H. MORGAN GRIFFITH 9TH DISTRICT, VIRGINIA COMMITTEE ON ENERGY AND COMMERCE SUBCOMMITTEES: OVERSIGHT AND INVESTIGATIONS REPUBLICAN LEADER ENERGY HEALTH www.morgangriffith.house.gov



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April 29, 2021

The Honorable Rosa DeLauro Chairwoman Committee on Appropriations U.S. House of Representatives Washington, DC 20515 The Honorable Kay Granger Ranking Member Committee on Appropriations U.S. House of Representatives Washington, DC 20515

Dear Chairwoman DeLauro and Ranking Member Granger:

I am requesting funding for Research and Development of Next Generation Explosives and Propellants in fiscal year 2022.

The entity to receive funding for this project is Virginia Polytechnic Institute and State University, located at Aerospace & Ocean Engineering (MC0203), Randolph Hall, RM 332-5, Virginia Tech, 460 Old Turner St., Blacksburg, VA 24061.

The funding level of \$1,000,000.00 for Research and Development of Next Generation Explosives and Propellants would be used for research to characterize novel explosive and propellant materials as a first step in reaching the goal of eventually creating munitions for the Department of Defense with increased range, accuracy, and stability, such as a solid rocket whose fuel could be made to throttle, as opposed to burning at the same rate, and therefore fly farther or carry a larger payload. The project would be a valuable use of taxpayer funds because the characterization of novel explosive and propellant materials would assist the Department of Defense in evaluating materials that could be used to create more precise, long-range munitions that are safer to manufacture and store. Continued innovation in the energetics and propellant fields will be necessary to keep pace with improved munition ranges from near-peer competitors.

Researchers at Virginia Tech would conduct characterization and evaluation of potential new energetics materials through activities such as thermal analysis, viscosity tests, and a material's reaction to light and electricity stimuli. These characterizations could help determine whether potential energetics materials are suitable for additive manufacturing or casting applications. Virginia Tech energetics researchers would also be able to interact with nearby Radford Army Ammunition Plant personnel. The Plant is the primary supplier of solventless propellants and the only North American manufacturer and supplier of nitrocellulose.

I certify that neither I nor my immediate family has any financial interest in this project.

Sincerely,

H. Morgan Griffith Member of Congress