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Navy TAGOS-25 (Previously TAGOS[X]) Ocean Surveillance Shipbuilding Program: Background and Issues for Congress

Introduction

The Navy in FY2022 procured the first of a planned class of seven new TAGOS-25 class ocean surveillance ships at a cost of \$434.4 million. The Navy's FY2024 budget submission shows that the ship's estimated procurement cost has since grown to \$789.6 million—an increase of \$355.2 million, or 81.8%. The Navy's proposed FY2024 budget requests \$355.2 million in additional cost-to-complete procurement funding to pay for this cost growth. The Navy wants to procure the second TAGOS-25 class ship in FY2025.

Meaning of TAGOS Designation

In the designation TAGOS (also written as T-AGOS), the *T* means the ships are operated by the Military Sealift Command (MSC); the *A* means they are auxiliary (i.e., support) ships; the *G* means they have a general or miscellaneous mission; and the *OS* means the mission is ocean surveillance. The TAGOS-25 program was previously known as the TAGOS(X) program, with the (X) meaning that the precise design for the ship had not yet been determined. Some Navy budget documents may continue to refer to the program that way.

TAGOS Ships in the Navy

TAGOS ships (**Figure 1** and **Figure 2**) support Navy antisubmarine warfare (ASW) operations. As stated in the Navy's FY2024 budget submission, TAGOS ships "gather underwater acoustical data to support the mission of the Integrated Undersea Surveillance System (IUSS) by providing a ship platform capable of theater anti-submarine acoustic passive and active surveillance.... The two current classes of [TAGOS] surveillance ships use Surveillance Towed-Array Sensor System (SURTASS) equipment to gather undersea acoustic data." **Figure 3** shows a simplified diagram of a TAGOS-25 ship with its SURTASS arrays.

Current TAGOS Ships

The Navy's five aging TAGOS ships include four *Victorious* (TAGOS-19) class ships (TAGOS 19 through 22) that entered service in 1991-1993, and one *Impeccable* (TAGOS-23) class ship that entered service in 2000. As of the end of FY2021, all five were homeported at Yokohama, Japan. The ships use a Small Waterplane Area Twin Hull (SWATH) design, in which the ship's upper part sits on two struts that extend down to a pair of submerged, submarine-like hulls (**Figure 2**). The struts have a narrow cross section at the waterline (i.e., they have a small waterplane area). The SWATH design has certain limitations, but it has features (including very good stability in high seas) that are useful for SURTASS operations.

Figure 1. USNS Impeccable (TAGOS-23)



Source: U.S. Navy photograph accompanying "Ocean Surveillance Ships," Military Sealift Command, accessed May 25, 2021.

Figure 2. USNS Effective (TAGOS-21) in Dry Dock



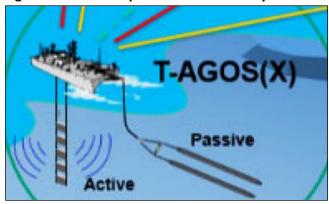
Source: U.S. Navy photograph 070913-N-2638R-004 posted at Wikimedia Commons, accessed May 25, 2021.

TAGOS-25 Program

Quantity, Schedule, and Design

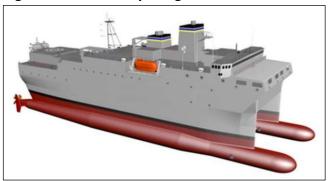
The Navy wants to procure seven TAGOS-25 class ships as replacements for its five in-service TAGOS ships. The first TAGOS-25 class ship was procured in FY2022. The Navy wants to procure the second through fifth ships in the class in FY2025-FY2028 at a rate of one ship per year. The Navy's notional design for the TAGOS-25 class (**Figure 4**) employs a SWATH design that would be larger and faster than the in-service TAGOS ships (see **Table 1**).

Figure 3. TAGOS Ship with SURTASS Arrays



Source: Detail from slide 13, entitled "TAGOS(X) Concept of Operations (CONOPS)," in Industry Day briefing for TAGOS(X) program, June 26, 2019, accessed May 26, 2021, at GovTribe.com.

Figure 4. Notional Navy Design for TAGOS-25



Source: Artist's rendering accompanying press released entitled "Halter Marine Secures Contract for Industrial Studies for T-AGOS Program," Halter Marine, July 20, 2020.

Table I. TAGOS Ship Designs

	TAGOS- 19	TAGOS- 23	TAGOS-25 (notional)
Length	235 feet	282 feet	356 feet
Maximum speed	10 knots	13 knots	20 knots
Displacement	3,384 tons	5,370 tons	8,500 tons
Accommodations	~48	54	68

Sources: "Ocean Surveillance Ships - T-AGOS," U.S. Navy, and (for TAGOS-25) slide 22, entitled "T-AGOS Class Comparison," from Industry Day briefing for TAGOS(X) program, June 26, 2019, accessed May 26, 2021, at GovTribe.com.

The Navy's desire to replace the five in-service TAGOS ships with seven larger and faster TAGOS-25s can be viewed as a response by the Navy to the submarine modernization efforts of countries such as China and Russia. For more on China's submarine modernization effort, see CRS Report RL33153, *China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress*, by Ronald O'Rourke.

Procurement Cost

The Navy estimates in its FY2024 budget submission that the first ship in the class will cost \$789.6 million to procure and that subsequent ships in the class will cost about \$430 million each in then-year dollars to procure. As mentioned earlier, the estimated procurement cost of the first ship has grown by \$355.2 million, or 81.8%. The Navy's FY2024 budget submission states that this cost growth is "due to several factors affecting shipbuilding prices including direct material inflation, supply chain challenges, and increased non-recurring engineering costs."

Acquisition Strategy

The Navy wants to use a single shipbuilder to build all seven TAGOS-25s. The Navy intends to competitively award in January 2024 a firm fixed-price contract for the detailed design and construction (DD&C) of the lead ship, with options for building up to six additional ships.

In January 2020, the Navy released a request for proposals (RFP) for contracts to perform initial industry studies for the program. On July 2, 2020, the Navy awarded four contracts for these studies to BMT Designers and Planners of Arlington, VA (with a contract value \$2.37 million); Bollinger Shipyards of Lockport, LA (\$2.78 million); Thoma-Sea Marine Constructors of Houma, LA (\$2.26 million); and VT Halter Marine of Pascagoula, MS (\$2.17 million). In November 2022, VT Halter Marine was purchased by Bollinger and is now called Bollinger Mississippi Shipbuilding.

The Navy used the industry studies to inform its understanding of TAGOS-25 design-cost tradeoffs in support of the RFP for the DD&C contract. The Navy posted the RFP for the DD&C contract on November 19, 2021, and amended it on December 21, 2021. Responses to the RFP were due by April 19, 2022.

Issues for Congress

Potential issues for Congress for the TAGOS-25 program include the following:

- the likelihood of further cost growth on the first ship in the class; and
- the accuracy of the Navy's estimated procurement costs for the second and subsequent ships in the class, particularly given the cost growth on the lead ship in the class.

FY2024 Procurement Funding

The Navy's proposed FY2024 budget requests \$355.2 million in cost-to-complete procurement funding for the first ship in the class.

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