

Appropriations Update: House Appropriations Committee Approves FY 2019 Defense Appropriations Bill

Lewis-Burke Associates LLC – June 13, 2018

On June 13, the House Appropriations Committee (HAC) approved its fiscal year (FY) 2019 defense appropriations bill on a 48-4 bipartisan vote. The bill would provide \$606.5 billion for Department of Defense (DOD) base programs, which is \$19.9 billion above the FY 2018 level, but \$882 million below the President's FY 2019 budget request. The bill would also provide \$68.0 billion in Overseas Contingency Operations (OCO) funding. The Committee noted the negative impact 17 years of continuous warfare has had on the military and the importance of increased funding to ensure DOD maintains its competitive advantage over nations like Russia, China, Iran, and North Korea as well as violent extremists. The Committee also highlighted the increasingly sophisticated capabilities of adversaries in cyberspace and the importance of secure and resilient networks capable of withstanding attacks and limiting the spread of false information online.

Of interest to the research community, the bill would provide \$91.2 billion for defense Research, Development, Test, and Evaluation (RDT&E) programs, which is \$2.9 billion above the FY 2018 level and \$161.3 million above the President's budget request. Within RDT&E, the HAC would allocate \$14.4 billion for DOD's science and technology (S&T) accounts (6.1 – 6.3), which is \$429.3 million less than the FY 2018 enacted level, but \$772 million above the President's budget request. The basic research accounts (6.1) across the Services and Defense-Wide would see decreases, demonstrating continued prioritization of advanced technology development, prototyping, and accelerated fielding efforts. As seen in the report, the Committee places significant emphasis on moving technology through the development pipeline and integrating existing technologies into military operations.

The HAC would fund the Defense Advanced Research Projects Agency (DARPA) at 3.3 billion, \$50 million less than the President's budget request but \$317 million above the current level. The committee also supports the Defense Health Program's R&D at \$1.4 billion, with an increase of \$732.6 million relative to the President's request, but \$596.0 million short of FY 2018 enacted levels. House appropriators also recommended a \$2 million increase for the Minerva Research Initiative, which supports DOD's social science research, and a \$10 million increase for the Defense University Research Instrumentation Program (DURIP).

Continuing the trend of expanding DOD's partners, the Committee's report had multiple provisions related to engaging with small businesses and non-traditional contractors, and increasing the speed of acquisition. The Committee expressed support for a hallmark program for the university community, providing a \$4 million increase to the Army Research Laboratory's (ARL) Open Campus program to hire university faculty under joint appointments. The report also directs the Navy to utilize Small Business Innovation Research (SBIR) awardees more fully and provide pathways to scale innovations. The provision is a response to the Navy not deploying SBIR-supported technologies across the Service. Additionally, the Committee recognized and encouraged cooperative S&T across the military Services, including a provision requiring a report describing the strategy and goals for each area of ongoing cooperation, a five-year plan of prospective areas of cooperative research, and an estimate of amounts and sources of funding to carry out such research.

The Committee continues to prioritize materials, manufacturing, lethality, and medical research while also increasing its focus space operations. Specific provisions include:

Materials – The Committee highlighted a number of areas where DOD should support or expand materials R&D efforts including multi-functional materials to protect military systems and assets, lightweight transparent armor for eye protection, cellulose-based products for ammunition, improved energy storage materials to improve lithium ion batteries, and the Army's Materials in Extreme Dynamic Environments program.

Manufacturing – The Committee supports DOD's Digital Manufacturing efforts such as the Digital Manufacturing and Design Innovation Institute, as well as DOD's close collaboration with industry and academia in this area. The Committee also encouraged the Secretary of the Army to support methods to foster a flexible, secure, and resilient domestic industrial base to support development of future technologies. Other provisions prioritized the need for new propulsion manufacturing processes and stated the importance of DARPA's Trusted Foundry Program to ensure a domestic supply of microelectronics.

Lethality – Lethality remains a priority across the Services, especially in the Army where it is one of six modernization priorities. The Committee encourages continued prioritization and development of long-range munitions, lightweight ammunitions, and precision gun-launched projectiles.

Medical – The Committee detailed its priorities for the Peer-Reviewed Cancer Research Program to include “bladder cancer, brain cancer, colorectal cancer, listeria vaccine for cancer, liver cancer, lymphoma, melanoma and other skin cancers, mesothelioma, pancreatic cancer, stomach cancer, and cancer in children, adolescents, and young adults.” The Committee also requested DOD carry out recommendations from a recent report on Metastatic cancer research, and to collect data on the prevalence of rare cancers among servicemembers to better understand their impact.

In addition to cancer research, the Committee also encouraged DOD to continue leveraging partnerships with academia and the private sector to support research on traumatic brain injuries (TBIs); perform research on understanding the role of gut microbiome in chronic disease; expand research into the efficacy of opioid alternatives; report on current hypoxia research efforts; and expand collaboration with Historically Black Colleges and Universities (HBCUs), Hispanic Serving Institutions (HSIs), and other Minority Serving Institutions (MSIs) on medical research.

Lastly, the Committee recommended funding the Joint Warfighter Medical Research program at \$45 million and supported prioritizing research to address the “golden hour” for servicemembers, referring to the hour immediately after an injury occurs, as well as battlefield diagnostics, and medical threats and treatments for warfighters around the world.

Space – The Committee is concerned about DOD's current satellite communications architecture as it was designed with integrated ad-hoc proprietary technologies, rather than as a holistic system. The Committee directs the Secretaries of the Army, Navy, and Air Force to develop a strategy on a new communications architecture and procurement to develop a system that is flexible and adaptable. The Committee also encourages a new Joint Program Office to develop this architecture. Additionally, the Committee transferred funds to the Air Force's RDT&E account to increase transparency of commercial satellite services and to prioritize its funding in future years.

Other S&T Priorities identified in the HAC report include:

- Encourages the Secretary of the Navy to conduct research on littoral region challenges of distinguishing magnetic, electric, and acoustic ambient fields from ships and submarines.
- Directs the Secretary of the Army to prioritize improving the infrastructure of Army research laboratories to ensure they stay at the cutting edge of technology development and are able to recruit top-tier talent.
- Recommends \$250 million for the Defense Rapid Innovation Fund and the prioritization of transitioning technologies from research to the development stage.
- Assigns programmatic responsibilities and budget authority of the Air Force's Space Solar Program to the Air Force Research Laboratory, as opposed to the Space Rapid Capabilities Office.
- The Committee encourages the Navy to support advanced energetics R&D and to incorporate successful technologies into advanced weapon systems.
- The Committee increased research programs related to development of hypersonic vehicle and propulsion capabilities.

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*As reported by the House Appropriations Committee
(In thousands of \$)*

	FY 2018 Enacted	FY 2019 Request	FY 2019 HAC	HAC v. FY 2018	HAC vs. Request
RDT&E, total	88,308,133	91,056,950	91,218,284	2,910,151 (3.3%)	161,334 (0.2%)
S&T, Total	14,863,004	13,661,667	14,433,672	-429,332 (2.9%)	772,005 (5.7%)
6.1, Total	2,343,154	2,269,206	2,298,102	-45,052 (1.9%)	28,896 (1.3%)
6.2, Total	5,681,752	5,100,359	5,571,178	-110,574 (1.9%)	470,819 (9.2%)
6.3, Total	6,838,098	6,292,102	6,564,392	-273,706 (4.0%)	272,290 (4.3%)
Army RDT&E	10,647,426	10,159,379	10,108,108	-539,318 (5.1%)	-51,271 (0.5%)
Army 6.1	470,022	445,895	442,241	-27,781 (5.9%)	-3,654 (0.8%)
Army 6.2	1,369,382	919,609	1,324,701	-44,681 (3.3%)	405,092 (44.1%)
Army 6.3	1,478,677	1,026,698	1,159,984	-318,693 (21.6%)	133,286 (13.0%)
Navy RDT&E	18,010,754	18,481,666	17,658,244	-352,510 (2.0%)	-823,422 (4.5%)
Navy 6.1	621,901	597,378	619,378	-2,523 (0.4%)	22,000 (3.7%)
Navy 6.2	994,110	891,471	889,198	-104,912 (10.6%)	-2,273 (0.3%)
Navy 6.3	816,707	750,995	742,253	-74,454	-8,742

				(9.1%)	(1.2%)
Air Force RDT&E	37,428,078	40,178,343	40,939,500	3,511,422	761,157
				(9.4%)	(1.9%)
Air Force 6.1	520,259	517,819	516,369	-3,890 (0.7%)	-1,450 (0.3%)
Air Force 6.2	1,434,714	1,312,342	1,384,342	-50,372 (3.5%)	72,000 (5.5%)
Air Force 6.3	869,117	814,797	865,797	-3,320 (0.4%)	51,000 (6.3%)
Defense Wide RDT&E	22,010,975	22,016,553	22,291,423	280,448	274,870
				(1.3%)	(1.2%)
Defense Wide 6.1	730,972	708,114	720,114	-10,858 (1.5%)	12,000 (1.7%)
Defense Wide 6.2	1,883,546	1,976,937	1,972,937	89,391 (4.7%)	-4,000 (0.2%)
Defense Wide 6.3	3,673,597	3,699,612	3,796,358	122,761 (3.3%)	96,746 (2.6%)
Defense Health R&D	2,039,315	710,637	1,443,237	-596,078	732,600
				(29.2%)	(103.1%)

Sources and Additional Information:

- The complete text of the HAC defense appropriations bill is available [here](#).
- The committee report is available [here](#).
- A video of the markup is available [here](#).