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AMPHIBIOUS COMBAT VEHICLE ACQUISITION

Cost Estimate Meets Best Practices, but Concurrency between Testing and Production Increases Risk

Why GAO Did This Study

In 2011, the Marine Corps began the acquisition process for the ACV as a potential replacement for all or a portion of the AAV fleet, the primary way to transport marines from ship to shore under hostile and hazardous conditions. The ACV fleet is to have improved protected land mobility.

The National Defense Authorization Act for Fiscal Year 2014 included a provision that GAO annually review and report on the ACV program until 2018. This report, GAO's fifth, assesses the extent to which (1) the cost estimate for the ACV program's first increment aligns with best practices and operations and support costs are accurately reported; and (2) the program's schedule changes affect risk. GAO assessed the cost estimate for the program against best practices in GAO's Cost Estimating Guide. GAO also compared the program's previous and current schedule and test plans, and interviewed program officials.

What GAO Recommends

GAO recommends that DOD (1) adjust the key assumption used to calculate the estimated AAV operations and support costs presented in the ACV SARs; and (2) postpone the ACV 1.1 production decision until early fiscal year 2019. DOD concurred with the first recommendation and non-concurred with the second, stating that delaying the decision could affect the ACV fielding schedule and other efforts. As discussed in the report, GAO stands by its recommendation because the approved ACV acquisition program baseline indicates it is acceptable for the production decision to occur as late as December 2018 (which is in fiscal year 2019).

View GAO-17-402. For more information, contact Marie A. Mak at (202) 512-4841 or makm@gao.gov.

What GAO Found

GAO assessed the cost estimate for the first increment of the Amphibious Combat Vehicle (ACV) program—ACV 1.1—and found that it was developed in accordance with best practices. The cost estimate, (approximately \$2.0 billion for development and procurement and \$4.2 billion for operations and support), which included both the Department of Defense (DOD) Office of Cost Assessment and Program Evaluation's (CAPE) and program cost estimates, fully or substantially met the criteria for the four characteristics of a high-quality, reliable cost estimate. Specifically, GAO found that the estimate:

- fully met the characteristic of being comprehensive,
- substantially met the characteristic of being well-documented,
- fully met the characteristic of being accurate, and
- substantially met the characteristic of being credible.

However, GAO also found that a comparison of Assault Amphibious Vehicle (AAV) to ACV 1.1 operations and support costs reported by DOD to Congress—through Selective Acquisition Reports (SARs)—may be overstating comparison AAV costs as a result of an underlying assumption relating to troop carrying capacity. The ACV SAR provides comparison costs for 204 ACVs and 204 AAVs, implying a one-for-one replacement of AAVs by ACVs, when in fact comparatively more ACVs may be required because they are expected to carry fewer marines. Specifically, the AAV can transport 17 marines, while the ACV 1.1 will carry a minimum of 10 marines or up to 13. Further, program officials informed GAO that only 180 AAVs would likely be replaced by the incoming 204 ACV 1.1s. Internal control standards call for communication of quality information—including externally—to achieve an entity's objectives. SARs provide useful information to Congress that can be used in decision making. Without revising the assumption, DOD may overstate the operations and support costs savings that may be realized through acquisition of the ACV 1.1.

Despite a December 2015 bid protest (that was denied), the Marine Corps is maintaining an aggressive schedule to achieve initial operational capability—the point at which it will receive vehicles and have the ability to employ them—while increasing program risk. The bid protest delayed multiple program events ranging from testing to the start of production. For example, developmental testing, initially planned for February 2017, will not begin until April 2017—around the same time that Congress typically decides whether to fund program activities for the following fiscal year. The program's current schedule increases the level of concurrency, or overlap, between testing and production—placing the program at an increased risk of discovering deficiencies after some vehicles have been built, potentially requiring costly modifications. Further, the current schedule for the production decision could weaken Congressional oversight as Congress will likely be deciding whether to provide funds for ACV production before results from developmental testing are available. Internal control standards call for management's use of quality information to make informed decisions. Postponing the program's production decision until early fiscal year 2019 would reduce concurrency and enable Congress to obtain sufficient knowledge prior to making a procurement funding decision.