

SYM-AM-21-043



EXCERPT FROM THE
PROCEEDINGS
OF THE
EIGHTEENTH ANNUAL
ACQUISITION RESEARCH SYMPOSIUM

**Assessing the Role of Congress in Defense Acquisition
Program Instability**

May 11–13, 2021

Published: May 10, 2021

Approved for public release; distribution is unlimited.

Prepared for the Naval Postgraduate School, Monterey, CA 93943.

Disclaimer: The views represented in this report are those of the author and do not reflect the official policy position of the Navy, the Department of Defense, or the federal government.



ACQUISITION RESEARCH PROGRAM
GRADUATE SCHOOL OF DEFENSE MANAGEMENT
NAVAL POSTGRADUATE SCHOOL

The research presented in this report was supported by the Acquisition Research Program of the Graduate School of Defense Management at the Naval Postgraduate School.

To request defense acquisition research, to become a research sponsor, or to print additional copies of reports, please contact any of the staff listed on the Acquisition Research Program website (www.acquisitionresearch.net).



ACQUISITION RESEARCH PROGRAM
GRADUATE SCHOOL OF DEFENSE MANAGEMENT
NAVAL POSTGRADUATE SCHOOL

Assessing the Role of Congress in Defense Acquisition Program Instability

Seamus P. Daniels—is an Associate Fellow and Associate Director for Defense Budget Analysis in the International Security Program at the Center for Strategic and International Studies (CSIS), where he contributes to the center’s research on issues related to defense funding, force structure, and military readiness. He has authored publications on trends in the overall defense budget, the legislative process surrounding defense appropriations, Navy readiness funding, and NATO burden sharing. He holds an A.B. from Princeton University’s School of Public and International Affairs with minors in Near Eastern studies and Arabic language and culture. [sdaniels@csis.org]

Todd Harrison—is the Director of Defense Budget Analysis and the director of the Aerospace Security Project at CSIS. As a Senior Fellow in the International Security Program, he leads the center’s efforts to provide in-depth, nonpartisan research and analysis of space security, air power, and defense funding issues. He has authored publications on trends in the overall defense budget, military space systems, defense acquisitions, military compensation, military readiness, nuclear forces, and the cost of overseas military operations. He graduated from the Massachusetts Institute of Technology with both a BS and an MS in aeronautics and astronautics. [tharrison@csis.org]

Abstract

This paper seeks to evaluate the impact of Congress on funding instability for defense acquisition programs. While the Department of Defense (DoD) requests specific funding levels for procurement and research, development, test, and evaluation (RDT&E) programs each fiscal year in the president’s budget submission, Congress ultimately determines the funds that will be made available to those programs via the appropriations process. While lawmakers constitutionally hold the power of the purse and oversight authority over the DoD, changes between the requested and actual level of funding for programs can force defense officials and industry partners to adjust program schedules and funding requirements. At a macro level, changes can also disrupt wider defense planning and strategic priorities for the Department and the executive branch. This study assesses trends in funding for acquisition accounts and programs relative to the requested level of funding from Fiscal Year (FY) 2010 to FY 2020 to determine if Congress regularly funded programs above or below administrations’ budget requests over that time frame. It identifies specific procurement and RDT&E accounts that typically have their funding adjusted by lawmakers and trends in the differences between requested funding and the actual level of funding.

Introduction

The Department of Defense (DoD) outlines the priorities of the administration in the budget request submitted to Congress for the upcoming fiscal year. Along with its request for funding for the next fiscal year, the Department submits thousands of pages of budget information justifying the funds required for its programs and outlining its plans in detail. For acquisition programs (primarily funded through the procurement and research, development, test, and evaluation [RDT&E] accounts), the DoD also provides lawmakers with detailed information at the line item and program element levels on program schedules and requirements as well as projected future funding requirements in the Future Years Defense Program (FYDP).

While the executive branch articulates its own strategic priorities, plans its defense acquisition agenda, and distributes contracts to private sector partners, Congress retains the power of the purse and ultimately has the final say in deciding which acquisition programs receive funding and how much they receive. Led by each chamber’s respective appropriations subcommittee on defense, the legislative branch can choose to match, modify, or eliminate the DoD’s requested funding levels for procurement and RDT&E programs as well as alter the



quantity of systems or platforms procured. Congressional adjustments to the budget can also be made after funding is appropriated via rescissions that cancel some or all of the budget authority prior to its obligation (Saturno et al., 2016, p. 20). Likewise, the DoD can reprogram funding to move it among accounts as needed within the constraints set by appropriators (Saturno et al., 2016, p. 12).

Congressional decisions on funding for acquisition programs in the appropriations process can have a significant impact on an administration's defense plans. Adjustments to the program of record for acquisition projects can force the program management teams in the DoD to alter the program's schedule and contracting actions. In addition to affecting the performance of acquisition programs, these adjustments can have secondary effects on private sector partners, particularly the prime contractors tasked with developing and building systems and their suppliers. At the macro level, disruptions to acquisition plans in the appropriations process can also affect an administration's ability to operationalize its defense strategy. Ultimately, the power of Congress to appropriate money gives the legislative branch an important role in overseeing how defense dollars are spent and the execution of defense strategy.

This analysis seeks to assess trends in congressional action on funding for defense acquisition programs relative to the requested level. It will compare the actual funding level for procurement and RDT&E accounts with the original level proposed in the administration's budget request and identify specific accounts which are regularly adjusted by Congress. Ultimately, this analysis aims to inform defense planners, acquisition officials and program managers, and industry partners of trends in congressional appropriations for defense so they can better plan for how the congressional budget process is likely to affect the defense budget request on a more granular level using historical data.

Methodology

This study assesses trends in congressional action on defense acquisition funding from Fiscal Year (FY) 2010 through FY 2020. The time frame was selected to determine the impact of the Budget Control Act (BCA) of 2011 on funding for procurement and RDT&E accounts. In an effort to reduce the federal deficit, the BCA imposed caps on discretionary funding levels for defense and non-defense programs between FY 2012 and FY 2021, among other efforts. These budget caps were then increased by Congress in a series of budget agreements over that time frame (Harrison & Daniels, 2020, p. 6). However, the inability of lawmakers to identify an alternative to the deficit reduction plan outlined in the BCA following its passage in 2011 led to sequestration, a budgetary mechanism that reduces discretionary spending in excess of the budget caps. A sequester was triggered in March 2013 that led to cuts of 6.7% and 8.1% to procurement and RDT&E accounts, respectively (Daniels, 2019, p. 3).

In its approach to measuring the role of Congress in acquisition funding, this analysis compares the *requested* level of funding from the presidential budget request with the *actual* level of funding for procurement and RDT&E accounts. Budget data was compiled from the procurement programs' (P-1s) and RDT&E programs' (R-1s) justification books published by the Office of the Comptroller with each year's budget request.

The *actual* level of funding for acquisition programs is calculated approximately 2 years after it is originally requested (for example, actual funding levels for FY 2019 are published with the FY 2021 request). While the *enacted* level of funding passed by lawmakers would be a more direct comparison to illustrate congressional action on the budget request (since lawmakers can make adjustments to funding after it is appropriated), this data is not consistently captured in budget justification documents due to delays in enacting appropriations. It is also not captured in legislative text in a machine-readable format at the program level. The *actual* funding level will not typically differ dramatically from the *enacted* level of funding, with the exception of FY 2013,



when sequestration occurred. Since the *actual* funding level for FY 2020 is not yet available, the *enacted* funding level is used because it is available and accurately reflects what was appropriated.

Occasionally, administrations may submit supplemental budget requests or amendments to their original budget requests. The requested level data analyzed in this study incorporates adjustments submitted by the administration after the fact and is also inclusive of Overseas Contingency Operations (OCO) funding. One exception is FY 2017, in which the Trump administration submitted an updated budget request after taking office, which amended the request submitted by the Obama administration. The data for that year’s request in this study represents the Obama administration’s request and any changes requested by that administration, but it does not include changes requested by the Trump administration that occurred during the middle of FY 2017.

Congressional adjustments to the requested level of funding for procurement and RDT&E accounts are measured by calculating the percent change between the actual funding level and the requested level for each given fiscal year. An average percent change for the FY 2010 to FY 2020 time frame is then calculated to allow for more direct comparison. Analysis is conducted at the topline procurement and RDT&E level, the military department level, and account level with further analysis at more granular levels to explain trends in the data.

Analysis of Congressional Action on Procurement Funding

Topline Procurement Funding

If assessed at the topline level, congressional funding for procurement accounts relative to the presidential request has fluctuated considerably over the period of analysis. Figure 1 presents the percent change from the actual level of procurement to the requested level. While funding is 2.9% higher than the requested topline on average from FY 2010 through FY 2020, actual funding for procurement accounts was below the requested amount for 4 years between FY 2011 and FY 2014. This was due in no small part to concerns over the federal deficit and the impact of the BCA in constraining the defense budget. The Obama administration repeatedly requested funding for defense programs above the level permitted by the BCA budget caps, yet congressional adjustments to the caps did not always match the level of increase requested by the Obama administration. Sequestration also contributed to lower actual levels of funding for procurement relative to the request in FY 2013.

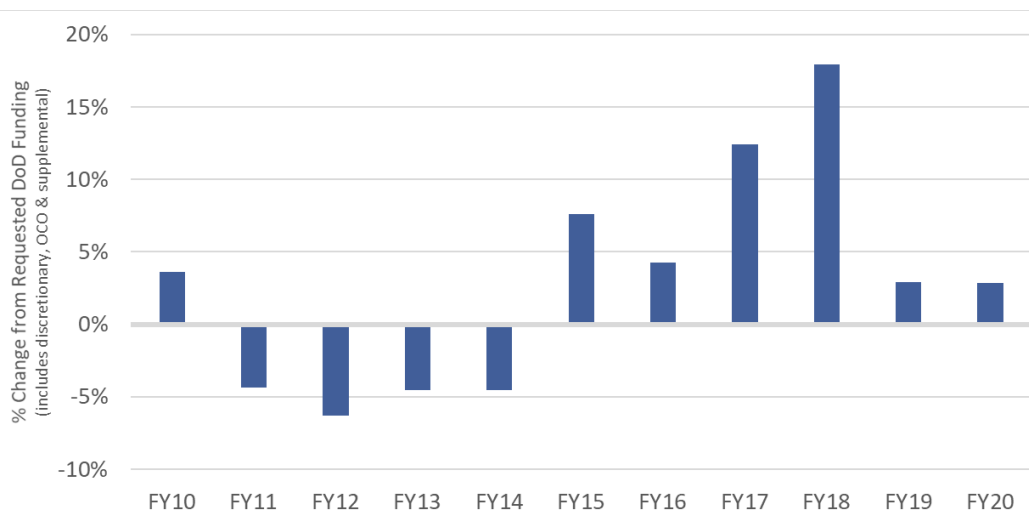


Figure 1. Actual Total Procurement Funding vs. Requested Level



Actual procurement funding surpassed the requested level by almost 18% in FY 2018 as a result of the Bipartisan Budget Act of 2018 (BBA 2018). The 2-year budget deal raised the spending caps for defense higher than the Trump administration had requested and was significantly larger than previous 2-year agreements that increased the caps from FY 2014 to FY 2015 and FY 2016 to FY 2017 (Daniels & Harrison, 2020).

Procurement Funding by Military Department

When assessed by military departments and defense-wide, or “Fourth Estate,” accounts, the procurement funding data yields similar trends to the topline analysis, as shown in Figure 2. However, defense-wide procurement funding shows significant fluctuations and differences relative to the request. This is largely due to the small amount of procurement funds requested for defense-wide accounts compared to the military departments; adjustments above or below that requested level will appear more drastic when represented as a percentage change because of the smaller amounts of funding involved. At times, the DoD may also request funds for defense-wide accounts, which Congress then cuts from defense-wide and appropriates directly into other service accounts.

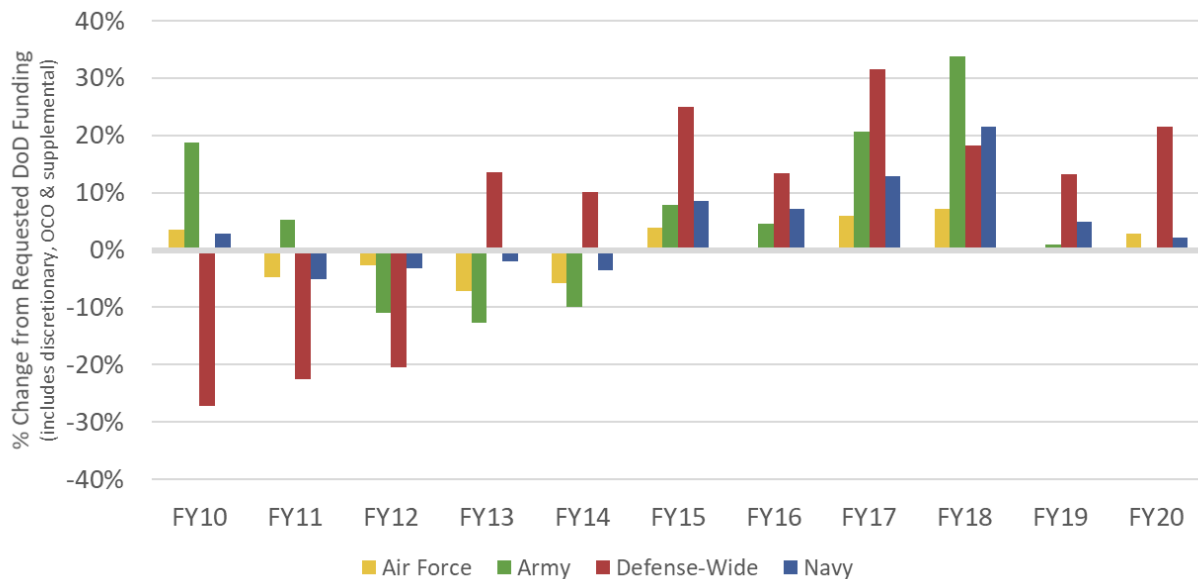


Figure 2: Actual Procurement Funding vs. Requested Level by Military Department

Compared across the FY 2010 to FY 2020 time frame, actual procurement funding for the defense-wide accounts was an average of 6.9% higher than the request, compared to 2.9% for overall procurement funding. Of the military departments, the Army received the greatest increase above the request at 5.3% on average, in comparison to a 4.2% average increase for the Navy and 0.3% for the Air Force. While Army accounts received significantly more funding than requested in FY 2017 and FY 2018, Congress was less generous in FY 2019 and appropriated slightly less funding than requested in FY 2020.

Procurement Funding by Account

A comparison of the requested and actual levels of funding at the account level provides a better idea of the factors driving trends at the military department level. Table 1 ranks procurement accounts by the average percent change between the actual level of funding and



the requested level over the FY 2010 to FY 2020 time frame.¹ Three Army accounts—weapons and tracked combat vehicles (W&TCV), aircraft, and missiles—received the greatest percentage increase over the budget request. As Figure 3 shows, funding for those three accounts exceeded the requested level for at least 7 of the 11 years assessed. Funding for W&TCV was higher than the request every year until FY 2019 and exceeded the requested level by nearly 60% in FY 2018.

Table 1: Average Difference Between Requested and Actual Funding Levels by Procurement Account

Account	Average Percent Change
Procurement of Weapons and Tracked Combat Vehicles, Army	15.1%
Aircraft Procurement, Army	7.5%
Missile Procurement, Army	7.0%
Shipbuilding and Conversion, Navy	6.8%
Procurement, Defense-wide	5.8%
Aircraft Procurement, Navy	5.1%
Aircraft Procurement, Air Force	2.2%
Other Procurement, Army	2.0%
Procurement of Ammunition, Air Force	0.9%
Procurement of Ammunition, Army	0.9%
Procurement, Marine Corps	0.7%
Other Procurement, Air Force	0.5%
Weapons Procurement, Navy	-1.8%
Other Procurement, Navy	-2.8%
Space Procurement, Air Force	-2.9%
Chemical Agents and Munitions Destruction, Defense	-3.0%
Procurement of Ammunition, Navy and Marine Corps	-5.5%

¹ Only certain defense-wide accounts are included in this ranking given the irregular nature of some accounts and the fact that others only had several years' worth of data compared to the 11 years of data for most other accounts assessed.



Missile Procurement, Air Force	-5.7%
---------------------------------------	--------------

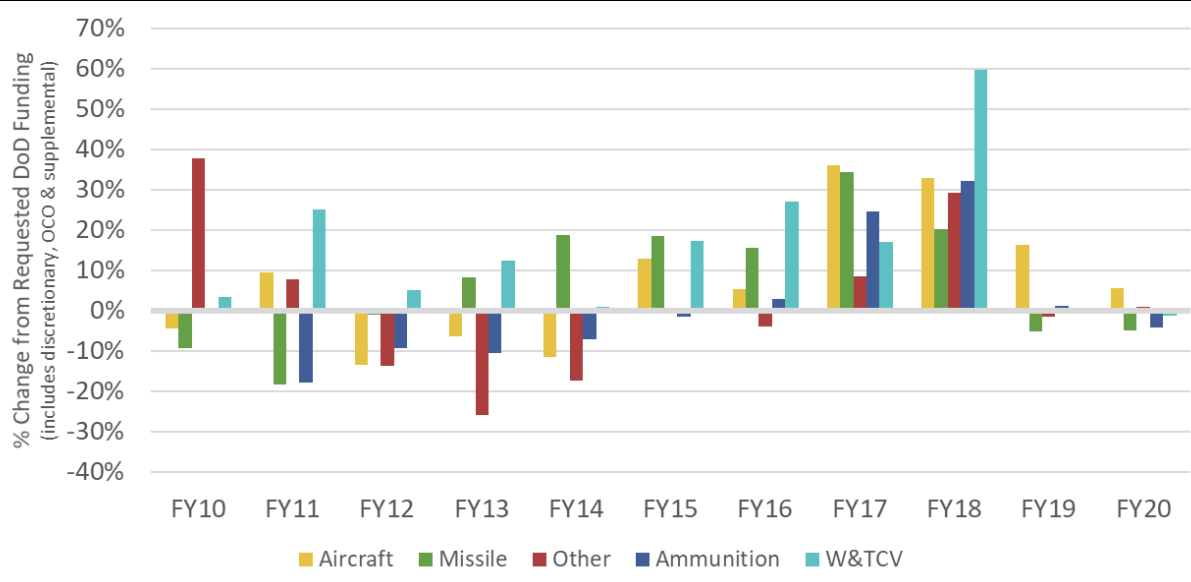


Figure 3. Army Actual Procurement Funding vs. Requested Level by Account

As previously discussed, the Navy received the second largest average increase above its requested level compared to the other two military departments. This was driven by funding for the shipbuilding and conversion account, which on average received 6.8% more funds than requested. As Figure 4 shows, Congress also added to the Navy’s aircraft procurement account from FY 2015 through FY 2020 for an average increase of 5.1% above the requested level. However, Congress regularly appropriated less funding for the Navy’s weapons, ammunition, and other accounts than requested over the selected time frame.

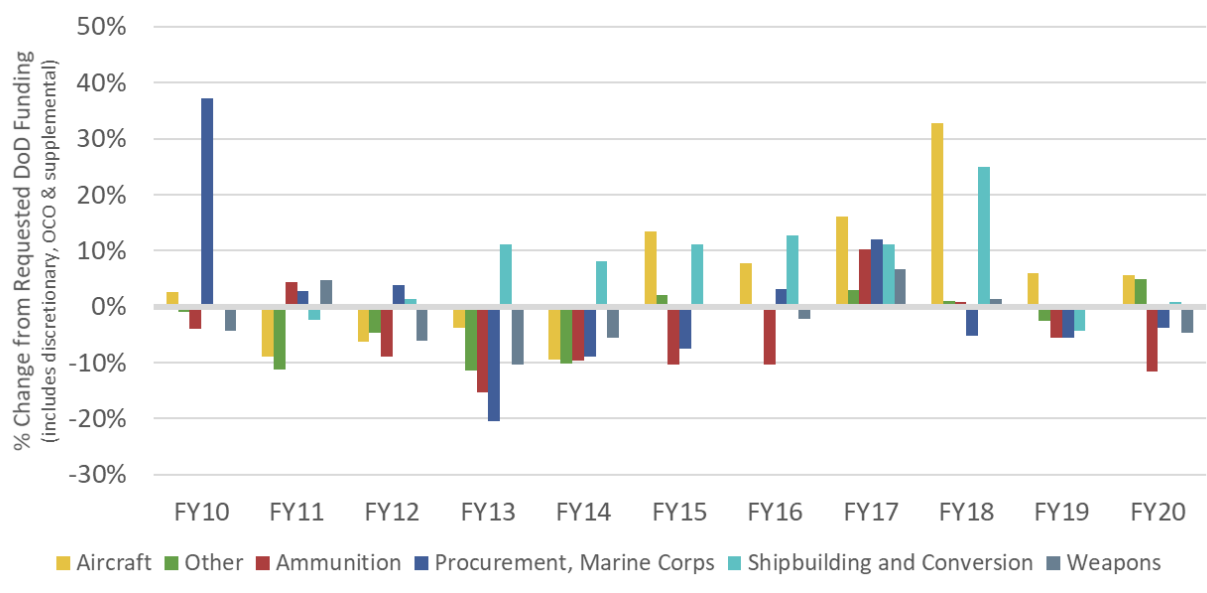


Figure 4. Navy Actual Procurement Funding vs. Requested Level by Account



Air Force procurement accounts received relatively smaller plus ups, if any, compared to their Army and Navy counterparts, as shown in Table 1. On average, Congress increased funding for the Air Force aircraft procurement account by an average of 2.2%, less than the increases for both the Army and Navy’s aircraft accounts. After initially receiving nearly 9% more funding than requested when the account was created in FY 2010, Air Force space procurement has received 2.9% less funding than the requested level, on average. The Air Force’s missile procurement account was the account cut most by Congress over the selected time frame, receiving an average of 5.7% less funding than requested. Congressional funding exceeded the requested level only once over the 11-year period, in FY 2015, as depicted in Figure 5.

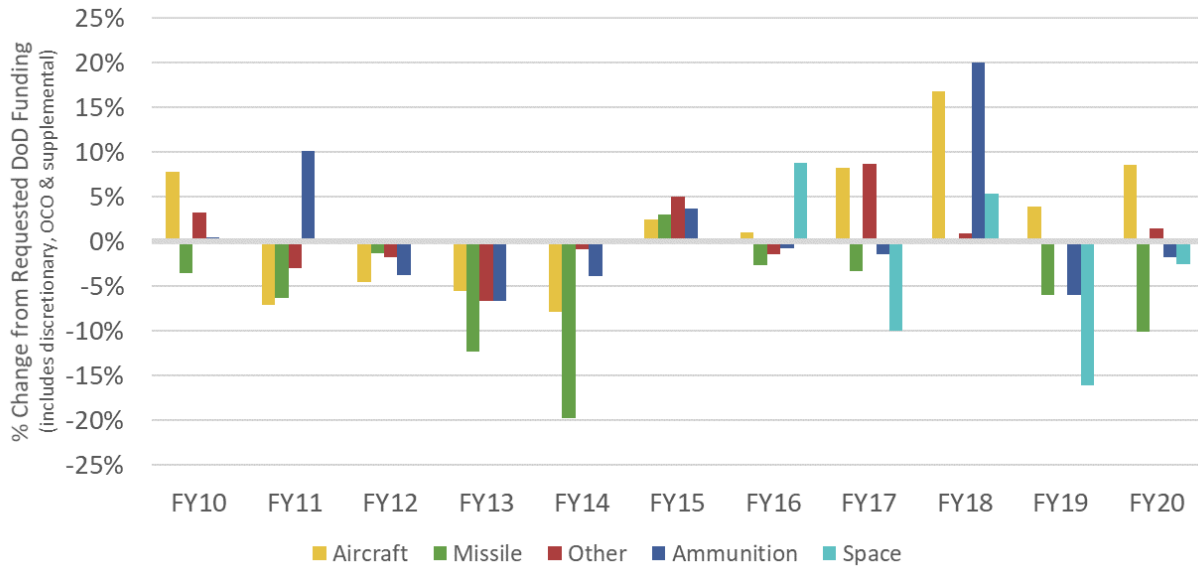


Figure 5. Air Force Actual Procurement Funding vs. Requested Level by Account

Procurement Funding by Category

Analyzing the difference between the requested and actual level of funding by category type provides a better impression of Congress’s procurement priorities. Table 2 ranks the average percent change between the actual level of funding and the requested level over the FY 2010 to FY 2020 time frame for 10 distinct categories of procurements assigned by the authors. Based on this data, Congress has regularly increased funding for missile defense programs more than any other category at an average of nearly 18% over the requested level. Funding for missile defense exceeded the requested level in 10 out of the 11 years assessed and was almost 55% higher than what was requested in FY 2017 (see Figure 6).

Shipbuilding programs received the second largest increase on average of any distinct category, which could be due to the strong support from representatives for shipyard constituencies in Congress. Lawmakers also increased funding for aircraft and ground systems at an average of 4.6% and 3.6% above requested levels, respectively. The addition to ground systems was driven by a significant plus to the Army W&TCV account in FY 2018, as shown in the previous section. Four procurement categories received less than the requested level on average between FY 2010 and FY 2020: missiles and munitions; space systems; communications, sensors, and electronics; and defense-wide programs.



Table 2. Average Difference Between Requested and Actual Funding Levels by Procurement Category

Category	Average Percent Change
Missile Defense	17.8%
Support and Other	10.5%
Shipbuilding	8.9%
Aircraft	4.6%
Ground Systems	3.6%
Classified	0.5%
Missiles and Munitions	-1.1%
Space Systems	-3.7%
Comms, Sensors, and Electronics	-4.9%
Defense-Wide	-6.5%

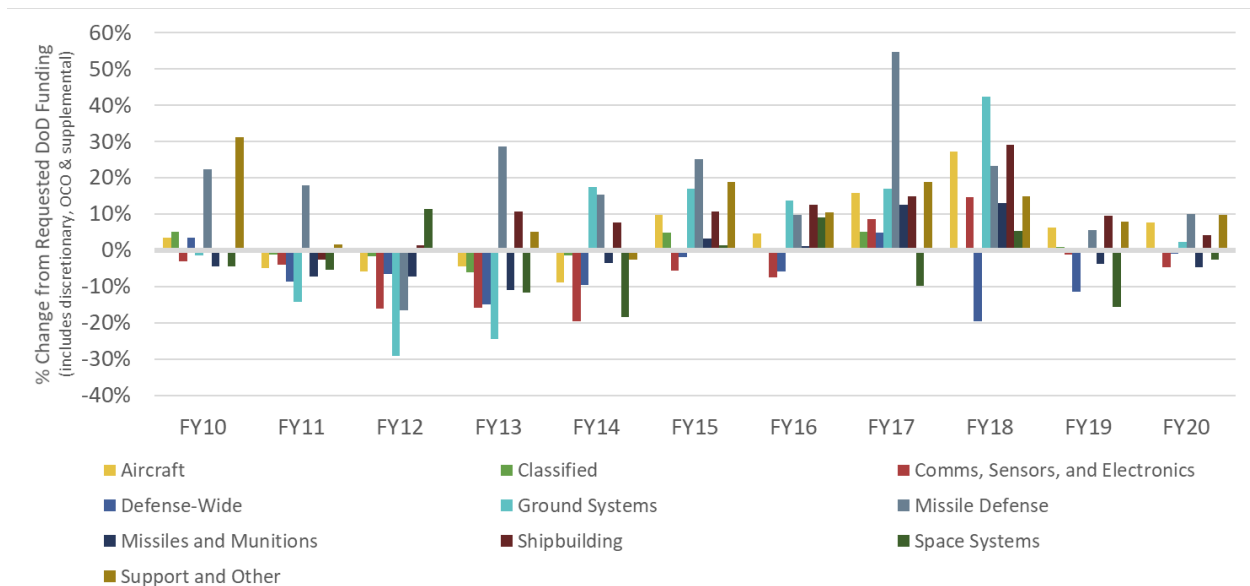


Figure 6. Actual Procurement Funding vs. Requested Level by Category



Analysis of Congressional Action on Research, Development, Test, and Evaluation Funding

Topline Research, Development, Test, and Evaluation Funding

As Figure 7 shows, topline RDT&E funding largely follows a similar pattern to trends in topline procurement in the FY 2010 to FY 2020 period, with exceptions in FY 2011 and FY 2020. Similar to procurement, RDT&E accounts also received a generous boost in FY 2018 as a result of the budget deal reached that year. Over the 11 fiscal years analyzed in this study, RDT&E funding was an average of 1.2% higher than the requested level.

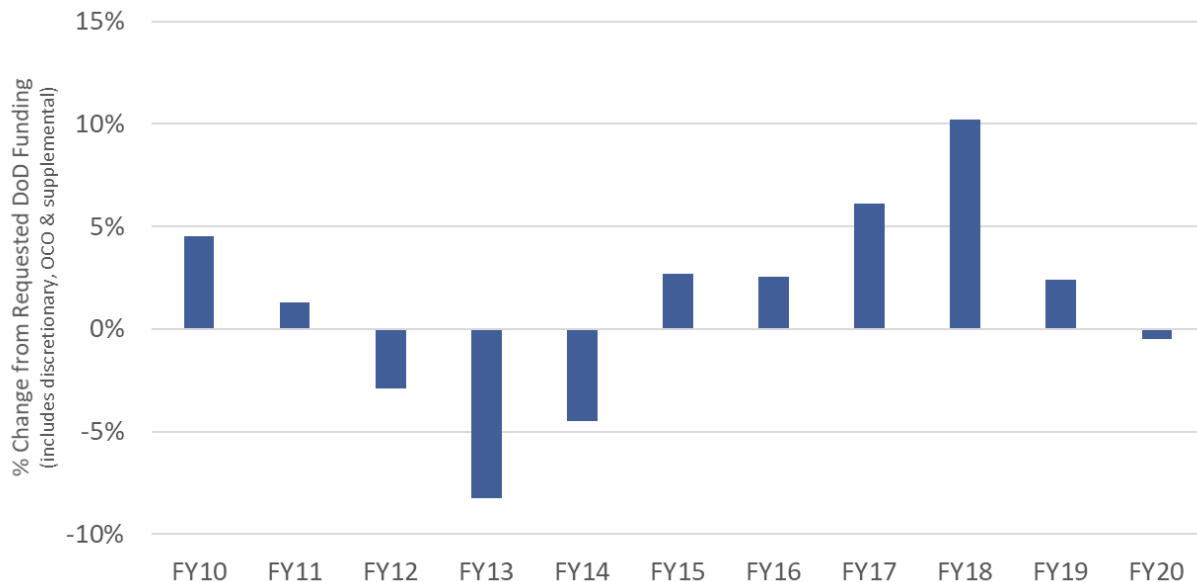


Figure 7. Actual Total RDT&E Funding vs. Requested Level

Research, Development, Test, and Evaluation Funding by Budget Activity

Funding for RDT&E is organized into different budget activities that “correspond to different phases of the development process” (Harrison and Daniels, 2020, p. 9). They include

- Basic Research (6.1)
- Applied Research (6.2)
- Advanced Technology Development (6.3)
- Advanced Component Development and Prototypes (6.4)
- System Development and Demonstration (6.5)
- Management Support (6.6)
- Operational Systems Development (6.7)

Funding for the first three budget activities is collectively referred to as Science and Technology (S&T) funds. In the FY 2021 request, the DoD requested funds for a new budget activity, Software & Digital Technology Pilot Programs (6.8), but because it did not appear until FY 2021, it does not fall within the range of data analyzed for this study.

Table 3 shows the average percent change between the requested and actual funding levels for each RDT&E budget activity between FY 2010 and FY 2020. On average, Management Support received 28.9% more funding than requested, while Applied Research received 16.5% more. Congressional support for Management Support funding was so strong that it received more funding than requested in all 11 years during the period of analysis, as



shown in Figure 8. Lawmakers also provided overall S&T accounts an average of 9.1% more funding than requested over that time frame.

Table 3. Average Difference Between Requested and Actual Funding Levels by RDT&E Budget Activity

Budget Activity	Average Percent Change
Basic Research (6.1)	2.0%
Applied Research (6.2)	16.5%
Advanced Technology Development (6.3)	4.9%
Aggregate S&T Funding	9.1%
Advanced Component Development and Prototypes (6.4)	0.6%
System Development and Demonstration (6.5)	-6.6%
Management Support (6.6)	28.9%
Operational Systems Development (6.7)	-2.5%
Total RDT&E Average	1.2%

The System Development and Demonstration and Operational Systems Development budget activities both received less funding than the requested level on average over the FY 2010 to FY 2020 period. Congress provided an average of 6.6% less funding than requested for System Development and Demonstration, while Operational Systems Development received 2.5% less than the requested level, on average.² Advanced Component Development and Prototypes only received an average of 0.6% more than the request.

² In the FY 2010 R-1 justification spreadsheets, the DoD requested approximately \$17.7 billion in RDT&E funding for “Other Programs” categorized under budget activity 99. The R-1 justification book in PDF form specified that amount as funding for classified programs. While the spreadsheets assigned that funding to budget activity 99, calculations based on the data in the justification book showed that just over \$17.5 billion of the classified amount fell under budget activity 6.7, and the remainder fell under budget activity 6.6. The previous analysis incorporates the classified amount under 6.7 and 6.6 based on the justification book data.



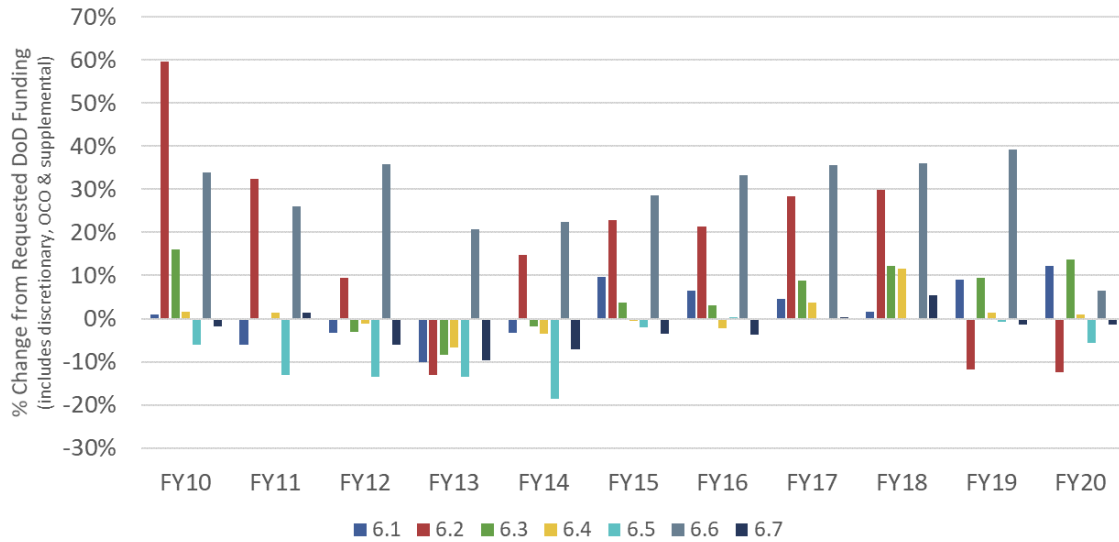


Figure 8. Actual RDT&E Funding vs. Requested Level by Budget Activity

Research, Development, Test, and Evaluation Funding by Military Department

When assessed by military department, defense-wide RDT&E programs received the greatest increase relative to the request at an average of 5.5%, followed by Army programs at 3.4%. As Figure 9 shows, Army RDT&E was over 10% higher than the requested level from FY 2016 to FY 2018 and surpassed 20% in FY 2018. Funding for the Navy and Air Force’s RDT&E programs fell below the requested level on average between FY 2010 and FY 2020, at 0.4% and 1.5% lower than the request for each department, respectively.

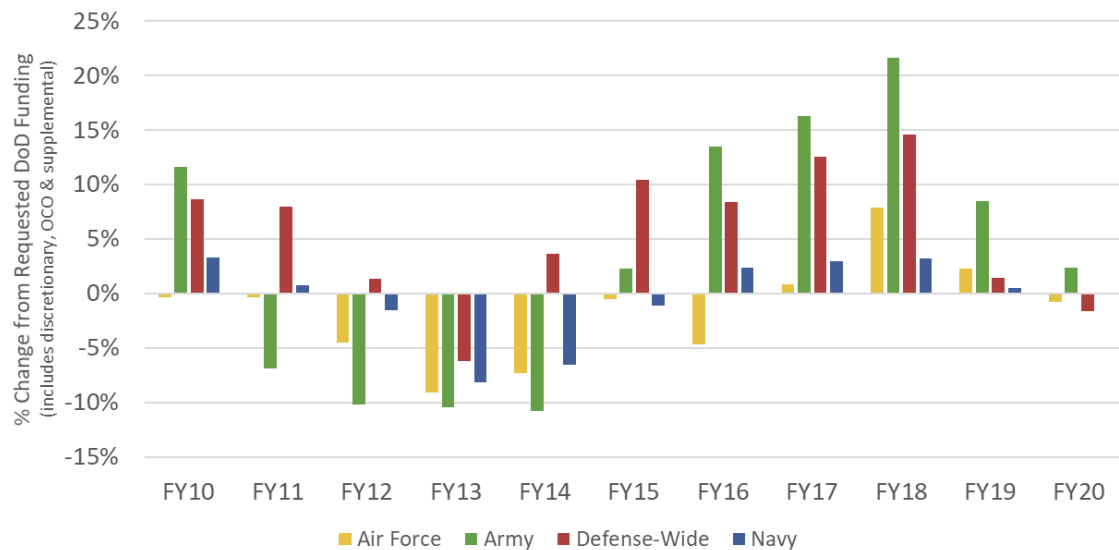


Figure 9. Actual RDT&E Funding vs. Requested Level by Military Department

Conclusion

The appropriations process is one of Congress’s primary tools in exercising its oversight authority on the executive branch’s defense policy and, more specifically, its defense acquisition plans. As the preceding analysis has illustrated, the process enables lawmakers to signal their



priorities to the administration by increasing or decreasing the funding levels for programs in the annual budget request. This study reaches several findings based on that analysis:

- Congressional action on procurement and RDT&E accounts largely followed similar trends over the past decade, due in no small part to the impact of the BCA and subsequent budget deals. With minor exceptions, Congress underfunded (relative to the request) both procurement and RDT&E accounts following the passage of the BCA in FY 2011, and it appropriated more than requested beginning in FY 2015. The budget deal reached in 2018 (BBA 2018) led to a notable increase above the request for procurement and RDT&E accounts in that same year.
- Congress has clear favorites among procurement accounts. Programs for missile defense, shipbuilding, aircraft, and ground systems all received increases above the requested level on average over the FY 2010 to FY 2020 period.
- Lawmakers regularly increase RDT&E funding for Management Support (6.6) and S&T (6.1, 6.2, and 6.3). Support for other budget activities is not as strong.

While Congress is able to enact its own defense priorities via the appropriations process, concerns over strategy are not the only drivers of congressional preferences for some programs over others. The appropriations process also serves as a political tool for lawmakers to serve their constituencies, which may include defense factories that produce aircraft or shipyards constructing future vessels.

For the executive branch, the budget request can similarly serve a political purpose for enacting the administration's priorities. With the knowledge that Congress regularly increases funding for some accounts above the request, the DoD can be strategic in signaling its own plans to the Hill. For example, it could cut funding from some accounts in the budget request if it feels confident that Congress is likely to restore that money later in the process. Understanding these trends in congressional action can enable policy-makers, program managers, and industry leaders alike to improve planning and efficiency in the overall acquisition process.

References

- Daniels, S. P. (2019). *How would sequestration impact DoD in FY 2020?* Center for Strategic and International Studies. https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/190515_Daniels_DBA_layout_FINAL_v2.pdf
- Daniels, S. P., & Harrison, T. (2018, February 20). *Making sense of the Bipartisan Budget Act of 2018 and what it means for defense.* Center for Strategic and International Studies. <https://www.csis.org/analysis/making-sense-bipartisan-budget-act-2018-and-what-it-means-defense>
- Harrison, T., & Daniels, S. P. (2020). *Analysis of the FY 2020 defense budget and its implications for FY 2021 and beyond.* Center for Strategic and International Studies. https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/HarrisonDaniels_FY20DBA_v4.pdf?FA48YSbbC3Vj.aH7pKhpdIbU56OQ9QUZ
- Harrison, T., & Daniels, S. P. (2020). *Analysis of the FY 2021 defense budget.* Center for Strategic and International Studies. <http://defense360.csis.org/wp-content/uploads/2020/08/Analysis-of-the-FY-2021-Defense-Budget.pdf>
- Saturno, J., Heniff, Jr., B., & Lynch, M. S. (2016). *The congressional appropriations process: An introduction* (CRS Report No. R42388). Congressional Research Service. <https://www.senate.gov/CRSpubs/8013e37d-4a09-46f0-b1e2-c14915d498a6.pdf>





ACQUISITION RESEARCH PROGRAM
GRADUATE SCHOOL OF DEFENSE MANAGEMENT
NAVAL POSTGRADUATE SCHOOL
555 DYER ROAD, INGERSOLL HALL
MONTEREY, CA 93943

WWW.ACQUISITIONRESEARCH.NET