

# Department of Homeland Security **Office of Inspector General**

## DHS' H-60 Helicopter Programs





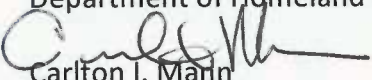
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Department of Homeland Security

Washington, DC 20528 / [www.oig.dhs.gov](http://www.oig.dhs.gov)

May 23, 2013

MEMORANDUM FOR: The Honorable Rand R. Beers  
Acting Deputy Secretary  
Department of Homeland Security

FROM:   
Carlton I. Mann  
Chief Operating Officer

SUBJECT: *DHS' H-60 Helicopter Programs (OIG-13-89)*

Attached for your information is our revised final report *DHS' H-60 Helicopter Programs*. The original report contained an incorrect organizational process name and acronym; however, based on new evidence provided from DHS' Office of Program Accountability and Risk Management, we have changed the organizational process name and acronym in the report from Investment Review Board (IRB) to Acquisition Review Board (ARB).

The report contains four recommendations aimed at improving DHS' H-60 helicopter programs. Your office concurred with 3 of the 4 recommendations. Based on information provided in your responses to the draft report, we consider recommendations 1, 2, and 4 resolved and open. Once your office has fully implemented the recommendations, please submit formal closeout letters to us within 30 days so that we may close the recommendations. The memorandum should be accompanied by evidence of completion of agreed-upon corrective actions and of the disposition of any monetary amounts. Recommendation 3 is unresolved and open. As prescribed by the Department of Homeland Security Directive 077-01, Follow-Up and Resolutions for Office of Inspector General Report Recommendations, within 90 days of the date of this memorandum, please provide our office with a written response that includes your (1) agreement or disagreement, (2) corrective action plan, and (3) target completion date for recommendation 3. Also, please include responsible parties and any other supporting documentation necessary to inform us about the current status of the recommendation. Until your response is received and evaluated, recommendation 3 will be considered open and unresolved.

Consistent with our responsibility under the *Inspector General Act*, we are providing copies of our report to appropriate congressional committees with oversight and appropriation responsibility over the Department of Homeland Security. We will post the report on our website for public dissemination.

Please call me with any questions, or your staff may contact Anne L. Richards, Assistant Inspector General for Audits, at (202) 254-4100.

Attachment



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### Abbreviations

ADM	Acquisition Decision Memorandum
AGB	Aviation Governance Board
AMC	Acquisition Management Council
ARB	Acquisition Review Board
Army	United States Army
CBP	U.S. Customs and Border Protection
DHS	Department of Homeland Security
FY	fiscal year
GAO	Government Accountability Office
IAA	Inter-Agency Agreement
OCPO	Office of the Chief Procurement Officer
OCRSO	Office of the Chief Readiness Support Officer
OIG	Office of Inspector General
PA&E	Office of Program Analysis and Evaluation
PARM	Office of Program Accountability and Risk Management
StAMP	Strategic Air and Marine Plan
USCG	United States Coast Guard
USM	Under Secretary for Management



## **Executive Summary**

The Department of Homeland Security (DHS) has 62 H-60 helicopters operated by U.S. Customs and Border Protection (CBP) and the United States Coast Guard (USCG), both of which are converting the helicopters to add about 15 years of operational life. These conversions include repairing the airframes as well as installing updated equipment. We performed this audit to determine whether DHS, CBP, and the USCG have efficiently acquired, converted, and modified these helicopters.

DHS established processes and procedures to govern its aviation assets and provide acquisition oversight. However, these efforts did not fully coordinate the acquisition, conversion, and modification of DHS aviation assets, and did not control acquisition costs, schedules, or performance. Department-level governance of aviation assets has been sporadic, and acquisition oversight in some components has been ineffective.

The USCG properly managed its H-60 helicopter program, but CBP did not. Most of the CBP H-60s were on loan from the United States Army (Army), and CBP had an Inter-Agency Agreement with the Army to complete all the conversions and modifications. CBP did not properly manage or oversee its H-60 program, which affected the cost-effectiveness and timely delivery of converted and modified H-60 helicopters. Between September 2008 and July 2012, the Army converted and modified two CBP H-60s at an average cost of \$22.3 million each, and each conversion was completed in about 1,300 days. OIG estimates that each future CBP conversion will cost approximately \$18.3 million and will take about 620 days to complete. Between January 2007 and July 2012, the USCG converted 27 of its H-60s, and the last 7 USCG conversions cost approximately \$5.3 million each and took an average of 301 days to complete.

As a result, the Department and CBP increased costs and experienced delays in converting and modifying CBP's H-60 fleet. These delays have already limited CBP's operation of its H-60s, and CBP anticipates that it may not be able to fly up to nine of its H-60s beginning in 2014. However, if DHS directs CBP and the USCG to complete the remaining 11 CBP H-60 conversions and modifications at the USCG Aviation Logistics Center, DHS could save about \$126 million and have CBP H-60s able to fly 7 years sooner than anticipated. We made four recommendations that, when implemented, should improve the Department's management and oversight of its aviation assets, as well as CBP's aviation acquisitions and its H-60 program. DHS concurred with three of the four recommendations.



## **Background**

On February 7, 2012, the DHS Secretary announced an Efficiency Review Initiative, which prioritized department-wide, cross-component aviation coordination and collaboration. On February 15, 2012, the Secretary testified to Congress that the fiscal year (FY) 2013 DHS budget proposal highlighted the need to increase the effectiveness of departmental aviation assets. These actions marked a renewed effort by DHS to examine leveraging joint requirements for CBP and USCG aviation assets.

DHS currently has 62 H-60 helicopters: 20 at CBP and 42 at the USCG. See appendix C for CBP and USCG H-60 locations. Both components fly twin engine H-60s manufactured by the Sikorsky Aircraft Corporation (Sikorsky) that can travel similar distances carrying similar weight. Both components are converting their H-60 helicopters to add about 15 years to their operational life. These conversions include repairing the airframes and installing updated equipment. To date, the two components have not coordinated these H-60 conversions.

### **DHS Acquisition Oversight**

DHS has issued policies and procedures and established various entities to oversee its components' acquisitions. In January 2010, the DHS Under Secretary for Management issued *Acquisition Management Directive 102-01* (MD 102-01) to provide an overall policy and structure for acquisition management in the Department. The Department's Office of Program Accountability and Risk Management is responsible for overseeing all of DHS' major acquisitions. Within this office, the Acquisition Review Board (ARB) acts across components to determine whether acquisitions have met specific requirements at key phases throughout the acquisition process. DHS also established a Joint Requirements Council to review high-dollar acquisitions and make recommendations to the ARB on cross-cutting savings opportunities. Additionally, DHS established an Aviation Management Council, reporting to the Joint Requirements Council, which reviewed and coordinated departmental aviation operational policy and procedures, generated requirements, and managed joint aviation assets.

In 2007, CBP's Office of Air and Marine submitted its congressionally mandated acquisition plan, the *CBP Air and Marine National Strategic Plan 2007–2012*, which outlined how its aviation assets and acquisitions would support its mission. The plan envisioned operating a fleet of 38 new and converted medium-lift helicopters by 2012. In 2012, CBP revised the plan to show that 20 helicopters would be operating by 2025. CBP approved its plan for acquiring the helicopters on February 7, 2008, and submitted the plan to DHS' Office of the Chief Procurement Officer (OCPO). According to a March 3, 2008, memorandum from OCPO to CBP, the acquisition plan included



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substantive issues that needed to be addressed. Although aware of these concerns, 3 days after receiving the OCPO’s memo, CBP officials continued with the acquisition, signing an Inter-Agency Agreement (IAA) with the Army.

**DHS H-60s**

CBP operates various aircraft, including 20 H-60 helicopters, of which 16 are on loan from the Army and 4 are new helicopters that CBP purchased from Sikorsky through the

**Figure 1. CBP H-60 Lima**



Source: CBP

Army. CBP entered into an IAA with the Army to convert and modify the 16 H-60s (from the Alpha to the Lima version) on loan from the Army, and also to purchase and modify the 4 new H-60s (Mike version). The first 2 of the 16 H-60 Alphas were converted at Sikorsky’s facilities at Chase Field; the third H-60 was inducted for conversion at the Army’s Corpus Christi Army Depot. The two converted CBP H-

60 Limas were then flown to the Army’s Prototype Integration Facility in Huntsville, Alabama, to be modified with CBP mission-specific equipment.

The USCG also operates H-60s to fulfill its missions, primarily for law enforcement and search and rescue missions. The USCG owns all 42 of its H-60s. It has converted 27 H-60 Juliet versions to Tangos at its Aviation Logistics Center in Elizabeth City, North Carolina, and it plans to convert the remaining 15 H-60 Juliets by FY 2014. Table 1 below contains information about CBP and USCG’s H-60 fleets as of July 2, 2012. See appendix D for a detailed comparison of CBP and USCG H-60 helicopters.

**Figure 2. USCG H-60 Tango**



Source: USCG



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**Table 1. CBP and USCG H-60 Fleets as of July 2, 2012**

DHS H-60s	CBP – 20 total	USCG – 42 total
<b>Ownership</b>	4 Mikes (M) owned by CBP 16 Alphas (A) on loan from Army	42 H-60s owned by the USCG (15 Juliets to be converted and 27 Tangos completed)
<b>Conversion</b>	16 Alphas (A) to be converted to Limas (L)	42 Juliets (J) to be converted to Tangos (T)
<b>Status</b>	M – 4 new in CBP inventory A – 11 in operation A/L – 3 in conversion L – 2 in operation	J – 8 in operation J/T – 7 in conversion T – 27 in operation

Source: DHS OIG

## Results of Audit

The USCG properly managed its H-60 helicopter program, but the Department and CBP did not effectively oversee or manage the acquisition, conversion, and modification of CBP’s H-60 helicopters. Although DHS established processes and entities, including the ARB and the Acquisition Management Council (AMC), to govern its aviation assets and manage CBP’s acquisition of the H-60s, its efforts did not ensure proper coordination of aviation assets or effective acquisition oversight. Most of CBP’s H-60s were on loan from the Army. Because CBP relied primarily on the Army to complete the helicopter conversions and modifications, it did not properly oversee the program and manage these activities, which affected the cost and delivery of the helicopters. As a result, the Department and CBP increased costs and experienced delays in converting and modifying CBP’s H-60 fleet. These delays have limited CBP’s operation of its H-60s, and CBP anticipates removing nine H-60s from operations beginning in FY 2014.

### DHS Governance and Oversight

DHS established processes and procedures to govern its aviation assets and provide acquisition oversight. However, these efforts did not fully coordinate the acquisition, conversion, and modification of DHS aviation assets, and did not control acquisition costs, schedules, or performance. Department governance of aviation assets has been sporadic, and acquisition oversight in some components has been ineffective. As a result, DHS has not implemented a comprehensive aviation strategy and did not properly oversee CBP’s acquisition of the H-60s.





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### **DHS Governance of Aviation Assets**

DHS has no formal structure to govern the Department's aviation assets and no specific senior official to provide expert independent guidance on aviation issues to DHS senior management. Over the past 9 years, DHS issued policies and established various entities to oversee its aviation assets and operations, but it did not sustain these efforts.

Since 2003, senior managers realized the need for a high-level structure to integrate the Department's components and help link cross-component aviation missions and capabilities. Over time, this oversight structure included Department-level management, with an Aviation Management Council started in 2005. Oversight was inconsistent, and the Aviation Management Council stopped meeting in 2007.

In 2009, Department-level oversight of DHS' aviation assets resumed. The purpose of DHS' Office of Program Analysis and Evaluation (PA&E) is to ensure that components' operational plans align with the Department's needs and resources. A PA&E-led Aviation Issue Team reviewed potentially collocating component aviation facilities, finding commonality in component aviation assets, and combining component aviation-related information technology systems. In a June 2011 briefing, PA&E discussed re-establishing an aviation management entity chaired by a DHS representative from within the Under Secretary of Management's (USM) directorate. The USM recommended that the Deputy Secretary officially re-establish the AMC to lead DHS' efforts to strategically align aviation assets across the Department's components to improve effectiveness, efficiency, and interoperability.

In 2011, the Deputy Secretary established an Aviation Working Group chaired by the Deputy Secretary, which included the USM as well as senior CBP and USCG officials, but the group did not have a charter, defined roles and responsibilities, or an independent aviation expert. The group collected data on CBP and USCG missions, aircraft inventories, flight hours, and aviation resources. It also reviewed components' funding plans and opportunities for joint acquisitions beginning in FY 2019, and it considered an organizational structure for a department-wide aviation office. However, according to senior PA&E officials, without a dedicated, independent aviation expert to lead an authoritative, decision-making entity, the Department was relying on unverified, component-provided information to make aviation-related decisions. Appointing an aviation manager whose sole responsibility is to manage DHS oversight of its aviation programs would increase the probability that the newly established Aviation



Management Council could act as an informed coordinator and overseer of the Department's aviation assets.

### **DHS Oversight of CBP's H-60 Acquisition Program**

DHS did not properly oversee CBP's acquisition of its H-60s. CBP did not take into account DHS OCPO guidance on its H-60 acquisition plan. In addition, the DHS Office of Program Accountability and Risk Management (PARM) did not conduct a complete review of CBP's H-60 program because the Department did not ensure that CBP followed departmental acquisition guidance and properly participated in the ARB process or coordinated with the ARB.

In 2008, the OCPO reviewed CBP's H-60 acquisition plan and expressed its concerns in a memorandum to CBP. According to the OCPO, CBP should have had two separate H-60 plans: one to convert H-60 Alphas to Limas, and a second one to purchase the new H-60 Mike helicopters. In addition, according to the OCPO, both plans should independently go through the acquisition review process, which includes ARB review. The OCPO was also concerned that CBP—

- Had not clearly defined the period of performance for the acquisition;
- Did not have a complete life cycle cost estimate;
- Had not completed a cost-benefit analysis to compare upgrading its existing fleet to purchasing new helicopters; and
- Had not used various contracting best practices.

Although they were aware of these concerns, CBP officials continued with the acquisition, signing an IAA with the Army 3 days after receiving the OCPO memo. In July 2012, a PARM official confirmed the need to divide CBP's Strategic Air and Marine Plan (StAMP) into separate programs so the Department would have greater visibility into the numerous acquisition programs and projects included in the plan.

According to a PARM official, CBP officials did not consider StAMP to be subject to the acquisition review process because the plan existed before the current acquisition review process was established. However, according to DHS acquisition policy, MD 102-01 applies to all existing acquisition programs "to the maximum extent possible."



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Further, CBP actually acquired three of its four new H-60 Mike helicopters in the fall of 2011, and in a September 2011 StAMP briefing, CBP acknowledged that the conversion and modification of its 16 H-60 Alphas to Limas was still in the acquisition phase. Therefore, CBP's StAMP acquisition programs were subject to the acquisition review process, and CBP's H-60 acquisition, conversion, and modification programs should have participated more transparently in the ARB process.

In a March 11, 2010, Acquisition Decision Memorandum (ADM), the ARB concluded that CBP and the USCG were both pursuing H-60 conversions, and that it was important to understand whether the USCG H-60 conversion programs were compatible with CBP's prospective conversions and modifications. The ARB directed the USCG to collaborate with CBP and report on possible helicopter program synergies and present a joint review within 75 days.

The USCG hosted CBP officials at its Aviation Logistics Center, but both USCG and CBP officials said that a senior CBP executive canceled any reciprocal visits by USCG officials to CBP sites and instructed CBP H-60 program personnel not to have any further contact with USCG H-60 officials. Without CBP's cooperation, the USCG was unable to complete the joint review. PARM did not provide any further official direction on the incomplete review to the components, and the ARB did not determine why the joint review was not presented within the 75 days.

In a June 17, 2011, ADM, the ARB directed CBP to prepare for a program review. The ARB intended for CBP to document its acquisition program baselines, as well as present program acquisition documentation, to comply with MD 102-01. CBP provided its response to the June 17, 2011, ADM on September 23, 2011, and the official ARB review was cancelled.

As a result, PARM sent a draft ADM to CBP that "found the StAMP program to be non-compliant" for the following reasons:

- CBP's "inability to submit an acquisition program baseline for approval";
- CBP's "failure to submit other acquisition documentation in accordance with MD 102-01 for review and adjudication"; and
- CBP's "inability to provide authoritative life cycle costs with supporting documentation for review and adjudication."

PARM did not issue a final signed ADM and acknowledged the limited effectiveness of providing a draft ADM to CBP. If PARM had issued a signed ADM documenting CBP's noncompliance, CBP would have been required to respond with an action plan addressing the identified issues.



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DHS did not effectively govern its aviation assets and did not oversee all its aviation acquisitions. The Department could better govern its aviation assets under a formal entity led by a senior-level DHS employee with appropriate authority. In addition, CBP's H-60 programs remain subject to review and should participate in the ARB process.

### **Ownership and Management of H-60 Helicopters**

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Although the USCG properly managed its H-60 helicopter program, DHS and CBP did not effectively oversee or manage the acquisition, conversion, and modification of CBP's H-60 helicopters. Because of the current loan agreement with the Army, as well as CBP's need for more effective program management, CBP H-60 conversions and modifications have cost more and taken longer than necessary. As a result, CBP anticipates removing nine H-60s from operations beginning in FY 2014.

#### **Army Ownership of CBP H-60s**

CBP spent millions of dollars to convert and modify H-60 helicopters that it did not own and may have to return to the Army at any time. According to a March 3, 2008, memo from the DHS OCPO to CBP regarding the CBP helicopter program:

The UH-60A's [H-60 Alphas] have been "on loan" from the US Army to CBP Air and Marine since 1983. Procuring a conversion on assets "borrowed" from another agency is a major concern. We understand CBP Air and Marine will secure a change in the ownership status of the aircraft before DHS invests in their conversion to UH-60L's [H-60 Limas].

CBP did not adequately respond to the OCPO's concerns, and instead signed an IAA with the Army 3 days later to convert and modify all the loaned H-60 Alphas, without taking ownership.

CBP officials believed that the H-60 loan agreement required the Army to convert and modify the CBP H-60s. However, the loan agreement:

...authorizes [CBP] to install and remove mission equipment without requesting approval from [the Army]. [CBP] assumes responsibility for configuration control and evaluation of the equipment to ensure airworthiness. This authorization is limited to mission equipment only; all other configuration changes will go through normal channels.



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Based on the loan agreement, the Army is not required to complete the conversion and modification work, only to authorize it. CBP officials also said that only the Army could complete and issue an Air Worthiness Release, which specifies the conditions under which the CBP H-60s can be safely converted, modified, and flown. (See appendix E for details on the conversion process.) USCG H-60s are also certified safe for flight upon completion. When questioned about having the USCG complete the CBP conversions and modifications, a senior CBP executive said that, if directed, CBP would move the program to the USCG.

In its *Review of CBP Acquisition Plan for Medium Lift Helicopters* (March 2008), CBP acknowledged that in November 1999 the Army had requested that the 16 H-60 Alphas be returned or that it be compensated for them. In 2010, a CBP manager requested ownership of the H-60s, sending a letter directly to the Secretary of Defense. However, the Army denied the request, stating that it was not removing H-60s from its inventory at that time. In March 2012, the Army released a plan to decommission and remove hundreds of H-60s from its inventory beginning in FY 2014. This plan gives DHS the opportunity to again request the transfer of ownership of the 16 loaned H-60s from the Army to CBP. If CBP owned its H-60s, DHS could properly oversee and better manage the cost, schedule, and performance for the acquisition, conversion, and modification of CBP H-60s.

#### **CBP's H-60 Program Management**

CBP did not effectively oversee its H-60 acquisition and conversion program with the Army. CBP officials delegated overall program management authority to the Army and did not request, obtain, or verify detailed financial or program documentation.

According to the Federal Acquisition Regulation (FAR § 4.801), agencies are required to maintain contract files that constitute a complete history of the transaction. DHS policy further requires components to perform indepth reviews of all invoices and vouchers to ensure costs are allowable. The contracting documents and agreements between CBP and the Army described the detailed cost information that Army was to provide to CBP for the CBP H-60 acquisitions, conversions, and modifications.

CBP officials received high-level cost information, which did not include the detail necessary to oversee the CBP H-60 programs adequately. For example, the Army conducted approximately 15,000 tests on the CBP H-60 components, but CBP could not identify completed tests or their corresponding costs. During



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our review, Army officials said that they did maintain detailed records of the costs associated with CBP's H-60 programs. Although we asked CBP officials to request and obtain detailed, authorized financial records from the Army, CBP officials did not obtain this information for our review.

For each CBP H-60 helicopter, we obtained high-level financial data from three sources, but each source listed a different total cost for each helicopter. For example, documentation related to one CBP helicopter conversion showed the following total costs:

- \$20.9 million on the first DD-1149 *Requisition and Invoice/Shipping Document* from the Army;<sup>1</sup>
- \$22.4 million on a *CBP Monthly Report* prepared by the Army; and
- \$21.4 million based on invoices submitted to CBP's National Finance Center.

CBP could not explain the discrepancies among the three sources of cost information. Because of this incomplete documentation and oversight, CBP program managers could not identify how much the agency actually paid the Army for individual tests, materials, and labor and services provided for CBP H-60 acquisition, conversion, and modification.

#### **Comparison of CBP and USCG H-60 Conversion and Modification Programs**

CBP H-60 conversions and modifications cost more and took longer than CBP originally planned; they also cost more and took longer than similar USCG H-60 conversions and modifications. If DHS directed CBP and USCG to complete the remaining 11 CBP H-60 conversions and modifications at the USCG Aviation Logistics Center, DHS could save about \$126 million and have CBP H-60s able to fly 7 years sooner than planned.

In 4 years, the Army converted two of CBP's H-60s at a total cost of approximately \$44.5 million. In 5 years, the USCG converted 27 of its H-60s at a total cost of approximately \$181.8 million. The USCG also efficiently planned and implemented conversions to limit the time that its H-60s were unavailable for operations. CBP currently plans to complete its remaining 11 H-60 conversions by 2025; the USCG plans to complete its remaining 15 H-60 conversions by 2014.

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<sup>1</sup> When CBP takes possession of the H-60, the Army provides a DD-1149 document showing the high-level costs.



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CBP’s first two conversions took 1,317 days and 1,325 days, respectively, at two different locations. The Army sent the CBP H-60 Alphas to the Army’s Corpus Christi Army Depot or to Sikorsky’s Chase Field in Texas for conversion to H-60 Limas. The converted H-60 Limas were then flown to the Army’s Prototype Integration Facility in Huntsville, Alabama, to add CBP-requested mission equipment. Based on the Army’s estimates, each future CBP conversion and modification will take approximately 620 days to complete.

In contrast, the USCG converted its first 11 H-60s in a total of 1,307 days at the USCG’s Aviation Logistics Center in Elizabeth City, North Carolina. The USCG’s last seven conversions averaged 301 days per helicopter.

The first CBP H-60 Alpha-to-Lima conversion and modification cost an estimated \$24.6 million. Its second conversion and modification cost an estimated \$19.9 million. OIG estimates that conversions will cost about \$18.3 million per helicopter, totaling approximately \$202 million for the remaining 11 CBP H-60s. CBP’s projected costs for its future conversions increase with each conversion.

The first USCG H-60 Juliet-to-Tango conversion and modification cost \$7.3 million, and the USCG averaged \$5.3 million each for its last seven H-60 conversions. The USCG will convert its remaining 15 H-60s for approximately \$79.5 million. By continuously improving its processes, the USCG has regularly reduced costs and production times.

Operationally, in FY 2011 the USCG H-60s flew an average of 54.5 hours per month; CBP H-60s flew an average of 15.4 hours per month. The USCG foresees its H-60 flight hours remaining steady; CBP has proposed reducing flight hours. Table 2 compares conversion costs and schedules, as well as flight hours for CBP and USCG H-60s.

**Table 2. Comparison of CBP and USCG H-60 Conversions**

<b>DHS H-60s</b>	<b>CBP</b>	<b>USCG</b>
<b>Estimated Cost</b>	\$18.3 million	\$5.3 million
<b>Estimated Schedule</b>	620 days	301 days
<b>Actual FY 2011 Flight Hours</b>	15.4 hours/month	54.5 hours/month

Source: DHS OIG



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The USCG Aviation Logistics Center has the experience and expertise to convert and modify CBP H-60s based on its prior work on different versions of non-USCG H-60s. The Aviation Logistics Center is ISO 9001- and ISO 14001-certified and, since 2001, has completed maintenance on more than 30 United States Air Force H-60 helicopters. The USCG also rebuilt a crash-damaged United States Navy H-60, converting it to a USCG H-60 Tango, and built a USCG H-60 Tango from damaged and spare parts from both United States Navy and Army H-60 helicopters.

Based on our analysis, the USCG Aviation Logistics Center is capable of efficiently and economically completing the CBP H-60 conversions and modifications. DHS can significantly reduce costs and increase efficiencies within its aviation programs by directing CBP to take ownership of its aviation assets, and by directing the USCG Aviation Logistics Center to complete CBP's H-60 program. As a result, DHS will save about \$126 million and shorten CBPs projected completion schedule by about 7 years, allowing CBP to have its conversion program completed in FY 2018 rather than 2025.

### Recommendations

We recommend that the Deputy Secretary:

#### Recommendation #1:

Establish and charter a formal department-level Aviation Management Council to provide governance and oversight of departmental aviation assets, which includes a senior-level position with direct authority and accountability over all Department of Homeland Security aviation programs.

#### Recommendation #2:

Direct U.S. Customs and Border Protection to apply all the requirements of the Acquisition Life Cycle Framework established through Management Directive 102-01 to each individual program or project within its Strategic Air and Marine Plan.

#### Recommendation #3:

Initiate discussions to obtain departmental ownership of U.S. Customs and Border Protection H-60 helicopters from the United States Army.





**Recommendation #4:**

Direct U.S. Customs and Border Protection and the United States Coast Guard to complete the remaining U.S. Customs and Border Protection H-60 conversions and modifications at the United States Coast Guard Aviation Logistics Center.

**Management Comments and OIG Analysis**

**Management Comments to Recommendation #1**

**DHS Concurred:** According to DHS, the Deputy Secretary has approved a proposal from the Management Directorate's Office of the Chief Readiness Support Officer (OCRSO) to establish an Aviation Governance Board (AGB). The AGB will be chaired and staffed by the OCRSO and will be responsible for providing coordinated oversight and management of DHS aviation programs. DHS notes that the OCRSO has begun to identify key aviation stakeholders in DHS to staff the AGB, and that it anticipates a first meeting by August 30, 2013. According to DHS, the AGB's first task will be to develop a formal charter, estimated to be completed by December 31, 2013.

**OIG Analysis:** This recommendation is resolved but will remain open until the OCRSO has fully established and staffed the AGB and developed its formal charter, and the AGB is providing coordinated oversight and management of DHS aviation programs. At that time, OIG will evaluate whether AGB's authorities, funding, and staffing were appropriately identified and implemented, and that it is providing sufficient authority and accountability over all DHS aviation programs.

**Management Comments to Recommendation #2**

**DHS Concurred:** According to DHS, the Chief Acquisition Officer directed that CBP submit StAMP to PARM. PARM will oversee StAMP in accordance with MD 102-01. Existing projects that are in the acquisition life cycle prior to Acquisition Decision Event 3 (full production) and any new acquisition programs or projects currently part of StAMP will be required to progress through the acquisition life cycle in accordance with MD 102-01. The DHS Acquisition Review Board will conduct Acquisition Decision Events as those programs and projects progress through the acquisition life cycle.

**OIG Comments:** This recommendation is resolved but will remain open until OIG receives and evaluates CBP's acquisition and management action plan to break out StAMP's individual projects to provide better acquisition management,



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oversight, and transparency. Also, PARM must demonstrate that it is properly overseeing and monitoring CBP Office of Air and Marine's individual projects in an effort to properly enforce MD 102-01's acquisition life cycle management processes.

#### **Management Comments to Recommendation #3**

**DHS Concurred:** DHS confirmed that in 2010, a CBP program manager sent a letter to the Secretary of the Department of Defense requesting ownership of the loaned helicopters, and that the Army responded to that request noting that it was currently short of UH-60 Blackhawks.

**OIG Comments:** This recommendation remains unresolved and open. As noted in this report, OIG was aware of the 2010 CBP program manager's request. We recommended that a senior-level DHS official now request acquiring ownership of the H-60s, based on the Army's current plans to reduce its fleet by more than 600 H-60s over the next 10 years, beginning in 2014.

#### **Management Comments to Recommendation #4**

**DHS Did Not Concur:** However, according to DHS, the OCRSO will facilitate a cost-benefit analysis with CBP and the USCG to determine whether cost efficiencies can be realized by completing the remaining CBP H-60 conversions and modifications at the USCG Aviation Logistics Center. Upon its completion, targeted for September 30, 2013, DHS will make a recommendation based on the analysis.

**OIG Analysis:** This recommendation is resolved but will remain open. The DHS OCRSO's proposed cost-benefit analysis is the first step in meeting the intent of the recommendation. This is the type of action that PARM directed CBP and the USCG to do more than 3 years ago, and it follows the Secretary's initiatives to increase the effectiveness of departmental aviation assets. Upon its completion, OIG requests a final copy of the OCRSO's cost-benefit analysis with supporting documentation, along with the Department's final recommendation.



## **Appendix A**

### **Objectives, Scope, and Methodology**

The Department of Homeland Security (DHS) Office of Inspector General (OIG) was established by the *Homeland Security Act of 2002* (Public Law 107-296) by amendment to the *Inspector General Act of 1978*. This is one of a series of audit, inspection, and special reports prepared as part of our oversight responsibilities to promote economy, efficiency, and effectiveness within the Department.

We performed an audit to determine whether DHS and its components have developed efficiencies for the acquisition, conversion, and modification of CBP and USCG H-60 helicopters. During this audit, we published the letter report OIG-12-104, *CBP Acquisition of Aviation Management Tracking System*. We reviewed Federal regulations, departmental guidance, and agency internal control procedures and requirements for acquisition programs. We reviewed ARB files based on MD 102-01 documentation requirements for CBP and USCG H-60 programs, as well as CBP and USCG contracting officer and contracting officer's technical representative H-60 program files. We reviewed Army-provided documents outlining various costs for the CBP H-60 program and compared those costs with data from the CBP National Finance Center.

We interviewed various officials at DHS PARM and PA&E in Washington, DC, as well as component acquisition officials and program managers at CBP and USCG Headquarters. We conducted field work at the U.S. Army's Corpus Christi Army Depot in Corpus Christi, Texas; the Army's Prototype Integration Facility at the Redstone Arsenal in Huntsville, Alabama; and the CBP Air and Marine Branches at the Naval Air Station North Island in San Diego, California, and Homestead Air Reserve Base in Homestead, Florida. We visited CBP's Air and Marine Operations Center in Riverside, California. We also conducted fieldwork at the USCG Aviation Logistics Center and Air Station Elizabeth City in Elizabeth City, North Carolina, as well as at USCG Air Station San Diego and USCG Joint Harbor Operations Center – Sector San Diego.

We conducted this performance audit between January and September 2012 pursuant to the *Inspector General Act of 1978*, as amended, and according to generally accepted government auditing standards, except that we identified an impairment of our independence in appearance. During this audit, it came to our attention that a family member of a senior OIG official was employed by an entity associated with the audit. To resolve this issue, we employed safeguards to protect the work from the threat to our independence in appearance. Our safeguards included extra steps to validate all evidence obtained and avoiding any interactions involving a conflict of interest. In our opinion, the safeguards provided sufficient controls to ensure that the impairment to



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our independence in appearance did not affect the findings and conclusions developed during this audit.

GAGAS requires that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based upon our audit objectives. We obtained an understanding of the internal controls that were significant within the context of our audit objective. We evaluated the design and operating effectiveness of these internal controls to determine the reliability of information used in performing these significant controls. We applied accepted cost estimating methods to determine total estimated future cost savings. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based upon our audit objectives, and that the impairment to our independence in appearance did not affect this evidence or any findings and conclusions.



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Appendix B  
Management Comments to the Draft Report

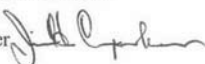
U.S. Department of Homeland Security  
Washington, DC 20528



Homeland  
Security

April 25, 2013

MEMORANDUM FOR: Carlton I. Mann  
Chief Operating Officer  
Office of the Inspector General

FROM: Jim H. Crumpacker   
Director  
Departmental GAO-OIG Liaison Office

SUBJECT: DHS' H-60 Helicopter Programs (Project No. 12-102-AUD-CBP)

Thank you for the opportunity to review and comment on this draft report. We appreciate the Office of Inspector General's (OIG's) work in planning and conducting its review and issuing this report.

We are pleased to note that OIG concluded the U.S. Coast Guards (USCG) has properly managed its H-60 helicopter program. However, the report includes many references that do not adequately capture the differences in scope of the U.S. Customs and Border Protection's (CBP's) Office of Air and Marine (OAM) and USCG H-60 Helicopter Programs. For example, the OIG report compares the USCG corrosion control<sup>1</sup> and avionics upgrade effort to the CBP/U.S. Army (Army) recapitalization program.<sup>2</sup> The Department maintains that the CBP H-60 recapitalization and the USCG H-60 upgrade efforts are not similar and not comparable in scope, including difference in asset configurations, air worthiness requirements and certifications, levels of required maintenance, and non-recurring engineering costs.

The audit report also does not provide information on potential cost and schedule savings of relinquishing the USCG H-60 helicopters versus pursuing an acquisition program for the HH-60J. In addition, the report does not discuss the USCG MH-60T program in the appropriate level of detail. Specifically, the MH-60T program is being executed in four acquisition phases, but it is not clear whether the \$5.3 million the OIG reported is for one or all four phases or any combination thereof. The OIG's conclusions lack a business case analysis that is necessary to determine whether USCG has the capacity to support CBP's recapitalization.

<sup>1</sup>The USCG program focuses on corrosion control due to the overwater environment in which they are used.

<sup>2</sup>The Army's recapitalization program does not focus on corrosion prevention and control. This program requires a total overhaul of varying components including upgrades to airframes, propulsion systems, and cockpit components. It also includes upgrades to digitized navigation and revised rotor and driveshaft assemblies.



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The report contained four recommendations, of which the Department concurs with three and nonconcur with one. Specifically, OIG recommended that the Deputy Secretary:

**Recommendation 1:** Establish and charter a formal department-level Aviation Management Council to provide governance and oversight of departmental aviation assets, which includes a senior-level position with direct authority and accountability over all Department of Homeland Security aviation programs.

**Response:** Concur. The DHS Deputy Secretary approved a proposal from the Management Directorate (MGMT) Office of the Chief Readiness Support Officer (OCRSO) to establish an Aviation Governance Board (AGB). The AGB will be chaired and staffed by the OCRSO, and will be responsible for providing coordinated oversight and management of DHS aviation programs. The OCRSO has begun to identify key aviation stakeholders in DHS to staff the AGB, and anticipates the first meeting by August 30, 2013. The first task of the AGB will be to develop a formal charter. Estimated Completion Date (ECD): December 31, 2013.

**Recommendation 2:** Direct U.S. Customs and Border Protection to apply all the requirements of the Acquisition Life Cycle Framework established through Management Directive 102-01 to each individual program or project within its Strategic Air and Marine Plan.

**Response:** Concur. The DHS Chief Acquisition Officer directed that CBP submit the Strategic Air and Marine Program (STAMP) to the MGMT Office of Program Accountability and Risk Management (PARM). PARM will oversee STAMP in accordance with Management Directive (MD) 102-01. Existing projects that are in the acquisition lifecycle prior to Acquisition Decision Event 3 (full production) and any new acquisition programs or projects currently part of STAMP will be required to progress through the acquisition lifecycle in accordance with MD 102-01. The DHS Acquisition Review Board will conduct Acquisition Decision Events as those programs/projects progress through the acquisition lifecycle. These reviews will be ongoing. We request that this recommendation be considered resolved and closed.

**Recommendation 3:** Initiate discussions to obtain departmental ownership of CBP's H-60 helicopters from the United States Army.

**Response:** Concur. CBP OAM has already been in discussions with the Army to obtain Department ownership of the H-60 helicopters. In a letter to the Department of Defense, CBP requested ownership of the loaned helicopters<sup>3</sup>. The Army responded to the request by stating that the Army was currently short UH-60 Blackhawks, and the Secretary of Defense had not determined that the aircraft were excess<sup>4</sup>. The Army did not foresee any change to the loan arrangement or commitment. Copies of both letters were previously provided to OIG. We request that this recommendation be considered resolved and closed.

<sup>3</sup> Charles C. Bourquardez, Jr., CBP, to The Honorable Robert M. Gates, Secretary of Defense, Washington, DC, 1 February 2010.

<sup>4</sup> Jeffrey J. Schloesser, Major General, United States Army, to Charles C. Bourquardez, Jr., Washington, DC, 23 March 2010.



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**Recommendation 4:** Direct U.S. Customs and Border Protection and the United States Coast Guard to complete the remaining U.S. Customs and Border Protection H-60 conversions and modifications at the United States Coast Guard Aviation Logistics Center.

**Response:** Non-concur. The OIG report compared two vastly different conversion programs at USCG and CBP reached a conclusion on various cost efficiencies, which we do not believe is fully supported with the evidence of the report. The programs are not comparable as they involve different aircrafts and the activities performed for the actual conversions vary greatly. Specifically, the USCG program is a corrosion inspection and mitigation and cockpit upgrade program, and the CBP program is an airframe depot overhaul with a cockpit upgrade and CBP missionization. The programs have different scopes as defined by their different statements of work. It is not at all clear if transferring the UH-60 recapitalization to USCG is in fact more cost effective.

The DHS MGMT OCRSO will facilitate a cost-benefit analysis with USCG and CBP to determine whether cost efficiencies can be realized by completing the remaining CBP H-60 conversions and modifications at the USCG Aviation Logistics Center. Once the scope of work has been agreed upon, USCG and CBP would each provide a business case for completing the remaining CBP H-60 conversion. The analysis will look at issues such as the specifics for the activities of the conversion, supply chain synchronization, timing and sequencing of work. The results will be evaluated and compared to OIG's findings, taking into consideration asset ownership, for an overall cost-benefit. Upon completion, OCRSO will make a recommendation on the basis of the analysis. DHS will consider the results and take the most cost-effective approach. ECD: September 30, 2013.

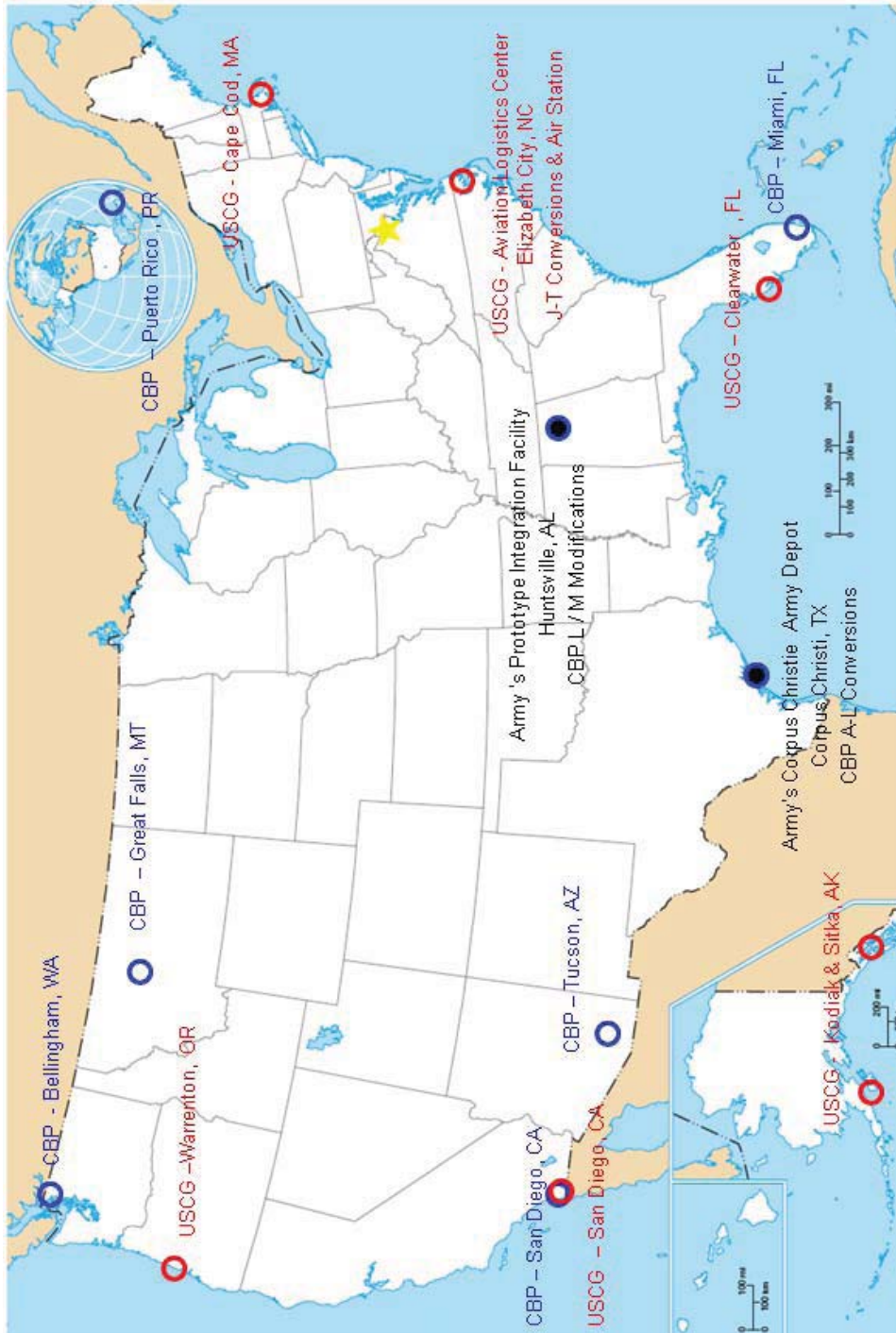
Thank you for the opportunity to review and comment on this draft report. Technical comments were previously submitted under separate cover. Please feel free to contact me if you have any questions. We look forward to working with you in the future.



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**Appendix C**

**Location Map for CBP and USCG H-60 Helicopters**



Source: OIG





## Appendix D

### Conversion Comparison of CBP and USCG H-60 Helicopters

Source: OIG, based on CBP and USCG testimony and documentation

#### USCG H-60J-Ts



Source: USCG

In the USCG, aircraft capabilities were developed to primarily meet Search and Rescue, Enforcement of Laws and Treaties and Marine Environmental Protection, and Military Readiness missions. The H-60 is the USCG's medium-range rescue aircraft used for distant or medium-lift missions. The USCG's target for aircraft availability is 71 percent. Additionally, air stations ensure that a crew and aircraft are ready to respond to alerts within 30 minutes from time of notice.

#### **Characteristics**

##### Power Plant

Twin Engine General Electric T700-GE-401C, turbo shaft

##### Performance

Max Speed: 180 knots  
Service Ceiling: 18,000 ft.  
Range: 700 nautical miles

##### Weight

Empty: 15,000 lbs  
Gross Weight: 21,884 lbs

##### Armament

Single M240 machine gun  
.50 caliber rifle

##### Dimensions

Rotor Diameter: 53 ft., 8 in.  
Length: 64 ft., 10 in.

#### CBP H-60A-Ls



Source: CBP

The mission of the CBP's Office of Air and Marine is to protect the American people and the Nation's critical infrastructure through the coordinated use of integrated air and marine forces to detect, interdict, and prevent acts of terrorism and the unlawful movement of people, illegal drugs and other contraband toward or across U.S. borders. In support of CBP's mission, the H-60 serves as a utility tactical transport helicopter.

#### **Characteristics**

##### Power Plant

Twin Engine General Electric T700-GE-701C, front drive, turbo shaft

##### Performance

Max Speed: 150 knots  
Service Ceiling: 20,000 ft.  
Range: 600 nautical miles

##### Weight

Approximate Empty: 13,371 lbs  
Gross Weight: 22,000 lbs

##### Armament

.50 caliber rifle

##### Dimensions

Rotor Diameter: 53 ft., 8 in.  
Approximate Length: 64 ft., 10 in.



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**Cockpit Comparisons**

**USCG H-60J (Juliet)**  
Analog Cockpit



Source: USCG

**CBP H-60A (Alpha)**  
Analog Cockpit



Source: OIG

**USCG H-60T (Tango)**  
Digital Cockpit  
Digital auto pilot with coupled hover



Source: USCG

**CBP H-60L (Lima)**  
Analog Cockpit



Source: CBP



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**Upgrades**

The USCG and CBP are both converting H-60 helicopters to provide about 15 additional years of operational life. These conversions include repairing the airframes and installing updated equipment. Upgrades include the following:

**USCG**

**Cockpit and Cabin Displays**

Five new multifunction display screens. The multifunctional displays include digital radar display, traffic collision avoidance system, traditional display of primary flight instruments on the pilots' flight display, radar altimeter, verbal low altitude, and improved Search and Rescue hoist camera images.

**Infrared Detection and Identification Systems**

Electro-Optical/Infrared Sensor System consisting of five units: turret sensor unit, control electronics unit, cabin Display Unit, pilot control unit, and joystick control unit. The turret sensor unit houses the sensor suite and optional payloads.

**Video Recording Systems**

Helicopter Airborne Video System provides a high-resolution camera system. The camera system is designed to capture cabin, hoist, and rescue swimmer activities. A Helicopter Integrated Data Storage digitally records and replays a wide variety of information.

**CBP**

**Cockpit and Cabin Displays**

Two Garmin communication and navigation systems (providing two VHF radios and navigation suite), a weather system display, and digital moving maps.

**Infrared Detection and Identification Systems**

Forward-Looking Infrared Star Safire High Definition Mission Sensor designed to provide infrared detection, recognition, and identification in support of intelligence, surveillance and reconnaissance, search and rescue, maritime patrol, border patrol, and force protection.

**Video Recording Systems**

Avalex AVR 8245 Digital Video Recorder records mission sensor videos to various recording media and/or allow for playback of the recorded video in the aircraft or for post mission analysis. A Broadcast Microwave Services Digital Downlink provides the ability to feed live or recorded mission sensor video to a compatible ground station.



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**USCG Searchlights**



Source: USCG

Trakkabeam A800 is designed for airborne and other applications, is mounted on an integrated motorized platform, is capable of being used with thermal and video cameras, and a moving map.

**CBP Searchlights**



Source: CBP

Trakkabeam A800 is intended to provide illumination of targets of interest. The searchlight has an infrared band pass filter for operations. The beam width can be varied from narrow to flood. The search light can be controlled from the cockpit or from the cabin using the hand control unit.

**USCG Hoist**



Source: USCG

Lucas Aerospace Cargo Systems Hoist was integrated into the H-60 airframe per USCG's purchase request.

**CBP Hoist**



Source: CBP

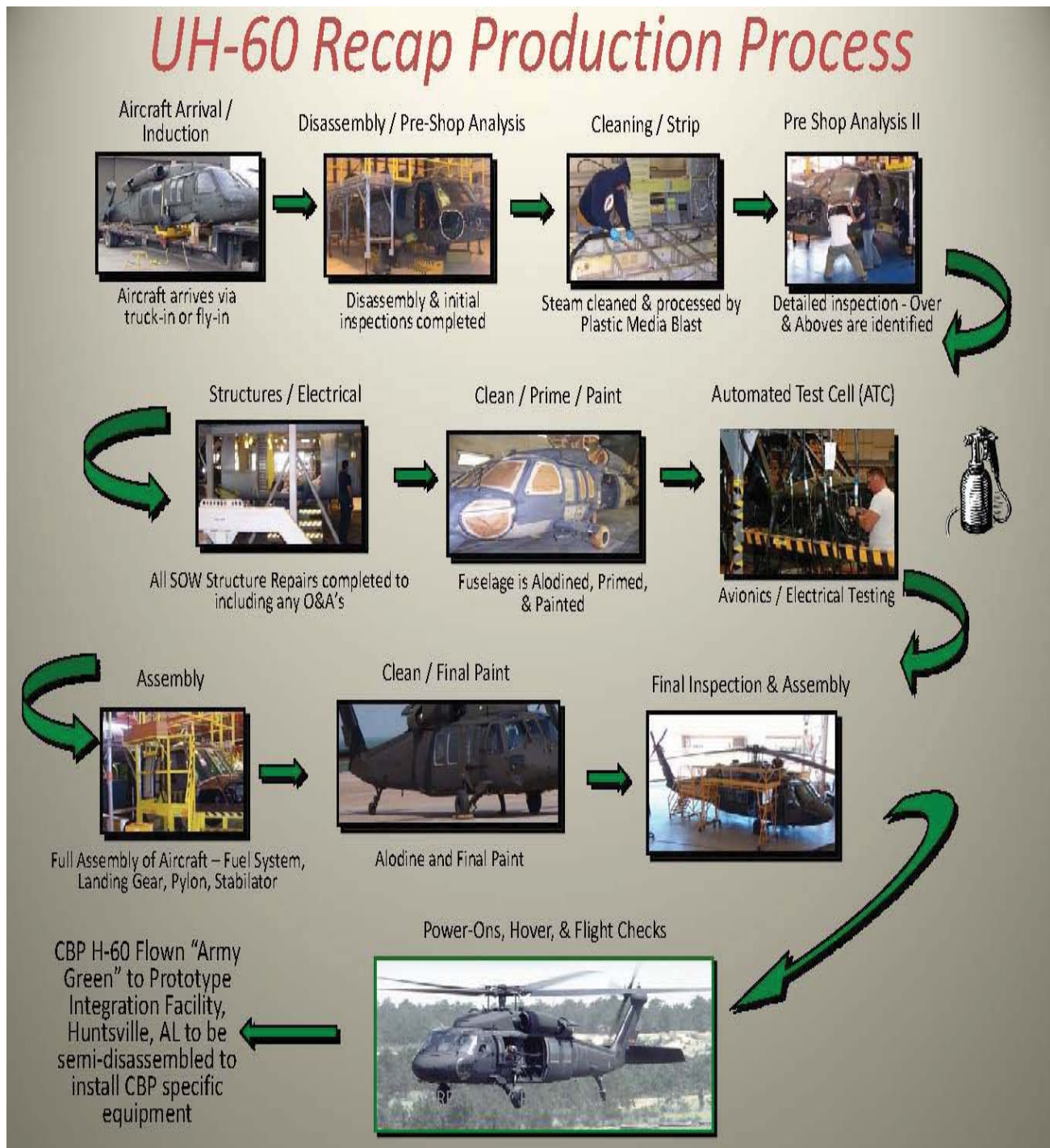
Breeze Eastern Electric Hoist and External Stores Support System Mount. Added on the side of H-60. Can be added and removed according to mission.



## Appendix E

### CBP H-60 Conversion Process

Source: OIG, based on Corpus Christie Army Depot's Process Workflow





## **Appendix F**

### **Major Contributors to This Report**

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## **Appendix G**

### **Report Distribution**

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Deputy Chief of Staff  
General Counsel  
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Executive Secretary  
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Assistant Secretary for Office of Policy  
Assistant Secretary for Office of Public Affairs  
Assistant Secretary for Office of Legislative Affairs  
Acting Commissioner, U.S. Customs and Border Protection  
Commandant, U.S. Coast Guard  
USCG Audit Liaison  
Acting Chief Privacy Officer

#### **Office of Management and Budget**

Chief, Homeland Security Branch  
DHS OIG Budget Examiner

#### **Congress**

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The OIG seeks to protect the identity of each writer and caller.