

Why GAO Did This Study

In March 2021, the Navy published a framework that called for developing and fielding uncrewed surface and undersea vehicles to complement its existing fleet as a key to future Navy capabilities. The Navy intends to prototype these systems to gain knowledge and address technical issues before acquiring systems in significant numbers.

A House Report included a provision for GAO to review the Navy's efforts to develop and produce uncrewed surface and undersea vehicles. GAO's report assesses the Navy's planned investments for these uncrewed maritime systems and its management and prototyping approaches.

GAO reviewed documentation for four ongoing medium and large uncrewed maritime system prototype efforts and the associated information technology efforts that enable these systems.

What GAO Recommends

GAO is making seven recommendations, including that the Navy (1) complete a cost estimate with full costs to develop and operate uncrewed maritime systems, (2) establish an uncrewed maritime systems portfolio and assign leadership to oversee it using portfolio management leading practices, and (3) develop evaluation criteria and schedules for its prototypes. The Navy generally concurred with the recommendations. However, the Navy's planned actions do not fully address three of them. GAO maintains that fully implementing all recommendations is warranted.

View [GAO-22-104567](#). For more information, contact Shelby S. Oakley at (202) 512-4841 or oakleys@gao.gov.

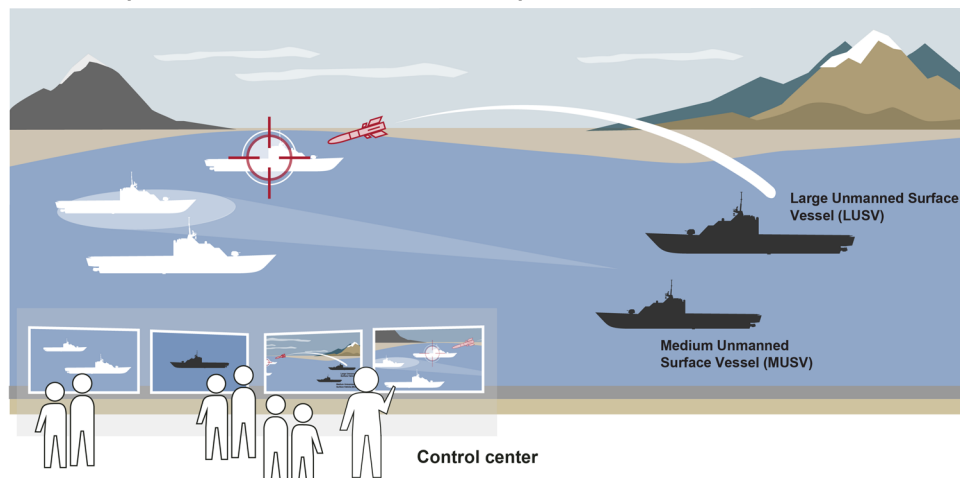
UNCREWED MARITIME SYSTEMS

Navy Should Improve Its Approach to Maximize Early Investments

What GAO Found

Other nations are investing in new weapons and technologies designed to disrupt U.S. naval advantages. Consequently, the U.S. Navy is reexamining its maritime strategy to respond to increased competition at sea. Based on the results of its analyses, the Navy determined that surface and undersea vehicles without crew on board—known as uncrewed maritime systems—are necessary to meet future threats (see figure). While the Navy's shipbuilding plan outlines spending more than \$4 billion on uncrewed systems over the next 5 years, its plan does not account for the full costs to develop and operate these systems.

Notional Depiction of Uncrewed Surface Vehicle Operations



Source: GAO analysis of Navy documents. | GAO-22-104567

Once conceived, the Navy must build these vehicles with the information technology and the artificial intelligence capabilities needed to replace crews. While the Navy has established strategic objectives for these efforts, it has not established a management approach that orients its individual uncrewed maritime efforts toward achieving these objectives. As such, the Navy is not measuring its progress, such as building the robust information technology needed to operate the vehicles. GAO has previously found that portfolio management—a disciplined process that ensures new investments are aligned with an organization's strategic needs within available resources—enables agencies to implement strategic objectives and manage investments collectively. However, if it continues with its current approach, the Navy is less likely to achieve its objectives. In addition, the Navy has yet to:

- establish criteria to evaluate prototypes and
- develop improved schedules for prototype efforts.

With detailed planning, prototyping has the potential to further technology development and reduce acquisition risk before the Navy makes significant investments. Since uncrewed systems are key to the Navy's future, optimizing the prototyping phase of this effort is necessary to efficiently gaining information to support future decisions.