The Expeditionary Fighting Vehicle (EFV) is the Corps' number-one priority ground system acquisition program and accounts for 25.5 percent of the Corps' total acquisition budget for fiscal years 2006 through 2011. It will replace the current amphibious assault craft and is intended to provide significant increases in mobility, lethality, and reliability. We reviewed the program under the Comptroller General’s authority to examine (1) the cost, schedule, and performance of the EFV program during system development and demonstration; (2) factors that have contributed to this performance; and (3) future risks the program faces as it approaches production.

What GAO Found

Although the EFV program had followed a knowledge-based approach early in development, its buying power has eroded during System Development and Demonstration (SDD). Since beginning this final phase of development in December 2000, cost has increased 45 percent as shown in figure 1.

Unit costs have increased from $8.5 million to $12.3 million. The program schedule has grown 35 percent or 4 years, and its reliability requirement has been reduced from 70 hours of continuous operation to 43.5 hours. Program difficulties occurred in part because not enough time was allowed to demonstrate maturity of the EFV design during SDD. The SDD schedule of about 3 years proved too short to conduct all necessary planning and to incorporate the results of tests into design changes, resulting in schedule slippages. In addition, several significant technical problems surfaced, including problems with the hull electronic unit, the bow flap, and the hydraulics. Reliability also remains a challenge.

Three areas of significant risk remain for demonstrating design and production maturity that have potential significant cost and schedule consequences. First, EFV plans are to enter low-rate initial production without requiring the contractor to demonstrate that the EFV’s manufacturing processes are under control. Second, the EFV program will begin low-rate initial production without the knowledge that software development capabilities are sufficiently mature. Third, two key performance parameters—reliability and interoperability—are not scheduled to be demonstrated until the initial test and evaluation phase in fiscal year 2010—about 4 years after low-rate initial production has begun.