

GAO Highlights

Highlights of [GAO-22-105974](#), a report to congressional committees

Why GAO Did This Study

The Navy is developing the XLUUV in response to a need to lay undersea mines. This ability could prevent an adversary from accessing strategic waterways and entry points on land. The Navy considers uncrewed autonomous vehicles to be prototypes that it is pursuing as a research and development effort. However, these XLUUVs are expected to serve a key role in the fleet and could protect sailors from performing dangerous missions.

The joint explanatory statement accompanying the Consolidated Appropriations Act, 2022, included a provision for GAO to review the XLUUV and the Navy's adherence to acquisition best practices. This report assesses (1) the extent to which the XLUUV is meeting cost and schedule targets, and (2) the Navy's efforts to develop, design, and produce the XLUUV compared to leading practices for product development.

GAO compared the XLUUV acquisition plan with the President's Budget for fiscal year 2023; compared XLUUV contracts, documents, and cost and schedule outcomes to leading practices for product development; and interviewed officials responsible for the XLUUV effort.

What GAO Recommends

GAO is making two recommendations to the Navy, to (1) conduct production readiness reviews prior to additional purchases beyond the five XLUUVs, and (2) develop cost and schedule estimates to improve the feasibility of acquiring the vehicles in a timely manner. The Navy concurred with both of the recommendations.

View [GAO-22-105974](#). For more information, contact Shelby S. Oakley at (202) 512-4841 or OakleyS@gao.gov.

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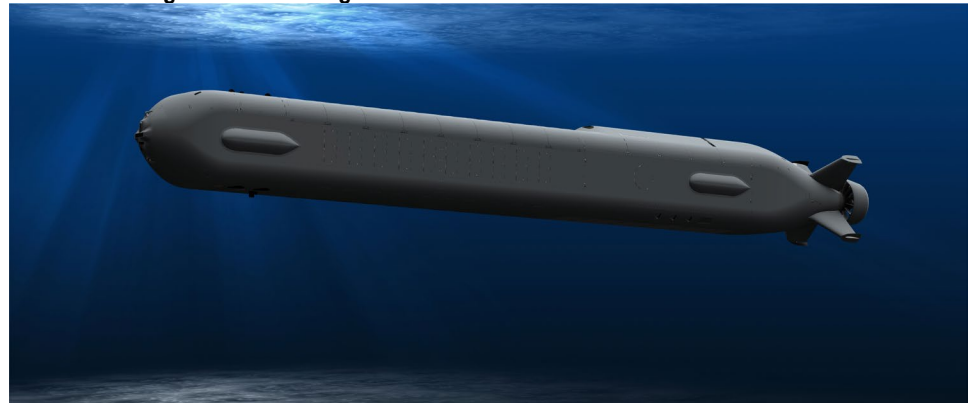
EXTRA LARGE UNMANNED UNDERSEA VEHICLE

Navy Needs to Employ Better Management Practices to Ensure Swift Delivery to the Fleet

What GAO Found

The Navy is attempting to rapidly deliver five Extra Large Unmanned Undersea Vehicles (XLUUV) to the fleet for deploying undersea mines without the need for sailors. However, the XLUUV effort is at least \$242 million or 64 percent over its original cost estimate and at least 3 years late. The contractor originally planned to deliver the first vehicle by December 2020 and all five vehicles by the end of calendar year 2022. The Navy and the contractor are in the process of revising the delivery dates. But both expect the contractor to complete and deliver all five vehicles between February and June 2024.

Artist Rendering of the Extra Large Unmanned Undersea Vehicle



Source: U.S. Navy. | GAO-22-105974

The contractor did not demonstrate its readiness to fabricate XLUUV because it was not required to do so. For acquisition programs, DOD and Navy typically conduct a production readiness review. While XLUUV is a prototype and not an acquisition program, the Navy plans to field the vehicles quickly. Key differences between the XLUUV and the contractor's prototype, the Echo Voyager, required the contractor to redesign critical components. Rather than address issues before starting fabrication, the contractor did not identify the full impact of these issues until after fabrication began. Then, significant delays were exacerbated by the COVID-19 pandemic. Further, the Navy has begun assessing the possibility of adding more capability and vehicles to this effort. If the Navy forgoes a production readiness review for its next XLUUV purchase, it risks beginning fabrication without information to assess the contractor's cost, schedule, and performance targets.

The Navy determined that XLUUV was critical to fulfilling an emergent need, which, under DOD policy, generally requires a capability be provided within 2 years. However, the Navy did not develop a sound business case, including cost and schedule estimates, to ensure that it could deliver the vehicles quickly to the fleet because XLUUV is a research and development effort. According to DOD urgent capability acquisition best practices, an acquiring organization should make cost and schedule trade-off decisions to get solutions to the fleet faster. Without more complete cost and schedule estimates, the Navy does not have the information it needs for decision-making and, thus, could continue experiencing cost overruns and schedule delays as it builds the XLUUV.