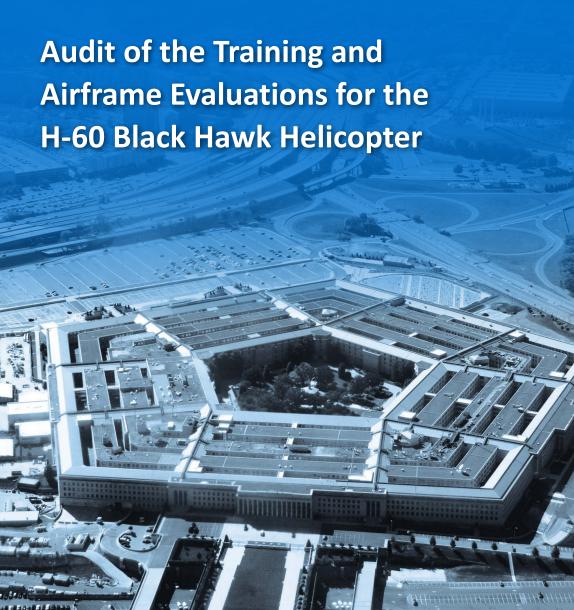


INSPECTOR GENERAL

U.S. Department of Defense

JUNE 27, 2017





Mission

Our mission is to provide independent, relevant, and timely oversight of the Department of Defense that supports the warfighter; promotes accountability, integrity, and efficiency; advises the Secretary of Defense and Congress; and informs the public.

Vision

Our vision is to be a model oversight organization in the Federal Government by leading change, speaking truth, and promoting excellence—a diverse organization, working together as one professional team, recognized as leaders in our field.



For more information about whistleblower protection, please see the inside back cover.



Results in Brief

Audit of the Training and Airframe Evaluations for the H-60 Black Hawk Helicopter

June 27, 2017

Objective

We determined whether the U.S. Army (Army) effectively managed its modernization of the H-60 Black Hawk (H-60) helicopter fleet. Specifically, we reviewed the Army's H-60 new equipment training strategy and airframe condition evaluations.

Background

The H-60 helicopter is used by the active duty Army, U.S. Army National Guard (Guard), and the U.S. Army Reserve (Reserve). According to Project Manager Utility Helicopters officials, the modernized fleet will consist of 1,375 H-60M helicopters and 760 H-60V helicopters by FY 2035. The H-60M helicopter is the newest helicopter in the H-60 fleet with a digital cockpit and autopilot capabilities. The Army is developing the H-60V helicopters by upgrading the H-60L analog cockpit to a digital cockpit. The H-60V cockpits are expected to be visually identical to the H-60M cockpits and allow an H-60M pilot to fly an H-60V helicopter with limited additional training.

New equipment training provides H-60 pilots with information about the helicopter's use and support requirements. Airframe condition evaluations are annual reviews of the structural parts of the H-60 helicopter. Army policy requires all H-60 helicopters to be evaluated annually for structural defects, unless valid exemptions exist.

Findings

The Army did not provide adequate funding and training for H-60 pilots on the new equipment. This occurred because Army officials did not agree which Army organization was responsible for funding and conducting H-60 new equipment training. The Army will need \$152.9 million more than it has budgeted to provide new equipment training for a total of 1,390 H-60 pilots from FY 2018 through FY 2035. If no action is taken, the Guard will have a shortage of 160 trained H-60 pilots by FY 2026.

Additionally, U.S. Army Aviation and Missile Command officials did not effectively manage airframe condition evaluations for the H-60 fleet. During the annual evaluation period from March 1, 2016, through February 28, 2017, the Army did not conduct an airframe condition evaluation, as required by Army regulation and policy, for 460 of 2,098 H-60 helicopters. This occurred because U.S. Army Aviation and Missile Command officials did not provide adequate oversight of the H-60 airframe condition evaluations. Specifically, U.S. Army Aviation and Missile Command officials did not require an evaluation for all H-60 helicopters or verify that all exemptions were valid, coordinate with unit commanders to ensure all H-60 helicopters were available for evaluation, and require evaluations of H-60 helicopters that were less than 3 years old. Evaluators identified safety problems with some H-60 helicopters that required the unit commander to ground (restrict flying) those helicopters. However, the unit commander did not always allow evaluators to finish the evaluation of additional helicopters because he did not want to ground more helicopters if additional safety problems were identified. As a result, Army pilots and crew could be flying H-60 helicopters with unidentified structural defects, which could impact the life and safety of the helicopter and its crew. Furthermore, Army officials may select the wrong helicopters for maintenance, modernization, or retirement.



Results in Brief

Audit of the Training and Airframe Evaluations for the H-60 Black Hawk Helicopter

Recommendations

We recommend that the Vice Chief of Staff, Army, provide training capacity for new equipment training to all pilots on H-60M and H-60V helicopters. In addition, we recommend that the Assistant Secretary of the Army (Acquisition, Logistics, and Technology) require the Project Management Utility Helicopters to fund H-60M and H-60V new equipment training until all new equipment has been fielded. We also recommend that the U.S. Army Aviation and Missile Command:

- determine which helicopters did not receive an evaluation during an evaluation period and ensure that those helicopters receive evaluations during the next evaluation period;
- coordinate with U.S. Army Forces Command to communicate to all H-60 unit commanders that they are required to comply with applicable airframe condition evaluation guidance;
- require the airframe condition evaluation teams to document a unit commander's refusal to make a helicopter available for evaluation and report that refusal to the Commander, U.S. Army Aviation and Missile Command; and
- coordinate with the U.S. Army Aviation and Missile Research, Development, and Engineering Center to determine whether helicopters that are less than three years old should undergo airframe condition evaluation and update applicable regulations and publications as necessary.

Furthermore, we recommend that the Project Management Utility Helicopters designate a H-60M and H-60V New Equipment Training Manager and evaluate the impact of funding the new equipment training has on the H-60M and H-60V programs' costs and update program documentation as needed.

Management Comments and Our Response

The Vice Chief of Staff, Army; the Commander, U.S. Army Aviation and Missile Command; and the Project Manager Utility Helicopters provided comments in response to a draft of this report.

The Vice Chief of Staff, Army, agreed with our recommendation to provide future training capacity for new equipment training to all pilots on H-60M and H-60V helicopters. The Vice Chief of Staff stated that the Army will ensure that future reviews address the total force needs. The Vice Chief of Staff also stated that the Army will provide additional resources for H-60 training if institutional training cannot accommodate future training needs. Therefore, the recommendation is resolved but remains open. We will close the recommendation once we verify that the Vice Chief of Staff has ensured that all U.S. Army H-60M and H-60V pilots will receive initial training.

The Commander, U.S. Army Aviation and Missile Command, agreed with our recommendations to provide oversight and ensure annual H-60 airframe condition evaluations are conducted as required. Therefore, the recommendations are resolved but remains open. We will close these recommendations once we verify that the U.S. Army Aviation and Missile Command has:

- developed an annual evaluation schedule that encompasses all helicopters and communicated it to H-60 unit commanders:
- · ensured that helicopters not evaluated will be given priority for evaluation in the next evaluation period;
- demonstrated that evaluators have been instructed on how to document why a helicopter is unavailable for evaluation, including a unit



Results in Brief

Audit of the Training and Airframe Evaluations for the H-60 Black Hawk Helicopter

Management Comments (cont'd)

commander's refusal to make a helicopter available for evaluation, and report that refusal to the Commander, U.S. Army Aviation and Missile Command; and

completed its review of the required evaluation interval and make changes to applicable regulations and publications as necessary.

The Project Manager Utility Helicopters agreed with our recommendations to designate a H-60M and H-60V New Equipment Training Manager, and to evaluate the impact of funding the new equipment training on the H-60M and H-60V programs' costs and update program documentation as needed. The Project Manager designated H-60M and H-60V New Equipment Training Managers. Therefore, the recommendation is closed. The Project Manager also agreed to evaluate the impact of funding the new equipment training has on the H-60M and H-60V programs' costs and update program documentation as needed. Therefore, the recommendation is resolved but remains open. We will close this recommendation once we verify that the Project Manager Utility Helicopters has completed the evaluation and updated the program documentation.

The Assistant Secretary of the Army (Acquisition, Logistics, and Technology) did not respond to our recommendation to require the Project Management Utility Helicopters to fund H-60M and H-60V new equipment training until all new equipment has been fielded. Therefore, the recommendation is unresolved and remains open. We request that the Assistant Secretary of the Army (Acquisition, Logistics, and Technology) provide comments on the final report.

Please see the Recommendations Table on the next page for the status of the recommendations.

Recommendations Table

Management	Recommendations Unresolved	Recommendations Resolved	Recommendations Closed
Vice Chief of Staff, Army	None	A.1	None
Assistant Secretary of the Army (Acquisition, Logistics, and Technology)	A.2	None	None
Commander, U.S. Army Aviation and Missile Command	None	B.1.a, B.1.b, B.1.c, B.1.d, B.1.e	None
Project Manager Utility Helicopters	None	A.3.b	A.3.a

Please provide Management Comments by July 27, 2017.

Note: The following categories are used to describe agency management's comments to individual recommendations.

- Unresolved Management has not agreed to implement the recommendation or has not proposed actions that will address the recommendation.
- Resolved Management agreed to implement the recommendation or has proposed actions that will address the underlying finding that generated the recommendation.
- Closed OIG verified that the agreed upon corrective actions were implemented



INSPECTOR GENERAL DEPARTMENT OF DEFENSE

4800 MARK CENTER DRIVE ALEXANDRIA. VIRGINIA 22350-1500

June 27, 2017

MEMORANDUM FOR AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Audit of the Training and Airframe Evaluations for the H-60 Black Hawk Helicopter (Report No. DODIG-2017-096)

We are providing this report for review and comment. The U.S. Army did not effectively manage its modernization of the H-60 Black Hawk helicopter fleet. Specifically, the U.S. Army did not provide adequate funding and training for H-60 pilot new equipment. Additionally, the U.S. Army did not conduct required airframe condition evaluations on 460 H-60 helicopters. We conducted this audit in accordance with generally accepted government auditing standards.

We considered comments on a draft of this report. DoD Instruction 7650.03 requires that recommendations be resolved promptly. Comments from the Vice Chief of Staff, Army, the Commander, U.S. Army Aviation and Missile Command, and the Project Manager Utility Helicopters addressed all specifics of the recommendations and conformed to the requirements of DoD Instruction 7650.03; therefore, we do not require additional comments. The Assistant Secretary of the Army (Acquisition, Logistics and Technology) did not provide comments to the draft report. Therefore, we request comments to the final report on Recommendation A.2 by July 27, 2017.

Please send a PDF file containing your comments to audclev@dodig.mil. Copies of your comments must have the actual signature of the authorizing official for your organization. We cannot accept the /Signed/ symbol in place of the actual signature. If you arrange to send classified comments electronically, you must send them over the SECRET Internet Protocol Router Network (SIPRNET).

We appreciate the courtesies extended to the staff. Please direct questions to Mr. Kenneth VanHove at (216) 535-3777 (DSN 499-9946).

Principal Assistant Inspector General for Audit

Contents

Introduction	
Objective	1
Background	1
Review of Internal Controls	4
Finding A. New Equipment Training Needed for	
H-60 Pilots	5
Resources Needed to Train H-60 Pilots	5
No Agreement on Funding and Conducting H-60 Training	6
Training Shortfall Impacts H-60 Mission Readiness and Other Funding	8
Management Comments on the Finding and Our Response	8
Recommendations, Management Comments, and Our Response	10
Finding B. Oversight of Annual Airframe Condition	
Evaluations Needed	12
Airframe Condition Evaluations Not Conducted as Required	12
AMCOM Did Not Provide Adequate Oversight of Evaluations	13
H-60 Evaluations Provide Safety Benefits	15
Recommendations, Management Comments, and Our Response	16
Appendix	
Scope and Methodology	19
Use of Computer-Processed Data	20
Prior Coverage	20
Management Comments	
Office of the Vice Chief of Staff for the Army	22
Headquarters, U.S. Army Material Command	24
U.S. Army Aviation and Missile Command	25
Program Executive Office, Aviation, Utility Helicopters Project Office	29
Acronyms and Abbreviations	31

Introduction

Objective

We determined whether the U.S. Army (Army) was effectively managing its modernization of the H-60 Black Hawk (H-60) helicopter fleet. Specifically, we reviewed the Army's H-60 new equipment training strategy and airframe condition evaluations. See the Appendix for a discussion of the scope and methodology and prior audit coverage related to the audit objective.

Background

The H-60 is a twin-engine, dual-pilot helicopter. The primary missions of the H-60 are troop and supply support and evacuating wounded personnel. As of March 2017, the Army's H-60 fleet consisted of three models called the H-60A, H-60L, and H-60M helicopters. The Army plans to modernize its fleet by upgrading some of the H-60A and H-60L helicopters to the H-60V model and procure additional H-60M helicopters. According to Army officials, the upgraded fleet will have a total of 2,135 H-60s consisting of 1,375 H-60M helicopters and 760 H-60V helicopters by FY 2035. The helicopter is used by all three Army Components: active duty, U.S. Army National Guard (Guard), and U.S. Army Reserve (Reserve). Table 1 details the number of planned H-60M and H-60V helicopters by Army Component.

Table 1. Number of H-60 Helicopters Planned by FY 2035 Listed by Army Component

Army Component	Number of Planned H-60M and H-60V Helicopters*
Active Duty	1,024
Guard	967
Reserve	144
Total	2,135

^{*} Current as of March 2017.

Source: Project Manager Utility Helicopters

H-60M Procurement

The Army began to procure H-60M helicopters in 2005 and plans to procure a total of 1,375 helicopters through FY 2028. The H-60M helicopter is the newest helicopter in the H-60 fleet and has a digital cockpit and autopilot capabilities.

H-60V Upgrade

The Army is retiring some H-60A helicopters and converting the others to H-60L helicopters. The H-60L conversion will replace outdated components and add 10 years of service life to the helicopter. The Army is developing the H-60V helicopters by upgrading the H-60L analog cockpit to a digital cockpit. According to an Army Deputy Chief of Staff, Programming (G-8) official, upgrading the H-60L helicopters is an affordable alternative to procuring new H-60M helicopters because the Army is reusing the H-60L airframes and upgrading the older cockpit. The H-60V cockpits are expected to be visually identical to the H-60M cockpits and allow a H-60M pilot to fly an H-60V helicopter with limited additional training. Figure 1 shows an H-60V helicopter.



Program Executive Office Aviation and Project Manager Utility Helicopters

Program Executive Office Aviation provides oversight and support to the Project Manager Utility Helicopters (program office) for the H-60M and H-60V programs. The program office is responsible for the H-60 fleet life cycle management, including program schedules; technical requirements; and planning, programming, budgeting, and execution. In addition, the program office is required to provide training support and funding for new equipment training for the helicopters. The program office is also required to assign a new equipment training manager

that develops a plan for how new equipment training will be conducted before the H-60M or H-60V helicopters are provided to an Army unit. New equipment training provides the pilots and crew with information about the H-60 helicopter's use and support requirements.

U.S. Army Training and Doctrine Command

The U.S. Army Training and Doctrine Command (TRADOC) develops and trains soldiers including H-60 helicopter training needed after new equipment training is complete. The training ensures continued expertise on the operation and maintenance of the H-60 helicopter after being fielded to the units. TRADOC oversees 32 Army schools organized under 8 Centers of Excellence. One of the H-60 helicopter training locations is at the U.S. Army Aviation Center of Excellence at Fort Rucker. Alabama.

U.S. Army Aviation and Missile Command

The U.S. Army Aviation and Missile Command (AMCOM) provides engineering, logistics, and contract support for aviation equipment, including the H-60 helicopter. AMCOM oversees the airframe condition evaluations that review the structural parts of a helicopter to determine which helicopters will undergo depot maintenance. The results of these annual evaluations are one of multiple factors in determining which helicopters should be modernized or retired, including those that are sold or destroyed.

Army Deputy Chiefs of Staff

The Army Deputy Chiefs of Staff, Operations (G-3/5/7) and Programming (G-8), coordinate Army modernization activities, including H-60 modernization efforts. Specifically, the Army Deputy Chiefs of Staff, G-3/5/7 and G-8, develop modernization plans including the distribution of the fielding plan and monitoring the impact of modernization on the Army. In addition, the Army Deputy Chief of Staff, G-3/5/7, develops training policy while the Army Deputy Chief of Staff, G-8, develops Army modernization guidance and allocates resources and funds.

Guard and Reserve

The Guard and Reserve comprise the U.S. Army Reserve Components. The Guard has both state and Federal roles and missions, such as combat operations, security operations, and disaster relief. The Reserve is the Army's Federal Reserve force that performs missions both domestic and abroad. The Reserve Components have more than half of the H-60 helicopters in the Army's fleet to fulfill missions and will receive H-60M and H-60V helicopters through FY 2035.

Review of Internal Controls

DoD Instruction 5010.40 requires DoD organizations to implement a comprehensive system of internal controls that provides reasonable assurance that programs are operating as intended and to evaluate the effectiveness of the controls.1 We identified internal control weaknesses related to H-60 new equipment training and airframe condition evaluations. Specifically, Army officials have not agreed which Army organization was responsible for funding and conducting H-60 new equipment training. In addition, Army officials did not provide adequate oversight of H-60 airframe condition evaluations. We will provide a copy of this report to the senior official responsible for internal controls in the Department of the Army.

 $^{^{\,1}}$ DoD Instruction 5010.40, "Managers' Internal Control Program Procedures," May 30, 2013.

Finding A

New Equipment Training Needed for H-60 Pilots

The Army did not provide adequate funding and training for H-60 pilots on the new equipment.² This occurred because Army officials did not agree on which Army organization was responsible for funding and conducting H-60 training. The Army will need \$152.9 million more than it has budgeted to provide training for a total of 1,390 H-60 pilots from FY 2018 through FY 2035. If no action is taken, the Guard will have a shortage of 160 trained H-60 pilots by FY 2026.³

Resources Needed to Train H-60 Pilots

The Army did not provide adequate funding and training for H-60 pilots on the new equipment. The training, which is funded by the program office, is the initial training on the operation and maintenance of new and improved equipment. According to Army Regulation 350-1, the program office is responsible for assigning a training manager who provides training to pilots before receiving new helicopters.4 The Army considers the H-60M and H-60V helicopters as new equipment; therefore, all H-60M and H-60V pilots should receive training. As of November 2016, the Army's training strategy required all H-60M and H-60V pilots to receive H-60M training before receiving the helicopters. In addition, the Army's training strategy required that H-60V pilots receive additional unit training on the differences between the H-60M and H-60V helicopters.

The Army will fund and provide training to 1,733 H-60M pilots from FY 2010 through FY 2017, which includes all active duty Army H-60M pilots. Additionally, the Army plans to fund and provide H-60M and H-60V training to 200 H-60V pilots from FY 2020 through FY 2023. According to program office officials, the program office does not plan to provide H-60M training or fund training after these pilots are trained. However, Guard and Reserve officials identified 1,390 H-60M and H-60V pilots that still required training from FY 2018 through FY 2035 because the Guard and Reserve will continue to receive H-60M and H-60V helicopters until FY 2026 and FY 2035, respectively. Guard officials stated that they can only conduct training for a portion of these pilots and there will be a shortage of at least

 $^{^{2}}$ For the purposes of this report, we will refer to "new equipment training" as training.

³ Reserve officials do not know if they will have a shortage of trained pilots because they have not planned for training that far into the future. In addition, according to H-60 program office and Army Deputy Chief of Staff, G-8, officials, all active duty Army H-60M pilots will be trained by the end of FY 2017.

⁴ Army Regulation 350-1, "Army Training and Leader Development," August 19, 2014.

160 trained Guard pilots and the funding needed to train them. Reserve officials do not know if they will have a shortage of trained pilots because they have not planned for training that far into the future.

No Agreement on Funding and Conducting H-60 Training

Army officials did not agree on which Army organization was responsible for funding and conducting H-60 training. Specifically, officials from the Guard, Reserve, and Army Deputy Chief of Staff, G-3/5/7, did not agree with H-60 program and Army Deputy Chief of Staff, G-8, officials on who should fund training after FY 2017. Additionally, officials from the program office, TRADOC, and the Guard did not agree on who would conduct training after FY 2017.

Agreement on How to Fund Training Needed

Army officials did not agree on how to fund the H-60 training. Army Regulations 350-1 and 700-142 require the program office to fund training, which includes paying for all costs of fielding material until deployment to all units is completed.⁵ However, program and Army Deputy Chief of Staff, G-8, officials did not plan to fully fund training for all H-60 pilots. According to program and Army Deputy Chief of Staff, G-8, officials, the Guard and Reserve should provide the funding for the remaining 1,390 pilots who will be trained after FY 2017. In addition, a program official stated that the program office could not afford to pay for training for a long period of time, although the program office funded training for all active duty Army H-60M pilots for an 8-year period. Army Regulations 350-1 and 700-142 require the program office to pay for training for all Army pilots. The Assistant Secretary of the Army (Acquisition, Technology, Logistics) should require the program office to fund H-60M and H-60V training until all units are trained, as required by Army Regulations 350-1 and 700-142. The program office should also evaluate the impact of funding training on the cost for H-60M and H-60V programs and update program documentation as needed.

In addition to disagreeing on which Army organization should fund training, program officials did not designate a training manager to determine the amount of funding needed for H-60M and H-60V training. Army Regulation 350-1 requires the training manager to coordinate funding requirements with the program manager, provide training throughout the life cycle of the equipment, and consider the locations

Program officials did not designate a training manager to determine the amount of funding needed for H-60M and H-60V training.

⁵ Army Regulation 700-142, "Type Classification, Materiel Release, Fielding, and Transfer," June 2, 2015, Section 5-1, "Purpose," and Army Regulation 350-1, "Army Training and Leader Development," August 19, 2014, Section 6-18, "Funding for New Equipment Training."

and increased costs of providing training to the Guard and Reserve. If a training manager had been designated, the Army should have known how much funding it needed to train all Army pilots and could have budgeted accordingly. Program office officials should designate a training manager for the H-60M and H-60V to develop training plans and all budgetary requirements.

Agreement on Which Organization Should Conduct **Training Needed**

Army officials did not agree on which Army organization should conduct the H-60 training. According to program officials, TRADOC and the Guard are responsible for providing training for the remaining 1,390 pilots. According to TRADOC and Guard officials, the program office is responsible for providing the training, and TRADOC does not have the capacity to provide the training for all the remaining H-60 pilots. Additionally, Army Regulation 350-1, Section 6-9, "Training Developer Determines Requirements for New Equipment Training and Doctrine and Tactics Training," states that the program office is responsible for providing the training. Guard officials identified an H-60 pilot shortage through FY 2026 because of the disagreement on who should conduct the training. Table 2 details the 160 Guard pilots⁶ that may not receive H-60M training from TRADOC or the Guard through FY 2026.

Table 2. Additional Training	Capacity Needed to Provide	Training for H-60 Pilots
------------------------------	----------------------------	--------------------------

Fiscal Year	Pilots Requiring Training	Pilot Training Capacity	Pilot Training Shortage*
2019	38	50	-12
2020	153	100	53
2021	160	100	60
2022	42	100	-58
2023	83	100	-17
2024	94	50	44
2025	93	50	43
2026	97	50	47
TOTAL	760	600	160

^{*} There is no Guard pilot shortage in FY 2019, FY 2022, and FY 2023 because training capacity exceeds pilot training requirements. According to Guard officials, the Guard plans to use that excess training capacity in those fiscal years to address training shortages in the other fiscal years. Therefore, we subtracted the excess training capacity for those fiscal years.

The Reserve was not scheduled to receive H-60M helicopters until FY 2022 and H-60V helicopters until FY 2032. Reserve officials do not know if they will have a shortage of trained pilots because they have not planned for training that far into the future.

Additionally, the Guard will receive 310 H-60V helicopters from FY 2027 through FY 2035.7 However, TRADOC has not finalized its training plans for that time period, so the shortfall could be even greater than 160 pilots through FY 2035.

Officials from the Army Deputy Chiefs of Staff, G-3/5/7 and G-8, acknowledged that there are future H-60 training shortfalls. However, as of January 2017, the Army had not developed a plan to address the training shortfalls. The training shortfalls could be addressed by expanding training capacity at TRADOC's training schools, extending the program office's H-60M training beyond FY 2017, extending the program office's H-60V training, or providing training capabilities at Guard facilities. Since the H-60 helicopters are used by all Army Components, coordination is critical to ensure there is an effective H-60 training program. The Vice Chief of Staff, Army, should provide future training capacity to all H-60M and H-60V pilots.

Training Shortfall Impacts H-60 Mission Readiness and Other Funding

The Army will need \$110,000 per pilot⁸ to provide training for 1,390 H-60 pilots, totaling \$152.9 million from FY 2018 through FY 2035. Without this funding in the program budget, the Guard and Reserve may have to divert funds from other critical programs to pay for H-60 training. For example, the Guard already diverted \$3.4 million from other Guard programs to pay for H-60M training. The

Army needs to identify the total resources necessary to support

The Guard will have a shortage of 160 trained H-60 pilots by FY 2026.

H-60 training needs for all Army Components. If no action is taken, the Guard will have a shortage of 160 trained H-60 pilots by FY 2026. This shortage will impact H-60 unit readiness and the Guard's ability to meet future Federal and state missions. The Army needs to determine which organization will fund and conduct training before new H-60 helicopters are fielded to units without properly trained pilots.

Management Comments on the Finding and Our Response

The Vice Chief of Staff, Army, provided the following comments on the finding. For the full text of the Vice Chief of Staff's comments, see the Management Comments section of the report.

As of February 2017, the Guard expected to receive 310 H-60V helicopters from FY 2027 through FY 2035.

 $^{^{8}}$ The Guard provided an average training cost of \$110,000 per H-60 pilot.

Vice Chief of Staff, Army, Comments on New Equipment Training

The Vice Chief of Staff, Army, did not agree with the finding, stating that the Army has and continues to provide adequate H-60 training through a combination of new equipment training and institutional training of pilots. The Vice Chief of Staff stated that current Army force structure plans address the needs of the total force and are refined through quarterly aviation meetings where all Army components (active duty, Reserve, and Guard) participate. The Vice Chief of Staff also explained that current Army training plans forecast out to FY 2022, and it is not possible to project with certainty that there will be insufficient training spaces available to meet Guard pilot training requirements in the years beyond. The Vice Chief of Staff also disagreed that an additional \$152.9 million is required in the budget for the training of 1,390 H-60 pilot training seats.

Our Response

We do not agree that the Army has provided adequate resources for all current and future H-60 pilot training requirements. As stated in the report, the Guard had to divert \$3.4 million from other Guard programs to pay for recent H-60M training needs. In addition, officials from the Army Deputy Chiefs of Staff, G-3/5/7 and G-8, acknowledged that future H-60 training shortfalls existed and no plans were yet in place to address the shortfalls. The Army's plans did not include training to accommodate pilots receiving H-60M helicopters after FY 2017 and H-60V helicopters after FY 2023 despite plans to field helicopters through FY 2026 and FY 2035, respectively. Furthermore, TRADOC and the Guard do not have the capacity to train the remaining H-60 pilots if initial training by the program office is not provided.

In addition, we do not agree that training requirements cannot be predicted beyond FY 2022. DoD Instruction 5000.02 requires DoD Components to complete a cost estimate for the life cycle of the program, which is required to be continuously updated. Training costs would be included as part of the life cycle costs included in this estimate. The Guard was able to estimate training requirements of 367 pilots from FY 2023 through FY 2026 given the Army's fielding plan of 186 helicopters. Based on the information available, the Army needs to identify the funding required, as well as how the pilots will be trained, in order to ensure there is no shortage of trained pilots prior to fielding H-60 helicopters.

Recommendations, Management Comments, and Our Response

Recommendation A.1

We recommend that the Vice Chief of Staff, Army, provide future training capacity for new equipment training to all U.S. Army H-60M and H-60V pilots.

Vice Chief of Staff, Army, Comments

The Vice Chief of Staff, Army, agreed with the recommendation, stating that the Army will ensure that future force structure reviews address the total force needs. The Vice Chief of Staff also stated that when institutional training cannot accommodate training needs that the Army will provide the additional H-60 training required to meet mission requirements.

Our Response

Comments from the Vice Chief of Staff addressed all specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once we verify that the Vice Chief of Staff has updated force structure plans to ensure that all U.S. Army H-60M and H-60V pilots will receive initial training.

Recommendation A.2

We recommend that the Assistant Secretary of the Army (Acquisition, Logistics, and Technology) require Project Manager Utility Helicopters to fund H-60M and H-60V New Equipment Training until all new equipment has been fielded, as required by Army Regulations 350-1 and 700-142.

Management Comments Required

The Assistant Secretary of the Army (Acquisition, Logistics, and Technology) did not respond to the recommendation in the report. Therefore, the recommendation is unresolved and remains open. We request that the Assistant Secretary of the Army (Acquisition, Logistics, and Technology) provide comments on the final report.

Recommendation A.3

We recommend that the Project Manager Utility Helicopters:

Designate a H-60M and H-60V New Equipment Training Manager, as required by Army Regulation 350-1, who will be responsible for developing H-60M and H-60V New Equipment Training Plans and all budgetary requirements.

Project Manager Utility Helicopters Comments

The Project Manager Utility Helicopters agreed with the recommendation, stating that the H-60M and the H-60V Product Managers have been designated as the H-60M and H-60V New Equipment Training Managers, respectively. The Project Manager explained that these individuals will execute all training as directed by the Program Executive Office for Aviation and Headquarters Department of the Army.

Our Response

Comments from the Project Manager addressed all specifics of the recommendation. Since the Project Manager Utility Helicopters has designated the H-60M and H-60V New Equipment Training Managers, the recommendation is closed.

b. Evaluate the impact of funding the H-60M and H-60V New Equipment Training has on the H-60M and H-60V programs' costs and update program documentation as needed.

Project Manager Utility Helicopters Comments

The Project Manager Utility Helicopters agreed with the recommendation, stating that his office will evaluate and update all H-60 program documentation if directed to continue to fund H-60 training.

Our Response

Comments from the Project Manager addressed all specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once we verify that the Project Manager Utility Helicopters has evaluated the impact of funding H-60 training and has updated program and budget documentation accordingly.

Finding B

Oversight of Annual Airframe Condition Evaluations Needed

AMCOM officials did not effectively manage airframe condition evaluations for the H-60 fleet.9 During the annual evaluation period from March 1, 2016, through February 28, 2017, the Army did not conduct an evaluation, as required by Army Regulation 750-1 and policy, ¹⁰ for 460 of 2,098 H-60 helicopters. This occurred because AMCOM officials did not provide adequate oversight of the H-60 evaluations. Specifically, AMCOM officials did not:

- require an evaluation for all H-60 helicopters or verify that all exemptions were valid.
- coordinate with unit commanders to ensure all H-60 helicopters were available for evaluation, and
- require evaluations of H-60 helicopters that were less than 3 years old.

Evaluators identified safety problems with some H-60 helicopters that required the unit commander to ground (restrict flying) those helicopters. However, the unit commander did not always allow evaluators to finish the evaluation of additional helicopters because he did not want to ground more helicopters if additional safety problems were identified. As a result, Army pilots and crew could be flying H-60 helicopters with unidentified structural defects, which could impact the life and safety of the helicopter and its crew. Furthermore, Army officials may select the wrong helicopters for maintenance, modernization, or retirement.

Airframe Condition Evaluations Not Conducted as Required

AMCOM officials did not conduct an evaluation, as required by Army Regulation 750-1 and policy, for 460 of 2,098 H-60 helicopters during the annual evaluation period from March 1, 2016, through February 28, 2017. AMCOM contracts personnel to conduct the evaluations in accordance with policy which requires all H-60 helicopters to be evaluated annually for structural defects, unless valid exemptions exist. The evaluations are administered by AMCOM in coordination

⁹ For the purposes of this report, we will refer to the "airframe condition evaluation" as evaluation.

¹⁰ Department of the Army Technical Bulletin 1-1520-237-50-6, "Procedures for Execution of the Airframe Condition Evaluation (ACE) on H-60 Aircraft," July 22, 2014.

with the U.S. Army Aviation and Missile Research, Development, and Engineering Center. The U.S. Army Aviation and Missile Research, Development, and Engineering Center identified these valid exemptions:

- accident, storm, crash, or battle damaged;
- undergoing depot maintenance;
- deployed to a combat or hazardous duty zone, remote training site, or on a ship at sea; or
- exempted by Headquarters Department of the Army authority.

Evaluations provide a method for the Army to identify aircraft that require depot-level maintenance. The evaluators review the aircraft's structure and record any defects, including safety problems. According to evaluation officials, they identified structural defects that may not have been found in standard safety or maintenance inspections. Table 3 shows the number of helicopters that were evaluated, exempted from evaluation, and not exempted or evaluated from March 1, 2016, through February 28, 2017.

Table 3. H-60 Helicopters That Were Not Evaluated From March 1, 2016, through February 28, 2017

Number of Helicopters	Helicopters Evaluated	Helicopters Exempted	Helicopters Not Exempted or Evaluated
2,098	1,478	160	460

AMCOM Did Not Provide Adequate Oversight of Evaluations

AMCOM officials did not provide adequate oversight of the H-60 evaluations. Specifically, AMCOM officials did not require an evaluation for all H-60 helicopters or verify that all exemptions were valid. In addition, AMCOM officials did not ensure that unit commanders made all H-60 helicopters available for evaluation, as required by Army Regulation 750-1 and policy. Finally, AMCOM officials did not require evaluations of H-60 helicopters that were less than 3 years old.

AMCOM Did Not Adequately Review Evaluation Results

AMCOM officials did not require an evaluation for all H-60 helicopters or verify that all exemptions were valid. Army policy requires AMCOM to maintain records of all helicopters exempted from the evaluation. However, Army policy does not require AMCOM to confirm that those helicopters had valid exemptions or identify which helicopters did not receive an evaluation. AMCOM officials collected and

maintained the data from the evaluators and then provided the information to the program office and U.S. Army Aviation and Missile Research, Development, and Engineering Center officials on a periodic basis to select appropriate helicopters for maintenance, modernization, or retirement. AMCOM officials did not compare the H-60 fleet inventory list to the evaluation results to determine which helicopters were not evaluated. For example, we compared the H-60 fleet inventory list to the evaluation results and identified that 109 helicopters did not receive an evaluation during the last 3 years. AMCOM officials could have prevented the helicopters from not being evaluated for multiple years if they had compared the fleet inventory list to the evaluation results. AMCOM should compare the H-60 fleet inventory list to the evaluation data on an annual basis and determine which helicopters did not receive an evaluation.

Unit Commanders Did Not Make Helicopters Available for Evaluation

AMCOM officials did not coordinate with unit commanders to

ensure that 60 H-60 helicopters were available for evaluation.

Unit commanders either declined to support the evaluations or reported that helicopters were away from station.

In these 60 instances, unit commanders either declined to support the evaluations or reported that helicopters were away from station.¹¹ Neither of these reasons were valid exemptions according to Army policy. In addition, evaluators did not have authority to require unit commanders to follow the policy and make the helicopter available for evaluation. For example, according to a lead evaluator, evaluators identified safety problems with some

H-60 helicopters that required the unit commander to ground (restrict flying) those helicopters. However, the unit commander did not allow evaluators to finish the evaluation of additional helicopters because he did not want to ground more helicopters if additional safety problems were identified. AMCOM should coordinate with the U.S. Army Forces Command to communicate to all H-60 unit commanders that they are required to comply with applicable airframe condition evaluation guidance. AMCOM, in coordination with the unit commander, should schedule an evaluation for any H-60 helicopters that do not receive an evaluation for any reason other than a valid exemption. Finally, AMCOM should require the evaluator to document a unit commander's refusal to provide requested helicopters for evaluation and report that refusal to the Commander, AMCOM.

¹¹ According to an evaluation official, "away from station" means that the unit commander told the evaluators that a helicopter was not at the unit and was not available.

Evaluations Not Required for Helicopters Less Than 3 Years Old

AMCOM officials did not require evaluations for 169 H-60 helicopters that were less than 3 years old. Army Regulation 750-1 and policy do not provide an exemption to evaluate based on a helicopter's age and AMCOM officials could not identify why these helicopters should not receive an evaluation. Since the U.S. Army Aviation and Missile Research, Development, and Engineering Center identifies evaluation exemptions, AMCOM should coordinate with the U.S. Army Aviation and Missile Research, Development, and Engineering Center to determine whether H-60 helicopters that are less than 3 years old should undergo an evaluation. If an evaluation should not be required, then AMCOM should update applicable guidance. If an evaluation is needed, AMCOM should require an evaluation on all H-60 helicopters, regardless of age, unless a valid exemption applies.

H-60 Evaluations Provide Safety Benefits

Army pilots and crew could be flying helicopters with unidentified structural defects that could impact the life and safety of the helicopter and its crew. Army policy requires evaluators to report all safety problems to the unit commander for corrective action before the helicopters are flown again. This is

a critical safety measure and an important benefit of the evaluation. For example, according to an AMCOM official and a lead evaluator, an H-60 unit commander in Korea grounded 16 helicopters based on safety problems identified during an evaluation. In addition, H-60 unit maintenance officials stated that evaluations benefitted their units and identified structural defects that the unit might not have otherwise identified. For example, according to a lead evaluator, evaluators found a helicopter

H-60 unit commander in Korea grounded 16 helicopters based on safety problems identified during an evaluation.

An

where the beam that holds the engine and transmission in place was cracked. Finally, as a result of not conducting helicopter evaluations, Army officials may select the wrong helicopters for maintenance, modernization, or retirement since 22 percent of the 2,098 helicopters did not receive an evaluation in the last evaluation period.

Recommendations, Management Comments, and Our Response

Recommendation B.1

We recommend that the Commander, U.S. Army Aviation and Missile Command:

a. Compare the H-60 fleet inventory list to the data provided by the airframe condition evaluations for each evaluation period and determine which H-60 helicopters did not receive an evaluation. Based on the results, initiate appropriate actions to ensure those evaluations are conducted during the March 1 through February 28 evaluation period for the following year.

AMCOM Comments

The Commander, AMCOM, agreed with the recommendation, stating that AMCOM will review the evaluation database and identify all H-60 helicopters not evaluated within the last 18 months. He stated that those helicopters not evaluated will be given priority for evaluation in the new evaluation period pending resource constraints. The Commander's response was endorsed by the Executive Deputy to the Commanding General, U.S. Army Materiel Command.

Our Response

Comments from the Commander addressed all specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once we verify that AMCOM has reviewed the evaluation database and identified the helicopters that will be given the first priority for evaluation in the next evaluation period.

 b. Coordinate with U.S. Army Forces Command to communicate to all H-60 unit commanders that they are required to comply with applicable airframe condition evaluation guidance.

AMCOM Comments

The Commander, AMCOM, agreed with the recommendation, stating that AMCOM will develop an annual evaluation schedule that encompasses all H-60 helicopters, which will be coordinated quarterly with several organizations including U.S. Army Forces Command. The Commander also stated that the evaluation schedule and its regulatory requirement should be communicated to H-60 unit commanders through their chain-of-command. The Commander explained that AMCOM has no direct authority over H-60 unit commanders and that ideally, this requirement should be directed by the Army Deputy Chief of Staff, G-3/5/7. The Commander's response was endorsed by the Executive Deputy to the Commanding General, U.S. Army Materiel Command.

Our Response

Comments from the Commander addressed all specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once AMCOM develops an annual evaluation schedule that encompasses all H-60 helicopters. In addition, AMCOM should demonstrate that it communicated the schedule and its regulatory requirement to H-60 unit commanders through their chain-of-command.

c. Schedule an airframe condition evaluation, in coordination with the H-60 unit commanders, for any H-60 helicopters that do not receive an airframe condition evaluation for any reason other than a valid exemption.

AMCOM Comments

The Commander, AMCOM, agreed with the recommendation, stating that AMCOM will closely manage the evaluation database and identify all H-60 helicopters not evaluated within the evaluation period. The Commander stated that those helicopters will be the priority for evaluation during the next evaluation period. The Commander's response was endorsed by the Executive Deputy to the Commanding General, U.S. Army Materiel Command.

Our Response

Comments from the Commander addressed all specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once we verify that AMCOM has reviewed the evaluation database and identified the helicopters that will be given the first priority for evaluation in the next evaluation period.

d. Require the airframe condition evaluation teams to document a unit commander's refusal to make an H-60 helicopter available for evaluation and report that refusal to the Commander, U.S. Army Aviation and Missile Command.

AMCOM Comments

The Commander, AMCOM, agreed with the recommendation, stating that evaluators will make an appropriate comment when a helicopter is unavailable for evaluation. The Commander stated that a full exception report and comments will be provided to the AMCOM, Commanding General, and Headquarters Department of the Army annually. The Commander's response was endorsed by the Executive Deputy to the Commanding General, U.S. Army Materiel Command.

Our Response

Comments from the Commander addressed all specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once AMCOM can demonstrate that evaluators have been instructed on how to document why a helicopter is unavailable for evaluation, including a unit commander's refusal to make a helicopter available for evaluation. In addition, AMCOM must demonstrate that it has communicated the requirement to provide an annual list of helicopters that were exempted from evaluation or were not made available for evaluation for some other reason to the Commander and Headquarters Department of the Army.

e. Coordinate with the U.S. Army Aviation and Missile Research, Development, and Engineering Center to determine whether H-60 helicopters that are less than three years old should undergo an airframe condition evaluation. If an airframe condition evaluation should not be required, update the applicable guidance. If an evaluation is needed, require airframe condition evaluations on all H-60 helicopters, regardless of age, unless a valid exemption applies.

AMCOM Comments

The Commander, AMCOM, agreed with the recommendation, stating that AMCOM began coordination with the U.S. Army Aviation and Missile Research, Development, and Engineering Center on April 12, 2017, to review and validate the required evaluation interval to determine whether helicopters that are less than 3 years old should be evaluated. Upon completion of the review, the Commander stated that AMCOM will initiate changes to applicable regulations and publications including Army Regulation 750-1 and policy as necessary. The Commander's response was endorsed by the Executive Deputy to the Commanding General, U.S. Army Materiel Command.

Our Response

Comments from the Commander addressed all specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once AMCOM and the U.S. Army Aviation and Missile Research, Development, and Engineering Center complete their review of the required evaluation interval and make changes to applicable regulations and publications as necessary.

Appendix

Scope and Methodology

We conducted this performance audit from September 2016 through April 2017 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

H-60 Training

We reviewed the following regulations and guidance related to training on the H-60 helicopter.

- Army Regulation 350-1, "Army Training and Leader Development," August 19, 2014
- Army Regulation 700-142, "Type Classification, Materiel Release, Fielding, and Transfer," June 2, 2015

We reviewed information to determine how many active duty, Guard, and Reserve pilots had already been trained on modernized H-60 helicopters and how many will need to be trained from FY 2018 through FY 2035 and the estimated cost. We identified that 1,390 Guard and Reserve pilots would need training for these fiscal years. We calculated the estimated cost for training by multiplying the 1,390 pilots that need training by the estimated average cost per pilot. The Guard provided an average training cost of \$110,000 per H-60 pilot.

We interviewed officials from the following organizations to determine the Army's strategy to meet the training needs.

- Army Deputy Chief of Staff, G-3/5/7
- Army Deputy Chief of Staff, G-8
- TRADOC
- H-60 program office
- Guard
- Reserve

We compared the number of pilots that need H-60 training to the program office's training strategy to determine whether the Army adequately planned to provide training or whether there would be a shortage of trained pilots. We subtracted TRADOC's annual training capacity of 50 H-60 pilots for FY 2019 through FY 2026

along with the program office's annual training capacity of 50 H-60 pilots for FY 2020 through FY 2023 from the Guard's annual pilot training requirement for FY 2019 through FY 2026. This identified whether there was a training capacity shortage during each of those fiscal years.

H-60 Evaluations

We reviewed the following regulations and guidance related to evaluations.

- Army Regulation 750-1, "Army Materiel Maintenance Policy," September 12, 2013
- Department of the Army Technical Bulletin 1-1520-237-50-6, "Procedures for Execution of the Airframe Condition Evaluation (ACE) on H-60 Aircraft," July 22, 2014

The H-60 evaluation period begins on March 1 and ends the following February 28. We obtained the lists of H-60 evaluations conducted during the three most recent evaluation periods from March 2014 through February 2017. We compared these lists to the H-60 fleet inventory list to determine which helicopters were not evaluated on an annual basis or were never evaluated during the past three evaluation periods.

We excluded helicopters procured during the most recent evaluation period, March 1, 2016, through February 28, 2017, since the helicopters may not have been fielded and assigned to a unit during the evaluation period. In addition, we excluded helicopters with a valid exemption in the Technical Bulletin as well as helicopters scheduled for depot maintenance.

We interviewed AMCOM and evaluation officials to determine how they conducted and oversaw the evaluations. Finally, we interviewed evaluation officials and obtained information from maintenance officers on the benefits of the evaluations and whether evaluations differ from standard safety and maintenance inspections.

Use of Computer-Processed Data

We did not rely on computer-processed data to support our findings and conclusions.

Prior Coverage

During the last 7 years, the Government Accountability Office (GAO) issued two reports discussing the gaps between training requirements and budgeted resources and the information needed to effectively manage and reduce operating and support costs. Unrestricted GAO reports can be accessed at http://www.gao.gov.

GAO

Report No. GAO-11-625, "Ballistic Missile Defense: Actions Needed to Improve Training Integration and Increase Transparency of Training Resources," July 18, 2011

This report identified that gaps existed between training requirements and budgeted resources for ballistic missile defense systems, and DoD and congressional decision makers did not have a full picture of the resources that would be needed over time and risk training gaps.

Report No. GAO-10-717, "Defense Management: DOD Needs Better Information and Guidance to More Effectively Manage and Reduce Operating and Support Costs of Major Weapon Systems," July 20, 2010

This report identified that the DoD lacked key information needed to effectively manage and reduce operating and support costs for most of the weapons systems reviewed, which included the UH-60L.

Management Comments

Office of the Vice Chief of Staff for the Army



DEPARTMENT OF THE ARMY OFFICE OF THE VICE CHIEF OF STAFF 201 ARMY PENTAGON WASHINGTON, DC 20310-0201

MAY 2 3 2017

MEMORANDUM FOR THE DEPARTMENT OF DEFENSE, OFFICE OF THE INSPECTOR GENERAL, 4800 MARK CENTER DRIVE, ALEXANDRIA, VA 22350-3606

SUBJECT: Response to Department of Defense Office of the Inspector Report No. Department of Defense Inspector General 2016-D000AT-0214.000, Recommendation A.1, dated 11 April 2017, Final Report, "U.S. Army Needs to Improve Training Plans and Airframe Evaluations for the H-60 Black Hawk Helicopter Fleet"

- 1. Reference, Department of Defense Office of the Inspector General (DoDIG) Report No. DoDIG-2016-D000AT-0214.000, dated 11 April 2017, subject: U.S. Army Needs to Improve Training Plans and Airframe Condition Evaluations for the H-60 Black Hawk Helicopter Fleet.
- 2. The Office of the Vice Chief of Staff of the Army has reviewed the report and provides the following response to Finding A and Recommendation A.1.
- a. Finding A: The Army nonconcurs with the DoDIG. The Army has and continues to provide adequate training through a combination of New Equipment Training (NET) and institutional training of pilots (UH-60M and future UH-60V) in line with the previous fielding plans for airframe modernization. The Army's Structure Manning Decision Review (SMDR), by design, addresses the needs of the total force in accordance with mission requirements and is later refined through the Quarterly Aviation Synchronization Meetings (QASMs), with participation from all COMPOs and Army Service Component Commands (ASCCs). Additionally, training of future UH-60V pilots will be simplified due to the similarities it has with the UH-60M aircraft. In short, the Army's plan will allow an aviator qualified in either airframe (UH-60M or UH-60V) to then quickly transition to the other by conducting a brief block of academic instruction followed by a check ride at the unit level. The upcoming SMDR; scheduled for September 2017, forecasts out to FY22; therefore, it is not possible to project with relative certainty that there will be insufficient training spaces available to meet ARNG pilot training requirements in the years beyond. Additionally, the Army disagrees with the finding that an additional \$152.9 million is required in the budget for the training of 1,390 UH-60 pilot training seats. Efficiencies gained through consolidation of both institutional training and unit based differences training to qualify UH-60M/V pilots are currently being assessed. The Army has provided adequate funding for current UH-60 pilot training requirements.

Office of the Vice Chief of Staff for the Army (cont'd)

SUBJECT: Response to Department of Defense Office of the Inspector Report No. Department of Defense Inspector General 2016-D000AT-0214.000, Recommendation A.1, dated 11 April 2017, Final Report, "U.S. Army Needs to Improve Training Plans and Airframe Evaluations for the H-60 Black Hawk Helicopter Fleet

b. Recommendation A.1: The Army concurs with the DoDIG. The Army will ensure the SMDR addresses needs of the total force and when institutional training cannot accommodate and an actual (not forecasted) back log has occurred-the Army will resource additional training required to meet mission requirements.

3. The point of contact for this action is

Headquarters, U.S. Army Material Command



DEPARTMENT OF THE ARMY HEADQUARTERS, U.S. ARMY MATERIEL COMMAND 4400 MARTIN ROAD REDSTONE ARSENAL, AL 35898-5000

AMCIR

2 8 APR 2017

MEMORANDUM FOR Department of Defense Inspector General (DoDIG/), Program Director, Acquisition and Sustainment Management, 4800 Mark Center Drive, Alexandria, VA 22350-1500

SUBJECT: Command Comments on DoDIG Draft Report: U.S. Army Needs to Improve Training Plans and Airframe Condition Evaluations for the H-60 Black Hawk Helicopter Fleet, Project D2016-D000AT-0214.

1. The U.S. Army Materiel Command has reviewed the subject draft report and the response from the U.S. Army Aviaition and Missile Command. U.S. Army Materiel Command endorses the enclosed response.

2. The U.S. Army Materiel Command point of contact is or email:

Encl as

Executive Deputy to the Commanding General

U.S. Army Aviation and Missile Command



DEPARTMENT OF THE ARMY UNITED STATES ARMY AVIATION AND MISSILE COMMAND 5300 MARTIN ROAD REDSTONE ARSENAL AL 36898-5000

AMSAM-IR

2 6 APR 2017

MEMORANDUM FOR Director, Internal Review and Audit Compliance Office, Headquarters, U.S. Army Materiel Command, 4400 Martin Road, Redstone Arsenal, AL

SUBJECT: DODIG Draft Report: U.S. Army Needs to Improve Training Plans and Airframe Condition Evaluations for the H-60 Black Hawk Helicopter Fleet (Project No. D2016-D000AT-0214.000) (AMC Project D1655)

- 1. Reference HQ, AMC Tasker No. A1-OC.2-7102-36978, 3 Mar 17, Internal Tasker #34516, SAB.
- 2. Enclosed are comments from the U.S. Army Aviation and Missile Command (AMCOM). AMCOM concurs with the comments on the recommendations presented in the draft report.

3. The point of contact is

AMSAM-IR, e-mail

Command Comments

Major General, USA Commanding



U.S. Army Aviation and Missile Command (cont'd)

COMMAND COMMENTS DODIG Draft Report U.S. Army Needs to Improve Training Plans and Airframe Condition Evaluations for the H-60 Black Hawk Helicopter Fleet (Project No. D2016-D000AT-0214.000) (AMC D1655)

Objective - To determine whether the U.S. Army is effectively managing its modernization of the H-60 Black Hawk fleet.

Finding B - Oversight of Annual Airframe Condition Evaluations Needed

CONCLUSION:

AMCOM officials did not effectively manage airframe condition evaluations for the H-60 fleet. During the annual evaluation period from March 1, 2016, through February 28, 2017, the Army did not conduct an evaluation, as required by Army Regulation 750-1 and policy, for 460 of 2,098 H-60 helicopters. This occurred because AMCOM officials did not provide adequate oversight of the H-60 evaluations. Specifically, AMCOM officials did not:

- require an evaluation for all H-60 helicopters or verify that all exemptions were valid,
- coordinate with unit commanders to ensure all H-60 helicopters were available for evaluation, and
- require evaluations of H-60 helicopters that were less than 3 years old.

Evaluators identified safety problems with some H-60 helicopters that required the unit commander to ground (restrict flying) those helicopters. However, the unit commander did not always allow evaluators to finish the evaluation of additional helicopters because he did not want to ground more helicopters if additional safety problems were identified. As a result, Army pilots and crew could be flying H-60 helicopters with unidentified structural defects, which could impact the life and safety of the helicopter and its crew. Furthermore, Army officials may select the wrong helicopters for maintenance, modernization, or retirement.

RECOMMENDATIONS AND COMMENTS:

U.S. Army Aviation and Missile Command (cont'd)

Recommendation B

The DODIG recommend that the Commander, U.S. Army Aviation and Missile Command:

B.1.a.

Compare the H-60 fleet inventory list to the data provided by the airframe condition evaluations for each evaluation period and determine which H-60 helicopters did not receive an evaluation. Based on the results, initiate appropriate actions to ensure those evaluations are conducted during the March 1 through February 28 evaluation period for the following year.

Command Comments: Concur. AMCOM will review the ACE database and identify all aircraft not evaluated within the last eighteen months. Pending the constraints of limited depot operations resourcing within FY17, those aircraft not evaluated will be the first priority for execution in the new ACE cycle.

B.1.b.

Coordinate with U.S. Army Forces Command to communicate to all H-60 unit commanders that they are required to comply with applicable airframe condition evaluation guidance.

Command Comments: Concur. AMCOM will develop an annual Airframe Condition Evaluation Schedule that encompasses all aircraft. The schedule will be coordinated with FORSCOM, the Training and Doctrine Command (TRADOC), Army Service Component Commands (ASCC), Direct Report Units (DRU), the Army National Guard Bureau, and the U.S. Army Reserve Command at the Quarterly Aviation Synchronization Meetings (QASM). The ACE schedule and its regulatory requirement should be communicated from Army Commands (ACOMs) down to H-60 unit commanders through their chain-of-command. AMCOM has no direct authority over ACOMs or their subordinate units. Ideally, this requirement would be within a plan that is deconflicted and directed by HQDA-G3/5/7 DAMO-AV.

B.1.c.

Schedule an airframe condition evaluation, in coordination with the H-60 unit commanders, for any H-60 helicopters that do not receive an airframe condition evaluation for any reason other than a valid exemption.

Command Comments: Concur. AMCOM will closely manage the ACE database and identify all aircraft not evaluated within the ACE inspection cycle. Those

U.S. Army Aviation and Missile Command (cont'd)

aircraft will be the priority effort within the next ACE inspection cycle. (see response to B.1.b above)

B.1.d.

Require the airframe condition evaluation teams to document a unit commander's refusal to make an H-60 helicopter available for evaluation and report that refusal to the Commander, U.S. army Aviation and Missile Command.

<u>Command Comments:</u> Concur. ACE inspectors will enter an appropriate comment when an unavailable aircraft is added to the ACE Exception List. A full ACE Exception Report with comments will be provided to the AMCOM Commanding General and HQDA annually.

B.1.e.

Coordinate with the U.S. Army Aviation and Missile Research, Development, and Engineering Center to determine whether H-60 helicopters that are less than three years old should undergo an airframe condition evaluation. If an airframe condition evaluation should not be required, update the applicable guidance. If an evaluation is needed, require airframe condition evaluations on all H-60 helicopters, regardless of age, unless a valid exemption applies.

<u>Command Comments:</u> Concur. AMCOM began coordination with the AMRDEC on 12 April 2017 for a review and validation of the required ACE interval in order to make a determination on whether aircraft that are less than three years old should undergo an ACE. AMCOM is awaiting engineering data that substantiates the three year condition as an exception. Pending engineering data, AMCOM will initiate the appropriate changes to applicable regulations and publications including AR 750-1 and the Technical Bulletin (or as necessary).

Program Executive Office, Aviation, Utility Helicopters Project Office



DEPARTMENT OF THE ARMY PROGRAM EXECUTIVE OFFICE, AVIATION UTILITY HELICOPTERS PROJECT OFFICE 5308 PATTON ROAD REDSTONE ARSENAL AL 35898-5000

SFAE-AV-UH

27 April 2017

MEMORANDUM THRU Program Executive Officer, Aviation, SFAE-AV, 5667 Wood Road, Redstone Arsenal, AL 35898

FOR Department of Defense Office of Inspector General, 1240 East 9th Street, Suite 2621, Cleveland, OH 44199-0705

SUBJECT: DODIG Draft Report: U.S. Army Needs to Improve Training Plans and Airframe Condition Evaluations for the H-60 Black Hawk Helicopter Fleet (Project No. D2016-D000AT-0214.000)

- 1. Below are the proposed Utility Helicopters responses for Recommendations A.3.a and A.3.b as specified in the U.S. Department of Defense Inspector General (DODIG) Draft Report: U.S. Army Needs to Improve Training Plans and Airframe Condition Evaluations for the H-60 Black Hawk Helicopter Fleet (Project No. D2016-D000AT-0214.000).
 - a. Recommendation/UHPO Response A-3. We recommend that the Project Manager Utility Helicopters:
- (1) Recommendation A.3a. Designate a H-60M and H-60V New Equipment Training Manager, as required by Army Regulation 350-1, who will be responsible for developing H-60M and H-60V New Equipment Training (NET) Plans and all budgetary requirements.
- (2) UHPO Response A.3a. Concur. Utility Helicopter Project Office (UHPO) has designated the UH-60M and the UH-60V Product Managers as the NET Manager for their respective organizations. These individuals will execute all First Unit Equipped (FUE) training and any training beyond FUE directed by PEO Aviation and HQDA.
 - b. Recommendation/UH Response A.3b. We recommend that the Project Manager Utility Helicopters:
- (1) Recommendation A.3b. Evaluate the impact of funding the H-60M and H-60V New Equipment Training has on the H-60M and H-60V programs' costs and update program documentation as needed.
- (2) UHPO Response A.3b. Concur. Upon direction to continue NET beyond FUE from the appropriate waiver authority, UHPO will evaluate and update all programmatic documents and Program Objective Memorandums.

Program Executive Office, Aviation, Utility Helicopters Project Office (cont'd)

SFAE-AV-UH SUBJECT: DODIG Draft Report: U.S. Army Needs to Improve Training Plans and Airframe Condition Evaluations for the H-60 Black Hawk Helicopter Fleet (Project No. D2016-D000AT-0214.000) 2. Point of contact for this action is WILLIAM D. JACKSON Project Manager, Utility Helicopters

Acronyms and Abbreviations

AMCOM U.S. Army Aviation and Missile Command

TRADOC U.S. Army Training and Doctrine Command



Whistleblower Protection

U.S. DEPARTMENT OF DEFENSE

The Whistleblower Protection Ombudsman's role is to educate agency employees about prohibitions on retaliation and employees' rights and remedies available for reprisal.

The DoD Hotline Director is the designated ombudsman.

For more information, please visit the Whistleblower webpage at www.dodig.mil/programs/whistleblower.

For more information about DoD OIG reports or activities, please contact us:

Congressional Liaison

congressional@dodig.mil; 703.604.8324

Media Contact

public.affairs@dodig.mil; 703.604.8324

For Report Notifications

www.dodig.mil/pubs/email_update.cfm

Twitter

www.twitter.com/DoD_IG

DoD Hotline

www.dodig.mil/hotline





DEPARTMENT OF DEFENSE | OFFICE OF INSPECTOR GENERAL

4800 Mark Center Drive Alexandria, Virginia 22350-1500 www.dodig.mil Defense Hotline 1.800.424.9098

