



March 2015

DEFENSE ACQUISITIONS

Better Approach Needed to Account for Number, Cost, and Performance of Non- Major Programs

Accessible Version

GAO Highlights

Highlights of [GAO-15-188](#), a report to the Committee on Armed Services, House of Representatives

Why GAO Did This Study

DOD requested \$168 billion in fiscal year 2014 to develop, test, and acquire weapon systems and other products and equipment. About 40 percent of that total is for major defense acquisition programs or ACAT I programs. DOD also invests in other, non-major ACAT II and III programs that are generally less costly at the individual program level. These programs typically have fewer reporting requirements and are overseen at lower organizational levels than ACAT I programs, although they may have annual funding needs that are just as significant.

GAO was asked to examine ACAT II and III programs. This report addresses, among other issues, (1) the extent to which information is available on the number, cost, and performance of ACAT II and III programs and (2) factors that affected the performance of selected ACAT II and III programs. GAO collected program and cost data on current ACAT II and III programs from five DOD components. GAO also selected a non-generalizable sample of 15 programs based on program cost and other criteria and reviewed documentation and interviewed officials about program performance.

What GAO Recommends

GAO recommends that DOD establish guidelines on what constitutes a current ACAT II and III program, take steps to improve data reliability, and determine how to measure cost and schedule performance. DOD partially concurred with the recommendations and described actions it plans to take. However, as discussed in the report, DOD's planned actions may not fully address the issues that GAO identified

View [GAO-15-188](#). For more information, contact Mike Sullivan at 202-512-4841 or sullivanm@gao.gov.

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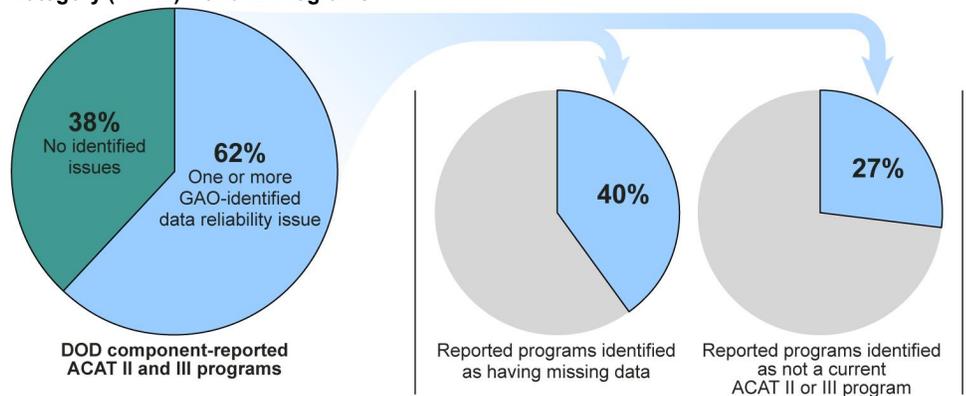
DEFENSE ACQUISITIONS

Better Approach Needed to Account for Number, Cost, and Performance of Non-Major Programs

What GAO Found

The Department of Defense (DOD) could not provide sufficiently reliable data for GAO to determine the number, total cost, or performance of DOD's current acquisition category (ACAT) II and III programs. These non-major programs range from a multibillion dollar aircraft radar modernization program to soldier clothing and protective equipment programs in the tens of millions of dollars. GAO found that the accuracy, completeness, and consistency of DOD's data on these programs were undermined by widespread data entry issues, missing data, and inconsistent identification of current ACAT II and III programs. See the figure below for selected data reliability issues GAO identified.

Two Most Frequent Reliability Issues Identified by GAO in DOD-Reported Data for Acquisition Category (ACAT) II and III Programs



Source: GAO analysis of DOD component data. | GAO-15-188

DOD components are taking steps to improve ACAT II and III data, but these steps do not fully address the problems GAO identified. For example, the components have not established systematic processes to perform data quality tests and assess the results to help identify problems for further review. These types of tests and assessments can be an important step in determining whether data can be used for its intended purposes. Additionally, DOD lacks metrics to assess ACAT II and III cost and schedule performance trends across programs and in some cases was missing baseline cost and schedule data to measure performance. Having timely and reliable cost, schedule, and performance data on smaller acquisition programs is critical to ensuring that DOD and its components can account for how they are spending their money and how well they are spending it. Reliable data are also essential for effective oversight and bringing the right oversight resources to bear when programs approach the cost threshold to become a major defense acquisition program due to cost growth.

Thirteen of the 15 ACAT II or III programs GAO reviewed in-depth had exceeded their original cost or schedule targets. Program officials from ACAT II and III programs GAO reviewed cited changing performance requirements, testing issues, quantity changes, and flaws in original cost estimates, among other factors, as the reasons for cost and schedule growth. GAO has previously found that similar factors affect the performance of major acquisition programs.

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Abbreviations

ACAT	acquisition category
AIS	automated information system
APB	acquisition program baseline
CBDP	Chemical and Biological Defense Program
DAMIR	Defense Acquisition Management Information Retrieval
DCI	data collection instrument
DOD	Department of Defense
LAV	Light Armored Vehicles
MAIS	major automated information system
MDAP	major defense acquisition program
PEO	Program Executive Officer
RDT&E	research, development, test, and evaluation
SOCOM	U.S. Special Operations Command

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Letter

March 2, 2015

The Honorable Mac Thornberry
Chairman
The Honorable Adam Smith
Ranking Member
Committee on Armed Services
House of Representatives

Department of Defense (DOD) weapon system acquisition represents one of the largest areas of the federal government's discretionary spending. In fiscal year 2014, DOD requested \$168 billion to develop, test, and acquire weapon systems and other products and equipment. About 40 percent of that total was for major defense acquisition programs (MDAP) or acquisition category (ACAT) I programs.¹ The remaining approximately 60 percent of the budget request included, among other investments, funding for DOD's non-major ACAT II and III programs.² These programs, which include everything from a multibillion dollar aircraft radar modernization program to soldier clothing and protective equipment programs in the tens of millions of dollars, are generally less costly than MDAPs at the individual program level. Due to the lower level of investment involved on a program-by-program basis, ACAT II and III programs typically have fewer reporting and documentation requirements and are overseen at lower organizational levels than MDAP and major automated information system (MAIS) programs.³ Accordingly, Congress's and DOD's insight into the performance of these programs is more limited.

¹ACAT I programs have an estimated total acquisition cost of more than \$480 million for research, development, test, and evaluation (RDT&E) or more than \$2.79 billion for procurement in fiscal year 2014 constant dollars.

²ACAT II programs have an estimated total cost of more than \$185 million for RDT&E or more than \$835 million for procurement in fiscal year 2014 constant dollars. ACAT III programs are all other programs that do not meet the criteria for ACAT II or above. DOD can also designate programs to higher ACAT levels based on special interest.

³DOD IT investments that fall within one of the following categories are designated as MAIS programs: (1) program costs in any single fiscal year exceed \$40 million, (2) total program acquisition costs exceed \$165 million, or (3) total life-cycle costs exceed \$520 million in fiscal year 2014 constant dollars. MAIS programs are also referred to as ACAT IA programs.

You asked us to examine the number, acquisition cost, and performance of DOD's ACAT II and III programs. This report assesses (1) the extent to which information is available on the number of current ACAT II and III programs, their total estimated acquisition cost, and their cost and schedule performance; (2) the factors affecting the cost and schedule performance of selected ACAT II and III programs; and (3) the number of DOD's current ACAT II and III programs that are likely to become MDAPs.

To determine the extent to which information was available on the number of current ACAT II and III programs and their estimated acquisition costs, we used a data collection instrument to collect data on the number and cost of current ACAT II and III programs from five DOD components: Army, Air Force, Navy, U.S. Special Operations Command (SOCOM), and the DOD Chemical and Biological Defense Program (CBDP).⁴ Our observations on DOD's ACAT II and III program data are based on the original data submitted by the components.⁵ To assess information available on cost and schedule performance, we collected and analyzed acquisition program baseline (APB) documents for a non-generalizable random sample of 170 non-automated information system ACAT II and III programs.⁶ To assess the reliability of the data, we reviewed the data for missing values and obvious errors, and compared the cost data for our sample of 170 programs to source documents when available. We found the data were unreliable as further discussed in the report.

⁴These five components accounted for approximately 88 percent of DOD's requested RDT&E and procurement funding in the President's Fiscal Year 2014 budget request. CBDP is a special interest program under the Defense Acquisition Executive's oversight. The Secretary of the Army is the DOD Executive Agent for CBDP. For the purposes of this report, we refer to CBDP as a component. Navy guidance allows for programs to be categorized as ACAT IV programs. For the purposes of this report, the term "ACAT III program" also includes Navy and Marine Corps ACAT IV acquisition programs.

⁵From January to July 2014, we worked with components to attempt to correct problems we identified in the data. However, we continued to identify additional errors and therefore determined we would not be able to report the corrected data. We analyzed the original data because it reflects the information DOD would have had available on ACAT II and III programs at the time we collected data.

⁶While our intention was to select a generalizable sample, after selecting our sample we determined through our data reliability assessment that the population of current ACAT II and III programs could not be reliably determined.

To identify the factors that affected the cost and schedule performance of selected ACAT II and III programs, we analyzed factors cited in program documentation and by DOD program officials. We reviewed a non-generalizable sample of 15 programs including each component's largest ACAT II and III program based on data reported by DOD components and one additional program per component based on factors such as cost growth or being part of a family of related systems.⁷ For each program, we analyzed APBs, reviewed program documents, and interviewed program officials to assess and identify factors that affected cost or schedule performance.

To determine the number of current ACAT II and III programs that were likely to become MDAPs, we analyzed data provided by DOD components through our data collection instrument to identify programs that appeared to be within 10 percent of or to have exceeded the ACAT I threshold for research, development, test, and evaluation (RDT&E) or procurement. We then collected information about these programs from DOD components using a set of structured questions. We determined the data were sufficiently reliable to serve as a starting point to identify the minimum number of programs likely to become MDAPs because we were able to confirm data with relevant program offices. Appendix I provides additional details on our scope and methodology.

We conducted this performance audit from October 2013 to March 2015 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.

Background

DOD acquisition policy defines an acquisition program as a directed, funded effort that provides a new, improved, or continuing materiel, weapon, or information system, or a service capability in response to an approved need.⁸ As shown in table 1, defense acquisition programs are

⁷We excluded automated information systems at all components and vaccine programs at CDBP from our case studies because our focus was on the performance of weapon system programs.

⁸DOD Directive 5000.01, *The Defense Acquisition System* (Nov. 20, 2007).

classified into acquisition categories that depend on the value and type of acquisition. The Army, Navy, Air Force, and SOCOM also have supplemental acquisition policies that address certain aspects of acquisition program categorization and management.

Table 1: Description of Acquisition Category (ACAT) I – III Programs

ACAT	Reason for ACAT designation
ACAT I	<ul style="list-style-type: none"> • Major defense acquisition program estimated to require an eventual total expenditure for research, development, test, and evaluation (RDT&E) of more than \$480 million or, for procurement of more than \$2.79 billion (in fiscal year 2014 dollars) for all increments • Milestone decision authority designation
ACAT IA	<ul style="list-style-type: none"> • Major automated information system (AIS) that is estimated to exceed: <ul style="list-style-type: none"> • \$40 million (in fiscal year 2014 dollars) for all expenditures directly related to the AIS definition, design, development, and deployment and incurred in a single fiscal year; or • \$165 million (in fiscal year 2014 dollars) for all expenditures directly related to the AIS definition, design, development, and deployment and incurred from the beginning of the materiel solution analysis phase through deployment at all sites; or • \$520 million (in fiscal year 2014 dollars) for all expenditures directly related to AIS definition, design, development, deployment, operations and maintenance, and incurred from the beginning of the materiel solution analysis phase through sustainment for the estimated useful life of the system • Milestone decision authority designation
ACAT II	<ul style="list-style-type: none"> • Does not meet criteria for ACAT I or IA • Major system estimated to require an eventual total expenditure for RTD&E of more than \$185 million, or for procurement of more than \$835 million (in fiscal year 2014 dollars) • Milestone decision authority designation
ACAT III	<ul style="list-style-type: none"> • Does not meet criteria for ACAT II or above • An AIS program that is not a major AIS program

Source: Interim Department of Defense Instruction 5000.02, *Operation of the Defense Acquisition System*, (Nov. 25, 2013). | GAO-15-188

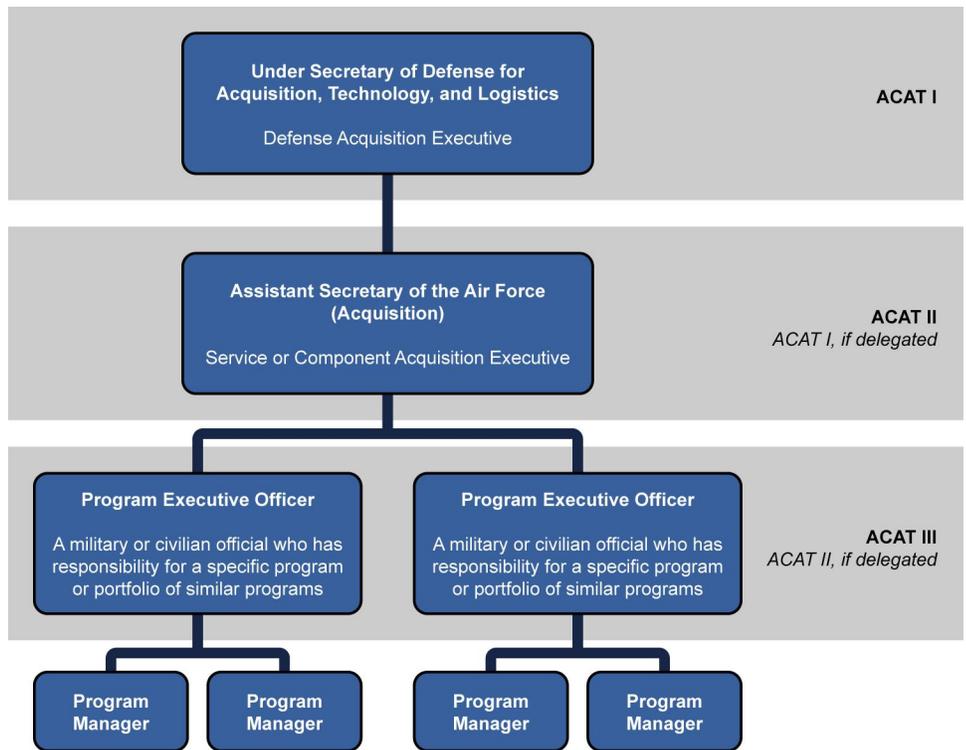
Notes: The Milestone Decision Authority is the designated individual with overall responsibility for a program and approves entry of a program into the next phase of the acquisition process. All dollars figures above reflect fiscal year 2014 constant dollars.

ACAT II and III programs encompass a wide range of efforts and program sizes. Programs may range from an ACAT II program with a total acquisition cost of more than \$3 billion to an ACAT III program with an acquisition cost in the millions of dollars or lower. DOD’s acquisition policy does not establish a minimum cost for ACAT III programs.

The level of oversight for acquisition programs varies based on the assigned ACAT level. DOD and component acquisition policies specify

the organizational level of the milestone decision authority—the designated individual with overall responsibility for a program—for each ACAT level.⁹ The organizational level at which program requirements and requirements changes are approved may vary by ACAT level as well. The organizational level of the milestone decision authority for Air Force ACAT I-III programs is shown in figure 1 as an example.

Figure 1: Acquisition Milestone Decision Authorities for Air Force Acquisition Category (ACAT) I – III Programs



Source: Air Force Instruction 63-101/20-101, *Integrated Life Cycle Management* (Mar. 7, 2013). | GAO-15-188

⁹According to DOD Directive 5000.01, the milestone decision authority shall have the authority to approve entry of an acquisition program into the next phase of the acquisition process and shall be accountable for cost, schedule, and performance reporting to higher authority, including congressional reporting.

All acquisition programs are required by statute or DOD guidance to provide program information at milestones and other decision points, although these requirements differ by ACAT level. MDAP and MAIS programs, also known as ACAT I and IA programs, require more documentation and analysis to support program decisions and have to regularly report to Congress on their cost, schedule, and technical performance. These programs are required to enter and maintain program cost, schedule, and performance data and create APBs within DOD's Defense Acquisition Management Information Retrieval (DAMIR) system, a web-based data system intended to provide data transparency of acquisition management information across DOD. Components may use DAMIR for other programs, but it is not required. Appendix II provides additional detail on acquisition documentation requirements and congressional reporting requirements by ACAT level.

DOD Does Not Have Reliable Data on ACAT II and III Programs and Component Actions to Improve Data Do Not Fully Address Limitations

DOD components could not provide sufficiently reliable data for us to accurately determine the number, total cost, or performance of DOD's current ACAT II and III programs. We found that the accuracy, completeness, and consistency of DOD's data was undermined by (1) widespread data entry issues and missing data, and (2) inconsistent identification of current ACAT II and III programs across and within components. DOD components have taken some steps to improve ACAT II and III program data, but their efforts do not fully address the causes of the problems we identified. In addition to data reliability problems, DOD lacks consistent cost and schedule metrics across components to assess ACAT II and III program performance. Further, the lack of baseline cost and schedule data and comparable schedule milestones prevents DOD from consistently measuring the performance of ACAT II and III programs. Taken together, these issues limit the utility of DOD's data on ACAT II and III programs for oversight, decision-making, and reporting purposes.

DOD Components Cannot Provide Accurate, Complete, or Consistent Data on Current ACAT II and III Programs

We identified data reliability issues related to accuracy, completeness, or consistency with data for about 60 percent of ACAT II and III programs reported to us by DOD components.¹⁰ These issues prevented us from accurately determining the number, total cost, or performance of DOD's current ACAT II and III programs. According to DOD acquisition policy, complete and current program information is essential to the acquisition process.¹¹ Internal control standards for federal executive branch agencies also emphasize that agencies should have relevant, reliable, and timely information for decision-making and external reporting purposes.¹² We found obvious accuracy and completeness issues in program cost data for ACAT II and III programs reported to us by DOD components. We also observed consistency issues in program data across components and within some components that affected the comparability of the data.

Widespread Data Entry Issues and Missing Data

Inaccurate data were evident across all of the components; issues we observed included reported dollar values outside the range of ACAT II and III programs and basic math errors. Inaccuracies like these suggest overall data quality problems. Further, when we reviewed a sample of programs and compared reported cost estimates to source documents, we found that cost estimate data was often misreported. Components incorrectly reported data or data was missing for 64 out of 95 programs for which we had complete source documents in our non-generalizable sample.¹³ We also observed missing data elements to varying degrees at all of the components except CBDP. For example, 333 out of 836 programs reported by the components were missing one or more cost estimate elements or basic information such as the ACAT level. Lastly, in numerous instances components did not follow the instructions of the

¹⁰Accuracy, completeness, and consistency are key characteristics of reliable data and refer to (1) the extent that recorded data reflect the actual underlying information; (2) data elements for each program are populated appropriately; and (3) the need to obtain and use data that are clear and well defined enough to yield similar results in similar analyses, respectively.

¹¹Department of Defense Directive 5000.01, *The Defense Acquisition System*, encl. 1, para E1.1.20 at 8 (May 12, 2003) (Certified Current as of Nov. 20, 2007).

¹²GAO, *Standards for Internal Control in the Federal Government*, [GAO/AIMD-00-21.3.1](#) (Washington, D.C.: November 1999).

¹³The non-generalizable sample included 170 programs. See appendixes I and III, respectively, for further details about our scope and methodology and data reliability assessment.

data collection instrument, which also affected our ability to use the data. See table 2 for examples of the reliability issues we identified.

Table 2: Examples of Data Reliability Issues Identified in Component-Reported Acquisition Category (ACAT) II and III Programs

Data reliability issue	Example
Dollar values outside the range for ACAT II and III programs	Thirty Air Force programs reported \$0 for their total baseline or current cost estimates even though Department of Defense policy defines acquisition programs as funded efforts. Most of these programs were either not current programs or were low cost efforts to modify aircraft. Air Force officials confirmed that programs without funding should not be listed as ACAT programs and told us that they are working to remove these types of programs from the component data system.
Basic math errors	Even after accounting for potential rounding errors, there were 54 programs with current or baseline total estimates that did not match the sum of the estimate elements (i.e., the total estimate provided did not match the sum of the cost estimates for research, development, test, and evaluation, procurement, acquisition operation and maintenance, and military construction).
Misreported cost data	Fifty out of 95 programs for which we had complete source documents in our non-generalizable sample misreported at least one element of the program's baseline or current cost estimate.
Missing key data elements	One Army Program Executive Office initially did not report any current cost estimates for its 28 reported ACAT II and III programs. As a result, we could not conduct cost performance analysis for any of these programs.
Basic errors in following data entry instructions	Sixteen U.S. Special Operations Command (SOCOM) programs reported current cost estimates that were substantially lower than their baseline cost estimate. For example, SOCOM reported a current cost estimate of \$11.5 million for its Special Communications Enterprise program, more than a 90 percent decrease from the baseline cost estimate, but later provided a corrected estimate of \$239 million. In some cases, these estimates appeared to reflect the amount requested in fiscal year 2014 rather than the program's total cost estimate per the data collection instrument instructions.

Source: GAO analysis of Department of Defense component-reported ACAT II and III program data. | GAO-15-188

In some instances, the accuracy and completeness issues we identified were consistent with known limitations of information in component systems. For example, Army acquisition officials told us that in the past there has been conflicting guidance about whether completed programs should be deleted from the Army's acquisition information system, and some completed programs were never removed from the system. Officials at all components, except CDBP, further told us that accuracy of data in their systems relies primarily on the quality of information

Inconsistent Identification of Current ACAT II and III Programs Across and Within Components

submitted by the Program Executive Officer (PEO) or program offices.¹⁴ Army, Navy, and Air Force acquisition officials told us that they work with PEOs to address data quality problems, such as by conducting ad hoc checks to flag obvious errors or missing data elements and following up with PEOs as necessary. SOCOM acquisition officials told us the Acquisition Executive emphasizes the importance of maintaining up-to-date data to program managers. Based on the data provided to us by DOD components, these existing data quality practices are insufficient to ensure the accuracy and completeness of data on DOD's ACAT II and III programs as required by DOD policy and federal internal control standards.

Data provided in response to our request for information on current ACAT II and III programs (1) included acquisitions that were not "current" ACAT II and III programs in accordance with our definition, (2) likely reflected inconsistent reporting of acquisitions at lower dollar levels across components, and (3) likely excluded certain acquisitions considered current ACAT II and III programs in accordance with certain component acquisition policies. For the purposes of our report, we define a current program as one that has been formally initiated in the acquisition process, but has not yet delivered 90 percent of its items or made 90 percent of planned expenditures. This definition is consistent with statutory reporting thresholds used by Congress in its reporting requirements for current MDAP programs.¹⁵

Inconsistent interpretations of what constitutes a current program and the inability of some components to reliably identify these programs contributed to the inclusion of programs that were not current in the data that components reported to us. DOD acquisition policy and component guidance generally do not define which ACAT II or III programs are considered to be current for management and reporting purposes. For example, DOD acquisition policy defines when a program is formally initiated and its operations and support phase begins, but it does not identify when a program should be considered current. Further, some

¹⁴All CDBP ACAT II and III acquisitions are managed by a single PEO, the Joint Program Executive Office for Chemical and Biological Defense. CDBP does not have a data system that includes ACAT II and III programs' acquisition baseline cost estimates. According to CDBP officials, in response to our request, ACAT II and III program data were manually entered into the data collection instrument from hard copy documents.

¹⁵10 U.S.C. §§ 2432(g) and (h)(1).

components told us PEOs may have different interpretations of what constitutes a current program. Components also told us that they could not consistently use the information in their data systems to readily identify current programs. Of the 836 programs initially reported by the five components, we identified 199 programs across the Army, Navy, Air Force, and SOCOM that should not have been included because they did not meet our criteria for current programs.¹⁶ For example, according to an Army PEO, 90 of 140 programs originally reported to us as current ACAT II or III programs by the Army were not current based on our definition because these programs had delivered more than 90 percent of planned items or expended more than 90 percent of planned funds. Without the consistent identification of current ACAT II and III programs, DOD and component officials do not know the accurate number of these programs and may miss opportunities to identify programs that may need more or less oversight depending on whether or not most of the anticipated acquisition funding has been spent.

Additionally, component guidance for defining acquisition programs varies and likely resulted in inconsistent reporting across components of acquisitions at lower dollar values. DOD acquisition policy establishes a cost ceiling and cost floor for ACAT II programs and a cost ceiling, but no cost floor, for ACAT III programs. However, some components have supplemental guidance that establishes additional acquisition categories or exclusions. For example, SOCOM and Navy have guidance that provides for certain acquisitions with less than \$10 million in total RDT&E contracts, less than \$25 million per year in annual procurement funding, and less than \$50 million total in procurement contracts to be categorized as non-ACAT programs. Specifically, SOCOM designates these low cost, schedule, and technical risk efforts to field special operations-peculiar capabilities as abbreviated acquisition projects. Similarly, the Navy designates lower dollar value programs that do not require operational testing and evaluation as abbreviated acquisition programs.¹⁷ Army and Air Force policies do not provide for lower dollar threshold categories

¹⁶We identified these programs using information available in the data and through follow up with PEOs. This is a minimum number of programs removed. Because PEOs did not provide information about program phase for all programs, there may also be other programs reported in the data that do not meet our definition of current.

¹⁷According to Navy acquisition policy, abbreviated acquisition programs are supposed to be captured in the Navy's Acquisition Program list. However, acquisition policy officials told us they do not have insight into these programs at the component level.

beneath the ACAT III level. According to officials from the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, acquisition programs at these dollar levels should be reported as ACAT III programs. However, Navy and SOCOM did not include their non-ACAT programs in the ACAT II and III program data reported to us.

There was also variation within components as to how acquisition programs were categorized. Army and Air Force acquisition officials told us that some programs that should have been considered ACAT II or III programs in accordance with component acquisition policy were not. These officials also told us that PEOs may have counted and handled programs differently in the absence of a clear definition of what should be considered a program of record. For example, Army officials told us that categorizing information technology programs was sometimes challenging, and they have worked with PEOs to review the categorization of certain information technology programs. Army and Air Force officials told us that as a result of confusion among PEOs about whether or not certain programs should be considered ACAT II or III programs, they have needed to add and remove numerous ACAT II and III programs from component information systems over the past year.

The types of issues we identified may have also contributed to components reporting varying numbers of ACAT II and III programs in response to different requests for information during the same time frame. Specifically, concurrent with reporting 755 current ACAT II and III programs to us, the Army, Navy, and Air Force reported 1,360 ACAT II and III programs in a presentation to the DOD Business Senior Integration Group, which is chaired by the Under Secretary of Defense for Acquisition, Technology, and Logistics and oversees DOD's Better Buying Power initiatives.¹⁸ Acquisition officials from these components told us they were unable to fully explain the reasons for the difference between the numbers of programs reported.

¹⁸DOD's Better Buying Power initiative 2.0 requires that services institute a system to measure the cost performance of programs and institutions and to assess the effectiveness of acquisition policies. As part of that effort DOD instructed Component Acquisition Executives to determine how to best measure non-ACAT I performance trends and brief the results to the DOD's Business Senior Integration Group by November 1, 2013.

Components Have Taken Steps to Improve ACAT II and III Program Data, but Have Not Fully Addressed the Causes of the Reliability Problems

The Army, Navy, Air Force, and SOCOM have established information systems to track cost and schedule data for ACAT II and III programs and taken some steps to address issues related to the completeness and accuracy of information tracked in these systems. CBDP officials told us they recognize the value of establishing a system to track data on ACAT II and III programs and are determining the capabilities that would be needed in such a system. Specifics of component efforts follow:

- According to Navy officials, data in the Navy's Research, Development & Acquisition Information System has potentially been incomplete because ACAT II and III program data has not been consistently entered into the system. The Navy issued an updated policy in August 2014 that requires input of programmatic information into the system for all ACAT programs.
- All Air Force ACAT II and III programs have been required to enter cost and schedule data into the System Metric and Reporting Tool since 2012, but Air Force officials told us that not all programs had complied with the requirement. They told us in June 2014 that they had an ongoing effort to review ACAT II and III programs in the system, including assessing whether cost and schedule data has been populated. Further, the Air Force has established an investment master list that will capture all programs receiving RDT&E and procurement funding.
- SOCOM requires that all ACAT II and III programs enter program and cost data into its centralized acquisition portal data system, however SOCOM officials told us some program managers have been more diligent than others in populating the system. These officials told us that data from the portal is now used to conduct monthly program reviews, rather than having the program prepare briefing slides, as a way to encourage program managers to populate and regularly update the system.

Components have also taken steps to improve the consistency with which they identify current ACAT II and III programs. For example, officials at four of the five components told us they are exploring ways to identify the acquisition phase—technology maturation and risk reduction, engineering and manufacturing development, production and deployment, operations and support—for programs in component information systems, which could improve their ability to reliably identify current programs. The Air Force and Army have also made efforts to address concerns they had previously identified related to the consistent identification of ACAT II and

III programs within their components. The Air Force issued guidance in January 2014, detailing which programs are and are not considered to be acquisition programs and acquisition policy officials told us they have been meeting with individual PEOs to clarify any misunderstandings about how acquisition programs should be categorized. Officials from the Office of the Assistant Secretary of the Army for Acquisition, Logistics, and Technology also told us they are in the process of revising the Army's acquisition guidance, with input from PEOs, to more precisely define the types of programs that should and should not be considered to be acquisition programs.

However, the components' efforts do not fully address the accuracy, completeness, and consistency issues we identified with ACAT II and III program data. For example, the components have not established systematic processes to perform data quality tests on PEO-submitted data and assess the results to help identify problems, such as basic math errors or missing data, for further review. These types of tests and assessments can be an important step in determining whether data can be used for its intended purposes.¹⁹ Additionally, the components have not developed plans that detail how they will implement or sustain data improvement efforts. For example, the components have not developed implementation steps for assessing data reliability on an ongoing basis or metrics to assess the success of data cleanup efforts. Developing such plans is a key project management practice.²⁰ Without establishing this planning foundation, the components will not be in a sound position to effectively monitor and evaluate the implementation of efforts to improve component data. Finally, efforts to consistently identify current ACAT II and III programs have been focused within individual components. Without a consistent understanding about which programs should be considered to be current ACAT II or III programs across components, similar programs will continue to be reported on differently, thereby limiting the consistency and comparability of ACAT II and III program data across DOD.

¹⁹GAO, *Assessing the Reliability of Computer-Processed Data*, [GAO-09-680G](#) (Washington, D.C.: July 2009). Examples of data quality tests include testing for missing data, either entire missing records or missing values in key data elements; looking for duplicate records; looking for invalid or duplicate identifiers; and, examining the relationship of one data element to another.

²⁰Project Management Institute, Inc. *The Standard for Project Management*, Third Edition, 2013.

DOD Lacks Consistent Cost and Schedule Performance Metrics and Faces Additional Challenges Measuring Trends

DOD components lack consistent cost and schedule performance metrics to assess performance trends across ACAT II and III programs. As part of the department's Better Buying Power initiatives, the Under Secretary of Defense for Acquisition, Technology, and Logistics instructed DOD components to determine how best to measure performance trends for non-ACAT I programs. Federal internal control standards also emphasize the importance of comparing actual performance to planned or expected results throughout the organization to help ensure effective results are achieved and actions are taken to address risks. The Army, Navy, and Air Force briefed DOD's Business Senior Integration Group in November 2013 on their current efforts and plans regarding assessing ACAT II and III cost and schedule performance, but no specific follow-on actions or action plans have been developed.

Unlike MDAPs and MAIS programs, ACAT II and III programs are not required to report cost and schedule data in a consistent fashion, despite the potential benefits of such reporting. MDAP and MAIS programs are required to report key cost and schedule metrics to Congress in a standardized format through Selected Acquisition Reports and MAIS Annual Reports, respectively. Cost and schedule data for these reports are pulled from DOD's web-based DAMIR system. MDAP cost and schedule data are used by DOD for its annual assessment of the performance of the defense acquisition system, which the department uses to improve acquisition program performance and inform policy and programmatic decisions. ACAT II and III programs are not required to produce similar cost and schedule reporting as larger programs and do not have to provide program data in DAMIR. According to officials from the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, although minor adjustments may be needed for reporting purposes, there is nothing that prevents components from using DAMIR to capture data on ACAT II and III programs, and acquisition officials from the Army have considered using it. Additionally, CBDP officials told us they would consider DAMIR when exploring potential systems to track ACAT II and III program data.

DOD component officials told us they are not yet sure how best to measure cost and schedule performance across ACAT II and III programs. For example, Army officials told us that analysis of component-wide ACAT II and III performance trends may not make sense given the differences across programs. Navy, SOCOM, Air Force, and CBDP officials told us they are interested in tracking cost and schedule performance trends across ACAT II or III programs, but are still working to define performance metrics and address limitations in existing data or

reporting capabilities. For example, the Air Force has attempted to assess cost and schedule performance for a subset of ACAT II and III programs, but acquisition officials noted that the process was very resource-intensive, and they had concerns about the reliability of the cost and schedule information used in their analysis given the lack of variability in program performance over time. While the components have developed oversight mechanisms to review individual ACAT II and III program performance, such as through periodic program status reviews at the PEO level and program or portfolio reviews by senior component acquisition officials, without assessing performance trends across ACAT II and III programs, DOD and its components may be missing opportunities to identify and analyze differences between actual and expected performance and develop strategies to address related risks throughout the department.

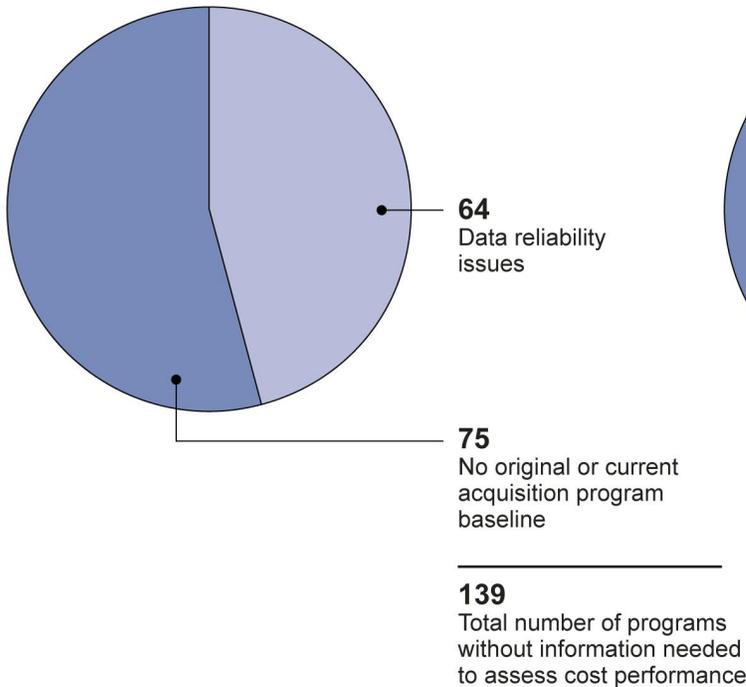
Data Limitations for Measuring
Cost and Schedule
Performance Trends

When we analyzed information available on cost and schedule performance, we determined that we could not assess cost performance for 139 programs out of a non-generalizable sample of 170 programs and schedule performance for 105 of the 170 programs.²¹ In addition to missing or misreported cost data, we identified two challenges to measuring cost and schedule performance trends for ACAT II and III programs: (1) programs without available APBs and (2) a lack of consistent and comparable key schedule milestones across programs. See figure 2 for a summary of our assessment of the data available to measure cost and schedule performance and appendix III for additional details.

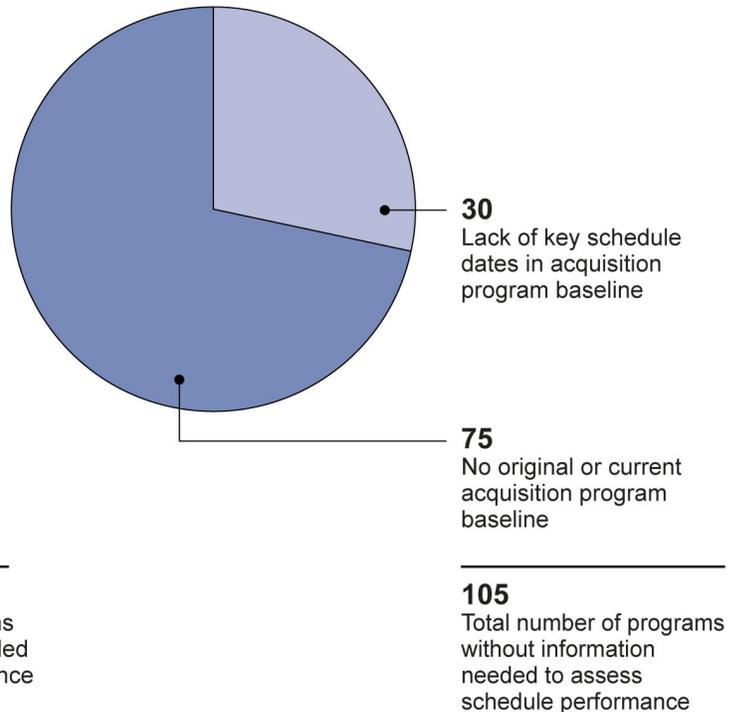
²¹We analyzed information provided by DOD components and in APBs for a non-generalizable sample of 170 programs. Since there are no established metrics to assess ACAT II and III programs' performance trends, we assessed the information available for these programs using the same metrics we use to assess major weapon systems performance in our annual review. We measured cost performance by comparing current cost estimates to cost estimates from program start and schedule performance by comparing changes in cycle time between program start and initial operational capability event dates in current schedules to the schedules from program initiation.

Figure 2: Assessment of Data Available to Measure Acquisition Category (ACAT) II and III Cost and Schedule Performance for Non-generalizable Sample of 170 Programs

Assessment of available cost data



Assessment of available schedule data



Source: GAO analysis of component-reported ACAT II and III data and acquisition program baselines for a non-generalizable sample of 170 ACAT II and III programs. | GAO-15-188

Note: Programs categorized as “no original or current acquisition program baseline” are those that were missing either the original or current acquisition program baseline, or both.

Programs without APBs

For 75 of the 170 programs that we examined in detail, we could not assess cost or schedule performance because DOD components had not developed, or did not provide, an original APB, a current one, or both. The components were unable to provide APBs for various reasons, such as because they could not locate the original or an APB was not developed at program start or to this point in the life of the program. APBs are critical management tools that establish how systems will perform, when they will be delivered, and what they will cost. According to DOD acquisition policy, APBs are required of all acquisition programs, and Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics officials told us they generally expect all acquisition programs to

have one.²² The first APB is approved by the milestone decision authority prior to entry into system development (Milestone B), or at program initiation, whichever occurs later. APBs may be revised at the time of significant program decisions, such as milestones, or as a result of major program changes or breaches to cost, schedule, or performance parameters. Table 3 shows the number of missing APBs by component in our sample.

Table 3: Acquisition Category (ACAT) II and III Programs in Sample Missing One or More Acquisition Program Baselines (APB)

	Total	Army	Navy	Air Force	U.S. Special Operations Command	Chemical and Biological Defense Program
Missing original APB only	51	9	9	25	4	4 ^a
Missing current APB only	1	1	0	0	0	0
Missing both original and current APBs	23	0	0	13	9	1
Programs providing both APBs	95	35	28	10	13	9
Total programs in sample	170	45	37	48	26	14

Source: GAO analysis of Department of Defense component-provided APBs. | GAO-15-188

Notes: The first APB is approved by the milestone decision authority prior to entry into system development (Milestone B), or at program initiation, whichever occurs later. APBs may be revised at the time of significant program decisions, such as milestones, or as a result of major program changes or breaches to cost, schedule, or performance parameters. Components were unable to provide APBs for various reasons, such as because they could not locate the original or an APB was not developed at program start or so far in the life of the program.

^aFor three of the four Chemical and Biological Defense Program programs that did not have APBs at program start, the decision to develop the APB after program start is documented in a decision memoranda.

As shown in table 3, Air Force and SOCOM programs were missing both original and current APBs much more often than other components for our sample. While we observed some programs at Army, Navy, and CBDP that were missing APBs, most of these were programs that started

²²Interim Department of Defense Instruction 5000.02, *Operation of the Defense Acquisition System*, (Nov. 25, 2013). The final version of DOD Instruction 5000.02 was issued on January 7, 2015; however, for purposes of this report, we analyzed the information requirements contained in the Interim DOD Instruction 5000.02 dated November 25, 2013. An APB summarizes a program’s cost, schedule, and performance parameters. It is the agreement between the milestone decision authority, the program manager, and his or her acquisition chain of command that is used for tracking and reporting for the life of the program or program increment.

in 2010 or earlier and were missing an APB from program start but had later developed one. Air Force officials told us there has been misunderstanding among PEOs about APB requirements and that they are working with PEOs to ensure that APBs or equivalent documents are developed for each acquisition program. The Air Force issued guidance in March 2012 establishing common processes and procedures for APB development and reporting.²³ However, when we conducted our analysis in July 2014, 13 of 48 Air Force programs we reviewed were missing both an original and current APB.²⁴ SOCOM was missing original and current APBs for 9 of 26 programs in our sample. SOCOM officials told us that milestone decision authorities can waive the requirement for APBs, but SOCOM acquisition policy does not require documentation of APB waivers. In October 2014, the SOCOM Acquisition Executive directed PEOs to improve APBs for all acquisition programs to facilitate the ability to measure cost, schedule, and technical performance. If the Air Force and SOCOM do not consistently implement revised guidance related to setting formal cost and schedule baselines, they will be limited in their ability to accurately assess ACAT II and III program performance and performance trends. These limitations could also affect DOD's ability to understand ACAT II and III performance across components and identify the root causes of both positive and negative program outcomes.

Lack of Comparable Schedule Milestones

We were unable to measure schedule performance for 30 of the 95 ACAT II and III programs in our sample that had both original and current APBs because they lacked comparable program start or initial operational capability milestone dates. For example, the APB developed at program start for the Air Force's B-1 Vertical Situation Display Upgrade—an ACAT II program— included dates for program start (Milestone B) and the start of production (Milestone C), but did not include an initial operational capability date or equivalent milestone. The initial operational capability date is important for measuring schedule performance because it specifies when the warfighter can expect a system to be fielded. While DOD acquisition policy generally permits milestone decision authorities to

²³Department of the Air Force, Office of the Assistant Secretary of the Air Force for Acquisition Memo, Subject: *Acquisition Program Baseline (APB) Standardization and Reporting*, March 8, 2012.

²⁴At the Air Force, 2 of 13 programs we reviewed that were missing both original and current APBs were quick reaction capability programs, which Air Force policy exempts from having APBs. Air Force Instruction 63-114, *Quick Reaction Capability Process*, January 4, 2011.

tailor program milestones in the interest of creating effective and efficient programs, the lack of consistency among programs with regard to key schedule milestones could hinder DOD and component efforts to develop effective metrics to track ACAT II and III schedule performance.²⁵

ACAT II and III Program Performance Most Frequently Affected by Requirements Changes and Testing Issues

Thirteen of the 15 ACAT II or III programs we reviewed in-depth had exceeded the cost or schedule targets in their original APBs. These programs cited changing requirements, testing issues, quantity changes, and flaws in original cost estimates, among other factors, as the reasons for cost and schedule growth. The programs we reviewed cited other factors, such as a reliance on mature technology—including commercial or government off-the-shelf or other non-developmental items—and early involvement of stakeholders or users as contributing to reduced risk of cost or schedule growth. We have previously reported that similar factors affect the performance of DOD’s MDAPs. Appendix IV provides additional details about the programs we reviewed.

Programs Most Frequently Attributed Cost and Schedule Growth to Requirements Changes

Thirteen of the 15 ACAT II or III programs we reviewed in-depth had exceeded the cost or schedule targets in their original APBs.²⁶ We did not attempt to quantify the extent to which these programs had exceeded cost or schedule targets due to overall concerns about the reliability of ACAT II and III cost and schedule data and because not all of these programs had developed APBs at program start. These programs most frequently attributed cost growth or schedule delays to changing requirements. Testing issues, quantity changes, and flaws in original cost estimates were also cited by at least 5 of the 13 programs as contributing

²⁵According to DODI Interim 5000.02, milestone decision authorities may tailor programs, to include eliminating phases and combining or eliminating milestones and decision points, unless constrained by statute.

²⁶Two of our 15 case studies were selected in part based on the fact that they had experienced substantial cost growth. The other 13 case study programs were selected either because data provided by DOD components indicated they were the largest ACAT II or III programs within the component based on total estimated acquisition cost (10 programs) or because they were part of a family of systems (3 programs). In the instances in which we selected families of systems for review, we reviewed multiple ACAT II or III programs included in the family of systems, but considered the group of systems as a single program for the purposes of our analysis. To determine whether a program had exceeded a cost or schedule target in its original APB, we analyzed whether the program had exceeded a cost or schedule threshold parameter in the earliest APB provided by the program.

to cost growth or schedule delays. All but 1 of the 13 programs cited multiple causes for cost growth or schedule delays, including factors beyond those listed in table 4.

Table 4: Factors Most Frequently Cited by Acquisition Category (ACAT) II and III Case Study Programs as Contributing to Cost Increases or Schedule Delays

Factor	Programs with cost growth and schedule delays (n=10)	Programs with cost growth only (n=3)	Total (n=13)
Changing requirements	6	3	9
Testing issues	7	0	7
Quantity increases	2	3	5
Flaws with original cost estimates	4	1	5

Source: GAO analysis of program documents and interviews with agency officials for 13 case study programs that had exceeded at least one cost or schedule threshold from the program's original acquisition program baseline. | GAO-15-188

Note: Programs could cite more than one factor as contributing to cost increases or schedule delays.

Requirements changes were associated with cost growth or schedule delays by at least one program at each of the five components in our review. According to program officials, programs added or increased requirements due to situations such as: adding capability to a new platform that had not been planned for when the original requirements were approved; creating additional variants to meet requirements that emerged after the original requirements were approved; or making improvements or refinements to a system in development or production as a result of changes in the operational environment, including new threats. For example, officials from the Army's Synthetic Environment Core program, which is providing the Army a common virtual environment that links virtual simulators and simulations into an integrated and interoperable training environment, told us that increasing terrain database requirements to meet additional training needs have contributed to program cost increases significant enough to require the program to be recategorized from an ACAT III to an ACAT II program. Program officials stated that in some cases, the additional requirements have been unrealistic from either a cost or technological perspective, but that historically there had not been an effective process to prioritize requirements or enforce capability tradeoffs. Table 5 provides additional examples from our case studies of factors cited by program offices as contributing to cost growth or schedule delays.

Table 5: Examples of Factors Most Frequently Cited by Acquisition Category (ACAT) II and III Case Study Programs as Contributing to Cost Increases or Schedule Delays

Factor	Example
Changing requirements	<p>Research and development costs for the Marine Corps' Light Armored Vehicle Command and Control Upgrade program—which is designed to improve the vehicle's ability to receive and transmit data; share information among computer workstations; and utilize more reliable, mobile, and long range communications capabilities—increased from \$22.2 million at program start in March 2005 to \$29.7 million at the start of production in November 2009. The program also experienced a more than two-year delay in delivering initial capability to the warfighter. According to program officials, this cost increase and schedule delay was due in part to requirements changes to enhance vehicle survivability against increased threats from improvised explosive devices in Iraq and Afghanistan. The additional armor needed to meet these requirements reduced the space available for the communications suite, which resulted in it being redesigned.</p>
Testing issues	<p>Total acquisition costs for the Chemical and Biological Defense Program's Joint Biological Point Detection System, a joint program designed to detect and identify biological threats, increased from \$313.2 million at development start in December 1996 to \$777.4 million as of September 2011. The program also experienced an approximately 2 year delay in delivering its initial capability. CBDP officials attributed the cost growth and schedule delays in part to DOD-directed changes to the testing strategy after the program started. The revised strategy required the program to conduct more realistic testing, which included a system-level test with live biological agents. Since the program was one of the first to conduct this type of testing, more time and funding than originally expected was needed to develop test facilities and methodologies and award related contracts.</p>
Quantity increases	<p>Procurement costs for the Navy's Nuika Shipboard Improvement program, a rocket-launched, active electronic warfare countermeasure system designed to defend ships against anti-ship missiles, increased from \$434.9 million dollars at production start in January 1999 to \$962.0 million as of April 2009. During this period, planned system quantities increased by approximately 85 percent, from 88 systems at production start to 163 systems as of April 2009. Expected quantities for decoy cartridges used by the system to lure anti-ship missiles away from their intended targets also increased from 896 to 1,288 during the same period. According to program officials, increases in the number of systems installed and decoys required was largely due to the outfitting of additional ship classes not originally anticipated by the program.</p>
Flaws in the original cost estimate	<p>Total acquisition costs for the Air Force's Haystack Ultra-Wideband Satellite Imaging Radar program, which improved the capability of an existing radar, increased from an estimated \$41 million at development start in June 2004 to \$108 million as of April 2013. Program officials told us that because the program was started as a low-cost modification, an independent cost estimate was not completed. As a result, the program office relied on the contractor's overly optimistic cost assumptions and failed to adequately account for risk and uncertainty.</p>

Source: GAO analysis of program documents and interviews with agency officials for selected case study programs that had exceeded at least one cost or schedule threshold from the program's original acquisition program baseline. | GAO-15-188

Note: All dollar figures are in then-year dollars and have not been adjusted for inflation.

We have previously reported that similar factors have negatively affected the cost and schedule performance of MDAPs. DOD's weapons system programs often enter the acquisition process without a full understanding of requirements, and we have reported numerous times that requirements changes or changes to designs to meet requirements are factors in poor

cost and schedule outcomes.²⁷ Additionally, in part due to high levels of uncertainty about requirements, program cost estimates and their related funding needs are often flawed. For example, in 2008 we assessed cost estimates for 20 MDAPs and found that the estimates were too low in most cases and that in some programs, cost estimates were off by billions of dollars.²⁸ The programs we reviewed frequently lacked sufficient knowledge and detail to develop sound cost estimates, which effectively set programs up for cost growth and schedule delays.

Programs Most Frequently Cited the Use of Mature Technologies and Early Stakeholder Involvement as Factors That Helped to Reduce the Risk of Cost or Schedule Growth

Program officials for the ACAT II and III programs we reviewed most frequently cited the reliance on mature technology—including commercial or government off-the-shelf or other non-developmental items—and early involvement of stakeholders or users as factors that helped to reduce the risk of cost or schedule growth. Both of these factors were cited by 5 or more of the 15 ACAT II or III program offices we reviewed. In some cases, these factors were cited by programs that experienced cost growth or schedule delays, for example, because one of these factors may have helped a program partially recover from a cost or schedule breach or keep initial program costs lower or schedules shorter than otherwise would be expected.

Reliance on existing mature technologies was a relevant factor for the two programs we reviewed that did not report cost growth or schedule delays, and the most frequently cited factor contributing to reduced risk of cost or schedule growth among all of the programs we reviewed. The two programs we reviewed that appeared to be on track to meet original cost and schedule targets—the Army’s 5.56 millimeter Enhanced Performance Round program and SOCOM’s Nonstandard Aviation program—relied on modified commercial off-the-shelf equipment or modified existing military service equipment or assets. The Army’s 5.56 millimeter Enhanced Performance Round was an incremental engineering change to replace the Army’s general purpose 5.56 millimeter bullet with a new bullet

²⁷See, for example, GAO, *Defense Acquisitions: Assessments of Selected Weapon Programs*, [GAO-14-340SP](#) (Washington, D.C.: Mar. 31, 2014) and *Defense Acquisitions: Assessments of Selected Weapon Programs*, [GAO-13-294SP](#) (Washington, D.C.: Mar. 28, 2013).

²⁸GAO, *Defense Acquisitions: A Knowledge-Based Funding Approach Could Improve Major Weapon System Program Outcomes*, [GAO-08-619](#) (Washington, D.C.: July 2, 2008).

design, which features a copper slug and exposed hardened steel penetrator. SOCOM's Nonstandard Aviation program acquires, modifies, fields, and sustains commercial aircraft to transport special operations forces. The use of mature technologies was also cited as contributing to reduced risk of cost or schedule growth by 6 of the 13 other programs we reviewed. For example, according to program documentation for the Air Force's F-15E Radar Modernization Program, the program planned to leverage existing commercial and government off-the-shelf technology from other fighter aircraft radar systems and the maturity of these technologies significantly lowered program development risk and costs.

Early stakeholder or user involvement was cited by 5 of the 15 programs we reviewed as contributing to reduced risk of cost or schedule growth, including 1 of the 2 programs that did not experience cost growth or schedule delays. For example, officials with the Army's 5.56 millimeter Enhanced Performance Round program noted that constant communication with all stakeholders, engineers, testers, and contractors was essential and a key success factor for the program. Similarly, program officials for CBDP's Dismounted Reconnaissance Sets, Kits, and Outfits program—which provides protective equipment for chemical, biological, radiological, or nuclear hazards—told us that the participation of all of the military services at the beginning of the program helped to keep program cost and schedule on track. According to program officials, they integrated user input from the outset, including in developing the concept of operations, which reduced the number of later requirements changes. At the time of our review, the program was on track to meet its original schedule targets. The program's unit cost also decreased between the start of development and production.

We have previously reported that similar factors appear to positively affect the cost and schedule performance of MDAPs. For example, in 2010, we reported on MDAPs that appeared to be stable and on track to meet their original cost and schedule targets. We found that the stable programs we reviewed leveraged mature technologies that had been demonstrated to work in relevant or realistic environments, and either did not consider immature technologies or deferred immature technologies to later program increments.²⁹ We also reported in 2012 that early

²⁹GAO, *Defense Acquisitions: Strong Leadership Is Key to Planning and Executing Stable Weapon Programs*, [GAO-10-522](#) (Washington, D.C.: May 6, 2010).

stakeholder involvement in pre-system development reviews helped facilitate trade-offs among cost, schedule, and technical performance requirements. For example, by involving both the requirements and acquisition communities in these reviews, the Army was able to identify trade-offs that reduced the projected unit costs for the Joint Light Tactical Vehicle without impairing operational needs.³⁰

At Least Five Current Programs Are Near or Over the ACAT I Cost Threshold, but Data Limitations Hinder DOD's Ability to Identify Additional Programs

Data provided by DOD components indicated that at least five current ACAT II programs were approaching or had exceeded ACAT I cost thresholds as of November 2013, though DOD component officials told us that most were not expected to become MDAPs.³¹ We were unable to identify with certainty the number of programs likely to become MDAPs because of data reliability issues related to identifying the population of ACAT II and III programs and their estimated cost. Using the 836 programs initially reported by DOD components as our starting point, we identified two current ACAT II programs that exceeded the ACAT I threshold for RDT&E—\$480 million in fiscal year 2014 constant dollars—and three current ACAT II programs that were within 10 percent of the ACAT I RDT&E or procurement threshold—\$2.79 billion in fiscal year 2014 constant dollars—as of November 2013. Of these five programs, DOD component officials told us that four would not become MDAPs because, for example, they did not expect further program cost growth or were considering restructuring the program, and that component-level discussions were underway with regard to the status of the remaining program (see table 6).

³⁰GAO, *Weapons Acquisition Reform: Reform Act Is Helping DOD Acquisition Programs Reduce Risk, but Implementation Challenges Remain*, [GAO-13-103](#) (Washington, D.C.: Dec. 14, 2012).

³¹The Army's Kiowa Warrior—Cockpit and Sensor Upgrade Program was also within 10 percent of the ACAT I RDT&E threshold as of November 2013, but the program was terminated in March 2014. As a result, we excluded this program from our analysis.

Table 6: Status of Current Acquisition Category (ACAT) II or III Programs Approaching or Exceeding ACAT I Cost Thresholds as of November 2013

Department of Defense component	Program	Cost status	Whether component expects program to become a major defense acquisition program	Component rationale
Army	AN/TPQ-53 Counterfire Target Acquisition Radar System	Within 10 percent of ACAT I procurement threshold	No	The Army does not expect the program's cost to exceed the ACAT I threshold based on current program office estimates.
Army	Close Combat Tactical Trainer	Within 10 percent of ACAT I research, development, test, and evaluation (RDT&E) threshold	No	The Army does not expect the program's cost to exceed the ACAT I threshold based on current program office estimates.
Air Force	Engine Component Improvement Program	Exceeds ACAT I RDT&E threshold	No	Air Force acquisition officials told us they are working with the program executive officer to determine the appropriate structure for this effort, which consists of multiple distinct research and development efforts for in-service Air Force engines.
Navy	Advanced Arresting Gear	Exceeds ACAT I RDT&E threshold	Undetermined	The Navy is revising the program's acquisition program baseline. The Navy will submit a request to change the acquisition category, if needed, after the revised baseline is complete.
Navy	AN/SPY-1D(V) Radar Upgrade	Within 10 percent of ACAT I RDT&E threshold	No	The Navy does not plan to expend additional RDT&E funding on the program. Therefore, the program's cost is not expected to exceed the ACAT I threshold.

Source: GAO analysis of information provided by Department of Defense components. | GAO-15-188

We also found that the Army, Navy, and Air Force did not comply with DOD reporting requirements for programs approaching ACAT I cost thresholds. DOD acquisition policy was revised in November 2013 to require components to notify the Defense Acquisition Executive—the Under Secretary of Defense for Acquisition, Technology, and Logistics—when an increase or estimated increase in program cost or a change in acquisition strategy will result in a possible reclassification of a formerly

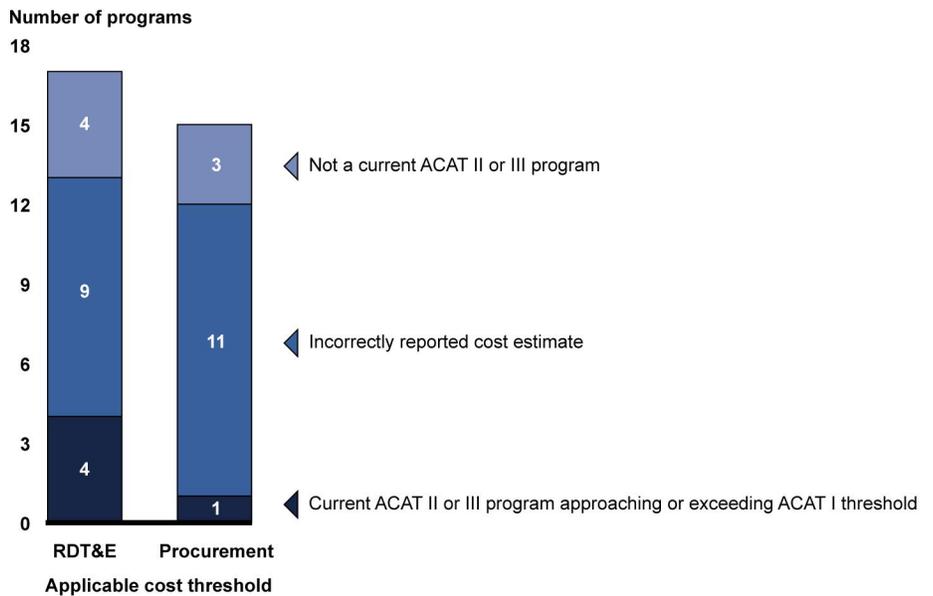
lower acquisition category program as an ACAT I program.³² Notification is to be made as soon as the DOD component anticipates that the program's cost is within 10 percent of the minimum cost threshold of the next acquisition category level. Policy officials from the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics told us that they expect components to provide notification upon an initial determination that the program's estimated cost is within 10 percent of either ACAT I cost threshold to facilitate the involvement of appropriate stakeholders in discussions about the future of the program. However, DOD components had not notified the Under Secretary of Defense for Acquisition, Technology, and Logistics about the five programs we identified as exceeding or approaching an ACAT I cost threshold. As of November 2014, the Army had drafted but not yet sent a notification memorandum for the AN/TPQ-53 Counterfire Target Acquisition Radar System—and that notification process was triggered as a result of our review. Component officials told us they had not notified the Under Secretary of Defense for Acquisition, Technology, and Logistics about the remaining four programs either because the program was not expected to exceed an ACAT I cost threshold or because component-level discussions about the status of the program were still ongoing.

Further, we found that DOD components' ability to identify additional ACAT II or III programs that may be approaching or exceeding an ACAT I cost threshold is hindered by a lack of reliable data on current ACAT II and III programs and their estimated costs. For example, Army officials were unaware that the Army's AN/TPQ-53 Counterfire Target Acquisition Radar System was within 10 percent of the ACAT I procurement threshold until our review because the cost estimate reported during program reviews had historically excluded certain costs that the PEO later determined should be included. Based on the data we originally received from DOD components, we initially identified 23 programs that appeared to be within 10 percent of or over the ACAT I RDT&E or procurement threshold. We later determined that most of the programs were not

³²Interim Department of Defense Instruction 5000.02, *Operation of the Defense Acquisition System*, enc. 1, para. 2.c(1), at 40 (Nov. 25, 2013). Prior to November 2013, DOD acquisition policy required that components notify the Under Secretary of Defense for Acquisition, Technology, and Logistics when ACAT II or III programs were reclassified as ACAT I programs. Department of Defense Instruction 5000.02, *Operation of the Defense Acquisition System*, enc. 3, para. 1.b, at 32 (Dec. 8, 2008).

current programs, because for example, they were in sustainment, or reported cost data incorrectly (see fig. 3 below).

Figure 3: Analysis of Acquisition Category (ACAT) II or III Programs Initially Reported by Department of Defense (DOD) Components with Estimated Costs Approaching or Exceeding ACAT I Cost Thresholds



Source: GAO analysis of DOD component data. | GAO-15-188

Note: RDT&E stands for research, development, test, and evaluation.

Without access to reliable data on current ACAT II and III programs and component-level policies to help ensure compliance with reporting requirements, components will be at risk of failing to identify programs that may become MDAPs. Potential delays in identifying these programs and notifying decision makers directly affects the visibility that the Under Secretary of Defense for Acquisition, Technology, and Logistics and other key stakeholders, including Congress, have into them, as well as their ability to exercise oversight over programs that are some of the department's largest investments.

Conclusions

DOD weapon system acquisition represents one of the largest areas of the government's discretionary spending, but much of this spending is still not well understood. DOD's primary focus has been on overseeing and assessing the performance of its large ACAT I major defense acquisition programs, but the annual funding spent on ACAT II and III acquisition

programs may be just as significant. Yet data provided by DOD components were so unreliable that we were unable to accurately identify even a minimum number or total cost of DOD's ACAT II and III programs. While tailoring documentation and reporting requirements for "smaller" programs can be a reasonable approach to help prioritize limited oversight resources, if DOD and its components are to effectively manage their investment dollars, they must be able to account for how they are spending their money and how well they are spending it on the full range of acquisition programs. Having timely and reliable data on smaller acquisition programs is also critical for providing effective oversight and bringing the right oversight resources to bear, when needed, to make sure troubled smaller programs do not grow into major ones.

The Under Secretary of Defense for Acquisition, Technology, and Logistics has recognized the value of having good data on DOD's acquisition programs—including its ACAT II and III programs—to assess the performance of the defense acquisition system and identify the factors that affect program performance. But work remains to make sure information on the complete range of DOD acquisition programs is consistently available. DOD components have taken and continue to take steps to improve the reliability of ACAT II and III program data, but they do not fully address the limitations we identified—missing data, widespread data entry issues and inconsistent reporting—or the causes of these issues, including: the lack of a common definition of a current acquisition program; insufficient data reliability testing; and inconsistent compliance with requirements for acquisition program baselines and reporting on ACAT II and III programs that may become major programs due to cost growth. Components also lacked plans to ensure their intended actions are implemented and improvements to data collection and analysis are sustained over the long term. Until these limitations are addressed, DOD components will be unable to generate reliable information to effectively manage and oversee their ACAT II and III programs.

Recommendations for Executive Action

We are making four recommendations to improve DOD's ability to collect and maintain reliable data on its acquisitions. Specifically, we recommend that the Secretary of Defense direct the Under Secretary of Defense for Acquisition, Technology, and Logistics, in consultation with DOD components, to take the following actions:

- establish guidelines on what constitutes a "current" ACAT II or III program for reporting purposes; the types of programs, if any, that do

not require ACAT designations; and whether the rules for identifying current MDAPs would be appropriate for ACAT II and III programs; and

- determine what metrics should be used and what data should be collected on ACAT II and III programs to measure cost and schedule performance; and whether the use of DAMIR and the MDAP selected acquisition report format may be appropriate for collecting data on ACAT II and III programs.

We also recommend that the Secretary of Defense direct the Secretaries of the Air Force, Army, and Navy and the Commander of SOCOM to take the following actions:

- assess the reliability of data collected on ACAT II and III programs and work with PEOs to develop a strategy to improve procedures for the entry and maintenance of data; and
- develop implementation plans to coordinate and execute component initiatives to improve data on ACAT II and III programs.

We are also making two recommendations to help ensure compliance with relevant provisions of DOD acquisition policy with the purpose of improving DOD's ability to provide oversight for ACAT II and III programs, including those programs that may become MDAPs.

- We recommend that the Secretary of Defense direct the Secretary of the Air Force and Commander of SOCOM to establish a mechanism to ensure compliance with APB requirements in DOD policy.
- We recommend that the Secretary of Defense direct the Secretaries of the Air Force, Army, and Navy to improve component procedures for notifying the Defense Acquisition Executive of programs with a cost estimate within 10 percent of ACAT I cost thresholds.

Agency Comments and Our Evaluation

We provided a draft of this report to DOD for review and comment. In its written comments, which are reprinted in full in appendix V, DOD partially concurred with all six of our recommendations. However, as discussed below, it is unclear whether the actions that DOD plans to take will fully address the issues we raised in this report.

DOD partially concurred with our first recommendation to establish guidelines on what constitutes a "current" ACAT II or III program for

reporting purposes; the types of programs, if any, that do not require ACAT designations; and whether the rules for identifying current MDAPs would be appropriate for ACAT II and III programs. DOD also partially concurred with our second recommendation related to determining what metrics should be used and what data should be collected on ACAT II and III programs to measure cost and schedule performance. In its response, DOD stated that the Under Secretary of Defense for Acquisition, Technology, and Logistics would review the existing policy direction for ACAT II and III programs to determine whether it needs to be altered or supplemented to facilitate data collection or reporting. However, as our review found, the question is not whether policy needs to be revised, but how it needs to be revised. We found that the existing policy direction was not adequate to ensure consistent data collection and reporting on ACAT II and III programs or their cost and schedule performance and our recommendations were designed to address those issues. We continue to believe that additional guidelines for components regarding which programs should be considered current ACAT II and III programs for reporting purposes and consistent metrics to measure performance trends, among other actions, are needed to correct the issues we found.

DOD partially concurred with our third and fourth recommendations to assess the reliability of data collected on ACAT II and III programs and work with PEOs to develop a strategy to improve procedures for the entry and maintenance of data; and develop implementation plans to coordinate and execute component initiatives to improve data on ACAT II and III programs, respectively. In its response, DOD stated the Under Secretary of Defense for Acquisition, Technology, and Logistics will direct the DOD components to evaluate the data collected on ACAT II and III programs and report back to him on their assessment of the reliability of that data and the status of the plans to improve the availability and quality of the data. DOD's response represents a good first step towards assessing the reliability of its ACAT II and III program data, but the response does not fully address our recommendations. DOD's response does not address whether components would be required to develop strategies with PEOs to improve the entry and maintenance of data, as we recommended. We continue to believe that developing these strategies with those responsible for entering and maintaining program data on a day-to-day basis, including PEOs, is important to make sure the causes of DOD's data quality problems are fully understood and addressed in a manner that can be implemented. Further, DOD's response does not directly address our recommendation to develop implementation plans for component efforts. We believe that fully

implementing this recommendation is essential for ensuring that DOD and its components can effectively monitor and evaluate the implementation of component initiatives to improve ACAT II and III data.

DOD partially concurred with our fifth recommendation to direct the Secretary of the Air Force and Commander of SOCOM to establish a mechanism to ensure compliance with APB requirements in DOD policy. DOD also partially concurred with our sixth recommendation to direct the Secretaries of the Air Force, Army, and Navy to improve component procedures for notifying the Defense Acquisition Executive of programs with a cost estimate within 10 percent of ACAT I cost thresholds. In its response, DOD stated that the Under Secretary of Defense for Acquisition, Technology, and Logistics will issue guidance to DOD components reiterating the APB requirements for ACAT II and III programs and directing that the Defense Acquisition Executive be notified when an increase or estimated increase in program cost is within 10 percent of the ACAT I cost thresholds. Reiterating existing departmental policy on these issues may help raise awareness at the component level, but without additional enforcement mechanisms it may not address the causes of the deficiencies we discuss in this report. For example, the Air Force has issued component-level guidance directing the development of APBs. However, we found that programs were not in compliance with the guidance, which demonstrates the need to improve enforcement mechanisms, such as ensuring milestone decision authorities do not approve programs to proceed through acquisition milestones without APBs. Similarly, with regard to our recommendation on notification requirements for programs approaching the ACAT I threshold, we found that component officials cited reasons other than a lack of awareness of the policy for not notifying the Defense Acquisition Executive of these programs' cost growth. As a result, we continue to believe that DOD should fully implement our recommendation by directing components to improve their notification procedures.

We are sending copies of this report to the appropriate congressional committees; the Secretary of Defense; the Under Secretary of Defense for Acquisition, Technology, and Logistics; the Secretaries of the Army, Navy, and Air Force; the Commander of U.S. Special Operations Command; the Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs; and other interested parties. This report will also be available at no charge on GAO's website at <http://www.gao.gov>.

If you or your staff have any questions concerning this report, please contact me at (202) 512-4841 or by e-mail at sullivanm@gao.gov.

Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix VI.

A handwritten signature in black ink, appearing to read 'Michael J. Sullivan', with a stylized, cursive script.

Michael J. Sullivan
Director, Acquisition and Sourcing Management

Appendix I: Objectives, Scope, and Methodology

Our objectives were to assess (1) the extent to which information is available on the number of the Department of Defense's (DOD) current acquisition category (ACAT) II and III programs, their total estimated acquisition cost, and cost and schedule performance; (2) the factors affecting the cost and schedule performance of selected ACAT II and III programs; and (3) the number of current ACAT II and III programs that are likely to become major defense acquisition programs (MDAP).

To address our first objective, we used a data collection instrument (DCI) to identify and collect data on the number and cost of current ACAT II and III programs from five DOD components that accounted for approximately 88 percent of DOD's requested research, development, test, and evaluation (RDT&E) and procurement funding in the President's Fiscal Year 2014 budget request: Army, Air Force, Navy, U.S. Special Operations Command (SOCOM), and DOD's Chemical and Biological Defense Program (CBDP).¹ We used a DCI to obtain ACAT II and III program data based on preliminary discussions with DOD and component officials that a DCI would be the best way to collect the information of interest. We requested that each component identify all of its current ACAT II and III programs and provide cost data and descriptive information for each program. For the purposes of this report, we defined a current program as one that has been formally initiated in the acquisition process but has not yet delivered 90 percent of its planned units or expended 90 percent of its planned expenditures. For cost data, we requested components provide baseline and current program estimates in millions of base year dollars, to include estimates for RDT&E, procurement, acquisition operation and maintenance, and military construction, as well as the program's total acquisition cost estimate and the base year associated with the estimate. We also collected pertinent information for each program including program name, ACAT level, type of acquisition (automated information system or non-

¹Navy guidance allows for programs to be categorized as ACAT IV programs. For the purposes of this report, we use the term ACAT III to also include Navy and Marine Corps ACAT IV acquisition programs.

automated information system), milestone decision authority, lead DOD component, and program executive office.²

To obtain additional information on schedule performance, we collected and analyzed acquisition program baseline (APB) documents, which contain program schedule and cost parameters, for a non-generalizable random sample of 170 non-automated information system ACAT II and III programs. To select the programs, we used the initial data provided to us by DOD components that included 836 reported ACAT II or III programs as a starting point. We adjusted our selection as appropriate to account for known errors in the data at the time of selection in May 2014, such as programs that were known to not be current ACAT II or III programs. Our intention was to select a sample that would be generalizable to the population of current ACAT II and III programs. However, after selecting our sample we determined through our data reliability assessment that the population of current ACAT II and III programs could not be reliably determined and that our sample would therefore be non-generalizable.³ As such, results of this analysis cannot be used to make inferences about all current ACAT II and III programs. When APB documents were available for programs in our sample, we reviewed them to determine whether they contained comparable program start and initial operational capability milestones to allow us to measure program schedule performance. We also used the APBs collected from this sample of programs as part of our reliability assessment of ACAT II and III cost data provided by DOD components.

Our observations on DOD's ACAT II and III program data are based on the original data submitted by the components. We did not assess the reliability of any underlying data systems that may have been used to generate this information. We analyzed the original data provided by the components because it reflects the information DOD would have had on

²We requested that the baseline cost estimate reflect the objective value from the program's original acquisition program baseline. We requested that the current cost estimate reflect the President's Fiscal Year 2014 budget request. Our instructions requested an explanation for any field the component was unable to provide and that zero be entered for any cost estimate element without a value. We excluded classified programs from the scope of our review.

³Consequently, we did not replace 14 programs in our sample that we determined did not meet our criteria for current ACAT II and III programs after selection and instead reduced the sample from 184 programs to 170 programs.

ACAT II and III programs at the time we collected data. From January through July 2014, we worked with components to attempt to correct problems we identified in the data. However, we continued to identify additional errors. As a result, we determined that the data provided by DOD components in response to our DCI were not sufficiently reliable to identify the number of current ACAT II and III programs, their estimated acquisition cost, or the cost performance of DOD's ACAT II and III programs. Appendix III contains a more detailed discussion of our data reliability assessment. We also determined that we could not assess schedule performance for ACAT II and III programs because more than half of programs we reviewed in our sample of 170 programs were missing source documents or lacked comparable schedule milestones.

To address our second objective, we selected a non-generalizable sample of 15 programs from the data provided by DOD in response to our DCI.⁴ We selected 3 programs from each component included in our review. For each component, these programs were selected to include the largest current non-automated information system ACAT II and III program based on total acquisition cost as of the President's Fiscal Year 2014 budget submission and one additional program based on factors such as significant cost growth or whether the program was part of a family of systems, which we defined as a related group of programs consisting of multiple increments or fielding similar capabilities for multiple platforms.⁵ To select the programs, we used the initial data provided to us by DOD components that included 836 reported ACAT II or III programs as a starting point. Programs that lacked data for current acquisition cost, commodity type, or ACAT level were excluded from selection. We also adjusted our selection as appropriate to account for known errors in the data at the time of selection, such as incorrectly-reported cost estimates, or programs that were known to not be current ACAT II or III programs. However, after our selection we identified additional concerns with the

⁴This sample of 15 programs was selected separately from the sample of 170 programs mentioned above using different criteria, although 7 of the 15 programs are included in both samples.

⁵We excluded automated information systems at all components and vaccine programs at CBDP from our case studies because our focus was on the performance of weapon system programs. In the three instances in which we selected families of systems for review—at Navy, SOCOM, and CBDP—we reviewed multiple ACAT II or III programs included in the family of systems, but considered the group of systems as a single program for the purposes of our analysis.

data reported by DOD that would likely have changed the results of our selection of the largest ACAT II or III programs at certain components. We did not make any subsequent adjustments to our original selection because we determined that the data provided by DOD was not sufficiently reliable to enable us to determine the largest ACAT II or III program at each component.

For each program, we analyzed key program documents, such as APBs, program status reports, acquisition strategies, acquisition decision memoranda, and requirements documentation, to assess cost and schedule performance and identify factors affecting that performance. We also conducted semi-structured interviews with program officials to discuss the information identified through reviews of program documentation and obtain additional insights into factors that affected program cost or schedule performance. Additionally, we analyzed prior GAO reports to determine the extent to which the factors we identified as affecting cost and schedule performance for selected ACAT II and III programs were similar to factors that we have identified in prior work as affecting performance of MDAPs.

To address our third objective, we reviewed DOD acquisition policy related to the reclassification of ACAT II or III programs to ACAT I programs and analyzed program cost data provided by DOD components. Based on the requirement in DOD acquisition policy for components to notify the Defense Acquisition Executive of ACAT II or III programs within 10 percent of the next ACAT level, we analyzed data provided by DOD through our DCI to identify programs that appeared to be within 10 percent of or have exceeded either the ACAT I RDT&E or procurement threshold. We were unable to identify an actual number of programs likely to become MDAPs because of reliability issues related to identifying the population of ACAT II and III programs. However, we determined the initial data provided to us by DOD that included 836 reported ACAT II or III programs were sufficiently reliable to serve as a starting point to identify the minimum number of programs likely to become MDAPs because we were able to confirm data with relevant program offices for those programs that appear to be within 10 percent of or have exceeded either ACAT I threshold. We excluded certain programs from further review that were known at the time that we initially identified programs to have incorrectly-reported cost estimates.

For programs that appeared to meet our criteria for current ACAT II or III programs likely to become MDAPs, we collected additional information using a structured set of questions to determine whether the relevant

DOD component had notified the Defense Acquisition Executive that the program was approaching or had exceeded the ACAT I threshold and whether the program had been or was expected to be reclassified as an ACAT I program. We also requested and reviewed supporting documentation when available, including documentation of notification to the Defense Acquisition Executive that the program was within 10 percent of the ACAT I threshold. After we received the information from the components, we identified additional programs that had incorrectly reported cost estimates or were no longer current ACAT II or III programs and we removed these programs from our analysis as appropriate.

We conducted this performance audit from October 2013 to March 2015 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.

Appendix II: Selected Acquisition Program Milestone Documentation Requirements and Congressional Reporting Requirements by Acquisition Category

Table 7: Applicability of Selected Acquisition Program Milestone Documentation Requirements by Acquisition Category (ACAT) Level

Requirement	Description	Major defense acquisition program	Major automated information system	ACAT II	ACAT III
2366a/b Certification Memorandum ^a	Certifies that certain acquisition process requirements have been fulfilled prior to milestone approval	✓			
Acquisition Program Baseline	Summarizes program cost, schedule, and performance parameters	✓	✓	✓	✓
Independent Cost Estimate	Program cost estimate completed outside of the supervision of the entity responsible for the acquisition program	✓	✓		
Requirements Documentation	Documents capability requirements to which the program responds	✓	✓	✓	✓
Systems Engineering Plan	Describes program's overall technical approach and details timing and criteria for technical reviews	✓	✓	✓	✓
Technology Readiness Assessment	Assessment of the maturity of critical technologies and related risks	✓			
Test and Evaluation Master Plan	Primary planning and management tool for integrated test program	✓	✓	✓	✓

Source: GAO analysis of Department of Defense Interim Instruction 5000.02. | GAO-15-188

^a10 U.S.C. § 2366a and b.

Table 8: Applicability of Selected Congressional Reporting Requirements by Acquisition Category (ACAT) Level

Requirement	Description	Major defense acquisition program	Major automated information system	ACAT II	ACAT III
Selected Acquisition Report/ Major Automated Information System Annual Report	Provides information on total program cost, schedule, and performance to Congress	✓	✓		
Congressional Notification of Critical or Significant Cost Breach	Provides notification of unit cost breaches above a certain threshold ^a	✓			
Major Automated Information System Critical Change Report or Significant Change Notification	Provides notification of cost or schedule changes above a certain threshold ^b		✓		

Source: GAO analysis of Department of Defense Interim Instruction 5000.02. | GAO-15-188

^a10 U.S.C § 2433 and 2433a. Notification must be provided to Congress when the program acquisition unit cost or average procurement unit cost increases by at least 15 percent over the current baseline estimate or 30 percent over the original baseline estimate.

^b10 U.S.C § 2445c. Notification must be provided to Congress when there is a schedule change that will cause a delay of more than 6 months; an increase in the expected development cost or full life-cycle cost for the program by at least 15 percent; or a significant, adverse change in the expected performance of the major automated information system to be acquired.

Appendix III: Observations on Reliability of Department of Defense Components' Acquisition Category II and III Program Data

We conducted an analysis to determine whether data provided by Department of Defense (DOD) components were sufficiently reliable for the purpose of determining the number, total acquisition cost, and cost performance of DOD's current acquisition category (ACAT) II and III programs. For our analysis, we conducted electronic and manual testing on data for all programs reported by components in response to our request for completion of a data collection instrument (DCI) and compared cost data for a non-generalizable sample of programs to source documents when available. We also reviewed relevant DOD and component acquisition policy, and interviewed knowledgeable officials. We identified reliability issues with the data for about 60 percent of the programs components initially reported to us. As a result, we determined that the data provided by DOD components were not sufficiently reliable to identify the number of current ACAT II and III programs, their estimated total acquisition cost, or the cost performance of DOD's ACAT II and III programs.

Methodology

To assess the accuracy and completeness of the ACAT II and III program data reported by DOD components, we electronically tested the data for:

- values outside the designated range of values for ACAT II and III programs, defined per DOD acquisition policy;¹
- obvious calculation or data entry errors (for example, individual cost elements do not sum to total reported);
- missing data in baseline or current cost estimate data elements, including estimates for research, development, test, and evaluation; procurement; military construction; and acquisition operation and maintenance, as well as the total acquisition cost estimate, and base year; and
- missing data in program descriptive data elements, such as ACAT level, milestone decision authority, or commodity type.

¹According to DOD policy, ACAT II and III programs are funded acquisitions and should generally have cost estimates less than the thresholds for ACAT I programs. ACAT I thresholds are \$480 million in research, development, test, and evaluation or \$2.79 billion in procurement in fiscal year 2014 constant dollars. Therefore, we expected that ACAT II or III programs reported by the components would have cost estimates greater than zero dollars and less than the ACAT I thresholds.

Additionally, we compared cost data for our sample of 170 programs to source documents when available. Specifically, for each program in our sample, we first requested and reviewed original and current acquisition program baselines (APB) to determine whether or not they reflected the actual baseline from program start and the current APB based on the approval date of the APB and relevant schedule milestones that trigger the development of an APB or an APB revision in accordance with DOD acquisition policy.² When APBs were not provided or did not appear to reflect the actual baseline and/or current APB, we followed up with DOD components to obtain the correct documents when possible. When we were able to obtain both original and current APBs, we took the following steps to assess the accuracy of the information reported in the DCI:

- Compared baseline cost data from the program's original APB to the baseline cost data reported in the DCI.
- Compared cost data in the current APB to cost data reported in the DCI to identify obvious errors in the cost data reported in the DCI, such as current cost data in the DCI that was significantly less than the amount reported in the APB without explanation.³

To assess the consistency of ACAT II and III program data, we manually reviewed the data provided in response to the DCI and subsequent requests to identify programs that did not appear to meet our criteria for current ACAT II and III programs. For the purposes of this report, we defined a current program as one that has been formally initiated in the acquisition process but has not yet delivered 90 percent of its planned units or expended 90 percent of its planned expenditures. For each program that did not appear to be a current ACAT II or III program, we analyzed whether the program was pre-program start, in sustainment, completed, or not a separate ACAT II or III program (for example, was a subprogram of another ACAT II or III program reported to us).

²Interim Department of Defense Instruction 5000.02, *Operation of the Defense Acquisition System*, (Nov. 25, 2013).

³We requested that current cost information in the DCI reflect the President's Fiscal Year 2014 budget request, which may not align with the time frame during which a program's current APB was developed. Therefore, we did not expect that current cost data reported in the DCI would necessarily match cost data in a program's current APB.

We also reviewed relevant DOD and component policy, and interviewed agency officials responsible for acquisition policy and knowledgeable about the maintenance of component-level data on ACAT II and III programs. We reviewed these policies for information such as whether they addressed what data should be collected and maintained on ACAT II and III programs or provided guidance to help ensure consistency of data across components. We met with officials from the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics to discuss relevant DOD acquisition policy, and component officials from the following offices to discuss relevant component acquisition policy and efforts to collect ACAT II and III program data, as well as any efforts to assess ACAT II and III program performance:

- Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology
- Office of the Assistant Secretary of the Navy for Research, Development and Acquisition
- Office of the Assistant Secretary of the Air Force for Acquisition
- Special Operations Research, Development, and Acquisition Center
- Joint Program Executive Office for Chemical and Biological Defense

Results of Analysis

The results of our data reliability analysis capture accuracy, completeness, and consistency issues with the data provided by DOD components. Accuracy, completeness, and consistency are key characteristics of reliable data and refer to (1) the extent that recorded data reflect the actual underlying information; (2) data elements for each program are populated appropriately; and (3) the need to obtain and use data that are clear and well defined enough to yield similar results in similar analyses, respectively.

Accuracy and Completeness

We identified numerous types of accuracy and completeness issues with the data provided by DOD components, including cost estimate values outside of the ACAT II and III program range, basic math errors, and missing data. For example, 333 out of 836 ACAT II and III programs reported by the components were missing a baseline or current cost estimate element or descriptive program data. Table 9 provides detail on accuracy and completeness issues by component.

**Appendix III: Observations on Reliability of
Department of Defense Components'
Acquisition Category II and III Program Data**

Table 9: Accuracy and Completeness Issues Identified by GAO in Department of Defense Components' Acquisition Category (ACAT) II and III Program Data

Issues identified by GAO	Army (n=307)	Navy (n=110)	Air Force (n=338)	U.S. Special Operations Command (n=65)	Chemical and Biological Defense Program (n=16)
Values outside ACAT II and III program range (63 programs) ^a	10	11	34	8	0
Basic math errors (54 programs) ^b	6	14	21	8	5
Missing cost estimate data (315 programs)	177	19	110	9	0
Missing descriptive program data (43 programs)	14	2	27	0	0

Source: GAO analysis of Department of Defense component data. | GAO-15-188

Notes: We identified these issues through electronic testing of the data. We conducted separate tests for each issue, so a single program may be reported in more than one category.

^aAccording to DOD policy, ACAT II and III programs are funded acquisitions and should be less than the thresholds for ACAT I programs. ACAT I thresholds are \$480 million in research, development, test, and evaluation or \$2.79 billion in procurement in fiscal year 2014 constant dollars. Therefore, we expected that all ACAT II and III programs would have cost estimates greater than zero dollars and less than ACAT I thresholds.

^bBasic math errors include programs with current or baseline cost estimate elements that when added up and rounded to the nearest million do not match the reported total cost estimate rounded to the nearest million. This category excluded programs missing baseline or current cost estimates.

We identified additional issues with the accuracy of the ACAT II and III program cost information when we compared reported cost estimates to available source documents for a non-generalizable sample of ACAT II and III programs. Specifically, of the 81 programs in our sample that reported complete cost estimates and provided source documents, 50 reported incorrect cost data. For example, for 37 of these 50 programs, we determined that baseline cost data was inaccurate because either the baseline cost estimate or the base year reported for this estimate did not match the source documents. Details of the accuracy and completeness issues we identified when assessing the cost data reported for our sample are provided by component in table 10.

Table 10: Issues Found When Comparing Reported Cost Data to Source Documents for Non-generalizable Random Sample of Acquisition Category (ACAT) II and III Programs

Cost Data Issues	Total for 5 Components	Army	Navy	Air Force	U.S. Special Operations Command	Chemical and Biological Defense Program
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**Appendix III: Observations on Reliability of
Department of Defense Components'
Acquisition Category II and III Program Data**

Cost Data Issues	Total for 5 Components	Army	Navy	Air Force	U.S. Special Operations Command	Chemical and Biological Defense Program
Missing one or more acquisition program baseline document ^a	75	10	9	38	13	5
Missing baseline or current cost estimate element	14	14	0	0	0	0
Partial cost estimate	2	0	1	0	1	0
Data error in cost estimate element	48	10	13	6	10	9
No reliability issues identified	31	11	14	4	2	0
Total programs in sample	170	45	37	48	26	14

Source: GAO analysis of Department of Defense component-provided acquisition program baselines and cost estimates. | GAO-15-188

^aWe did not analyze data reliability issues for programs that lacked one or more acquisition program baseline documents since these documents were considered to be the source document for the baseline cost data provided.

Consistency

We identified 226 of the 836 programs reported by DOD components that did not meet our criteria for current ACAT II or III programs because, for example, they were not current or they were not stand-alone acquisition programs. Additionally, because information on program phase was not available for all programs reported by DOD components, the number of programs we identified as not a current ACAT II or III program reflects a minimum number of such programs. Table 11 provides details on consistency issues we identified by component.

Table 11: Consistency Issues Identified in Department of Defense Components' Acquisition Category (ACAT) II and III Program Data

	Army (n=307)	Navy (n=110)	Air Force (n=338)	U.S. Special Operations Command (n=65)	Chemical and Biological Defense Program (n=16)
Not a current program (pre-program start, in sustainment, or completed) (199 programs)	120	8	68	3	0
Not a separate program or other reason (27 programs) ^a	4	3	6	14	0
Sum of non-current/non-ACAT II and III programs (226 programs)	124	11	74	17	0

Source: GAO analysis of Department of Defense component data. | GAO-15-188

^aPrograms categorized as "other reason" include programs led by a component other than the reporting component or programs for which the reporting component provided sufficient information to determine the program was not a current ACAT II or III program, but not enough information to determine the specific program phase (e.g. pre-program start, in sustainment, or completed).

Appendix IV: Description of Selected Department of Defense (DOD) Acquisition Category (ACAT) II and III Programs

Figure 4: Description of Selected Army Acquisition Category (ACAT) II and III Programs

	<p>ACAT LEVEL II: AN/TPQ-53 Counterfire Target Acquisition Radar System Program Executive Office: Missiles and Space Estimated Total Acquisition Cost as of March 2012: \$2.7 billion</p> <p>The AN/TPQ-53 Counterfire Target Acquisition Radar System provides warfighters with continuous and responsive counter-battery target acquisition capabilities for all types of military operations and replaces the legacy AN/TPQ-36 and AN/TPQ-37 target acquisition counterfire radar systems. It detects in-flight projectiles and determines and communicates firing point locations for mortars, artillery, and rockets with a high degree of accuracy and low false alarm rates. The AN/TPQ-53 program was initiated in 2006 and was approved to start production to meet an urgent warfighter need in July 2008. The Army expects to field a total of 178 systems.^a</p>
	<p>ACAT LEVEL III: M855A1 5.56 mm Enhanced Performance Round Program Executive Office: Ammunition Estimated Total Acquisition Cost as of February 2011: \$2.4 billion</p> <p>The M855A1 5.56mm Enhanced Performance Round is a lead-free version of the M855 cartridge fired from the M4 carbine, M16 rifle, and M249 Squad Automatic Weapon machine gun. According to Army officials, the design of the M855A1 has resulted in several performance enhancements, including better hard target penetration, more consistent performance against soft targets, and better outcomes for these effects at significantly increased distances as compared to the original M855 cartridge. The M855A1 was approved for fielding as an engineering change proposal to the original M855 cartridge in June 2010. As of December 2014, over one billion rounds had been produced.</p>
	<p>ACAT LEVEL III: Synthetic Environment Core Program Executive Office: Simulation, Training, and Instrumentation Estimated Total Acquisition Cost as of October 2011: \$161.2 million</p> <p>The Synthetic Environment Core program includes development efforts for new components and the integration of existing software and hardware products to create the Army's Common Virtual Environment. These components will be available for integration into host virtual training aids, devices, simulators, and simulations that will undergo development or upgrades based on emerging requirements. The program also includes the development of a rapid terrain generation process and the establishment of associated database facilities. Synthetic Environment Core was initiated as an ACAT III program at development start in March 2005, but it is currently being re-designated an ACAT II program due to cost increases.</p>

Source: GAO analysis of Army program documents (data); Lockheed Martin Mission Systems & Training (top photo) and U.S. Army (middle and bottom photos). | GAO-15-188

Notes: All dollar figures are provided in then-year dollars and have not been adjusted for inflation. Estimated total acquisition cost was taken from each program's most-recently approved acquisition program baseline. A program's current total acquisition cost estimate may differ from the amount reported here if the estimate has changed since the program's acquisition program baseline was approved.

^aThe initial operational capability date for the AN/TPQ-53 Counterfire Target Acquisition Radar System is considered by the Army to be sensitive and is therefore not included in this report.

Appendix IV: Description of Selected Department of Defense (DOD) Acquisition Category (ACAT) II and III Programs

Figure 5: Description of Selected Navy Acquisition Category (ACAT) II and III Programs

	<p>ACAT LEVEL II: AN/SPY-1D(V) Radar Upgrade Program Executive Office: Integrated Warfare Systems Estimated Total Acquisition Cost as of February 2012: \$304.8 million</p> <p>The AN/SPY-1D(V) Radar Upgrade program improves the performance of the AN/SPY-1D(V) radar, a high-powered multi-functional phased-array radar capable of performing search, track, and missile guidance functions simultaneously in both littoral and deepwater environments. The AN/SPY-1D(V) radar upgrade program was initiated at development start in September 1993. The Navy fielded its initial capability in 2004 and expects to field a total of 35 systems. The program is nearly complete and the Navy expects the Air and Missile Defense Radar program to provide radar resources for DDG-51 class ships going forward.</p>
	<p>ACAT LEVEL III: Nulka Shipboard Improvement Program Executive Office: Integrated Warfare Systems Estimated Total Acquisition Cost as of April 2009: \$1.1 billion</p> <p>The Nulka Shipboard Improvement program is a rocket-launched active electronic warfare countermeasure system designed to defend surface combatants against anti-ship cruise missiles. It processes multiple threats simultaneously from either data entered manually by the operator or inputted automatically by the ship's Combat System and Electronic Support Measures equipment. The program was initiated at development start in March 1987 and expected to deliver a total of 163 launch systems and 1,288 decoy cartridges as of the program's most recent acquisition program baseline in April 2009.</p>
<p>Marine Corps Family of Light Armored Vehicles – Anti-Tank Modernization and Command and Control Upgrade Programs Program Executive Office: Marine Corps Systems Command</p>	
<p>The Family of Light Armored Vehicles (LAV) is an 8x8 wheeled family of vehicles comprised of a base variant that was initially fielded in 1983 as the LAV-25 and six mission role variants. The vehicles are intended to provide combined arms reconnaissance, security missions, and mobile electronic support.</p>	
 <p>ACAT LEVEL III: LAV Anti-Tank Modernization Estimated Total Acquisition Cost as of June 2013: \$339.0 million</p> <p>The LAV Anti-Tank Modernization program is expected to enable the Marine Corps to acquire and destroy main battle tanks when Light Armored Reconnaissance units face an enemy armored formation threat. The anti-tank variant is expected to be capable of firing multiple shots and acquiring targets while on the move with an improved thermal sight and advanced fire control system. This program was initiated at development start in May 2011 and plans to deliver the initial capability in fiscal year 2018 and procure a total of 118 systems.</p>	 <p>ACAT LEVEL III^a: LAV Command and Control Upgrade Estimated Total Acquisition Cost as of November 2009: \$114.5 million</p> <p>The LAV Command and Control Upgrade program is a suite of vehicle communication upgrades including the ability to receive and transmit data between vehicles and share information among computer workstations. It also is designed to incorporate more reliable and mobile long range high-frequency and satellite communication capabilities. The program was initiated at development start in March 2005, delivered its initial capability in September 2011, and as of August 2012, had delivered 55 of 69 total planned systems.</p>

Source: GAO analysis of Navy program documents (data); Senior Chief Donnie Ryan, U.S. Navy (top photo), Navy Program Executive Office Integrated Warfare Systems (middle photo), and U.S. Marine Corps (bottom photos). | GAO-15-188

Notes: All dollar figures are provided in then-year dollars and have not been adjusted for inflation. Estimated total acquisition cost was taken from each program's most-recently approved acquisition program baseline. A program's current total acquisition cost estimate may differ from the amount reported here if the estimate has changed since the program's acquisition program baseline was approved.

^aThe LAV Command and Control Upgrade program is considered to be an ACAT IV program by the Marine Corps. For the purposes of this report, we considered the Navy's ACAT IV programs to be ACAT III programs since DOD only recognizes ACAT I, II, and III programs.

Appendix IV: Description of Selected Department of Defense (DOD) Acquisition Category (ACAT) II and III Programs

Figure 6: Description of Selected Air Force Acquisition Category (ACAT) II and III Programs

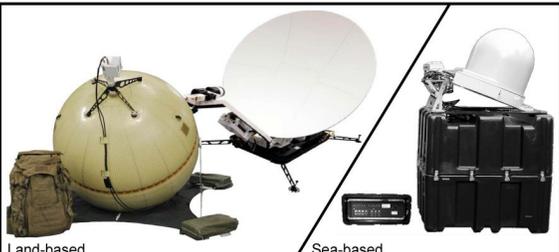
	<p>ACAT LEVEL II: F-15E Radar Modernization Program Program Executive Office: Fighters and Bombers Estimated Total Acquisition Cost as of May 2014: \$2.9 billion</p> <p>The F-15E Radar Modernization Program replaces the F-15E legacy APG-70 mechanically scanned radar with an active electronically scanned array system designed to retain functionality of the legacy radar system while providing expanded mission employment capabilities including improved operational capabilities for long-range detection, tracking, and mapping in air-to-air and air-to-ground environments. The program was initiated at development start in September 2008 and the Air Force plans to procure 222 systems and deliver the initial capability to the warfighter in August 2015.</p>
	<p>ACAT LEVEL III: Air Force Subscale Aerial Target Program Executive Office: Weapons Estimated Total Acquisition Cost as of February 2010: \$968.9 million</p> <p>The Air Force Subscale Aerial Target program is a turbojet powered, subscale aerial target system consisting of an aircraft, payload, and support equipment. It uses rocket-assisted takeoffs from the ground to conduct various scenarios and employs countermeasure techniques to simulate adversarial threats and tactics for weapons evaluation and operator familiarization. The program was initiated at production start in July 2004 and the Air Force expects to field 800 systems. The initial capability was delivered to the warfighter in December 2007.</p>
	<p>ACAT LEVEL III: Haystack Ultra-Wideband Satellite Imaging Radar Program Executive Office: Space Estimated Total Acquisition Cost as of April 2013: \$107.5 million</p> <p>The Haystack Ultra-Wideband Satellite Imaging Radar program was an upgrade to the existing X-band Haystack Imaging Radar, operated by Massachusetts Institute of Technology Lincoln Laboratory for the Air Force. The upgrade adds W-band capability and enhances imaging resolution to characterize smaller objects in low earth orbit and add deep-space tracking capability. The Air Force initiated the program as a low-cost modification at development start in July 2004. The upgrade was completed and accepted by the Air Force in February 2014.</p>

Source: GAO analysis of Air Force program documents (data); Boeing (top photo) and U.S. Air Force (middle and bottom photos). | GAO-15-188

Notes: All dollar figures are provided in then-year dollars and have not been adjusted for inflation. Estimated total acquisition cost was taken from each program's most-recently approved acquisition program baseline. A program's current total acquisition cost estimate may differ from the amount reported here if the estimate has changed since the program's acquisition program baseline was approved.

Appendix IV: Description of Selected Department of Defense (DOD) Acquisition Category (ACAT) II and III Programs

Figure 7: Description of Selected U.S. Special Operations Command (SOCOM) Acquisition Category (ACAT) II and III Programs

	<p>ACAT LEVEL II: AC-130J Program Executive Office: Fixed Wing Estimated Total Acquisition Cost as of October 2013: \$2.1 billion</p> <p>The AC-130J program is designed to be a modular, scalable weapon system that maximizes the full spectrum of available weapons through full use of the AC-130J aircraft with the primary missions of close air support, air interdiction, and other associated collateral missions. SOCOM expects the AC-130J and its associated precision strike package to provide combatant commands with increased operational availability and fire support capabilities. The program was initiated at development start in March 2012, and SOCOM expects to field 37 systems and deliver the initial capability to the warfighter by March 2017.</p>
	<p>ACAT LEVEL III: Nonstandard Aviation Program Executive Office: Fixed Wing Estimated Total Acquisition Cost as of July 2009: \$480.0 million</p> <p>The Nonstandard Aviation program objective is to acquire, modify, field, and sustain commercial aircraft for SOCOM and the Air Force Special Operations Command. Program efforts also include procuring initial spares and training aircrews and maintenance personnel on the nonstandard aviation mission to support Special Operations Forces counter-terrorism operations. The Nonstandard Aviation program was initiated at production start in July 2009. SOCOM expects to deliver a total of 23 aircraft by September 2018.</p>
 <p>Land-based</p> <p>Sea-based</p>	<p>ACAT LEVEL III: Special Operations Forces Deployable Node Family of Systems (Heavy, Medium, and Light) Program Executive Office: Command, Control, Communications, and Computers Estimated Total Acquisition Cost as of September 2013: \$156.7 million^a</p> <p>The Special Operations Forces Deployable Node Family of Systems is a family of deployable land or sea satellite communication systems providing deployed special operations forces user elements and teams with access to the Special Operations Forces Information Environment for high-capacity voice, data, video-teleconference, and video at all levels of classification. These satellite communication systems with associated switching equipment and terminals have super high frequencies and multiple sizes to support large, medium, and small special operations forces operational elements using the heavy, medium, and light variants, respectively. As of April 2014, SOCOM had delivered 58 Special Operations Forces Deployable Node-Heavy systems, 208 Medium systems, and 860 Light systems.</p>

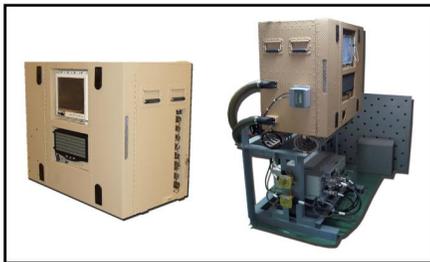
Source: GAO analysis of SOCOM program documents (data); SOCOM (photos). | GAO-15-188

Notes: All dollar figures are provided in then-year dollars and have not been adjusted for inflation. Estimated total acquisition cost was taken from each program's most-recently approved acquisition program baseline unless otherwise noted. A program's current total acquisition cost estimate may differ from the amount reported here if the estimate has changed since the program's acquisition program baseline was approved.

^aThe Special Operations Forces Deployable Node Family of Systems cost estimate was taken from the program's September 2013 Life Cycle Cost Estimate. The figure reflects fiscal year 2012 through 2019 only and excludes \$654.3 million of Capital Equipment Replacement Program funding included in the program's budget.

Appendix IV: Description of Selected Department of Defense (DOD) Acquisition Category (ACAT) II and III Programs

Figure 8: Description of Selected Chemical and Biological Defense Program (CBDP) Acquisition Category (ACAT) II and III Programs



ACAT LEVEL II: Joint Biological Point Detection System
 Program Executive Office: Chemical and Biological Defense
 Estimated Total Acquisition Cost as of September 2011: \$777.4 million

The Joint Biological Point Detection System program increases detection sensitivity and the number of agents that are identified, decreases detection and identification time, and provides automated detection and identification. It consists of complementary detector, collector, and identification technologies to rapidly and automatically detect and identify biological threat agents. The program was initiated at development start in December 1996. CBDP planned to field 1,063 systems and delivered initial capability to the warfighter in August 2003.



ACAT LEVEL III: Dismounted Reconnaissance Sets, Kits, and Outfits
 Program Executive Office: Chemical and Biological Defense
 Estimated Total Acquisition Cost as of April 2013: \$1.0 billion

The Dismounted Reconnaissance Sets, Kits, and Outfits program is expected to provide commanders more detailed information reports for use against chemical, biological, radiological, and nuclear hazards and toxic industrial chemicals on the integrated battlefield. The program was initiated at development start in March 2011. CBDP plans to field 601 systems and deliver initial capabilities to the warfighter by service, starting with the Navy in June 2014; the Air Force and Army in June 2015; and the Marine Corps in March 2016.

Joint Service Aircrew Mask (JSAM) Family of Systems
 Program Executive Office: Chemical and Biological Defense

The Joint Service Aircrew Mask variants are expected to provide individual head, eye, respiratory, and chemical-biological protection across numerous fixed and rotary wing platforms. The Joint Service Aircrew Mask Program was initiated at development start in November 2002 as a single program, but the program has since been restructured multiple times to include programs focused on specific variants.

 <p>ACAT LEVEL III: Joint Service Aircrew Mask – Rotary Wing Estimated Total Acquisition Cost as of October 2011: \$202.6 million</p> <p>Joint Service Aircrew Mask – Rotary Wing program is intended for general purpose rotary wing aircraft and is expected to address aircrew physiological performance degradation, restrictions to field-of-view, and provide don in-flight capability. The program was created in 2008 during a restructuring of the JSAM program. CBDP plans to field 20,446 systems and provide the initial capability to the warfighter in December 2015.</p>	 <p>ACAT LEVEL III: Joint Service Aircrew Mask – Fixed Wing Estimated Total Acquisition Cost as of November 2010: \$56.8 million</p> <p>The Joint Service Aircrew Mask – Fixed Wing program was created in 2008 during a restructuring of the JSAM program, but was terminated in March 2014 due to concerns about the feasibility of meeting requirements. Selected program requirements will be addressed through two new programs: Joint Service Aircrew Mask – Strategic Aircraft and Joint Service Aircrew Mask – Tactical Aircraft.</p>
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Source: GAO analysis of CBDP program documents (data); Joint Program Executive Office for Chemical and Biological Defense (photos). | GAO-15-188

Notes: All dollar figures are provided in then-year dollars and have not been adjusted for inflation. Estimated total acquisition cost was taken from each program's most-recently approved acquisition program baseline. A program's current total acquisition cost estimate may differ from the amount reported here if the estimate has changed since the program's acquisition program baseline was approved.

Appendix V: Comments from the Department of Defense



ACQUISITION

ASSISTANT SECRETARY OF DEFENSE
3600 DEFENSE PENTAGON
WASHINGTON, DC 20301-3600

FEB 5 2015

Mr. Michael J. Sullivan
Director, Acquisition and Sourcing Management
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Sullivan:

This is the Department of Defense (DoD) response to the GAO Draft Report, GAO-15-188, "DEFENSE ACQUISITIONS: Better Approach Needed to Account for Number, Cost, and Performance of Non-Major Programs," dated January 7, 2015 (GAO Code 121170). Comments on the report recommendations are enclosed.

Sincerely,

A handwritten signature in black ink, appearing to read "Katharina McFarland".

Katharina McFarland

Enclosure:
As stated

GAO DRAFT REPORT DATED JANUARY 7, 2015
GAO-15-188 (GAO CODE 121170)

“DEFENSE ACQUISITIONS: BETTER APPROACH NEEDED TO ACCOUNT FOR
NUMBER, COST, AND PERFORMANCE OF NON-MAJOR PROGRAMS”

DEPARTMENT OF DEFENSE COMMENTS
TO THE GAO RECOMMENDATIONS

RECOMMENDATION: To improve DoD’s ability to collect and maintain reliable data on its acquisitions, the GAO recommends that the Secretary of Defense direct the Under Secretary of Defense for Acquisition, Technology and Logistics, in consultation with DoD components, to take the following actions:

- establish guidelines on what constitutes a “current” ACAT II or III program for reporting purposes; the types of programs, if any, that do not require ACAT designations; and whether the rules for identifying current MDAPs would be appropriate for ACAT II and III programs; and
- determine what metrics should be used and what data should be collected on ACAT II and III programs to measure cost and schedule performance; and whether the use of DAMIR and the MDAP selected acquisition report format may be appropriate for collecting data on ACAT II and III programs.

DoD RESPONSE: DoD partially concurs with the above recommendation. Within one year of publication of the final GAO report, the USD(AT&L), on behalf of the Secretary of Defense, in consultation with the Service and Component Acquisition Executives, will review the existing policy direction for ACAT II and III programs to determine whether it needs to be altered or supplemented to facilitate data collection and/or reporting.

RECOMMENDATION: The GAO recommends that the Secretary of Defense direct the Secretaries of the Air Force, Army, and Navy and the Commander of SOCOM to take the following actions:

- assess the reliability of data collected on ACAT II and III programs and work with PEOs to develop a strategy to improve procedures for the entry and maintenance of data; and
- develop implementation plans to coordinate and execute component initiatives to improve data on ACAT II and III programs.

DoD RESPONSE: DoD partially concurs with the above recommendation. Within 90 to 120 days of publication of the final GAO report, the USD(AT&L), on behalf of the Secretary of Defense, will direct the DoD Components to evaluate the data collected on ACAT II and III programs and report back to him on their assessment of the reliability of that data and the status of their plans to improve the availability and quality of the data.

RECOMMENDATION: To help ensure compliance with relevant provisions of DoD acquisition policy with the purpose of improving DoD's ability to provide oversight for ACAT II and III programs, including those programs that may become MDAPs, the GAO recommend that the Secretary of Defense:

- direct the Secretary of the Air Force and Commander of SOCOM to establish a mechanism to ensure compliance with APB requirements in DoD policy.
- direct the Secretaries of the Air Force, Army, and Navy to improve component procedures for notifying the Defense Acquisition Executive of programs whose cost estimate is within 10 percent of ACAT I cost thresholds.

DoD RESPONSE: DoD partially concurs with the above recommendation. Within 90 to 120 days of publication of the final GAO report, the USD(AT&L), on behalf of the Secretary of Defense, will issue guidance to all of the DoD Components reiterating the APB requirements for ACAT II and III programs and directing that the DAE be notified when an increase or estimated increase in program cost is within 10 percent of the ACAT I cost thresholds.

Appendix VI: GAO Contact and Staff Acknowledgments

GAO Contact

Michael J. Sullivan, (202)512-4841 or sullivanm@gao.gov

Staff Acknowledgments

In addition to the contact named above, Ron Schwenn, Assistant Director; Leslie Ashton, Jenny Chanley, Teakoe Coleman, Dani Greene, John Krump, Jesse Lamarre-Vincent, Anne McDonough-Hughes, Carol Petersen, and Oziel Trevino made key contributions to this report.

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