



# VH-71 Presidential Helicopter Program

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## **Summary**

On January 28, 2005, Navy officials announced the award of the VH-71 presidential helicopter contract to a team led by Lockheed Martin Corp. and composed of European companies. Subsequently, the VH-71 program has experienced noteworthy cost increases and schedule delays, which have generated controversy and scrutiny. This report will be updated as warranted.

## Contents

Background .....	1
Potential Issues for Congress.....	2
Urgency .....	2
Requirements and Capabilities.....	3
Economic Concerns .....	4
Trade Issues.....	5

## Contacts

Author Contact Information .....	6
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## Background

On January 28, 2005, Assistant Secretary of the Navy John Young announced that Lockheed Martin Corp. had won a competition against Sikorsky Aircraft Corp. to develop the VXX (later named the VH-71) presidential helicopter. Navy representatives said that the Lockheed US101 was chosen over Sikorsky's S-92 because it was deemed the most likely helicopter to meet presidential needs on time and at a lower cost, among other factors. Some criticized the award to purchase Lockheed's helicopter, partly because the winning team included foreign companies.

The VH-71 is intended to replace the President's current operational fleet of helicopters, consisting of 11 VH-3D *Sea Kings* and 8 VH-60N *Night Hawks*.<sup>1</sup> These helicopters began service in 1974 and 1989, respectively, and have been regularly upgraded. Examples of upgrades include new and more effective main rotor blades, improved communications, and better cockpit displays.<sup>2</sup> Current presidential helicopters have also been the subjects of service-life-extension programs, which have been significantly boosted as problems with the VH-71 program have arisen.<sup>3</sup>

Approximately \$3.4 billion has been provided since the beginning of this program to buy 28 helicopters. This program has been split into two "increments"; Increment 1 helicopters will be less capable, and are planned for initial operational capability (IOC) in 2010. Increment 2 helicopters will be more capable, and are planned for IOC in 2017. In January 2009, DOD officials confirmed that the VH-71 program suffered a "Nunn-McCurdy breach"<sup>4</sup> and that the total program cost is likely to increase from \$6.7 billion to \$11.2 billion.<sup>5</sup> Such cost escalation requires DOD to certify that the program in question is essential to national security or else face cancellation. At a February 23, 2009, White House meeting, President Obama directed Defense Secretary Robert Gates to conduct "a thorough review" of the VH-71 program."<sup>6</sup> Congressional leaders have expressed their desire for a rigorous evaluation of the program.<sup>7</sup>

In FY2009 the Navy requested \$1.04 billion in R&D funds for the VH-71 helicopter. \$735 million of these funds was for Increment 1, while \$312.8 million was for Increment 2. Both appropriations (H.R. 2638) and authorization (S. 3001) conferees cut \$212.8 million from the Increment 2 portion of the request, leaving the VH-71 with a total of \$835 million. Authorizers

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<sup>1</sup> Two additional VH-3Ds are used for test purposes.

<sup>2</sup> "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.

<sup>3</sup> Christopher Castelli. "DOD Tells Navy to Spend Millions More on Existing Presidential Helicopters." *InsideDefense.com*. December 21, 2007.

<sup>4</sup> The Nunn-McCurdy Act (10 U.S.C. § 2433) requires DOD to notify Congress whenever a Major Defense Acquisition Program breaches an established cost overrun threshold. A significant 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.

<sup>5</sup> Emelie Rutherford. "Conn. Lawmakers Seek to Reinsert Sikorsky Into Pres Helo Effort." *Defense Daily*. February 19, 2009.

<sup>6</sup> "VH-71 Program Coming Under Increased Scrutiny." *Aerospace Daily & Defense Report*. February 25, 2009.

<sup>7</sup> Donna Borak. "Aging Presidential Chopper May Force Obama's Hand." *Washingtonpost.com*. February 24, 2009.

also prohibited the Navy from making any changes to the VH-71 contract until after the Nunn-McCurdy certification process is complete.

## Potential Issues for Congress

Considering the cost and schedule problems reported above, it appears infeasible for the VH-71 program to proceed as currently envisioned. Noteworthy changes in cost, schedule, or inventory are likely required. Thus, it appears that the key question facing the 111<sup>th</sup> Congress is whether to cancel or to restructure the program. Three issues will likely inform this debate: (1) the urgency with which the current fleet of helicopters must be replaced, (2) VH-71 operational requirements and capabilities, and (3) economic concerns.

### Urgency

Government officials argued that principally owing to post-September 11<sup>th</sup> security issues, replacing the current presidential helicopter fleet is urgent. It has been reported that White House officials repeatedly urged DOD to accelerate the VH-71 program, proposing an initial operational capability by 2007.<sup>8</sup> Numerous VH-71 program documents and statements by DOD officials refer to the “urgent need” to field a new presidential helicopter. Official perceptions that the need to replace the VH-3D and VH-60N fleets was urgent may have had two important consequences for the VH-71 program.

First, some believe that one outcome of this challenging schedule was to make the competition more favorable to Lockheed Martin and less favorable to Sikorsky. As evidence of this, one might cite official DOD statements, such as

[t]he Lockheed streamlining proposal was selected (over Sikorsky) because it was judged more likely to meet these government requirements on schedule, with lesser risk, and at a lower cost ... we can't let the traditional acquisition process impede the need to meet the President's security requirements now.<sup>9</sup>

Second, some argue that by responding to this perceived urgency with an aggressive acquisition schedule, DOD pursued a strategy that was unnecessarily risky and prone to cost growth and schedule delay. Former Navy Assistant Secretary John Young commented on the risk associated with pursuing the VH-71 on an urgent timeline:

The requirements of the program are very demanding. The volume of work to be completed in this program is substantial.... However, the need to improve the capability and security level provided to the president is urgent and demands that we move expeditiously.<sup>10</sup>

Further, statements in 2005 by Tom Christie, DOD's Director of Operational Test and Evaluation, appear prescient today. Christie reportedly disapproved of the VH-71 schedule, calling it overly

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<sup>8</sup> Christopher Castelli, “Facing Criticism From Christie, Young Defends Rapid VXX Schedule,” *Inside the Navy*, February 7, 2005.

<sup>9</sup> DOD News Briefing, John Young, Assistant Secretary of the Navy for Research, Development and Acquisition and Thomas Laux, Program Executive Officer, January 28, 2005.

<sup>10</sup> *Ibid*

aggressive and inconsistent with “fly before buy principles.” He reportedly found that the VH-71 test schedule was “not executable.”<sup>11</sup>

Although it may be too late to redress past acquisition decisions driven by a sense of urgency, the 111<sup>th</sup> Congress may wish to determine for itself the urgency of replacing the VH-3 and VH-60 fleets, so to avoid potential future cost and schedule growth and to not unnecessarily foreclose acquisition options, such as choosing a different aircraft.

It appears that assumptions about urgency are debatable. For example, President Obama himself quipped, if anecdotally, that “the helicopter I have now seems perfectly adequate to me”<sup>12</sup> and that it was “very impressive.”<sup>13</sup> Also, it can be argued that the vast majority of presidential helicopter flights are short (e.g. from the White House to Andrews AFB, or to Camp David), and take place in very secure, if not totally restricted airspace. From this perspective, regular combat air patrols by F-16 aircraft, and standard defensive countermeasures should provide the President with adequate security regardless of the helicopter flown. If improvements to the President’s security are urgently needed, critics ask, what is being done to improve security until the VH-71 is fielded?

Those who believe that the need for a new helicopter is urgent are likely to argue that a key lesson of the terrorist attacks of September 11 is that tomorrow’s security challenges are difficult to predict and that the President needs more capability to address scenarios outside the norm. Also, some argue, the consequences of not providing the President with improved capabilities are potentially dire, such as ineffective crisis response or even a discontinuity of government. Therefore, they maintain that an aggressive schedule is warranted.

## Requirements and Capabilities

Owing to the unique security concerns surrounding an aircraft designed to carry the President, the specific technical and operational requirements for the VH-71 cannot be openly debated. To some degree, this limitation may reduce congressional visibility into the program. Generally speaking, however, there appear to be a number of issues that Congress may wish to explore that pertain to VH-71 requirements and capabilities.

One question that might be posed is why the President requires a fleet of 23 VH-71 helicopters. The current operational fleet of helicopters dedicated to his use is composed of 19 operational helicopters and two test helicopters. Presumably, the new helicopters will require less maintenance and fewer upgrades than older helicopters, and therefore, one might reasonably expect the new fleet to be smaller than the one it replaces. In an Operational Requirements Document (ORD), dated November 14, 2003, the Navy states the need for 23 VXX helicopters but gives no indication that there is some shortcoming in the legacy force structure of 19 operational helicopters that needs to be redressed with more aircraft. It appears reasonable to ask whether an operational force of 19 new and more capable helicopters couldn’t replace an operational force of 19 old and less capable helicopters.

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<sup>11</sup> Castelli, op. cit.

<sup>12</sup> Donna Miles. “New Presidential Helicopter Faces Scrutiny.” *American Forces Press Service*. February 24, 2009.

<sup>13</sup> “Obama Impressed With His Helicopter and Jet.” *Baltimore Sun*. February 6, 2009.

A second set of questions pertains to the apparent growth in required VH-71 capabilities. The VXX ORD outlines the operational deficiencies of legacy helicopters and describes the more advanced capabilities required in the new helicopter. It has been widely reported, however, that *additional* requirements were added to the Increment 2 helicopter *after* the VXX contract was awarded to the Lockheed Martin team.<sup>14</sup> Some observers suggest that these additional capabilities are more than what is really required, making the VH-71 analogous to the President's VC-25, *Air Force One*, aircraft.<sup>15</sup> Are these additional capabilities what is driving the noteworthy cost increases reflected in the recent VH-71 Nunn-McCurdy breach? If these capabilities were added to the VH-71 program after the VXX ORD was approved by the Joint Requirements Oversight Council (JROC) are they valid requirements? If these capabilities were added to the VH-71 program after award of the contract to Lockheed Martin, does this suggest a breach of good business practices? Was it fair to Sikorsky, the other competitor for this contract?

## **Economic Concerns**

When the VXX contract was awarded to Lockheed Martin and its European partners on January 28, 2005, a number of economic concerns were raised. In light of the current economic recession, some in Congress may wish to re-visit these issues.

**Jobs Created or Lost Within the United States.** The net effect of the VH-71 award on the number of jobs in the U.S. helicopter industry is unclear. Various estimates put the number of *new jobs* created by the US101 program at approximately 1,050 in New York and Texas. If Sikorsky had received the VH-71 contract, it may be that fewer new jobs would have been created in the United States because Sikorsky's S-92 is already primarily built in the United States. (The EH-101, upon which the US101 will be built, is today primarily built in Europe.) However, Sikorsky had said it planned to eliminate foreign suppliers and build the VH-71 entirely in the United States. It is unclear how many U.S. jobs may be affected, if any, due to reduced orders for the S-92 following the VH-71 decision. Opponents of the US101 program say it will send offshore key aircraft design, manufacture and support activities, and that new jobs created by the US101 will be assembly line jobs that do little to sustain or nurture the U.S. industrial base.<sup>16</sup>

**Future Competitiveness.** One VH-71 issue frequently discussed is the potential for the award of this contract to influence other military helicopter competitions. Several new military helicopter contracts are expected to be awarded in the near term—potentially up to \$40 billion in value. Prominent among these new programs is the Air Force's new Combat Search and Rescue helicopter (CSAR-X) which will replace its HH-60G combat search and rescue helicopters. Sikorsky and its supporters say that the VH-71 contract could harm the future competitiveness of the U.S. helicopter industry. They fear that the VH-71 will form the basis for the next generation of U.S. medium lift helicopters; just as H-60 helicopters formed the basis for the last generation.

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<sup>14</sup> See, for example: Geoff Fein. "VH-71 On Track to Meet October '09 IOC, Navy Says." *Defense Daily*. May 25, 2007. John Bennett. "Boeing Gripes Are Latest Charges of Pentagon Ignoring Requirements." *Defense News*. March 17, 2008.

<sup>15</sup> Michael Fabey. "Navy sticking with US101 for presidential helo; more costly mods expected." *Aerospace Daily & Defense Report*. January 17, 2008.

<sup>16</sup> Dave Ahearn, "Marine One and Buy American: A Debate," *Defense Today*, November 10, 2004.

They also argue that the S-92 is better positioned than Lockheed's helicopter to compete internationally, due in part to lower costs.<sup>17</sup>

Lockheed supporters dispute claims about negative effects that the VH-71 award might have on the U.S. helicopter industry. In his January 28 briefing, Assistant Secretary of the Navy John Young stated that the design and performance demands of presidential transportation are "a fairly unique opportunity ... very different" from other military requirements. There is no guarantee that the winner of the VH-71 helicopter competition will win future military helicopter contracts. They further argue that DoD's *Industrial Capabilities Report to Congress* found no major industrial base problems, and dispute claims that the U.S. is too dependent on foreign suppliers.<sup>18</sup> Finally, Lockheed supporters may also point to remarks made by Sikorsky's own leaders regarding the helicopter company's rosy business projections. In 2005, the CEO of Sikorsky's parent company (United Technologies Corp.) predicted that Sikorsky would double its business between 2003 and 2008, even without the VXX contract.<sup>19</sup>

## Trade Issues<sup>20</sup>

Some suggest that the VH-71 decision may signal growing transatlantic industrial cooperation, and a more open DOD procurement policy concerning foreign suppliers. Traditionally, less than 5% of DOD procurement went to foreign contractors. On the other hand, this decision could spur some in Congress to support additional restrictions on foreign defense suppliers. Some observers state that if European suppliers are deemed good enough to make the President's helicopter, then the rest of DOD may be more inclined to consider foreign bids for a range of military contracts. Doing so, it could be argued, may make economic sense as foreign contractors increase the supply of contract bids, presenting opportunities to keep down procurement costs, and to take advantage of technology found in a global marketplace. It has been asserted that a more open sourcing policy for foreign suppliers could also make foreign governments more willing to buy from U.S. defense suppliers.

Others suggest that the decision could foster a backlash against a more open policy for defense procurement. Combined with the record U.S. trade deficits, some worry that the United States could become more dependent on foreign suppliers. Others argue that the U.S. taxpayers who foot the bill for the strongest military in the world should have the right to supply it. Still others raise concerns about the risk of losing proprietary technology by shipping sensitive blueprints overseas and the need to assure tight security for offshore manufacturing and assembly.

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<sup>17</sup> The VH-71 contract is a prestigious award. By choosing a helicopter that was designed and engineered by Europeans, Sikorsky supporters argue, the U.S. Navy is making a vote of "no confidence" in the U.S. helicopter industry.

<sup>18</sup> Sharon Weinberger, "Annual Report Paints Rosy Picture of Defense Industrial Base," *Defense Daily*, March 28, 2005.

<sup>19</sup> Scott Nance. "Even Without Marine One, Sikorsky on Track to Double Business." *Defense Today*. May 4, 2005.

<sup>20</sup> This section written by Raymond J. Ahearn, Specialist in Trade Relations, Foreign Affairs, Defense, and Trade Division.



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