



VH-71/VXX Presidential Helicopter Program: Background and Issues for Congress

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Summary

The VH-71 program is intended to provide 23 new presidential helicopters to replace the current fleet of 19 aging presidential helicopters. As part of its proposed FY2010 Department of Defense (DOD) budget, the Administration proposed terminating the VH-71 program in response to substantial cost growth and schedule delays in the program. As a successor to the VH-71 program, the Administration proposed beginning a new presidential helicopter program in FY2010 called the VXX Presidential Helicopter Program.

The Administration's proposed FY2010 budget requested \$85.2 million in Navy research and development funding for the VH-71 program. Of this total, \$55.2 million is for terminating the VH-71 program and \$30 million is for initial studies on the proposed successor VXX program.

The issue for Congress is whether to approve the Administration's proposal to terminate the VH-71 program and initiate a successor VXX program, or pursue another course, such as continuing the VH-71 program in some restructured form. Congress's decision on the issue could affect DOD funding requirements, the schedule for replacing the 19 older helicopters, and the helicopter industrial base. This report will be updated as events warrant.

FY2010 defense authorization act: The conference report (H.Rept. 111-288 of October 7, 2009) on the FY2010 defense authorization act (H.R. 2647/P.L. 111-84 of October 28, 2009) approves the Administration's FY2010 funding request for the VH-71 program. The conference report states that "the conferees strongly encourage the Department of Defense and the Executive Branch to consider a complete range of alternatives for meeting requirements. The conferees believe that such consideration must include evaluating both single- and multi-platform solutions to meet the complete transportation requirements of the President, and [in] evaluating costs, consider the investment already made in the VH-71 program for possible use for some portion of the mission within a multi-platform solution."

FY2010 DOD appropriations bill: In lieu of a conference report, the House Appropriations Committee on December 15, 2009, released an explanatory statement on a final version of H.R. 3326. This version was passed by the House on December 16, 2009, and by the Senate on December 19, 2009, and signed into law on December 19, 2009, as P.L. 111-118.

The explanatory statement includes \$130.0 million for VHXX Executive Helo Development in 2010, an increase of \$44.8 million from the Administration's request. This includes a \$100.0 million increase for technology capture and a decrease of \$55.2 million for "termination costs funded ahead of estimate."

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Introduction

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On May 15, 2009, Ashton Carter, the DOD acquisition executive,¹ issued an internal DOD memorandum directing that the VH-71 program be cancelled. The Navy announced the same day that it had issued a stop-work order on the VH-71 program. On June 1, 2009, the Navy announced that it would terminate the main contract for the program, called the System Development and Design (SDD) contract.

The Administration's proposed termination of the VH-71 program is one of the higher-profile program cancellations or reductions in the proposed FY2010 DOD budget, and has become an item of discussion in the debate on FY2010 defense funding.²

The issue for Congress is whether to approve the Administration's proposal to terminate the VH-71 program and initiate a successor VXX program, or pursue another course, such as continuing the VH-71 program in some restructured form. Congress's decision on the issue could affect DOD funding requirements, the schedule for replacing the 19 older helicopters, and the helicopter industrial base.

Background

Mission of Presidential Helicopters

Presidential helicopters are operated by the Marine Corps in a squadron called Marine Helicopter Squadron One (HMX-1). DOD states that HMX-1 "is required to provide safe and timely transportation for the President and Vice President of the United States, heads of state and others as directed by the White House Military Office (WHMO)."³ In addition to providing the president and others with safe and timely transportation, presidential helicopters are equipped with specialized self-defense features and specialized communications systems that permit the president to carry out critical command functions while aboard. Presidential helicopters need to

¹ The formal title for the DOD acquisition executive is the Under Secretary of Defense (Acquisition, Technology and Logistics (USD [ATL].)

² See, for example, Bettina H. Chavanne and Andy Nativi, "Congressional, Trans-Atlantic Objections To VH-71 Cancellation Grow Louder," *Aerospace Daily & Defense Report*, June 5, 2009: 1-2; and Rebekah Gordon, "Murtha to Navy: Find a Way to Leverage \$3.2 Billion Already Spent on VH-71," *InsideDefense.com (DefenseAlert-DailyNews)*, June 3, 2009.

³ *Department of the Navy Fiscal Year (FY) Budget Estimates, Justification of Estimates, May 2009, Research, Development, Test & Evaluation, Navy, Budget Activity 5, Exhibit R-2, DRT&E Budget Item Justification for Program Element (PE) 0604273N, VH71A Executive Helo Development, page 1 of 23 (overall page 351 of 1037).*

be large enough to carry a certain number of passengers and mission equipment, but small enough to operate from the White House lawn.

Existing Presidential Helicopters

The existing presidential helicopter fleet of 19 helicopters includes 11 VH-3D helicopters that achieved Initial Operational Capability (IOC) in 1975, and 8 VH-60N helicopters that achieved IOC in 1989. The helicopters have had their services lives extended and have been regularly upgraded over time. Examples of upgrades include new and more effective main rotor blades, improved communications, and better cockpit displays.⁴ A September 7, 2009, press report states that:

the presidential helicopter program is busy with a service life assessment program to try to keep aging legacy VH-3 and VH-60 helos in the fleet for as long as possible, [Marine Corps Lt. Gen. George Trautman, deputy commandant for aviation] said.

“Obviously the concern for HMX [Marine One] and me is that the VH-3s and the H-60s are being taken care of, and they are being taken care of,” he said. “We’re still going through service life assessment programs on both, so we’re assessing what needs to be done.”

The program is also making some cockpit upgrades to the VH-60, as well as dealing with some cabin and structural issues to be expected on aging aircraft.

“The H-60 is in pretty good shape,” he said. “The H-3s are in good shape too, but what we’re doing is ... [deciding] how much and what would need to be done if we had to extend their lives past about the 2018, 2019 time frame, if we had to do that.”⁵

VH-71 Program⁶

Program Origin and Lead Service

The VH-71 program traces back to the late-1990s, but was formally started earlier in this decade. HMX-1 submitted a Fleet Operational Needs document in March 1998. A Mission Needs Statement (MNS) was approved in September 1999. In November 2002, a White House memorandum stated a need to accelerate the effort. The Center for Naval Analyses (CNA) completed a presidential helicopter Analysis of Alternatives (AOA), meaning a comparison of acquisition alternatives, in July 2003. An Operational Requirements Document (ORD) was approved by DOD’s Joint Requirements Oversight Council (JROC) in December 2003, and a DOD Acquisition Decision Memorandum (ADM) that same month directed a program that would provide replacement helicopters with an IOC of the first quarter of FY2009. The program received Milestone B/C approval—its initial milestone approval—on January 27, 2005.

⁴ “News Breaks.” *Aviation Week & Space Technology*. May 29, 2006. Bettina Chavanne. “Lockheed Martin Watching, Waiting As VH-71 Rhetoric Escalates.” *Aerospace Daily & Defense Report*. February 26, 2009.

⁵ Dan Taylor, “Trautman: Pentagon Casting Wide Net As It Seeks VH-71 Replacement,” *Inside the Navy*, September 7, 2009.

⁶ Principal sources for this section include justification materials for the FY2010 budget and DOD and Navy information papers and briefing slides for Congress on the VH-71 program.

The VH-71 program was established with a sense of urgency. DOD officials argued at the time that in light of security issues raised by the terrorist attacks of September 11, 2001, replacing the existing presidential helicopter was an urgent matter. It was reported that White House officials repeatedly urged DOD to accelerate the VH-71 program, proposing an IOC by 2007.⁷ Numerous VH-71 program documents and statements by DOD officials referred to the “urgent need” to field a new presidential helicopter.

The Navy is the lead service for the VH-71 acquisition program. The Navy and Marine Corps are organized under the Department of the Navy, and Marine Corps aircraft are acquired through the Navy’s research and development and aircraft procurement appropriation accounts.

Competition, Contract Award, and Contractors

The Navy conducted a competition for the VH-71 program, which was earlier called the VXX program (not to be confused with the successor VXX program that the Administration is now proposing to initiate). The competitors for the program were industry teams led by Sikorsky and Lockheed Martin. Sikorsky, a leading U.S. helicopter manufacturer and the maker of the existing VH-3D and VH-60N presidential helicopters, submitted a bid based on Sikorsky’s S-92 helicopter. Lockheed Martin submitted a bid based on the EH-101, a somewhat larger helicopter made by AugustaWestland, an Anglo-Italian helicopter manufacturer. The competition was closely followed by various observers, in part because of the prestige of being the maker of the helicopter used by the U.S. president, and also because the competition pitted a U.S. helicopter design against a European helicopter design.

On January 28, 2005 (three days after the program received Milestone B/C approval), John Young, the Navy’s acquisition executive,⁸ announced that the Lockheed-led team had won the competition. Navy representatives stated the Lockheed bid was chosen over the Sikorsky bid in part because the EH-101 was deemed more likely to be able to meet the program’s operational requirements on time and at a lower cost. Some observer’s criticized the Navy’s award decision, in part because the winning team included foreign companies.

The prime contractor for the VH-71 program is Lockheed Martin System Integration (LMSI) of Owego, NY. Lockheed’s contract for the program, called a System Development and Design (SDD) contract, is a Cost Plus Award Fee (CPAF) contract. Major VH-71 program subcontractors include AugustaWestland of the UK and Italy, which is responsible for production of the basic VH-71 helicopter, and Bell Helicopter of Fort Worth, TX, which is responsible for VH-71 final assembly and logistics.

Prime contractors for the existing fleet of VH-3D and VH-60N helicopters include Sikorsky of Stratford, CT, which manufactured the helicopters and operates a rework facility for them, and Rockwell Collins of Cedar Rapids, IA, which is responsible for VH-60N Cockpit Upgrade Program (CUP) avionics integration.

⁷ Christopher Castelli, “Facing Criticism From Christie, Young Defends Rapid VXX Schedule,” *Inside the Navy*, February 7, 2005.

⁸ The formal title of the Navy’s acquisition executive is Assistant Secretary of the Navy (Research, Development and Acquisition).

General Electric of Lynn, MA, is a major subcontractor responsible for engines on both the VH-71 helicopter and the existing VH-3D and VH-60N helicopters.

A November 17, 2009, press report states:

Bethesda-based Lockheed Martin said Monday that it is revamping its missile-making Electronic Systems unit and appointing a new person to head it—moves that could result in an undisclosed number of job losses after the giant defense contractor lost two lucrative deals at its facility in Owego, N.Y.

Lockheed said it will also realign the division, which makes the Aegis [air and] ballistic missile [defense system] and the Pac-3 surface-to-air guided missile, to improve operations and affordability. The company's ground-vehicle business will no longer report to Owego, where it was part of Systems Integration, but to Dallas, where it will be part of Missiles and Fire Control. The rest of Owego's business will become part of the company's Maritime Systems and Sensors division, which makes ships and radars.

Lockheed cut nearly 1,000 jobs this year at its Owego operations after the Pentagon canceled several weapons systems, including the presidential helicopter program and a search-and-rescue helicopter,⁹ which were run out of Owego.¹⁰

Increment I and II Helicopters

The goal of the VH-71 program is to provide 23 new presidential helicopters to replace the 19 existing presidential helicopters. The VH-71 program is divided into Increment I and Increment II helicopters. Increment I helicopters, which meet some but not all of the operational requirements in the VH-71 ORD, were to enter service first as near-term replacements for some of the existing presidential helicopters. Increment II helicopters, which were to fully meet the requirements in the VH-71 ORD, were to enter service later.

The numbers of Increment I and Increment II helicopters to be acquired through the VH-71 program have changed over the life of the program. Just prior to the submission of the proposed FY2010 budget, the program included eight government-funded Increment I helicopters and 26 government-funded Increment II helicopters, for a total of government-funded 34 helicopters. The eight Increment I helicopters include three test aircraft not intended to enter operational service, and five pilot production aircraft intended to enter operational service as interim replacements for some of the existing presidential helicopters. The 26 Increment II helicopters include three test aircraft not intended to enter operational service, and 23 production aircraft intended to enter operational service.

The VH-71 program as of early-2009 also included a fourth Increment I test aircraft that was funded by industry, and a fourth Increment II test aircraft that would be funded by industry. Including these two industry-funded test aircraft would make for a total of 36 industry- and government-funded aircraft, including nine Increment I aircraft and 27 Increment II aircraft.

⁹ This is an apparent reference to the Air Force CSAR-X program, a program to develop a new combat search and rescue (CSAR) helicopter. As part of its proposed FY2010 defense budget, the Administration proposed canceling the CSAR-X program.

¹⁰ Dana Hedgpeth, "Lockheed To Realign Unit; Jobs May Be Cut," *Washington Post*, November 17, 2009.

At an earlier stage in the VH-71 program, four of the five pilot production Increment I helicopters were to be retrofitted to the Increment II standard (the fifth is to be used for live-fire testing), and 19 additional Increment II helicopters were to be procured, making for a total of 23 new and retrofitted Increment II helicopters. The program was subsequently changed to drop the plan for retrofitting four pilot production Increment I helicopters and to purchase 23 new Increment II helicopters instead.

Program Funding

Location in Budget

The VH-71 program has been funded through the Navy's research and development appropriation account, known formally as the Research, Development, Test & Evaluation, Navy (RDT&EN) account. The funding is contained in Program Element (or PE, meaning line item) 0604273N in the RDT&EN account, entitled VH-71A Executive Helo (i.e., helicopter) Development. The program was to be funded in future fiscal years through both the RDT&EN account and the Navy's aircraft procurement appropriation account, known formally as the Aircraft Procurement, Navy (APN) account. There is also some military construction (MilCon) funding associated with the VH-71 program for the construction of VH-71-related facilities.

FY2009 Funding

The Navy requested a total of \$1,047.8 million for the VH-71 program in FY2009. Congress appropriated \$835.0 million—a reduction of \$212.8 million from the request. The reduction came from \$312.8 million that was requested for the Increment II portion of the program, leaving \$100 million for Increment II. Following enactment of the FY2009 defense budget, DOD adjusted the appropriated figure of \$835 million downward to \$831.8 million.

FY2010 Funding Request

The Navy's proposed FY2010 budget requested \$85.2 million for the VH-71 program, all of which is in PE0604273N of the RDT&EN account. Of this total, \$55.2 million is for Increment I, for use in terminating the program, none is for Increment II, and \$30 million is for initial studies on the proposed successor VXX program.

Obligations and Expenditures of Prior-Year Funding

As of April 10, 2009, about \$3.3 billion in funding had been obligated for the VH-71 program (including about \$3.1 billion in RDT&E funding and about \$179 million in MilCon funding), and about \$2.9 billion had been expended (including about \$2.7 billion in RDT&E funding and \$171 million in MilCon funding). Of the \$831.8 million in FY2009 funding for the program, the Navy as of May 12, 2009, had obligated \$709.2 million and expended \$288.2 million.

Cost Growth and Schedule Delays

Cost Growth and Nunn-McCurdy Breach

The estimated total acquisition (i.e., development plus procurement) cost of the VH-71 has grown considerably over time. In January 2005, the program's total acquisition cost was estimated at about \$6.5 billion in then-year dollars. In January 2008, it was estimated at about \$11.2 billion in then-year dollars. In December 2008, it was estimated at about \$13.0 billion in then-year dollars—twice the January 2005 estimate. The figure of about \$13.0 billion in then-year dollars translates into about \$11.9 billion in constant FY2009 dollars.¹¹

Of the total estimated acquisition cost of \$13.0 billion in then-year dollars, about \$9.9 is RDT&EN funding, \$2.9 billion in APN funding, and about \$200 million in MilCon funding. Of the \$9.9 billion in RDT&EN funding, about \$4.6 billion is for Increment I and about \$5.3 billion is for Increment II. The total estimated cost of the Increment II aircraft would appear to be about \$8.2 billion (this includes the \$2.9 billion in APN funding, which appears to be for Increment II aircraft only, plus the \$5.3 billion in RDT&EN funding for Increment II).

The growth in the program's estimated total acquisition cost led to what is known as a Nunn-McCurdy breach, meaning a growth in cost sufficient to trigger the Nunn-McCurdy provision (10 USC 2433), which requires DOD to notify Congress whenever a major defense acquisition program breaches an established cost overrun threshold. Programs that experience a Nunn-McCurdy breach face cancellation unless they are certified for continuation by the Secretary of Defense.¹² DOD notified Congress of the program's Nunn-McCurdy breach in late-January 2009.¹³

Schedule Delays

The VH-71 program has experienced significant schedule delays, and estimated dates for having VH-71s enter operational service are now years beyond what was originally planned. Under the original program milestones for the VH-71 program, the Increment I helicopters were to achieve IOC at the start of FY2009, the Increment II helicopters were to achieve IOC toward the end of FY2011, and the VH-71 fleet was to achieve full operational capability (FOC) in mid-FY2015. As of early 2009, the date for Increment I IOC had slipped to mid-FY2012 (a delay of about three and a half years), the date for Increment II IOC had slipped to late-FY2019 (a delay of almost eight years), and the FOC date had slipped to late FY2021 (a delay of more than six years).

¹¹ The Navy states that the December 2008 estimated total acquisition cost of \$12,999 million in then-year dollars equates to \$10,358 million in calendar year (CY) 2003 dollars—a sum that equates to about \$11.9 billion in constant FY2009 dollars.

¹² Under the Nunn-McCurdy provision, a significant cost breach occurs when the Program Acquisition Unit Cost (PUAC) increases 15% or more over the current baseline estimate or 30% or more over the original baseline estimate. A critical breach occurs when the PUAC increases 25% or more over the current baseline estimate or 50% or more over the original baseline estimate. Source: Defense Acquisition Reform. Written Statement of Moshe Schwartz, Analyst in Defense Acquisition Congressional Research Service. Submitted to Senate Armed Services Committee, March 3, 2009.

¹³ Zachary M. Peterson, "Navy: New VH-71 Presidential Helicopter Breached Cost Threshold," *Inside the Navy*, February 2, 2009.

Some observers believe that cost growth and schedule delays in the VH-71 program were made likely by the program's aggressive original schedule, which in turn reflected the view that there was an urgent need to replace the 19 existing presidential helicopters.

Status of Increment I Aircraft¹⁴

The nine Increment I aircraft include four test vehicles (TVs), one of which was industry-funded and the others government-funded, and five pilot production (PP) aircraft, all of which were government-funded. As of June 17, 2009, the status of these nine aircraft was as follows:

- TV-4—the industry-funded test vehicle—was complete and about 75% missionized (i.e., equipped with mission-related systems).
- TV-3 was located at the Naval Air System Command's facility at Patuxent River, MD. It was complete and 100% missionized.
- TV-2 and TV-5 were also located at Patuxent and were being used as air-quality trainers, meaning that they flew for purposes such as vibration testing and evaluation of handling characteristics. They were complete as aircraft, but were not missionized.
- PP-2 and PP-5 were located at Patuxent and were being used for test flights. They were complete as aircraft, but were not missionized.
- PP-1, PP-3, and PP-4 were located at Owego, NY. They were in various stages of disassembly for the purpose of being missionized, but no missionization had been accomplished.

March 2009 GAO Report

A March 2009 Government Accountability Office (GAO) report on the status of various DOD major weapon acquisition programs stated the following in its entry on the VH-71 program:

Technology Maturity and Design Maturity

Increment I of the VH-71 program is nearing technology maturity and design stability. A January 2004 Technology Readiness Assessment concluded that there are no critical technologies on the program. One of the two critical technologies originally identified by the program—the Communication and Subsystem Processing Embedded Resource Communication Controller—has been tested in a laboratory setting, but not demonstrated in a realistic environment. As of May 2008, about 90 percent of expected Increment I engineering drawings were released.

For Increment II, no critical technologies have been identified. Program officials estimate roughly 50 percent of the Increment I and II designs will be common. The most significant differences will be a new engine, transmission, and main rotor blade. The Increment II blade will be larger than Increment I, and will employ a new design, which has been implemented on another aircraft but must be scaled up by 30 percent.

Production Maturity

¹⁴ Source for this section: Information provided to CRS program office by VH-71 program office on June 17, 2009.

Increment I production is underway, but concurrent design, production, and testing continues to drive program risk. Although VH-71 officials have identified metrics to evaluate production, they said that they have not been able to set specific targets for these measures because of continued design iterations. Program officials reported some quality concerns with the initial aircraft, including foreign object debris, but DCMA officials noted that these issues are of concern only because of the rigorous standards of a presidential aircraft, and would not otherwise be seen as problems. The program office is flight testing two Increment I aircraft. Delivery of the first missionized test article is expected in April 2009, which will allow testing of the aircraft's integrated systems.

Other Program Issues

The VH-71 program began with a compressed schedule dictated by White House needs stemming from the September 11, 2001, terrorist attacks. According to the program manager, this aggressive acquisition strategy included a source selection process that was shorter than desired and contributed to confusion regarding specifications between the program office and the contractor and concurrent design, testing, and production that resulted in increased program risk, an unsustainable schedule, and inaccurate cost estimates. As a result of continued cost growth, program officials expect to initiate the certification process for a critical Nunn-McCurdy breach in January 2009.

Increment II is being restructured and the VH-71 program office recently requested a proposal from Lockheed Martin to modify its existing contract to reflect the restructured program. The program faces significant challenges due to funding instability. Fiscal year 2008 budget reductions slowed program progress, and a stop work order has been in place for Increment II since December 2007. In addition, the joint statement accompanying the 2009 Defense Appropriation Act recommended \$212 million less funding than requested for Increment II. According to program officials, this will prevent any Increment II work during fiscal year 2009 and result in a further 18-month delay in Increment II initial operating capability beyond the fiscal year 2017 date anticipated in the proposed restructured schedule. Officials also said the shortfall would cause about \$640 million in cost growth above the \$11.2 billion estimated total program cost.

Increment I aircraft will have a short service life of 1,500 hours compared to the 10,000-hour service life of Increment II aircraft. The program manager estimated that remedies to extend use of Increment I aircraft would take about 4 years to implement, making this approach of limited use to address delays in Increment II availability. According to program officials, the short service life is in part because Increment I lacks some redundant fail-safe design elements. Program officials have requested funding for a fatigue test article, but they stated that it would take 2 years to assess fatigue problems and another 2 years to develop remedies.

Program Office Comments

In commenting on a draft of this assessment, the Navy stated that the program is executing an accelerated schedule driven by an urgent need to replace existing aging assets. Concurrency in development, design, and production was necessary to meet the accelerated schedule, but Increment II will follow a more typical acquisition approach. The Navy reported that significant production maturity has been demonstrated for Increment I, including the first flights of two pilot production aircraft.¹⁵

¹⁵ Government Accountability Office, *Defense Acquisitions[:] Assessments of Selected Weapon Programs*, GAO-09-326SP, March 2009. p. 144.

Proposed Cancellation of VH-71 Program

February 23 Remarks by President Obama

On January 23, 2009, President Obama stated that he thought the VH-71 program was “an example of the procurement process gone amuck.”¹⁶ Obama’s comments led some observers to speculate that the Administration might propose the termination of the program as part of its FY2010 budget submission.¹⁷

April 6 Announcement by Secretary Gates

On April 6, 2009, Secretary of Defense Robert Gates announced a series of recommendations he was making to the president regarding the Administration’s proposed FY2010 defense budget. Among these, he said, was a recommendation to terminate the VH-71 program. In his announcement, Secretary Gates stated that:

In today’s environment, maintaining our technological and conventional edge requires a dramatic change in the way we acquire military equipment. I believe this needed reform requires three fundamental steps.

¹⁶ The president made the remark as part of a question-and-answer session in the Dwight D. Eisenhower Executive Office Building at the closing of an administration event called the Fiscal Responsibility Summit. The president’s remark was made as part of an exchange with Senator John McCain, who was one of those in attendance at the question-and-answer session. The text of the exchange between Senator McCain and the president is as follows:

SENATOR McCAIN: Just one area that I wanted to mention that I think consumed a lot of our conversation on procurement was the issue of cost overruns in the Defense Department. We all know how large the defense budget is. We all know that the cost overruns—your helicopter is now going to cost as much as Air Force One. I don’t think that there’s any more graphic demonstration of how good ideas have cost taxpayers an enormous amount of money.

So we will—and I know that you’ve already made plans to try to curb some of the excesses in procurement. We really have to do that. We’re going to have to pay for Afghanistan, as you well know, and we’re not done in Iraq. But most importantly, we have to make some tough decisions—you, Mr. President, have to make some tough decisions about not only what we procure, but how we procure it.

And I thank you for the opportunity and sharing your thoughts with a lot of very smart people.

THE PRESIDENT: Well, John, let me—this is going to be one of our highest priorities. By the way, I’ve already talked to Gates about a thorough review of the helicopter situation. The helicopter I have now seems perfectly adequate to me. (Laughter.) Of course, I’ve never had a helicopter before—(laughter)—maybe I’ve been deprived and I didn’t know it. (Laughter.)

But I think it is a—it is a—an example of the procurement process gone amuck. And we’re going to have to fix it. Our hope is, is that you, Senator Levin, and others, can really take some leadership on this.

And one of the promising things is I think Secretary Gates shares our concern and he recognizes that simply adding more and more does not necessarily mean better and better, or safer and more secure. Those two things are not—they don’t always move in parallel tracks, and we’ve got to think that through.

(Source: Transcript of session, available online at http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-in-QandA-session-at-closing-of-Fiscal-Responsibility-Summ/)

¹⁷ See, for example, R. Jeffrey Smith, “Marine One Upgrade Now Looks Less Likely,” *Washington Post*, February 24, 2009: 5; Zachary M. Peterson, “Sources: Presidential Helicopter Strands Little Chance of Survival,” *Inside the Navy*, March 2, 2009; and Christopher P. Cavas, “Renewed Verbal Assaults Put VH-71 on Shaky Ground,” *Defense News*, March 2, 2009: 7.

First, this department must consistently demonstrate the commitment and leadership to stop programs that significantly exceed their budget or which spend limited tax dollars to buy more capability than the nation needs....

Second, we must ensure that requirements are reasonable and technology is adequately mature to allow the department to successfully execute the programs. Again, my decisions act on this principle by terminating a number of programs where the requirements were truly in the “exquisite” category and the technologies required were not reasonably available to affordably meet the programs’ cost or schedule goals.

Third, realistically estimate program costs, provide budget stability for the programs we initiate, adequately staff the government acquisition team, and provide disciplined and constant oversight.

We must constantly guard against so-called “requirements creep,” validate the maturity of technology at milestones, fund programs to independent cost estimates, and demand stricter contract terms and conditions. I am confident that if we stick to these steps, we will significantly improve the performance of our defense acquisition programs. But it takes more than mere pronouncements or fancy studies or reports. It takes acting on these principles by making tough decisions and sticking to them going forward....

Fully reforming defense acquisition also requires recognizing the challenges of today’s battlefield and constantly changing adversary. This requires an acquisition system that can perform with greater urgency and agility. We need greater funding flexibility and the ability to streamline our requirements and acquisition execution procedures.

The perennial procurement and contracting cycle—going back many decades—of adding layer upon layer of cost and complexity onto fewer and fewer platforms that take longer and longer to build must come to an end. There is broad agreement on the need for acquisition and contracting reform in the Department of Defense. There have been enough studies. Enough hand-wringing. Enough rhetoric. Now is the time for action.

First, I recommend that we terminate the VH-71 presidential helicopter:

- This program was originally designed to provide 23 helicopters to support the president at a cost of \$6.5 billion. Today, the program is estimated to cost over \$13 billion, has fallen six years behind schedule, and runs the risk of not delivering the requested capability.
- Some have suggested that we should adjust the program by buying only the lower capability “increment one” option. I believe this is neither advisable nor affordable. Increment One helicopters do not meet requirements and are estimated to have only a five- to 10-year useful life. This compares to the current VH-3 presidential helicopters that are 30 to 40 years old.
- We will promptly develop options for an FY11 follow-on [presidential helicopter] program.¹⁸

¹⁸ Source: Defense Budget Recommendation Statement (Arlington, VA), [Text] As Prepared for Delivery by Secretary of Defense Robert M. Gates, Arlington, VA, Monday, April 06, 2009, available online at <http://www.defenselink.mil/speeches/speech.aspx?speechid=1341>.

FY2010 Budget Submission

The Administration's proposed FY2010 budget, with its proposal to terminate the VH-71 program and initiate a successor VXX program, was submitted to Congress in early May 2009. The Administration's FY2010 budget submission includes a document summarizing program terminations, reductions, and savings. The document's entry on the VH-71 program stated:

The VH-71 program is six years behind schedule, and its cost has grown from \$6.5 billion to over \$13 billion. Over \$3.2 billion has already been spent on this program with no operational aircraft delivered. The Government Accountability Office has warned that future costs of the VH-71 are unknown, and the Congressional Research Service has raised the question if the current program should be cancelled.¹⁹ These high costs and schedule slippage have occurred because of challenging program requirements and an ambitious schedule. Instead of continuing to pursue the current program, the Administration proposes to cancel it, review requirements, and establish a new program. A new Presidential Helicopter replacement program will allow the Administration to take advantage of new technologies and develop a helicopter that is fiscally responsible while still meeting the President's requirements.

Funding in 2010 will cover termination costs, Government efforts to develop options for a Presidential Helicopter replacement program, and service life extensions for the current Presidential Helicopter fleet.²⁰

May 15 Termination Memorandum and Navy Stop-Work Order

On May 15, 2009, Ashton Carter, the DOD acquisition executive, issued an Acquisition Decision memorandum (ADM)—an internal DOD memorandum—directing that the VH-71 program be cancelled.²¹ The Navy announced the same day that it had issued a stop-work order for both Increment I and Increment II of the VH-71 program. A press report on the Navy's announcement stated:

"The Naval Air Systems Command Contracting Office directed stop-work on all activities associated with VH-71 Systems Design and Demonstration requirements, with the exception of security requirements and protection of government property, information and equipment during the orderly transition of these functions to the government," Navy spokesman Lt. Clay Doss said in a statement.

The order allows the government to reduce program expenditures and secure property and equities for future decisions on the presidential helicopter program, Doss said.

He attributed the cancellation to cost growth that breached thresholds set by the Nunn-McCurdy act. A comprehensive program review that took place during the development of the fiscal year 2010 president's budget submission led to its cancellation.

¹⁹ The document at this point cites the March 5, 2009, version of this CRS report, which stated that "the key question facing the 111th Congress is whether to cancel or to restructure the program."

²⁰ Office of Management and Budget, *Terminations, Reductions, and Savings, Budget of the U.S. Government, Fiscal Year 2010*, Washington, 2009. p. 50.

²¹ See, for example, Christopher Drew, "Work Halted On Helicopter For President," *New York Times*, May 16, 2009: B1.

“The Navy will begin to develop options for a presidential helicopter replacement program and present these to the Office of the Under Secretary of Defense for Acquisition, Technology and Logistics within 30 days,” Doss’ statement reads.

He added that the FY-10 budget submission, released earlier this month, includes money for service life extensions of legacy presidential helicopters and to develop options for the presidential helicopter replacement program.

“The Navy continues to review a range of options regarding for already-built VH-71 aircraft to include sales to interested parties, contractor buy-back or potential applications to other [Pentagon] needs,” Doss said.²²

June 1 Announcement of Intent to Terminate

On June 1, 2009, the Navy announced that it would terminate the main contract for the VH-71 program, called the System Development and Design (SDD) contract. A news report on the announcement from the Navy’s news service stated:

The Navy announced June 1 that it will terminate the VH-71 System Development and Demonstration (SDD) program contract. The announcement follows a Department of Defense (DoD) decision to cancel the existing presidential helicopter replacement program.

The VH-71 was intended to replace both the VH-3D and VH-60N aircraft currently used to conduct presidential support missions.

Navy contract N00019-05-C-0030 and associated work with Lockheed Martin Systems Integration—Owego (LMSI-O), Owego, N.Y., awarded Jan. 28, 2005, for the SDD of the VH-71 program, has been terminated for the convenience of the government.

The under secretary of defense for acquisition, technology and logistics issued a VH-71 program acquisition decision memorandum May 15, 2009, which directed the program be cancelled, to include both Increment 1 and Increment 2.²³

Estimated Cancellation and Termination Costs

The Navy in February 2009 estimated the liability costs for terminating the VH-71 program at \$555 million, including \$405 million for Increment I and \$150 million for Increment II. The Navy further stated that program-cancellation costs beyond these estimated termination liability costs had not yet been determined.²⁴ The Navy stated in May 2009 that all prior-year funding available for the VH-71 program would be needed to cover costs associated with terminating the

²² Dan Taylor, “Navy Issues Stop-Work Order On VH-71 Presidential Helo,” *InsideDefense.com (DefenseAlert—Daily News)*, May 15, 2009. Bracketed material as in the original.

²³ “Navy Terminates Contract For VH-71 Presidential Helicopter,” *Navy News Service (NNS)*, June 2, 2009. See also August Cole, “Navy Ends Lockheed’s Copter Pact,” *Wall Street Journal*, June 2, 2009; and Bettina H. Chavanne, “Navy Officially Terminates VH-71 Presidential Helo,” *Aerospace Daily & Defense Report*, June 3, 2009: 2.

²⁴ Source: February 23, 2009, Navy information paper to Congress on VH-71 program. See also Andrea Shalal-Esa, “Navy Sees \$555 Million To Cancel President’s Copter,” *Reuters.com*, May 19, 2009.

program.²⁵ The \$55.2 million in FY2010 funding requested for Increment I is also requested to cover costs associated with terminating the program.

Disposition of Existing VH-71 Aircraft

A September 7, 2009, press report states that:

Lockheed has already built some VH-71 aircraft. No decision has been made yet on what to do with them, though, according to Naval Air Systems Command spokeswoman Stephanie Vendrasco.

“The Navy continues to review a full range of options regarding the future of already-built VH-71 aircraft to include, but not limited to, sales to interested parties, contractor buy-back and potential applications to other [Defense Department] needs,” she said in a Sept. 2 e-mail in response to questions from [*Inside the Navy*].²⁶

Proposed VXX Successor Program

In General²⁷

The Administration’s proposed successor VXX Presidential Helicopter Program is not yet defined. At a May 20, 2009, hearing before the Defense subcommittee of the House Appropriations Committee on the proposed FY2010 DOD budget, Secretary Gates stated that one idea “worth pursuing” would be to procure two different presidential helicopters—“one that the president basically uses here in town to go to Andrews [Air Force Base] and on regular trips here in the United States and things like that, and an escape helicopter that has different kinds of capabilities and that could perhaps be a modified kind of helicopter that we use now in combat.” Gates stated that “all of the [performance] requirements that are being placed on this helicopter may not be feasible in a single helicopter and maybe we look at one for escape and one for regular everyday use.”²⁸

A September 7, 2009, press report states:

Navy leadership is casting a “very wide” net as the Pentagon mulls its options for the next-generation presidential helicopter to replace the terminated VH-71 program, according to Marine Corps Lt. Gen. George Trautman, deputy commandant for aviation.

After the VH-71 program was canceled earlier this year due to cost increases and schedule delays, the Navy went back to referring to the next-generation Marine One helicopter as VXX. *Inside the Navy* [ITN] reported in April that the government had talked to Sikorsky,

²⁵ Source: May 12, 2009, Navy information paper to Congress on VH-71 program.

²⁶ Dan Taylor, “Trautman: Pentagon Casting Wide Net As It Seeks VH-71 Replacement,” *Inside the Navy*, September 7, 2009. The appearance of “Defense Department” in brackets is as in the original.

²⁷ The first two paragraphs of this section are based on information provided in Navy briefing slides provided to the House Armed Services Committee in May 2009.

²⁸ As quoted in Emelie Rutherford, “Gates Floats Idea of Two Pres Helos As Lawmakers Call For Salvaging VH-71,” *Defense Daily*, May 21, 2009: 4-5. See also Andrea Shalal-Esa, “Pentagon Eyes Two Presidential Helicopter Models,” *Reuters.com*, May 20, 2009.

manufacturer of the H-92, the runner-up from the original competition. Trautman told *ITN* on Aug. 28 that all options are on the table.

“The net is being purposely cast very wide,” Trautman said. “So literally, all options are being assessed by this team, and they’ll narrow it down as they do their work. They’ll narrow down to the feasible best options and those will be assessed by senior leaders. The White House is obviously involved in that endeavor.”

The acquisition and requirements communities “are working very hard” on the issue, he said.

“It’s at the one-star level,” he said. “What they’re trying to do is move forward on essentially an analysis of alternatives process very quickly. That’s probably a 30-, 45-, 60-day process, and so all they’re doing is canvassing the whole landscape to see what the alternatives are, and then we’ll go to the next stages of the acquisition process.

“You really want to go through these steps so that you make a wise decision about where we’re going to go next,” he continued.

The group reports its findings to Sean Stackley, the assistant secretary of the Navy for research, development and acquisition, and Ashton Carter, the under secretary of defense for acquisition, technology and logistics, Trautman said....

Trautman said the Pentagon will have to decide on a Marine One replacement program soon in order to get the new helicopter to the fleet by about 2019.²⁹

An October 9, 2009, press report states:

The next U.S. presidential helicopter program will cost less than the \$13-billion program that was canceled because of its excessive price tag, the Pentagon said on Friday.

“We are not going to pursue a program that costs more than the VH-71 program,” Pentagon Press Secretary Geoff Morrell told reporters.

He said the Pentagon was still reviewing options but hoped to have the new helicopters fielded by 2020....

Morrell said the Pentagon was still in the initial stages of working through what the follow-on program should look like.

Some options have been laid out, Morrell said, but added: “None of those options comes close to the \$20 billion figure, and frankly, for that matter, none of them comes close to the cost of the canceled program.”□

Another October 9, 2009, press report states:

“The notion that we are somehow considering a follow-on program to the VH-71 that would cost \$20 billion is simply not true,” [Pentagon spokesman Geoff] Morrell said. “We are not going to pursue a program that will cost more than the current program.”

²⁹ Dan Taylor, “Trautman: Pentagon Casting Wide Net As It Seeks VH-71 Replacement,” *Inside the Navy*, September 7, 2009.

Morrell also said it would cost far more than \$500 million to finish off the five helicopters that are already partially made.

Building just those choppers “will cost us between \$2 billion and \$3 billion,” Morrell said. “To complete all 23 helicopters, it will cost us \$8 billion.”

Besides, that type of helicopter wouldn’t meet the president’s needs, he said.

“It’s basically useless to us. There’s nothing salvageable about that program,” Morrell said. “They are not suitable for the presidential fleet.”³⁰

An October 12, 2009, press report states:

The Navy plans to extend the service lives of the current fleet of aging presidential helicopters instead of spending billions to field five of the canceled VH-71 aircraft built by Lockheed Martin, a sea service official told Inside the Navy last week.

“When the VH-71 contract was terminated in June, the estimated cost to complete development, test and squadron stand-up for the five increment 1 pilot-production aircraft was greater than \$2 billion,” the Navy official, who spoke on the condition of anonymity, said. “That estimate is significantly higher today and continues to increase.

“The new program is being structured from its inception to cost less than the VH-71 program, including sunk costs,” the source continued. “A preliminary examination of the broadest possible range of alternatives has already discarded the high-cost approaches. Because it will take time to properly establish the new program, the Navy will extend the current mission aircraft at a cost of approximately \$500 million.

“This will continue to provide 19 mission capable aircraft until the replacement program can be fielded, which is more cost-effective for the Navy and the nation than spending billions to qualify and field the five increment 1 aircraft,” the source added....

However, the Navy official said the first increment of VH-71 aircraft were not intended for long-term service and the aircraft do not meet the full operational requirements.

“To operationalize the increment 1 aircraft for long-term service, significant technical modifications to the aircraft would be required and the VH-71 contract would have to be significantly restructured,” the official said. “In view of the significant technical shortfalls, structural modifications required and the inescapable fact that the aircraft does not meet requirements, the Navy has found continued investment in an interim, partial solution, such as increment 1, is not an affordable solution for a replacement presidential helicopter program....”

The Navy’s fiscal year 2010 budget request includes \$85.2 million for terminating the program and to fund the early steps of development of a new presidential helicopter program. If the president and Congress approve the appropriations request, the Navy will move forward with an analysis of alternatives study to determine the way forward.

“The analysis of alternatives will provide solid projections of the cost and schedule for each alternative considered, informing our selection of the best way forward,” the official noted.

³⁰ Jen DiMascio, “Pentagon Fires Back Over Choppers,” *Politico.com*, October 9, 2009.

In August, the Navy completed an initial capabilities document for VXX. This document established “preferred values” for what had previously been firm requirements, the source explained.

“This allows expansion of the trade space in considering more affordable alternatives,” the official noted.³¹

VXX Initial Capability Document (ICD) of August 6, 2009

DOD has produced an Initial Capability Document (ICD) for the VXX program, dated August 6, 2009, and approved by DOD’s Joint Requirements Oversight Council (JROC) on that date,³² that includes the following points, among others:

- “The VXX replacement(s) as a standalone (single TMS)³³ or in the aggregate (multiple TMS) must fill these [VXX] mission requirements completely.”
- “The end of the operational service life of the current in-service fleet of VH-3D/VH-60N aircraft begins in approximately 2017. Coupled with this fact and the capability shortfalls of the existing fleet, an IOC in the 2017 time frame is preferred and platform(s)³⁴ will require support through the anticipated life cycle of approximately 40 years.”
- “The VXX must be maintainable and upgradeable to keep pace with projected aviation standards and requirements.”
- “Previously conducted analysis identified platform, interior, and communications systems capability gaps” in the existing presidential helicopter fleet in 18 areas. These capability gaps are caused by several factors, including the age and inherent limitations of the existing helicopters.
- Capability metrics for the presidential helicopter fleet, and “preferred values” for these metrics, include the following, among others: 14 passenger seats, an ability to fly or land with one engine inoperative, a certain range for administrative lift missions and a certain longer range for contingency missions, and a high availability rate.
- “The analysis to date concluded that there were no non-materiel approaches³⁵ that would significantly improve or resolve the capability gaps. Due to advances in technology coupled with the age and status of the current platform[,] non-materiel solutions cannot fill the capability gaps present. Additionally, numerous policy and procedural measures have been undertaken to improve the efficiency

³¹ Zachary M. Peterson, “Navy To Extend Current Presidential Helicopter Service Lives,” *Inside the Navy*, October 12, 2009.

³² Department of Defense, *Initial Capability Document for Presidential Vertical Lift Platform(s) (VXX)*, August 6, 2009. 24 pp.

³³ TMS is type, model, and series. The statement is referring to how many helicopter types, models within those types, and series within those models, are involved in the VXX program. A single-TMS VXX fleet would be one in which all the helicopters belong to a single type, model, and series.

³⁴ Platform means the basic vehicle (in this case, a helicopter) that carries mission equipment.

³⁵ Non-material approaches are those that do not involve procuring or modernizing equipment. Examples of non-material approaches include changes in policies or procedures.

and effectiveness of the current platform(s) since initial delivery. These have been stopgap solutions; but have necessitated greater aircrew workload. Non-materiel approaches are no longer effective due to analog systems, physical limitations of the platform(s), and aging platform(s) airframes and systems with increased maintenance requirements.”

- “Based upon the analysis to date there are no non-materiel recommendations that should be considered for implementation.”
- “The following are the materiel approaches identified in the analysis to correct/mitigate some or all of the identified platform, interior, and communications gaps[:]...
 - “Product Improvement Program. Platform(s) currently or programmed to be in the DOD inventory could be improved to satisfy the requirement....
 - “Non-developmental Approach. A commercially available, non-developmental item could be procured....
 - “Research and Development (R&D). A R&D³⁶ (clean sheet)³⁷ effort could be initiated to meet this requirement....
 - “Other Service Program. No other service is assigned the vertical lift requirement for Presidential support and WHMO³⁸ operations.”
- “Three materiel approaches from the analysis to date each satisfy the capability gaps to varying degrees of effectiveness.”³⁹
- “Capability gaps have been identified and the analysis to date recommends three viable materiel approaches to resolve the identified gaps. An AoA⁴⁰ to address these capability gaps has been previously completed, however; due to age of the data and evolution of required capabilities[,] an update is warranted.”

Potential VXX Options

Range of Potential Airframe Options

There are several potential airframe options for new presidential helicopters, including but not limited to the following:

- a new, “clean sheet” helicopter designed specifically for the VXX program;
- the VH-71 Increment I or Increment II designs, or variations thereof;
- existing military or civilian helicopters other than the VH-71, of which there are several; and

³⁶ R&D is research and development.

³⁷ This is a reference to creating an entirely new design (i.e., starting with a clean sheet of paper).

³⁸ WHMO is White House Military Office.

³⁹ The ICD does not state which of the above four material approaches is not included in this statement.

⁴⁰ AoA is analysis of alternatives – a DOD study to examine the relative merits of various candidates for an acquisition program.

- the V-22 tilt-rotor aircraft, which can takeoff and land vertically like a helicopter.⁴¹

A fleet of new presidential helicopters could consist entirely of a single helicopter type, as envisioned in the VH-71 program, or consist of more than one type, like the current presidential helicopter fleet.

A November 24, 2009, press report states:

The Pentagon's top acquisition official said Monday that the military has begun drawing the outlines of a new presidential helicopter program....

Acquisition chief Ashton Carter said he hoped to have an acquisition strategy in place for the new program by the spring....

Carter told reporters that the White House has been presented with a number of options and trade-offs to consider.

He said that where there were once 48 "alternative program approaches," the Pentagon and the White House now are considering 17.

Carter said some of the trade-offs affect the aircraft's range, payload and communications as well as the number of passengers it can carry. The Pentagon and White House are also examining approaches that would involve the use of different types of helicopters, as well as varying numbers of aircraft. He said it might be preferable to adapt an existing helicopter to do the job.

The problem faced by the VH-71 program was the "piling on of requirements" that sent costs beyond expectations, Carter said. He said the Pentagon was looking at a program that would require "a lot less money than the canceled program would have cost."⁴²

Notional Options in May 2009 Navy Briefing⁴³

A May 2009 Navy briefing provided preliminary information on some notional options for presidential helicopters, as the options were understood at that time. These options included:

- a new VXX helicopter acquisition program with a certain notional acquisition strategy;
- continuing with the VH-71 program in more or less its current form—with program restructuring (e.g., schedule adjustments) as required to take recent program developments into account—and procuring 23 Increment II aircraft;

⁴¹ For more on the V-22, see CRS Report RL31384, *V-22 Osprey Tilt-Rotor Aircraft: Background and Issues for Congress*, by Jeremiah Gertler.

⁴² Frank Oliveri, "Pentagon Official Says Military Is Planning New Presidential Helicopter Program," *Roll Call (CongressNow)*, November 24, 2009.

⁴³ This section is based on information provided in Navy briefing slides provided to the House Armed Services Committee in May 2009.

- restructuring the VH-71 program to one that would provide a total of 23 Increment I aircraft, including the five pilot production Increment I aircraft already procured, plus 18 additional Increment I aircraft; and
- upgrading and extending the service life of the 19 existing presidential helicopters, and pursue no new presidential helicopter program of any kind, at least for the next several years.

Each of these options is outlined briefly below.

New VXX Helicopter with a Certain Notional Acquisition Strategy

The Navy briefing stated that one possibility for a new VXX program would be a program that maintained a competition between two contractors (e.g., Lockheed and Sikorsky) through the preliminary design review (PDR) stage of a new helicopter, and then procured 27 aircraft—four test aircraft not intended to enter operational service, and 23 production aircraft. The briefing estimated that under such an approach, the production aircraft might achieve IOC around FY2024, and FOC around FY2026. The production aircraft would presumably be intended to meet all of the operational requirements established for the new program, which might equate to something less than, equal to, or greater than the operational requirements in the VH-71 ORD.

The briefing estimated the acquisition cost of such a program at \$10 billion to \$17 billion, depending on the operational requirements that are established for the program, and not including sunk costs of the VH-71 program of more than \$3 billion. This estimate included the cost of reviewing operational requirements and conducting a new AOA, and of maintaining two contractors through PDR. It did not include costs to keep the 19 existing presidential helicopters in operation until they are replaced by new helicopters.

Continue with VH-71 Program in More or Less Current Form

The Navy briefing stated that under this option, 23 Increment II aircraft would be procured. The briefing estimated that under this option, the aircraft might achieve IOC in late FY2019, and FOC in late FY2021. The aircraft would be intended to fully meet the operational requirements in the VH-71 ORD. The briefing estimated the acquisition cost of this option at \$13 billion (or more), including sunk costs on the VH-71 program of more than \$3 billion, leaving a potential net cost going forward of about \$10 billion (or more). This estimate did not include costs of keeping the 19 existing presidential helicopters in operation until they are replaced by new helicopters, the cost of taking steps to reduce the weight of the Increment I pilot production aircraft so as to make them more effective during the time that they are in operation pending the delivery of Increment II aircraft, additional support costs for Increment I aircraft, and the effects on total program cost resulting from recent decisions regarding the VH-71 program, such as the May 15, 2009, stop-work order.

Restructure VH-71 Program to One That Provides 23 Increment I Aircraft

The Navy briefing stated that under this option, 18 Increment I aircraft would be procured. These 18 aircraft, plus the five pilot production Increment I aircraft, would make for a total fleet of 23 Increment I aircraft. The Navy estimates that the aircraft might achieve IOC in mid-2012, and FOC in late FY2019. The aircraft would meet some but not all of the operational requirements in the VH-71 ORD. The Navy estimates the acquisition cost of this option at \$9.4 billion, including

Increment II termination costs and sunk costs on the VH-71 program of more than \$3 billion, leaving a potential net cost going forward of less than \$6.4 billion. The estimate did not include costs of keeping the 19 existing presidential helicopters in operation until they are replaced by new helicopters, the cost of a potential follow-on program to eventually replace the Increment I helicopters with new helicopters, and performance modifications to Increment I helicopters.⁴⁴

A variation on this option that was not detailed in the Navy briefing would be to procure 14 (rather than 18) additional Increment I aircraft, and combine these 14 aircraft with the five pilot production Increment I aircraft to produce an Increment I fleet of 19 aircraft—the same number of aircraft as in the current presidential helicopter fleet. The acquisition cost of this option would be hundreds of millions of dollars less than that of the previous option due to the avoidance of costs associated with procuring four Increment I aircraft.⁴⁵

Upgrade and Extend Lives of Existing Helicopters; No Acquisition Program

The Navy briefing stated that under this option, the 19 existing presidential helicopters would be upgraded and their service lives would be extended. The briefing stated that the VH-60Ns would have their service lives extended from 10,000 flight hours to 12,000 flight hours, providing another 6.9 years of operation, and the VH-3Ds would have their service lives extended from 14,000 hours to 16,000 hours, providing another 6.7 years of operation. No new acquisition program for presidential helicopters would be pursued, at least for the next several years. The 19

⁴⁴For examples of press reports providing industry comments proposing or supporting this option, see Christopher J. Castelli, “Amid Soaring Costs, Lockheed Suggests Scaled-Back VH-71 Program,” *Inside the Pentagon*, March 12, 2009; Tom Kington, “VH-71 Maker: U.S. Will Pare Requirements,” *Defense News*, March 16, 2009: 4; and “[Interview with] Pierfrancesco Guarguaglini,” *DefenseNews.com*, June 10, 2009.

⁴⁵ On June 5, 2009, *InsideDefense.com*, a subscription website, posted a two-page document supporting the procurement of 19 Increment I VH-71s (http://www.insidedefense.com/secure/defense_extra.asp). *InsideDefense.com* described the document as a “May 2009 white paper, prepared by Lockheed Martin.” The document, however, is undated, and although the text of the document mentions that Lockheed Martin was awarded the contract for the VH-71 program in 2005, the document does not contain an explicit statement of its author. The document is entitled “On-Budget Option for Presidential Helicopter Fleet Replacement.” The document asserts that a program for 19 Increment I helicopters would have a total cost of about \$6.8 billion, including \$3.0 billion in sunk costs on the VH-71 program, leaving a potential net cost going forward of about \$3.8 billion. (It also asserts that a program for 23 Increment I helicopters would have a total cost of about \$7.3 billion, including \$3.0 billion in sunk costs on the VH-71 program, leaving a potential net cost going forward of about \$4.3 billion.) The document makes several arguments in favor of procuring 19 Increment I VH-71s. It argues, for example, that “It is impossible to meet the urgent replacement schedule [for replacing the existing presidential helicopters] by standing up a new program. The VH-71A Increment I program is on schedule to reach Initial Operational Capability in April 2011. The development of the VH-71A is near completion and the entire [existing presidential helicopter] fleet could be replaced with [19] VH-71A aircraft by 2017....” The document argues that the VH-71 “is faster, safer, [and] can travel farther [than the existing presidential helicopters], possesses state of the art avionics, navigation, and communication systems, and allows for more passengers than [the existing presidential helicopters]. The VH-71A meets all key performance parameters including reliability, maintainability, and availability.” The document argues that “A fleet of VH-71A aircraft is a low risk and cost effective solution. All four test aircraft and five production aircraft are built. Three dedicated Systems Integration Laboratories have been established and development of mission system software is 99% complete. The overall program is over two-thirds complete and the first missionized aircraft will enter flight test in May 2009, building on the more than 800 flight hours already accomplished by VH-71 test vehicles. The current achievements of the program could be leveraged to replace the existing fleet in the time required and with low risk to schedule and budget.” The document argues that “The VH-71A also has room for growth with a low-cost, low-risk upgrade to use existing higher-performance main rotor blades to provide additional range and payload capability. This upgrade could be integrated into the current development program or provided in a spiral upgrade at a later time.”

For a press article discussing this option, see Geoff Fein and Emelie Rutherford, “Rep. Bartlett Says VH-71 Contractor Wants To Build 14 Aircraft Under Fixed Price Contract,” *Defense Daily*, June 5, 2009: 4-6.

existing aircraft would not meet at least some, and perhaps many, of the operational requirements in the VH-71 ORD.

The Navy briefing estimated the cost of this option at \$4.4 billion, including VH-71 program termination costs and sunk costs on the VH-71 program of more than \$3 billion, leaving a net cost going forward of less than \$1.4 billion. This option did not include the cost of a potential follow-on program to eventually replace the 19 existing helicopters with new helicopters.

Issue For Congress

Administration's Proposal

A primary issue for Congress is whether to approve the Administration's proposal to terminate the VH-71 program and initiate a successor program, or pursue another course.

Factors to Consider

In assessing this issue, factors to consider include but are not limited to the following:

- operational requirements for presidential helicopters, including which of these requirements should be mandatory (i.e., "must have") or preferred (i.e., "nice to have," but not mandatory), and how these operational requirements compare to those used for the VH-71 program;
- characteristics of potential presidential helicopter programs based on various airframe options, including
 - costs (development, procurement, and life-cycle operation and support),
 - operational capabilities (including potential for accepting future upgrades),
 - potential IOC and FOC dates, and
 - development risks,
- the feasibility, costs, and operational implications of extending the service lives of the existing presidential helicopters by various amounts of time; and
- potential implications for the helicopter industrial base.

Notional Arguments

Supporters of the Administration's proposed course of action could argue the following:

- Terminating the VH-71 program would improve future DOD acquisition practices by sending a signal to both the services and industry that programs that experience significant cost growth and schedule delays will be subject to termination.
- A successor VXX program could be structured to incorporate best practices in acquisition, including reasonable rather than overly aggressive program goals and the use of mature technologies.

- Establishing a new VXX program would provide an opportunity to review operational requirements for presidential helicopters, eliminating excessive requirements, and permit the use of competition between industry teams to identify the most cost-effective solution.
- Increment I helicopters would not fully meet the operational requirements for future presidential helicopters, creating operational risk, could have limited service lives (meaning that a program for new replacement helicopters would still be needed), could pose significant supportability challenges, and would have limited or no capacity to accept future upgrades.
- The past history of upgrades and service life extensions of the 19 existing presidential helicopters suggests that these helicopters can continue to be upgraded and extended until they are replaced by new VXX helicopters.

Supporters of certain potential alternatives to the Administration's proposed course of action—particularly the option of continuing the VH-71 program in some restructured form—could argue one or more of the following:

- Terminating the VH-71 program would waste more than \$3 billion in sunk VH-71 costs, including five pilot production Increment I aircraft that are built and were scheduled to enter operational service.
- Continuing the VH-71 program and procuring Increment II aircraft is the option that offers the lowest technical and schedule risk for procuring new helicopters that fully meet the operational requirements in the VH-71 ORD. A new VXX program could cost as much, if not more, than continuing the VH-71 program, and new VXX helicopters would enter service later than Increment II (or additional Increment I) helicopters, requiring the 19 existing presidential helicopters, which do not meet requirements for future presidential helicopters, to be kept in service longer.
- The ability of the 19 existing presidential helicopters to accept future upgrades is not certain, since some of those upgrades are not yet fully defined, and there may be unknown technical risks associated with attempting to extend their service lives until they would be replaced by VXX aircraft. A past history of successful upgrades and service life extensions does not guarantee that additional upgrades and service life extensions would be feasible or cost effective.
- A review of operational requirements for presidential helicopters is unlikely to lead to major changes from operational requirements in the VH-71 ORD, meaning that a new VXX helicopter would be very similar to a VH-71, except that its IOC and FOC could occur years later.
- Increment I helicopters could be certified for substantial service lives if funding is provided for the necessary testing and certification, and while Increment I helicopters would not fully meet operational requirements in the VH-71 ORD, they could meet enough of them to represent a cost-effective compromise between desired performance and affordable procurement. Increment I helicopters could also be upgraded (either during original construction or at a later point) to meet more of the operational requirements in the VH-71 ORD.

DOD's Understanding of Alternatives When VH-71 Cancellation Was Proposed

Another potential issue for Congress concerns DOD's understanding earlier this year of potential alternatives to the VH-71 program (including both a restructured VH-71 program or VXX programs based on alternate airframes). At the time DOD proposed the cancellation of the VH-71 program, how well did DOD understand the potential costs, operational capabilities, IOC and FOC dates, and development risks of these alternatives? If DOD earlier this year did not understand potential alternatives to the VH-71 program very well in terms factors such as these, then how firm was the analytical basis for DOD's decision to propose canceling the VH-71 program?

President's February 23 Remarks

Another potential issue for Congress concerns the president's remarks on February 23, 2009 (see "February 23 Remarks by President Obama"), in which he stated that that he thought the VH-71 program was "an example of the procurement process gone amuck." A potential question for Congress is whether this remark made it difficult for DOD, in preparing the proposed FY2010 defense budget, to consider any option other than canceling the VH-71 program, or to consider completing the five existing Increment I VH-71s and putting them into operation as presidential helicopters, and, if so, whether this distorted DOD decision making regarding the VH-71 program.

Causes of VH-71 Cost Growth and Schedule Delays

Another potential for Congress concerns the causes of cost growth and schedule delays in the VH-71 program. To what degree were cost growth and schedule delays in the VH-71 program due to potential causes such as unrealistically low initial cost estimates, growth in requirements (or sticking with overly ambitious requirements), insufficiently mature technologies, schedule compression resulting from a sense of urgency, unclear lines of authority and responsibility between the Navy and the White House in managing the program, or contractor performance?

Legislative Activity in 2009

FY2010 Funding Request

The Navy's proposed FY2010 budget requested \$85.2 million for the VH-71 program, all of which is in PE0604273N of the RDT&EN account. Of this total, \$55.2 million is for Increment I, for use in terminating the program; none is for Increment II; and \$30 million is for initial studies on the proposed successor VXX program.

FY2010 Defense Authorization Act (H.R. 2647/P.L. 111-84)

Conference

The conference report (H.Rept. 111-288 of October 7, 2009) on H.R. 2647/P.L. 111-84 of October 28, 2009, approves the Administration's FY2010 funding request for the VH-71 program (page 1003). The conference report states:

VH-71 Presidential helicopter program

In April 2009, the administration proposed in budget documents, including a document called "Terminations, Reductions, and Savings, Fiscal Year 2010," to terminate the Presidential helicopter replacement (VH-71) program and initiate a new Presidential helicopter replacement program.

The Secretary of Defense announced on April 6, 2009, the cancellation of the VH-71 program, after that program experienced a history of excessive and uncontrolled cost growth and persistent slips in its delivery schedule. On May 15, 2009, the Under Secretary of Defense for Acquisitions, Technology, and Logistics issued an acquisition decision memorandum implementing the Secretary's decision and the Department of the Navy issued a stop-work order on the program. Subsequently, on June 1, 2009, the Secretary of the Navy canceled the System Development and Design contract for the program.

While the conferees agree that cancellation of the program was warranted under the circumstances, they are disappointed that:

- (1) the Nation has invested more than \$3.0 billion in this program and has little to show for that investment;
- (2) the Navy invested considerable time and talent in trying to implement the acquisition program without success; and
- (3) the "requirements" system failed to do its fair share of trading requirements or adding resources when the acquisition program ran into immovable obstacles.

During this process, the Navy and its acquisition system failed to receive adequate support, resources, and authority from the Office of the Secretary of Defense (OSD) and the White House Military Office (WHMO) to execute a successful acquisition program. The conferees understand that despite the many warnings and expert advice from the Government Accountability Office, Navy acquisition officials were directed by OSD and WHMO to execute a schedule-driven program and were unable to adhere to prudent acquisition practices.

The conferees note that a June 5, 2009, Congressional Research Service report⁴⁶ cites Navy estimates that a new acquisition program would probably cost between \$10.0 billion and \$17.0 billion.

Therefore, given that level of possible investment, the conferees strongly encourage the Department of Defense and the Executive Branch to consider a complete range of alternatives for meeting requirements. The conferees believe that such consideration must

⁴⁶ This is a reference to the June 5, 2009 version of this CRS report.

include evaluating both single- and multi-platform solutions to meet the complete transportation requirements of the President, and [in] evaluating costs, consider the investment already made in the VH-71 program for possible use for some portion of the mission within a multi-platform solution. The conferees also believe that a program to replace the Presidential helicopter presents a particularly valuable opportunity for the Department of Defense to demonstrate the right way to develop and procure major weapon systems. Accordingly, the conferees expect that, in implementing such a program, the Department will fully comply with the letter and the spirit of the recently enacted Weapon Systems Acquisition Reform Act of 2009 (Public Law 111-23). (Pages 676-677)

House

The House Armed Services Committee, in its report (H.Rept. 111-166 of June 18, 2009) on H.R. 2647, recommends approving the Administration's request for \$85.2 million in FY2010 RDT&E funding for the VH-71 program (page 167). The committee's report states:

The budget request contained \$85.2 million for cancellation costs of the VH-71 Presidential helicopter recapitalization program recently terminated by the Secretary of Defense.

The committee understands that the Secretary of Defense announced on April 6, 2009 the cancellation of the VH-71 program based on excessive cost growth and schedule delays. The committee is disappointed that the Navy has invested \$3.3 billion in this program to date. The committee is also disappointed that the Navy's acquisition system was not provided adequate support, resources, and authority by the Office of the Secretary of Defense (OSD) and the White House Military Office (WHMO) to execute a successful acquisition program. The committee understands that despite the many warnings and expert advice from the Government Accountability Office, Navy acquisition officials were directed by OSD and WHMO to execute a schedule-driven program and were unable to adequately synchronize and adhere to prudent acquisition practices.

The committee supports a new acquisition plan which may incorporate more than a one platform solution to the needs of the President. The committee notes that a June 5, 2009 Congressional Research Service (CRS) report⁴⁷ cites Navy estimates that a new acquisition program would cost \$10.0 to \$17.0 billion. Therefore, the committee strongly suggests that the Department of Defense consider continuing procurement of the current "increment 1" helicopter for use as the normal transport for the President, and study other alternatives for Presidential transport in other situations. The committee notes that this approach will leverage on the investment already made by the taxpayer in developing a helicopter that would meet all normal requirements of the President. (Pages 182-183)

Senate

Division D (Section 4001) of the FY2010 defense authorization bill (S. 1390) as reported by the Senate Armed Services Committee (S.Rept. 111-35 of July 2, 2009) contains the detailed line-item funding tables that in past years have been included in the committee's report on the defense authorization bill. Section 4001 recommends approving the Administration's request for \$85.2 million in FY2010 RDT&E funding for the VH-71 program (page 677 of the printed bill).

⁴⁷ This is a reference to the June 5, 2009 version of this CRS report.

FY2010 DOD Appropriations Bill (H.R. 3326)

Final Version

In lieu of a conference report, the House Appropriations Committee on December 15, 2009, released an explanatory statement on a final version of H.R. 3326. This version was passed by the House on December 16, 2009, and by the Senate on December 19, 2009, and signed into law on December 19, 2009, as P.L. 111-118.

The explanatory statement states that it “is an explanation of the effects of Division A [of H.R. 3326], which makes appropriations for the Department of Defense for fiscal year 2010. As provided in Section 8124 of the consolidated bill, this explanatory statement shall have the same effect with respect to the allocation of funds and the implementation of this as if it were a joint explanatory statement of a committee of the conference.”

The explanatory statement provided \$130.0 million for VHXX Executive Helo Development, an increase of \$44.8 million from the Administration’s request. This includes a \$100.0 million increase for technology capture and a decrease of \$55.2 million for “termination costs funded ahead of estimate.”

The explanatory statement also included this text:

PRESIDENTIAL HELICOPTER

The House report directed the Secretary of Defense to report on the use of certain funds for the VH-71 Presidential Helicopter. The Senate report contained no similar language. The recommendation does not retain the House language. (Page 282)

House

The House Appropriations Committee, in its report (H.Rept. 111-230 of July 24, 2009) on H.R. 3326, recommends \$485.2 million—an increase of \$400 million over the request—“to operationalize and incorporate the five [Increment I pilot production] VH-71 Presidential Helicopters into the current fleet....” (Page 12; see also page 257.) The report states:

VH-71 PRESIDENTIAL HELICOPTER

The Committee has included \$400,000,000 above the President’s request to make the five Increment I VH-71 Presidential helicopters operational. Although the Navy would not respond to the Committee regarding costs to operationalize the previously purchased five aircraft, the Future Year’s Defense Plan for fiscal year 2009 proposed \$328,000,000 for fiscal year 2010 and \$140,000,000 in fiscal year 2011 to complete testing and outfitting to make the aircraft operational.

The Navy has invested over \$3,200,000,000 in the VH-71 Presidential helicopter program. On April 6, 2009, the Secretary of Defense announced the cancellation of the program. To date, the Navy has provided no plan for the disposition of the five aircraft that were intended to provide interim service in the Presidential helicopter fleet due to the age of the current fleet. If these aircraft are not made operational, the previously appropriated funds will have been wasted.

The Committee directs the Secretary of Defense to submit a report on progress toward making the five Increment I VH-71 Presidential helicopters operational. The report shall be submitted to the congressional defense committees no later than 30 days after the enactment of this Act. (Page 261)

Senate

The Senate Appropriations Committee, in its report (S.Rept. 111-74 of September 10, 2009) on H.R. 3326, recommends \$30 million—a reduction of \$55.2 million from the request, with the reduction being for “Termination costs funded ahead of estimate.” (Page 183)

FY2009 Supplemental Appropriations Act (H.R. 2346/P.L. 111-32)

House

Section 10012 of H.R. 2346 as passed by the House would rescind, among other things, \$30.51 million in FY2009 RDT&EN funding and \$5 million in FY2008 RDT&EN funding, but the House Appropriation Committee’s report on H.R. 2346 (H.Rept. 111-105 of May 12, 2009, page 32) states that these rescissions are for fuel and for a classified program, respectively, rather than for the VH-71 program.

Senate

Section 308 of H.R. 2346 as passed by the Senate would rescind, among other things, \$270.26 million in FY2009 funding for the Research, Development, Test and Evaluation, Navy (RDT&EN) appropriation account. This provision is also present in S. 1054 as reported by the Senate Appropriations Committee. The committee’s report on S. 1054 (S.Rept. 111-20 of May 14, 2009, page 55) states that the \$270.26 million includes a rescission of \$47 million in FY2009 funding for the VH-71 program.

Conference

Section 309 of H.R. 2346/P.L. 111-32 of June 24, 2009, rescinds \$217.06 million in FY2009 and FY2010 RDT&EN funding. The conference report on H.R. 2346 (H.Rept. 111-151 of June 12, 2009) states that this sum includes \$47 million in FY2009 RDT&E funding for the VH-71 program (page 106).

Appendix. May 19, 2009, Hearing on FY2010 Navy Aviation Programs

This appendix presents excerpts from a May 19, 2009, hearing on FY2010 Navy aviation programs before the Seapower and Expeditionary Forces subcommittee of the House Armed Services Committee.

Chairman's Opening Statement

In his opening remarks for the hearing, the chairman of the subcommittee, Representative Gene Taylor, stated the following:

Briefly I would like to address the VH 71 program. The Navy invested over \$3.2 billion dollars, received nine test and pilot-production aircraft, yet was unable to successfully execute this program that ultimately was cancelled by Secretary Gates. I would like to understand what the plan is for the current aircraft assets that have already been delivered, what the plan is going forward, and how the mistakes of the original program will be prevented from happening in the next program?⁴⁸

Question-and-Answer Portion⁴⁹

During the question-and-answer portion of the hearing, the following exchanges took place regarding the VH-71 program:

COURTNEY:⁵⁰

In Mr. Taylor's opening statement, he sort of walked through a number of issues that he was asking for some responses from the witnesses. I think the last item was on the presidential helicopter. You've referenced the fact, obviously, that Secretary Gates, on Friday, announced the cancellation of the program. And I was just following on his comments. I don't know which witness would be appropriate to respond. But what do you sort of see as the next steps in the way forward? Obviously, we need a new helicopter.

TRAUTMAN (?):⁵¹

Congressman Courtney, let me start and I'll turn it over to anyone else. You're correct. Secretary Gates did announce—recommend cancellation. And his basis to that was the original \$6 billion program which was headed towards \$13 billion, six years overdue; does not meet the requirements of the White House. And (inaudible) in fact was the long way to meet that requirement. So this has been an extremely challenging requirement in this program, complicated and exacerbated by us trying to bring this program to meet a need earlier, when we hadn't really defined what we needed to do. There were mistakes that were made. We drove significant developmental efforts forward at time when we weren't certain

⁴⁸ Source: Text of Representative Taylor's opening remarks.

⁴⁹ Source: Transcript of hearing.

⁵⁰ Representative Joe Courtney.

⁵¹ Lieutenant General George J. Trautman III, USMC, Deputy Commandant for Aviation.

what those impacts would be. And we grossly underestimated the cost and schedule required to deliver this.

As a result of that, Undersecretary Defense Carter directed the cancellation of the program to Mr. Stackley (ph).⁵² We are taking those initiatives now to cancel that program, and bring it to a resolution. The path forward is within 30 days, we will come forward with a high level plan of what we will—how will we anticipate going forward in the future. That's not all the details that go with every facet of the program to understand, but it is a high level, if you will, plan of action, how we're going to go forward to meet the direction; also to have a program developed so we can do the presidential replacement helicopter program.

So in this case, I believe, what we need to do now is we need to meet the requirements. We need to understand what those requirements are going to be. Understand the impacts of those requirements. Begin with requirements, take them through to the impacts of that, and do the due rigor we needed to do—we need to do an executable program, sir. And I'll turn it over for other comments.

ARCHITZEL:⁵³

Well, then let add then, sir. Two things come to my mind. First is: Are the legacy VH-3s and VH-60s preserved and remain safe for carrying our president? And the answer to that is "yes." And this budget includes requested dollars to make that a reality. The second is: These airplanes are going to need to be replaced. The VH-3 is 40 years old by 2017 even with the service life extension programs that we are assessing now. They are near the end of their life. I am very anxious to get back into the requirements generation process. Work with the White House military office to decide what requirements they will lay out, and then help move those requirements to the joint requirements oversight council into the acquisition community so that we can each start on a new replacement for the VH-3 and the VH-60.

COURTNEY:

I realize you said 30 days from now, you'll come out with a new position or a new plan. And I don't want to get ahead of that. But one argument that's been out there—"The New York Times" had a column about it the other day—about—that we shouldn't cancel because there's so much sunk cost already into the VH-71. I guess—I was wondering—I was thinking that through. The Navy is not going to just sort of walk away from the research and the development and the investment that's already taken place. I mean, there's some ways to recoup some of what's already been paid for. I mean, is that a safe assumption to make so that the taxpayers won't feel like it was just completely thrown away?

TRAUTMAN (?):

Congressman Courtney, if I could, let me begin—I know you want my colleagues to comment. But, first off, what I mentioned to you was a high level comeback, if you will, or a plan to go forward. But we have to—simultaneous with that, we have another course of action we have to follow. Following the cancellation program, we have to bring about what we do with this program, and how we bring it to closure. So the first thing that was done was this, for example, this stop work due, which allows us to—the contracting officer to issue actions, that then would result in us being able to—as I said, bring the thing to closure.

⁵² This is a reference to Sean Stackley, the Assistant Secretary of the Navy (Research, Development and Acquisition) (i.e., the Navy's acquisition executive).

⁵³ Vice Admiral David Architzel, USN, Principal Military Deputy, Research, Development and Acquisition.

That involves understanding all that we have invested, and where we are, and be able to close out the books; be able to make sure we understand where we are in funding, be it '09 or '10 funding, et cetera, and what we need to do to follow through that once the contracting officer takes actions on the termination. So understanding what we want to do in the future, obviously, we will take advantage of anything we can from a technology standpoint that would go into future helicopter programs or other programs of similar nature.

Again, as we start back in this program, we have to understand the requirements—that to begin with requirements—understand what they mean and what we have to meet those missions that are set in front of us. That was fundamental to it. Now, to your point: The investments that were made—understanding the technology investments that were ongoing—certainly, we'll take advantage of that going forward.

Thank you, Mr. Chairman.

TAYLOR:

Chair thanks the gentleman.

Chair now recognizes the gentleman from Maryland, Mr. Bartlett.

BARTLETT:⁵⁴

Thank you very much. You know, you would think from the discussion we've been having that we hadn't spent \$3.2 billion and a number of years building the 71. And the original requirements document for the VH-71 program, the Navy gave a litany of reasons why the legacy fleet was in urgent need of replacement—so urgent that we were working around some of the usual procedures to get a plane more quickly so the president could have it.

They—the planes, Navy said, was overweight. They lack all weather capability. They have extremely limited range, speed and payload. And I quote from the document, “The legacy aircraft is no longer capable of implementing upgrades for mission requirements.”

And now, we're told that the current fleet is OK. It can, indeed, be upgraded and the cost of doing so will likely—might be enormous. We already spent \$3.2 billion to produce the nine increment one helicopters. They neither exceed their performance requirement. They're always intended to fly the president. Why isn't it reasonable that Congress would expect the Navy to field these aircraft to meet the highly urgent need we have been briefed on for years?

But instead, congressmen are given a list of reasons why flying the 35-year-old legacy fleet for another decade is preferable to fielding a modern V8-71 [sic: VH-71] helicopters we have already paid to produce.

For instance, we're told that increment one only has a five year service life, even though the committee knows that it was designed for a minimum of 30 years that the Navy has not even performed a basic airframe fatigue testing to make a sound determination. We need real answers as we consider the budget request.

Frankly, Congress has been ignored for too long on this critical program. And I'm concerned that in the stop-work order, we're now being ignored.

⁵⁴ Representative Roscoe Bartlett.

The Navy said that we needed a new aircraft to fly the president. We bought that. We asked the Navy to build that aircraft and now, without coming back to Congress for consultation, the Navy has issued a stop work order.

This very limits our options because there will be costs involved with a stop work order. If we decide that we really ought to continue building these planes then there's additional cost involved in making the line hot again.

First, what is the estimated cost of extending and maintaining the current legacy fleet, if the VH-71 is terminated? How much will it cost to provide service life extension for the current fleet? What kind of new improvements will be made and at what cost?

We were previously told that we really couldn't make the necessary improvements, which is why we needed a plane so urgently that we were bypassing some of the usual procurement procedures.

And second, are you telling this committee the Increment 1 helicopters did not in fact provide a better overall capability than the current VH-3? General Trautman, you have flown the VH-71, would you not agree that on its own it represents a more capable, modern and safer aircraft?

TRAUTMAN:

Yes, sir, let me start—I've flown the VH-3 and the VH-71 Increment 1 aircraft recently and there's no doubt that the VH- 71 increment three—Increment 1 aircraft is a better aircraft than the VH-3.

The challenge has been, sir, that the VH-71 Increment 1 aircraft does not meet the requirements that were passed to us by the White House military office and the requirements...

BARTLETT:

General,...

(CROSSTALK)

BARTLETT:

...if you would let me comment for just a moment...

TRAUTMAN:

Yes, sir.

BARTLETT:

...we know that. We know that the Increment 1 was designed to provide what we were told was essential transportation for the president, while Increment 2 was being developed.

We know that Increment 1 is deficient in—a little deficient in payload capability, in speed and in how far it can go, in range, but the essential reason we were told for moving away from the current fleet was to have better communication capabilities we understand the VH-71 provides, the Increment 1.

If the gentleman's got just a moment, I'd like to go through some numbers that I think are absolutely compelling that we ought to continue.

We've now invested \$3.2 billion. If we now shut down, it's going to cost about half a billion in the industry to shut down. It's going to cost about a tenth of a billion in the Navy to shut down and for another \$1.3 billion, we could make ready five of the nine planes so that the president could use them.

And I am told by the manufacturer that for roughly \$100 million each, which comes well under the original figure of \$6.8 billion, that they will enter into a firm, fixed price contract to deliver another 14, which would mean we would have a total fleet then of 19 planes.

You—the additional cost to provide nineteen planes is small compared to the investment we've already made. Why isn't it in the taxpayers' and the president's best interest to go ahead and provide these extra planes? We'll have essentially nothing if we simply terminate and shut down.

TAYLOR:

If the General would answer the question, please.

TRAUTMAN:

Congressman Bartlett, if I could, the—part of what your discussion is on the Increment 1. As I mentioned before, this VH-71 is an extremely challenging requirement. There are significant developmental efforts that were grossly underestimated. On top of that, we went to a two increment approach in an effort to deliver near-term as well as long-term solutions.

Sir, we are not delivering on the capability with Increment 1. The program does not meet the requirements, and that was what the recommendation for cancellation was for.

BARTLETT:

But, sir, if I might interrupt for just a moment. It was going to be sufficiently superior to the present fleet, that it was deemed desirable to spend the money to produce it and use it for five years while we produced Increment 2. Why isn't that analysis still valid?

TRAUTMAN:

Sir, the second estimate—you're referring to numbers. In terms of operational use and, quite frankly, the VH-71 Increment 1, the additional weight was the—that has to do with the aircraft itself would be a different aircraft than the one you're talking to, when you're talking 30 years aircraft life.

That's another factor in the Increment 1, in terms of its not being able to make more than approximately, estimates now, 1,500 hour life. But the overarching consideration was not making the requirements needed for the helicopter and the decision to cancel Increment 1 and 2 from Secretary Gates, sir.

BARTLETT:

Thank you. Mr. Chairman, I think that the original five year life was not what the plane was expected could do. It was just that, well, they only needed it for five years until they had

Increment 2, but nobody doubts that this plane is built as well as other helicopters and it should have the usual 30, 35, 40 year life, should it not?

TRAUTMAN:

Our understanding is that systems command would have to inspect the airplane and go through a rigorous service life extension program seeking hot spots and areas of interest, similar to the discussion we had previously [at this hearing] about the F/A-18A through D [strike fighters].⁵⁵ That work has not been done yet.

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⁵⁵ For discussion of the service life issue on F/A-18 strike fighters, see CRS Report RL30624, *Navy F/A-18E/F and EA-18G Aircraft Procurement and Strike Fighter Shortfall: Background and Issues for Congress*, by Jeremiah Gertler.