



October 6, 2022

The Honorable Lloyd J. Austin III  
Secretary  
U.S. Department of Defense  
1400 Defense Pentagon  
Washington, DC 20301

Dear Mr. Secretary,

As you develop the fiscal year (FY) 2024 U.S. Department of Defense (DoD) budget request, the Coalition for National Security Research (CNSR), representing the undersigned members of industry, academia, scientific and professional organizations, and non-profits, urges you to reverse recent trends of requesting cuts for the defense science and technology (S&T) program including the defense basic research programs. We respectfully request you seek to fund the defense S&T program equal to 3% of the overall DoD budget and ensure defense basic research is funded at 20% of the defense S&T budget, per expert recommendations from public and private sector organizations as outlined in this letter.

Deterring aggression and strategic attacks, and building enduring advantages for the Joint Force are the foundation of the *National Defense Strategy (NDS)*.<sup>1</sup> Ensuring the United States has military technological superiority over competitors is essential to supporting the *NDS* deterrence goals. As noted by the Defense Science Board (DSB), adequate investment in defense S&T is vital to military dominance and lower funding levels could put the military at a national security disadvantage.<sup>2</sup> In addition, defense basic research often attracts the most innovative scientists and engineers to work on issues of critical importance to DoD while also training the next generation DoD workforce through supporting research and educational opportunities for students, which is another key priority of the *NDS* as it relates to DoD investing in its most valuable resource – its extraordinary people.<sup>3</sup>

**The DSB,<sup>4</sup> National Security Commission on Artificial Intelligence (NSCAI),<sup>5</sup> National Academies,<sup>6</sup> Center for New American Security (CNAS),<sup>7</sup> bipartisan House Armed Services Committee’s Future of Defense Task Force report,<sup>8</sup> and Council on Competitiveness<sup>9</sup> all recommend that the defense S&T program funding equal 3% of the DoD budget in order to ensure United States military technological dominance. Further,**

<sup>1</sup> <https://media.defense.gov/2022/Mar/28/2002964702/-1/-1/1/NDS-FACT-SHEET.PDF>

<sup>2</sup> <https://dsb.cto.mil/reports/1990s/DefenseScienceandTechnologyBaseforthe21stCentury.pdf>

<sup>3</sup> <https://dsb.cto.mil/reports/2010s/BasicResearch.pdf>

<sup>4</sup> <http://www.dtic.mil/dtic/tr/fulltext/u2/a403874.pdf>

<sup>5</sup> <https://www.nscai.gov/wp-content/uploads/2021/03/Full-Report-Digital-1.pdf>

<sup>6</sup> <https://www.nap.edu/catalog/11463/rising-above-the-gathering-storm-energizing-and-employing-america-for>

<sup>7</sup> <https://www.cnas.org/publications/commentary/sharpening-the-u-s-militarys-edge-critical-steps-for-the-next-administration>

<sup>8</sup> <https://armedservices.house.gov/cache/files/2/6/26129500-d208-47ba-a9f7-25a8f82828b0/6D5C75605DE8DDF0013712923B4388D7.future-of-defense-task-force-report.pdf>

<sup>9</sup> <https://compete.secure.nonprofitsoapbox.com/reports/all/202-innovate-america>

**the DSB,<sup>10</sup> National Academies<sup>11</sup> and Council on Competitiveness<sup>12</sup> recommend defense basic research comprise 20% of the defense S&T budget to support the high-payoff research needed to yield transformational capabilities for the military.** Unfortunately, DoD's budget requests have not met these recommendations. The FY 2023 budget request sought defense S&T funding of just 2.1% and basic research funding of 14.4%. DoD has essentially requested lower percentages for defense S&T and basic research in each budget request since FY 2017.

Finally, we would like to highlight two recent reports from the National Academies related to strengthening the STEM workforce by investing in Minority Serving Institutions (MSIs) among others. The Academies concludes that MSIs have huge potential to grow the STEM workforce and United States' research capacity<sup>13</sup>. However, increased federal investment is required, particularly in defense S&T,<sup>14</sup> to enable MSIs to adequately support their students and acquire infrastructure needed to conduct world-class scientific research in areas of importance to DoD. We hope you will keep this in mind, as well as the other recommendations mentioned in this letter, as you craft the FY 2024 DoD budget request.

Thank you for consideration of our views. If we can be of any assistance, please do not hesitate to contact us.

Sincerely,

Aerospace Industries Association (AIA)  
American Association for the Advancement of Science (AAAS)  
American Chemical Society (ACS)  
American Institute for Medical and Biological Engineering  
American Mathematical Society (AMS)  
American Political Science Association  
American Psychological Association (APA)  
American Society for Engineering Education  
Arizona State University  
ASME  
Association of American Universities (AAU)  
Association of Public and Land-grant Universities (APLU)  
Battelle  
Boston University  
Brown University  
California Institute of Technology  
Carnegie Mellon University  
Coalition for Academic Scientific Computation (CASC)  
Columbia University

Computing Research Association  
Consortium for Ocean Leadership  
Consortium of Social Science Associations (COSSA)  
Cornell University  
Duke University  
Dupont  
Energetics, Inc.  
Federation of Associations in Behavioral & Brain Sciences (FABBS)  
Federation of Materials Societies  
Florida International University  
Florida State University  
George Mason University  
Georgia Institute of Technology  
Harvard University  
IEEE-USA  
Indiana University  
Lehigh University  
Louisiana State University  
Louisiana Tech University  
Massachusetts Institute of Technology  
Materials Research Society  
Miami University of Ohio

<sup>10</sup> <https://apps.dtic.mil/dtic/tr/fulltext/u2/a387244.pdf>

<sup>11</sup> <https://www.nap.edu/catalog/11463/rising-above-the-gathering-storm-energizing-and-employing-america-for>

<sup>12</sup> <https://compete.secure.nonprofitsoapbox.com/reports/all/202-innovate-america>

<sup>13</sup> <https://nap.nationalacademies.org/catalog/25257/minority-serving-institutions-americas-underutilized-resource-for-strengthening-the-stem>

<sup>14</sup> <https://nap.nationalacademies.org/catalog/26399/defense-research-capacity-at-historically-black-colleges-and-universities-and-other-minority-institutions>

Michigan State University  
Michigan Technological University  
Montana State University  
National Defense Industrial Association (NDIA)  
Emerging Technologies Institute (ETI)  
New Mexico State University  
New York University  
Northeastern University  
Northern Illinois University  
Northwestern University  
Oak Ridge Associated Universities  
Ohio State University  
Old Dominion University  
Oregon Health and Sciences University  
Oregon State University  
OSA-The Optical Society  
Pace University  
Penn State University  
Princeton University  
Purdue University  
Rensselaer Polytechnic Institute  
Rochester Institute of Technology  
Rutgers, The State University of New Jersey  
Scripps Institution of Oceanography  
Semiconductor Industry Association  
Society for Industrial and Applied Mathematics  
SPIE, the international society for optics and photonics  
SRI International  
Stony Brook University  
Syracuse University  
Temple University  
Texas A&M University  
The Catholic University of America  
The George Washington University  
The Johns Hopkins University  
The State University of New York  
University of Alaska  
University of Arizona  
University of California System  
University of California, Davis  
University of California, Irvine  
University of California, Los Angeles  
University of California, Riverside  
University of California, San Diego  
University of Central Florida  
University of Chicago  
University of Cincinnati  
University of Colorado Boulder  
University of Delaware  
University of Florida  
University of Hawaii System  
University of Houston  
University of Illinois System  
University of Iowa  
University of Kansas

University of Maryland at College Park  
University of Michigan  
University of Missouri System  
University of Nebraska  
University of North Carolina – Chapel Hill  
University of North Carolina System  
University of Oklahoma  
University of Pennsylvania  
University of Pittsburgh  
University of Rhode Island  
University of Rochester  
University of South Florida  
University of Southern California  
University of Tennessee  
University of Texas at San Antonio  
University of Texas System  
University of Vermont  
University of Virginia  
University of Washington  
University of Wisconsin - Madison  
Vanderbilt University  
Virginia Commonwealth University  
Washington State University  
West Virginia University  
William & Mary  
Woods Hole Oceanographic Institution  
Yale University