

GAO@100 Highlights

Highlights of [GAO-21-208](#), a report to the Subcommittee on Tactical Air and Land Forces, Committee on Armed Services, House of Representatives

Why GAO Did This Study

The Marine Corps is replacing its aging CH-53E helicopters with the CH-53K heavy-lift helicopter. Designed as an evolution of the CH-53E, the CH-53K is intended to transport armored vehicles, equipment, and personnel from ships to deep inland locations. The CH-53K program office is overseen by the Department of the Navy. As we have previously reported, the program has experienced delayed milestones and cost increases from almost its inception in 2005, in part, due to technical issues.

GAO was asked to review the CH-53K program. This report examines the program's (1) progress toward completing testing and demonstrating system experience, (2) schedule and cost performance to date, and (3) potential future challenges.

GAO analyzed cost, schedule, performance, test, manufacturing, and planning documents; and interviewed officials from the CH-53K program office, other defense offices—such as the Defense Contract Management Agency—the testing community, and the prime contractor, Sikorsky.

What GAO Recommends

GAO recommends that the Navy take steps to ensure the CH-53K schedule is credible and well-constructed, and that the Navy should not exceed the current annual procurement of six helicopters per year until the completion of initial operational test and evaluation. The Department of Defense did not concur with these recommendations. GAO continues to believe that the recommendations are valid, as discussed in this report.

View [GAO-21-208](#). For more information, contact Jon Ludwigson at (202) 512-4841 or ludwigsonj@gao.gov.

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HEAVY LIFT HELICOPTER PROGRAM

Navy Should Address Cost and Schedule Risks

What GAO Found

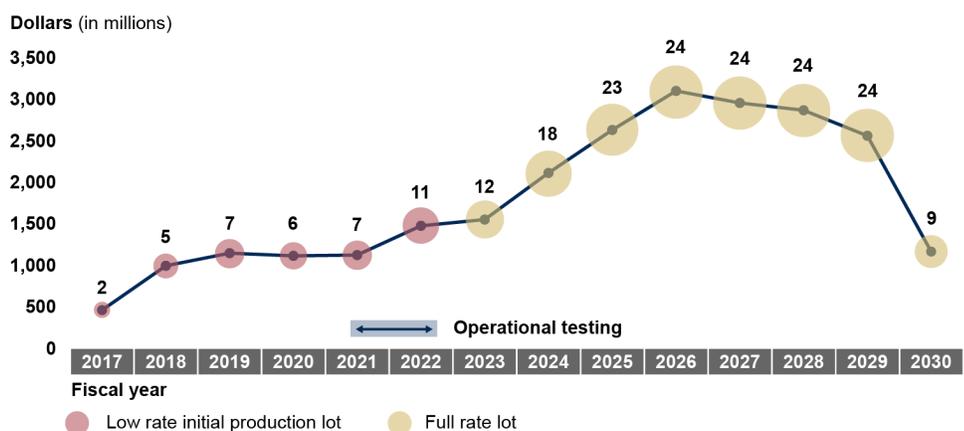
Fifteen years into development, the CH-53K program has made progress in testing the aircraft. Program documentation indicates that there is a moderate risk of not demonstrating the required levels of reliability or payload carrying weight by the end of operational testing.

The technical issues identified during testing caused program milestones to slip. For example, the full-rate production decision was delayed by nearly 7 years—from December 2015 to November 2022. CH-53K total program costs also increased by nearly \$15.3 billion since the program began due to technical issues and a quantity increase fielded helicopters from 156 to 200.

The program faces several challenges going forward.

- First, the schedule for completing the development of the CH-53K does not meet all of the leading practices, which makes the schedule unreliable. Specifically, GAO found that the master schedule is not fully credible or well-constructed. For example, the schedule indicates there is more flexibility in the schedule than it truly has, which can affect the ability to change allocated resources appropriately to meet schedule milestones.
- Second, the program faces potential further cost increases due to concurrency—or overlap between testing and procurement—which has increased due to delays in the completion of testing. In previous reviews of weapon systems, GAO found that while some concurrency is understandable, it can also result in cost increases and schedule delays, and deny timely, critical information to policy makers. Concurrency, coupled with plans for increased numbers of helicopters to be produced, beyond the six per year currently being built, could result in costly retrofits to helicopters built before the completion of operational testing. This testing will provide decision makers needed information on the resolution of the technical issues facing the program (see figure).

CH-53K Helicopter Testing and Procurement, Fiscal Years 2017-2030



Source: GAO analysis of December 2019 Selected Acquisition Report and program office documents. | GAO-21-208