Ford-class aircraft carriers will feature new technologies designed to reduce life-cycle costs. The lead ship, CVN 78, has been under construction since 2008, and early construction on CVN 79 is underway. In 2007 Congress established a cap for procurement costs—which has been adjusted over time. In September 2013, GAO reported on a $2.3 billion increase in CVN 78 construction costs.

GAO was mandated to examine risks in the CVN 78 program since its September 2013 report. This report assesses (1) the extent to which CVN 78 will be delivered within revised cost and schedule goals; (2) if CVN 78 will demonstrate its required capabilities before ship deployment; and (3) the steps the Navy is taking to achieve CVN 79 cost goals. To perform this work, GAO analyzed Navy and contractor data, and scheduling best practices.

What GAO Found

The extent to which the lead Ford-class ship, CVN 78, will be delivered by its current March 2016 delivery date and within the Navy’s $12.9 billion estimate is dependent on the Navy’s plan to defer work and costs to the post-delivery period. Lagging construction progress as well as ongoing issues with key technologies further exacerbate an already compressed schedule and create further cost and schedule risks. With the shipbuilder embarking on one of the most complex phases of construction with the greatest likelihood for cost growth, cost increases beyond the current $12.9 billion cost cap appear likely. In response, the Navy is deferring some work until after ship delivery to create a funding reserve to pay for any additional cost growth stemming from remaining construction risks. This strategy will result in the need for additional funding later, which the Navy plans to request through its post-delivery and outfitting budget account. However, this approach obscures visibility into the true cost of the ship and results in delivering a ship that is less complete than initially planned.

CVN 78 will deploy without demonstrating full operational capabilities because it cannot achieve certain key requirements according to its current test schedule. Key requirements—such as increasing aircraft launch and recovery rates—will likely not be met before the ship is deployment ready and could limit ship operations. Further, CVN 78 will not meet a requirement that allows for increases to the size of the crew over the service life of the ship. In fact, the ship may not even be able to accommodate the likely need for additional crew to operate the ship without operational tradeoffs. Since GAO’s last report in September 2013, post-delivery plans to test CVN 78’s capabilities have become more compressed, further increasing the likelihood that CVN 78 will not deploy as scheduled or will deploy without fully tested systems.

What GAO Recommends

Congress should consider revising the cost cap legislation to include all construction costs. The extent to which the lead Ford-class ship, CVN 78, will be delivered by its current March 2016 delivery date and within the Navy’s $12.9 billion estimate is dependent on the Navy’s plan to defer work and costs to the post-delivery period. Lagging construction progress as well as ongoing issues with key technologies further exacerbate an already compressed schedule and create further cost and schedule risks. With the shipbuilder embarking on one of the most complex phases of construction with the greatest likelihood for cost growth, cost increases beyond the current $12.9 billion cost cap appear likely. In response, the Navy is deferring some work until after ship delivery to create a funding reserve to pay for any additional cost growth stemming from remaining construction risks. This strategy will result in the need for additional funding later, which the Navy plans to request through its post-delivery and outfitting budget account. However, this approach obscures visibility into the true cost of the ship and results in delivering a ship that is less complete than initially planned.

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The Navy is implementing steps to achieve the $11.5 billion congressional cost cap for the second ship, CVN 79, but these are largely based on ambitious efficiency gains and reducing a significant amount of construction, installation, and testing—work traditionally completed prior to ship delivery. Since GAO last reported in September 2013, the Navy extended CVN 79’s construction preparation contract to allow additional time for the shipbuilder to reduce cost risks and incorporate lessons learned from construction of CVN 78. At the same time, the Navy continues to revise its acquisition strategy for CVN 79 in an effort to ensure that costs do not exceed the cost cap, by postponing installation of some systems until after ship delivery, and deferring an estimated $200 million - $250 million in previously planned capability upgrades of the ship’s combat systems to be completed well after the ship is operational. Further, if CVN 79 construction costs should grow above the legislated cost cap, the Navy may choose to use funding intended for work to complete the ship after delivery to cover construction cost increases. As with CVN 78, the Navy could choose to request additional funding through post-delivery budget accounts not included in calculating the ship’s end cost. Navy officials view this as an approach to managing the cost cap. However, doing so impairs accountability for actual ship costs.