

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)*. 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. 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.³

The DSB,⁴ National Security Commission on Artificial Intelligence (NSCAI),⁵ National Academies,⁶ Center for New American Security (CNAS),⁷ bipartisan House Armed Services Committee's Future of Defense Task Force report,⁸ and Council on Competitiveness⁹ 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,

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

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

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

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

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

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

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

the DSB,¹⁰ National Academies¹¹ and Council on Competitiveness¹² 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 capacity¹³. However, increased federal investment is required, particularly in defense S&T,¹⁴ 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

 $^{^{10}\ \}underline{https://apps.dtic.mil/dtic/tr/fulltext/u2/a387244.pdf}$

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

https://compete.secure.nonprofitsoapbox.com/reports/all/202-innovate-america

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

¹⁴ 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