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The Honorable Carl Levin
Chairman
The Honorable James M. Inhofe
Ranking Member
Committee on Armed Services
United States Senate

Defense Acquisitions: Military Services Consistently Held Required Configuration Steering Boards That Actively Reviewed Requirements Changes

The Department of Defense (DOD) established Configuration Steering Boards (CSBs) in 2007 as a measure to control requirements changes and associated cost increases on its major defense acquisition programs (MDAPs).¹ These boards are a forum for senior acquisition, funding, and requirement leaders in the Office of the Secretary of Defense, Joint Staff, and the military services to review proposed changes to program requirements or system configurations that have the potential to adversely affect program cost or schedule.² Congress has also identified CSBs as a way to control requirements. In the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009, Congress directed DOD to establish and hold annual CSBs for the military services' MDAPs.³

In July 2011, we found that the military services held a CSB review for about 77 percent of the MDAPs in 2010, and that programs varied in how they used the boards to control requirements and mitigate cost and schedule risks.⁴ In addition, we found that not all of the required officials were invited to participate in the board meetings, particularly in the Navy. We recommended that the Navy amend its policy to ensure that all statutorily required participants are included, and that DOD amend its CSB policy to be consistent with statute and align CSBs with other reviews when possible. Since then, the Navy has updated its guidance to explicitly include the Joint Staff

¹ MDAPs are those estimated by DOD to require an eventual total expenditure for research, development, test, and evaluation of more than \$480 million, or for procurement of more than \$2.79 billion, in fiscal year 2014 constant dollars.

² A requirement is an established need justifying the timely allocation of resources to achieve a capability to accomplish approved military objectives, missions, or tasks. These are often communicated in requirements and other documentation as key performance parameters, key system attributes, or contract specifications. Configuration refers to the functional and physical characteristics of a product.

³ Pub L. No 110-417, §814 (2008). The Under Secretary of Defense for Acquisition, Technology and Logistics recently directed the military services to employ the Configuration Steering Board construct for all acquisition category levels.

⁴ GAO, *Defense Acquisitions: DOD Can Improve Its Management of Configuration Steering Boards*, [GAO-11-640](#) (Washington, D.C.: Jul. 7, 2011).

and the Office of the Secretary of Defense as CSB participants. In November 2013, DOD amended its CSB policy to ensure that statutorily required participants are included and require annual CSBs for programs in production and sustainment, among other things.⁵

The Senate Report accompanying the National Defense Authorization Act for Fiscal Year 2014 mandated GAO to review DOD's implementation of the CSB process.⁶ This report examines the extent to which (1) the military services have held CSBs, and (2) CSBs were approving requirements changes that could impact cost and schedule outcomes.

To conduct this work, we reviewed the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 and acquisition guidance related to CSBs. Using the Defense Acquisition Management Information Retrieval System, we identified 79 current MDAPs that are required to hold annual CSBs.⁷ For each program, we asked the acquisition organization overseeing it—the Air Force, Army, or Navy—to provide the minutes, briefing slides, or other documentation related to the meetings. Specifically, we examined 2013 CSB documentation to determine when the meetings were held; whether requirements and technical configuration increases or decreases were proposed; and if the boards approved the changes. For 12 Navy programs that conducted a CSB in 2013, we were unable to determine if requirements and technical configuration changes were proposed to and approved by the CSB, because the Navy was unable to provide appropriate documentation for these programs. Therefore, we excluded the following programs when determining whether CSBs were approving requirements changes that could impact cost and schedule outcomes: CH-53K Heavy Lift Replacement Helicopter, EA-18G Growler Aircraft, Ground/Air Task Oriented Radar, H-1 Upgrades, Joint Standoff Weapon-Baseline Variant and Unitary Warhead Variant, KC-130J Transport Aircraft, MH-60R Multi-Mission Helicopter, MH-60S Fleet Combat Support Helicopter, Mobile User Objective System, Tactical Tomahawk RGM-109E/UGM-109E Missile, V-22 Osprey Joint Service Advanced Vertical Lift Aircraft, and MQ-8 Vertical Takeoff and Landing Tactical Unmanned Aerial Vehicle Fire Scout.

We also interviewed officials from the Joint Staff, and acquisition and requirements organizations regarding the services' use of CSBs. Finally, we used information gathered from our latest annual weapon acquisition assessment to determine if programs were changing requirements without the approval of a CSB.⁸ Our annual weapon acquisition assessment includes a non-generalizable sample of Air Force, Army, and Navy weapon programs in both development and production phases. We assessed program responses to a standard set of questions and identified programs that reported requirements changes in fiscal year 2013. We interviewed program officials to determine whether these requirements changes were presented to the CSB for review.

⁵ DOD's Interim Department of Defense Instruction 5000.02, Operation of the Defense Acquisition System (Nov. 25, 2013) contains other modifications to defense acquisition policy which were not relevant for our review.

⁶ S. Rep. No. 113-44, at 144 (2013).

⁷ We defined current MDAPs as those included in DOD's Defense Acquisition Management Information Retrieval system's official MDAP list. We excluded two programs, the Ballistic Missile Defense System and Chemical Demilitarization-Assembled Chemical Weapons Alternatives, from our analysis because statutory requirements for Configuration Steering Boards only apply to military department major defense acquisition programs. These programs are managed by the Missile Defense Agency and the Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense programs, respectively.

⁸ GAO, *Defense Acquisitions: Assessments of Selected Weapon Programs*, [GAO-14-340SP](#) (Washington, D.C.: Mar. 31, 2014).

We conducted this performance audit from February 2014 to May 2014 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.

Results in Brief

In 2013, the military services held a Configuration Steering Board (CSB) for 77 of 79 current MDAPs required to hold one by statute, approximately 97 percent. The Army and Air Force held meetings for all of their programs, while the Navy did not hold a CSB for two of its programs because one program began development in 2013 and the other program had its board cancelled and rescheduled in 2014 in an effort to reduce costs. We also found that the services combined these boards for similar programs or held them in combination with other reviews, although the Navy held some CSB meetings without officials from the Joint Staff and the Office of the Secretary of Defense in attendance.

Based on information the military services were able to provide on 65 of the 77 programs that held a CSB in 2013, the boards actively reviewed and approved requirements or technical configuration changes proposed by eight programs. The boards approved decreases or deferrals for four of the programs, increases for two programs, and both increases and decreases for two programs. The remaining 57 programs that the military services provided information on did not propose any changes to the CSB. However, we found that four programs changed requirements in 2013 without presenting the changes to the CSB for review or approval. In all four instances, the programs deferred, decreased, or modified their requirements.

We are not making recommendations in this report. We provided a draft of this product to DOD for comment. In an e-mail received on May 2, 2014, the Assistant Secretary of Defense for Acquisition stated that the department did not have any comments on the report. However, DOD provided technical comments which were incorporated into the report, as appropriate.

Military Services Consistently Held Annual Configuration Steering Boards

The military services held a CSB in 2013 for nearly all of the current MDAPs as required by statute—77 of 79 programs (approximately 97 percent). Table 1 shows the number of CSBs held in 2013 by military service.

Table 1: Number of Current Programs that Held Configuration Steering Boards in 2013

Military Service	Number of Major Defense Acquisition Programs ^a	Number of Programs that Held a Configuration Steering Board
Air Force	25	25
Army	18	18
Navy	36	34
Total	79	77

Source: GAO analysis of DOD data.

^a The 2013 Configuration Steering Boards for the Joint Light Tactical Vehicle and the F-35 Joint Strike Fighter Aircraft were chaired by the Service Acquisition Executive of the Army and Navy, respectively, and were included in the count for each military service.

The Air Force and Army held CSBs for all of their programs in 2013, while the Navy held a CSB for all but two of its MDAPs. One of the Navy’s programs, the Air and Missile Defense Radar program began development in October 2013 and is not required to complete the review until

October 2014. The Navy cancelled its planned November 2013 CSB review of the other program, the Navy Multiband Terminal Satellite, in an effort to reduce costs and rescheduled the review for May 2014.

Each of the services combined CSBs for similar programs or held them in combination with other reviews to increase efficiency; however, this may have led to the Navy excluding required participants. For example, the Air Force and Army typically held boards for multiple similar programs at one time (i.e. aviation programs), while the Navy held boards in conjunction with annual execution or program executive office reviews. According to Navy officials, program executive office reviews were service-led meetings that included representatives from the Navy, but did not include representatives from the Joint Staff or the Office of the Secretary of Defense. Navy officials stated that any changes made during these reviews were to be sent afterwards to the Joint Staff and the Office of the Secretary of Defense for review.

CSBs Were Actively Involved in the Review of Requirements Changes and Cost and Schedule Impacts, but Not All Changes Were Brought to the Boards For Approval

CSBs reviewed and approved requirements or technical configuration changes proposed by eight programs in 2013, based on our analysis. The majority of the changes were for requirements decreases or deferrals; however, CSBs did approve some requirements increases. In addition, four programs reduced, deferred, or modified requirements in 2013 without getting approval by the CSB.

CSBs Approved Few Requirements Increases and Most Programs Identified Cost Impacts

Based on information the military services were able to provide on 65 of the 77 programs that held a CSB in 2013, the boards actively reviewed and approved requirements or technical configuration changes proposed by eight programs. The remaining 57 programs that the military services provided information on did not propose any changes to the board. We found that programs often proposed low-level system requirements changes, such as physical design requirements, as opposed to top-level requirements such as key performance parameters or key system attributes, which are considered to be critical or essential to the operation of the system. Of the eight programs whose proposals were approved by the CSB, four programs decreased or deferred requirements, two programs increased requirements, and two programs both increased and decreased requirements. Table 2 provides additional details about the eight programs whose proposals were approved by the CSB.

Table 2: Requirements and Technical Configuration Proposals Approved by Configuration Steering Boards

Program	Type of Change	Description of Change
DDG 51 Arleigh Burke Class Guided Missile Destroyer	Deferral	Deferred installing intelligence equipment until ship deployment, resulting in cost savings and minimal schedule delays.
P-8A Poseidon Multi-Mission Maritime Aircraft	Deferral	Deferred targeting and search capabilities to future increments, resulting in design change cost savings.
MQ-1C Gray Eagle Unmanned Aircraft System	Decrease	Decreased requirements for the removal and replacement of system payloads and communications data rate; no cost impacts were identified.
Warfighter Information Network-Tactical Increment 3	Decrease	Decreased key Net-Ready requirement, the ability to exchange information with the “network”, and key training requirement as a result of Army budget constraints and program restructure.
AGM-88E Advanced Anti-Radiation Guided Missile	Increase	Added new technology into the system to address obsolescence, resulting in an increase in cost.
LPD 17 San Antonio Class Amphibious Transport Dock (LPD 17)	Increase	Increased security features, including containers, tubing, and locks, resulting in an increase in cost.
F-35 Joint Strike Fighter Aircraft	Increase and Decrease	Increased two requirements and decreased one requirement for allowed contaminant levels based on testing, lessons learned, and safety assessments; no cost impacts were identified.
Littoral Combat Ship	Increase and Decrease	Increased requirements to make habitability modifications and improve satellite communications, and also decreased a requirement for a stabilizing component, resulting in a net increase in cost.

Source: GAO presentation of DOD data.

As described in the table, three programs that increased requirements identified cost impacts as a result of the changes. The board approved the configuration changes and associated costs presented by the Littoral Combat Ship program, and also approved the release of engineering change order funding for the LPD 17 program to cover the cost of the changes. The CSB required the AGM-88E Advanced Anti-Radiation Guided Missile program to formally request the funding for the cost of the technology insertion and include information about the effort’s return on investment. According to Navy officials, the funding was released in January 2014. The F-35 program office did not present cost and schedule impacts of its proposed changes to the CSB. According to a program official, the contractor has not yet provided a cost estimate for the changes, but these changes needed to be made for safety reasons.

Four Programs Changed Requirements Without CSB Approval

Although the CSBs were actively involved in reviewing requirements and technical configuration changes that were presented to them, we identified four programs that changed key or system requirements in 2013 without presenting the changes to the CSB for review or approval. Almost all of these changes were for requirements decreases or deferrals. Service acquisition policies allow program managers to request CSBs outside of the annual cycle, if needed, however none of these programs requested this type of meeting in 2013. Officials from most of the programs indicated that they briefed board members about the decreased requirements at the next annual meeting. A brief description of changes made to the programs is provided below.

- **Family of Beyond Line-of-Sight Terminals** – The Air Force program deleted two system-level requirements in 2013, both without CSB approval. The program did not propose these deletions to the board for approval because, according to program officials, the Air Force’s requirements council had already approved them. According to program officials, both requirements related to software architecture, and were deleted

either because the program no longer needed the architecture due to technology developments or because DOD no longer used these legacy interfaces.

- **Paladin Integrated Management** – This Army program modified a key system attribute related to firing accuracy without CSB approval. The program adjusted its minimum and maximum range values upwards and downwards, respectively, based on testing results. Officials stated that the accuracy requirement adjustment did not impact the program’s cost or schedule. Program officials further stated that they worked with requirements officials to receive approval for the modification and did not find the need to call special event-driven boards because everyone involved in the CSB process was already involved with the normal requirements change approval process. The program did, however, brief the CSB about the change during its 2013 annual meeting.
- **RQ-4A/B Global Hawk Unmanned Aircraft System** – In 2013, the Air Force’s Global Hawk program deferred 15 system-level requirements related to the ground control station and control of the aircraft, among other things. The President’s Budget for Fiscal Year 2013 divested the program’s Block 30 system and eliminated related funding. Global Hawk officials stated that these deferrals were not proposed during the program’s annual CSB review because they were directly related to the termination of the Block 30 aircraft.
- **Warfighter Information Network-Tactical (WIN-T) Increment 2** – The Army’s WIN-T Increment 2 program deleted a key performance parameter related to force protection. According to program officials, the program’s final product will be installed on various platforms that did not have the same requirement criteria, and are beyond the program’s control. The program sought and received approval for the deletion from the Joint Requirements Oversight Council in August 2013. According to program officials, the program did not propose this deletion to the board for approval because the requirements council had already approved the deletion. Program officials further stated that the program did not consider holding an event-driven CSB because the Joint Requirements Oversight Council is responsible for approving key performance parameter changes. However, program officials stated that they informed the board of the deleted requirement during the annual board meeting.

Agency Comments

We are not making recommendations in this report. We provided a draft of this product to DOD for comment. In an e-mail received on May 2, 2014, the Assistant Secretary of Defense for Acquisition stated that the department did not have any comments on the report. However, DOD provided technical comments which were incorporated into the report, as appropriate.

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Should you or your staff have questions, please contact me at (202) 512-4841 or 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 were Cheryl Andrew, Assistant Director; Kristine Hassinger; Laura Jezewski; LeAnna Parkey; Brian Smith; Robert Swierczek; and Abby Volk.

A handwritten signature in black ink, appearing to read 'Michael J. Sullivan', with a long horizontal flourish extending to the right.

Michael J. Sullivan
Director, Acquisition and Sourcing Management

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