LEWIS–BURKE ASSOCIATES LLC

Appropriations Update: Senate Appropriations Committee Releases FY 2022 Defense Funding Bill

Lewis-Burke Associates LLC – October 22, 2021

The Senate Appropriations Committee (SAC) released its fiscal year (FY) 2022 defense appropriations bill, along with eight other appropriations bills, on October 18. The Committee would provide $725.8 billion in total defense funding, a 5 percent increase over FY 2021 enacted funding ($29.3 billion) and roughly $19.4 billion above both the FY 2022 House bill and the President's budget request. Notably, the proposed 5 percent increase is consistent with the topline figures recommended in the respective versions of the House and Senate FY 2022 *National Defense Authorization Act* (NDAA). Additionally, key Administration priorities are reflected in this bill, including investments in climate and environment initiatives, STEM education and workforce development for minority and underserved communities, and safeguards against increased threats from China, as well as enhanced focus on sustainment and modernization programs, warfighter lethality, and next generation weapons and infrastructure.

With respect to research, development, test, and evaluation (RDT&E) funding, SAC would provide $116 billion, more than an 8 percent increase over the FY 2021 enacted level and a 5 percent increase over the House FY 2022 recommended amount. Overall, total science and technology (S&T) accounts—which include basic research (6.1), applied research (6.2), and advanced technology development (6.3)—would increase by 5 percent above the FY 2021 enacted level and 20 percent more than the President's budget request. Army, Navy, and Air Force basic research accounts would receive increases relative to the FY 2021 enacted levels. Additionally, within the basic research accounts for each Service, SAC would provide $100 million for the Defense University Research Instrumentation Program (DURIP).

While defense-wide basic research would be cut by approximately 4 percent, the Committee would provide $13 million for the Minerva Research Initiative, the Department of Defense (DOD) social sciences research program, and $19 million for the Defense Established Program to Stimulate Competitive Research (DEPSCoR), both of which would be funded at higher levels than in the House bill ($8 million and $5 million, respectively). The Committee would provide a $35 million increase for the National Defense Education Program (NDEP), including $15 million for civil society and $20 million for STEM programs. Additionally, the Committee would provide a $10 million increase in basic research funding for Historically Black Colleges and Universities (HBCUs) and Minority Serving Institutions (MSIs), totaling over $41 million.

Other policies and programs of interest related to the S&T enterprise include:

- Prioritizing artificial intelligence (AI), cyber, data analytics, and microelectronics, through Defense Advanced Research Projects Agency (DARPA) by allocating $70 million for cyber and AI programs and $80 million for the Electronics Resurgence Initiative (ERI), of which $20 million would be for ERI basic research.
- Investments focused on climate and the environment, including a $10 million increase for the Strategic Environmental Research and Development Program (SERDP).
- Directives to improve DOD's understanding of and reporting on capabilities of longer-term sustainment costs for prototypes moving downstream for commercialization.

- Directives to maintain audits and reporting of the use of Other Transaction Agreements (OTAs).
- Support for the Army to improve operational capabilities within cold and extreme climate environments, and research aimed at the delivery and use of natural gas.
- $20 million for the Navy to develop stronger partnerships between research labs, warfighters, academia, and industry with a focus on submarine and autonomous undersea vehicle research.
- $163 million for the new Rapid Defense Experimentation Reserve (RDER), a fund to enable prototyping, experimentation, delivery, and support for mission-critical innovative S&T across the 'valley of death.' Several programs were repositioned to this account such as various Joint Technology Concept Demonstration projects, red teaming initiatives, and various rapid prototyping and equipping programs. RDER is intended to support warfighter needs by accelerating the development and delivery of technology solutions from historically slow or otherwise ineffective R&D/S&T programs.

Space

In support of Space Force research, the Committee would provide $353 million for applied research, which would double funding compared to FY 2021 enacted levels and would provide $299 million for advanced technology development. This would support additional investment in space power systems, digital engineering for future space operations, laser communications, battery development, ultra-lightweight solar arrays, operational cryogenic upper stage augmentation, and small satellite mission control, as well as include $7.5 million to fund university consortia for space technology. Additionally, the Senate bill would provide $75 million for basic research. However, this funding would be dispersed through the Air Force Office of Scientific Research (AFOSR) via Air Force RDT&E, as there is no basic research account or program within Space Force currently.

Defense Health

Within the Defense Health Program, the Senate would provide $1.85 billion for RDT&E, approximately a 23 percent decrease compared to the FY 2021 enacted level, and not less than $954.5 million for the Congressionally Directed Medical Research Program (CDMRP). Keeping with tradition, the Senate bill would fund the Peer Reviewed Medical Research Program (PRMRP), which is not included in the House bill, at $370 million, consistent with FY 2021 funding. New PRMRP topics would include hypercholesterolemia, myeloma, nephrotic syndrome, Rett syndrome, and trauma. Additionally, the Committee would allocate $130 million for the Peer Reviewed Cancer Research program, a $15 million increase compared to FY 2021, and include Von Hippel-Lindau syndrome as a new topic.

Sources and Additional Information:

- The bill text is available at https://www.appropriations.senate.gov/imo/media/doc/DEFFY2022_Final.PDF
- The Committee report is available at https://www.appropriations.senate.gov/imo/media/doc/DEFRept_FINAL.PDF
- The summary statement is available at https://www.appropriations.senate.gov/imo/media/doc/Final_Senate%20Appropriations%20Highlights.pdf

Department of Defense

As reported by the House Appropriations Committee on October 18, 2021
(in thousands of $)

	FY 2021 Enacted	FY 2022 House	FY 2022 Senate	FY 2022 Senate vs. FY 2021 Enacted	FY 2022 Senate vs. FY 2021 Request	Senate v. House
Total RDT&E	**107,454,767**	**110,368,824**	**116,152,543**	**8,697,776 (8.1%)**	**4,188,355 (3.7%)**	**5,783,719 (5.2%)**
Total S&T (6.1-6.3)	**16,816,487**	**16,003,435**	**17,672,089**	**855,602 (5.1%)**	**2,986,811 (20.3%)**	**1,668,654 (10.4%)**
6.1, Total	2,625,796	2,441,498	3,005,434	379,638 (14.5%)	722,500 (31.6%)	563,936 (23.1%)
6.2, Total	6,436,330	5,924,283	6,531,879	95,549 (1.5%)	1,022,995 (18.6%)	607,596 (10.3%)
6.3, Total	7,754,361	7,637,654	8,134,776	380,415 (4.9%)	1,241,316 (18.0%)	497,122 (6.5%)
Army RDT&E	**14,144,856**	**13,381,427**	**13,467,949**	**-676,907 (4.8%)**	**668,304 (5.2%)**	**86,522 (0.6%)**
Army 6.1	552,521	535,725	681,475	128,954 (23.3%)	208,000 (43.9%)	145,750 (27.2%)
Army 6.2	1,518,770	1,150,305	1,302,188	-216,582 (14.3%)	387,900 (42.2%)	151,883 (13.2%)
Army 6.3	1,940,015	1,667,538	1,735,037	-204,978 (10.6%)	437,600 (33.7%)	67,499 (4.0%)
Navy RDT&E	**20,138,391**	**20,694,650**	**21,546,521**	**1,408,130 (7.0%)**	**-1,092,841 (4.8%)**	**851,871 (4.1%)**
Navy 6.1	650,180	632,319	803,869	153,689 (23.6%)	202,000 (33.6%)	171,550 (27.1%)
Navy 6.2	1,179,053	1,081,594	1,157,000	-22,053 (1.9%)	181,085 (18.6%)	75,406 (7.0%)
Navy 6.3	835,756	821,328	872,388	36,632 (4.4%)	94,600 (12.2%)	51,060 (6.2%)
Air Force RDT&E	**36,360,842**	**39,062,352**	**40,098,662**	**3,737,820 (10.3%)**	**914,334 (2.3%)**	**1,036,310 (2.7%)**
Air Force 6.1	536,314	490,706	665,706	129,392 (24.1%)	175,000 (35.7%)	175,000 (35.7%)
Air Force 6.2	1,560,836	1,413,080	1,448,990	-111,846 (7.2%)	136,500 (10.4%)	35,910 (2.5%)
Air Force 6.3	1,000,257	890,248	748,510	-251,747 (25.2%)	14,524 (2.0%)	-141,738 (15.9%)
Space Force RDT&E*	**10,540,069**	**10,774,318**	**11,642,581**	**1,102,512 (10.5%)**	**376,194 (3.3%)**	**868,263 (8.1%)**
Space Force 6.2	216,874	190,696	353,306	136,432 (62.9%)	177,510 (101.0%)	162,610 (85.3%)
Space Force 6.3	0	82,584	298,653	298,653 --	222,000 (289.6%)	216,069 (261.6%)
Defense Wide RDT&E	**26,013,489**	**26,239,486**	**29,120,239**	**3,106,750 (11.9%)**	**3,262,364 (12.6%)**	**2,880,753 (11.0%)**

Defense Wide 6.1	886,781	782,748	854,384	-32,397 (3.7%)	137,500 (19.2%)	71,636 (9.2%)
Defense Wide 6.2	1,960,797	2,088,608	2,270,395	309,598 (15.8%)	140,000 (6.6%)	181,787 (8.7%)
Defense Wide 6.3	3,978,333	4,175,956	4,480,188	501,855 (12.6%)	472,592 (11.8%)	304,232 (7.3%)
Defense Health R&D	**2,392,579**	**1,836,680**	**1,849,627**	**-542,952 (22.7%)**	**1,218,947 (193.3%)**	**12,947 (0.7%)**

**Note: Continuing in FY 2022, Space Force does not feature a 6.1 basic research account.*