DoD’s highest priorities. Hypersonic weapons, capable of flying at speeds greater than five times the speed of sound (Mach 5), are highly maneuverable and operate at varying altitudes. The DoD is working in collaboration with industry, government national laboratories, and academia to field hypersonic warfighting capability in the early-to mid-2020s.

The Army and Navy routinely share data with MDA that supports its work on hypersonic defenses.

Navy to Consolidate Fire Scout UAVs on West Coast

Aviation Electronics Technician 1st Class Nathan Thomas and Aviation Electrician's Mate 2nd Class Tristan Persky, assigned to the "Sea Knights" of Helicopter Sea Combat Squadron (HSC) 22, Detachment 5, prepare an MQ-8C Fire Scout for takeoff on the flight deck of the Freedom-variant littoral combat ship USS Milwaukee (LCS 5) Jan. 29, 2021. *U.S. NAVY / Mass Communication Specialist 2nd Class Danielle Baker*

ARLINGTON, Va. – The Navy plans to consolidate operations of its Fire Scout unmanned helicopters to the West Coast in 2023, a Navy spokesman said.

The MQ-8 Fire Scouts have been by detachments of Helicopter Sea Combat Squadron 22 (HSC-22) on the East Coast and by HSC-21 and HSC-23 on the West Coast. The squadrons operated Fire Scouts alongside their MH-60S Seahawk helicopters.

"The Navy plans to pivot all MQ-8 operations to the West Coast

in [fiscal 2023] with HSC-21 transitioning from the MQ-8B to the more capable MQ-8C. HSC-23 already operates the MQ-8C," said Cmdr. Zach Harrell, spokesperson for Commander, Naval Air Forces, in an email to Seapower.

According to a Sept. 27 Navy directive, the East Coast squadron, HSC-22, will be de-activated effective June 30, 2023.

"Currently, there are no plans to expand Fire Scout operations to other helicopter sea combat (HSC) squadrons," Harrell said.

CSG-4 Exercise Enhances Gerald R. Ford Inaugural Deployment with NATO Allies

The first-in-class aircraft carrier USS Gerald R. Ford (CVN 78) transits the Atlantic Ocean, Oct. 20, 2022. The Gerald R. Ford Carrier Strike Group (GRFCSG) is deployed in the Atlantic Ocean, conducting training and operations alongside NATO Allies and partners. *U.S. NAVY / Mass Communication Specialist 2nd Class Jackson Adkins*

NORFOLK, Va. – The Gerald R. Ford Carrier Strike Group and ships from three North Atlantic Treaty Organization (NATO) countries completed a three-week exercise orchestrated by Carrier Strike Group (CSG) 4 called Task Force Exercise (TFEX) 23-2 from Oct. 5-23, Carrier Strike Group Four (CSG-4)Public Affairs said in an Oct. 24 release.

During TFEX 23-2, USS Bulkeley (DDG 84) and James E. Williams (DDG 95) joined exercise events to prepare for independent-duty deployments later this year. USS Bainbridge (DDG 96) and USS Mason (DDG 87) supported CSG-4 throughout the exercise by augmenting several training scenarios.

The exercise occurred concurrently with the beginning of Ford Strike Group’s inaugural deployment.

Rear Adm. Jeffrey “Caesar” Czerewko, commander, CSG-4, reiterated the significance of the training exercise, especially the unique interoperability opportunities alongside the Ford Strike Group and allies.

“Carrier Strike Group 4 develops scenarios in an agile and informed manner to best prepare our warfighters for anything they may encounter while deployed at-sea,” said Czerewko. “The Task Force Exercise with the Gerald R. Ford Carrier Strike Group and coalition partners provided an unmatched opportunity to integrate together in the Atlantic. The scenarios offered all participants a building block approach to planning and executing missions culminating in successful demonstrations of lethal performance in a high-end fight.”

The three participating countries outside the United States were Canada, Germany and Spain. Their ships included: ESPS Alvaro De Bazan (F 101), HMCS Fredericton (FFH 337), and FGS Hessen (F 221).

The scenarios offered during the exercise included dynamic maneuvers, simulated strait transits, flight operations, weapons systems testing, communication drills, and cyber response.

“All entities within Carrier Strike Group 12 benefited tremendously from this CSG-4-led exercise,” said Rear Adm. Greg Huffman, commander, CSG-12. “As the Gerald R. Ford Carrier Strike Group continues on its first deployment, the relationships built and capabilities refined with our NATO partners will continue to enhance our flexibility while operating forward.”

The Ford Strike Group includes: Carrier Strike Group (CSG) 12, Carrier Air Wing (CVW) 8, Destroyer Squadron (DESRON) 2, USS Gerald R. Ford (CVN 78), USS Normandy (CG 60), USS Ramage (DDG

61), USS McFaul (DDG 74), and USS Thomas Hudner (DD 116).

CSG-4 is a team that consists of experienced Sailors, Marines, government civilians and reservists, who mentor, train and assess U.S. 2nd Fleet combat forces to forward-deploy in support and defense of national interests. CSG-4’s experts shape the readiness of U.S. 2nd Fleet Carrier Strike Groups (CSG), Expeditionary Strike Groups (ESG), Amphibious Readiness Groups (ARG) and independent deploying ships through live, at-sea and synthetic training, as well as academic instruction. Along with its subordinate commands, Tactical Training Group Atlantic (TTGL) and Expeditionary Warfare Training Group Atlantic (EWTGL), CSG-4 prepares every Atlantic-based CSG, ARG and independent deployer for sustained forward-deployed high-tempo operations.

Navy Conducts Final AQM-37 Target Launch

The Navy prepares to launch the final AQM-37 targets Sept. 22 in support of the U.S. Army's Integrated Fires Mission Command operations at White Sands Missile Range, New Mexico. *U.S. ARMY*

PATUXENT RIVER, Md. – The Navy launched the last two remaining AQM-37 targets Sept. 22 in support of the U.S. Army's Integrated Fires Mission Command operations at White Sands Missile Range, New Mexico, the Naval Air Systems Command said in an Oct. 25 release.

"The final launch of the AQM-37 represents the closing of a chapter for the Aerial Targets Program Office (PMA-208) and our industry partners, but also intensifies our focus and provides us the opportunity to start and sustain new chapters with more advanced technology and capabilities that closer resemble the threats we face," said Don Blottenberger, PMA-208 program manager.

Since 1962, more than 5,000 AQM-37 targets have been delivered and launched in various training and system development

operations across the globe. The system replicated both air-to-air and air-to-surface threats and was able to fly simulated ballistic-missile profiles at altitudes of up to 300,000 feet.

“The legacy of the AQM-37 and those who were involved in its development and sustainment through the decades will not be forgotten,” said Blottenberger. “Its 60-year lifespan is a testament to its capability, reliability and the critical role it has played in the security and preparedness of both our own, and our international partners’ armed forces.”

Over six decades, the target played an instrumental role in the testing and deployment of new systems including short range air-to air missiles including the Air Intercept Missile (AIM-9) Sidewinder, ship-borne short range anti-aircraft missiles including the Sea Sparrow Missile (RIM-7) and ships equipped with missile defense (AEGIS) systems. The targets supported both domestic and international partners including NATO nations and was commonly used in conjunction with the U.S. Air Force, most often launched from the F-16 Fighting Falcon.

Just recently, the Air Force’s 412th Test Wing launched seven AQM-37 targets from F-16s to support testing of E-2D Advanced Hawkeye and F-35 Lightning II capabilities at Navy Exercise Gray Flag at the Point Mugu Sea Range. The AQM-37’s involvement in this exercise and countless others, enhanced capability and supported mission readiness for joint forces.

“Our supersonic technical team has done fantastic work over the last several years to get the final targets launched and put to use in a way that supports development and testing for our military,” Blottenberger said. “The team saved the Navy close to $1 million by avoiding demilitarization of the last several targets by using them for the Navy Gray Flag Exercise and other test and evaluation events.”

PMA-208 provides threat representative aerial targets for fleet training and weapons systems test and evaluation.

L3Harris Invests in Seasats to Accelerate New Autonomous Maritime Capabilities to the Navy

L3Harris Techonolgies announced its strategic investment in Seasats for their low-cost, solar-powered maritime autonomous surface vehicles. *L3HARRIS*

MELBOURNE, Fla. – L3Harris Technologies has made a strategic investment in Seasats, a privately-owned company involved in the design and production of low-cost, solar-powered maritime autonomous surface vehicles (ASV) for military and commercial use, L3Harris said in a release.

L3Harris is making its investment to fuel collaborative

development and accelerate production of Seasats' X3 micro-ASV, whose unique design and low-signature waterline makes it difficult to detect by sight and radar. The X3 features stealthy performance and reliable six-month endurance in all weather conditions for a fraction of the price of current small maritime ASVs, and provides a complement to L3Harris' large and medium-sized ASV offerings.

"Our U.S. Navy customers are pursuing innovative solutions to reliably and efficiently patrol the waters from the Red Sea into the Persian Gulf and we understand their urgent need for proliferated maritime ASV architectures," said Daniel Gittsovich, vice president, Corporate Strategy and Development, L3Harris. "Our investment and collaboration with Seasats provides a proven, multi-capability solution for global maritime security challenges."

Inexpensive, versatile and ideally suited to host a variety of maritime payloads, the X3 is well positioned to enhance the counter-piracy, mine clearing, intelligence, surveillance and reconnaissance, and electronic warfare solutions L3Harris already provides its customers.

Seasats can also serve commercial clients by pairing platforms and sensors to enable advanced hydrographic surveys, infrastructure monitoring, and scientific discovery. Future collaboration and technology sharing between L3Harris and Seasats has the potential to increase the autonomous capabilities, artificial intelligence and endurance of the X3 while cutting production time up to 75 percent.

"The L3Harris team recognized the value in pairing their payloads and sensors with our versatile platform because together they create an operations-ready solution for a wide range of critical military and commercial uses," said Mike Flanigan, CEO of Seasats. "Our previous tests and demonstrations with the Navy were enthusiastically received and we are looking forward to making collaborative

improvements with L3Harris as we prepare for operational capabilities testing with Task Force 59 in the Arabian Peninsula next year."

The U.S. Navy 5th Fleet commander, Vice Adm. Brad Cooper, recently announced a goal to have at least 100 unmanned surface vessels patrolling the Arabian Peninsula by mid-2023. Earlier this year the Navy invited Seasats to participate in its "Digital Horizon 2022" exercise designed to develop maritime domain awareness and accelerate the Navy's robotic and artificial intelligence maritime capabilities.

Naval Stakeholders Assess Lessons Learned from Ukraine Conflict for Future War at Sea

Ships from multiple NATO nations including Italy, Spain, Germany and the United States, participate in Exercise Mare Aperto 22-2, a high-end exercise sponsored by the Italian Navy aimed at strengthening and enhancing the combat readiness of participating assets in the conduct of maritime operations. *U.S. NAVY / Mass Communication Specialist 2nd Class Ezekiel Duran*

PARIS – Naval stakeholders are continuing to learn lessons from the ongoing conflict in Ukraine, and are considering the implications of these lessons for future naval warfare.

In workshop briefings given at the Euronaval 2022 exhibition in Paris, France, in mid-October, navies and naval industry alike discussed lessons ranging from strategic to operational to technological contexts.

Capt. Yann Briand, a French Navy officer serving as strategic policy branch head in France's Ministry of Defence, set out several lessons France is learning from the Ukraine war.

"The first one is that it recalls the fundamentals of naval combat at sea – that is to say, violence, velocity, and

attrition," Briand said. Second, he underscored the wider strategic context of "the central role of nuclear deterrence" in the crisis.

"Another point – one not specific to the French navy, but the same for all the world's navies – is we are in close contact with our competitors," Briand said. In other words, he continued, "at sea, there is the possibility to send different political messages in a very subtle way."

"You use a fire-control radar, you come very close to another ship: all this is something you can do at sea that you cannot do on land."

This process works due to professional approaches on all sides, he said. However, he noted, instability persists.

Finally, Briand said, "Alliances and partnerships are more than very useful," with countries and their navies not able to address all such challenges alone.

The lessons learned are also indicative of a wider shift in the nature of security.

"In the last 30 years, the stability of France and Europe was based on laws, regulations and treaties; now, it is more based unfortunately on physical defense – weapons, fighters, aircraft carriers," Briand said.

Richard Keulen, a former Royal Netherlands Navy officer and frigate commander and now Dutch shipbuilding company Damen Naval Division's director for Naval Sales Support, mirrored this perspective.

"The Baltic and Black Sea show us that Europe is flanked by important and disputed waters. Europe is depending for its prosperity and freedom to maneuver on a mare librum, in the Mediterranean also, the wider Atlantic, and even waters east of Suez."

“So, innovation in defense is extremely important, as clearly witnessed for example in the Ukraine war,” Keulen said. “We have seen the pictures.”

“We saw the extensive use of drones. We saw the sinking of the [Russian Slava-class cruiser] Moskva. We also witnessed the extension into northern waters of hybrid warfare towards the seabed.”

In the Baltic Sea, the two Nordstream gas pipelines both suffered ruptures recently, although the cause of the ruptures has not been confirmed publicly. Such incidents prompted regional concerns about the security of sea lines of communication, including on the seabed.

“This latter phenomenon for example raises concerns and awareness in the Netherlands and its neighboring countries in the North Sea area, around the busiest waters in Europe,” Keulen said.