



**DEPARTMENT OF THE ARMY**  
U.S. ARMY CORPS OF ENGINEERS, ENGINEER RESEARCH AND DEVELOPMENT CENTER  
INFORMATION TECHNOLOGY LABORATORY  
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CEERD-IZP

4 August 2020

MEMORANDUM FOR HIGH PERFORMANCE COMPUTING ADVISORY PANEL

SUBJECT: Selection of Fiscal Year 2021 Department of Defense (DoD) High Performance Computing Modernization Program (HPCMP) Frontier Projects

1. Frontier Projects were established in FY 2014 to enable research, development, test, and evaluation outcomes that could not be achieved using typically available HPCMP resources alone. These projects are aligned with DoD mission priorities and are supported by multi-year investments in multi-disciplinary teams leveraging exceptional amounts of high performance computing resources.
2. Based upon the recommendation of my management team and the evaluation criteria specified in the FY 2021 call for proposals, I have selected the following three projects for award:
  - a. *Terminal Ballistics to Advance Army Modernization Priorities*, Robert Doney, Army Research Laboratory
  - b. *Whole Atmosphere NEPTUNE*, P. Alex Reinecke, Naval Research Laboratory
  - c. *Direct Numerical Simulations of Turbulence at Hypervelocity Flight Conditions*, Neal Bitter, Office of Naval Research
3. These three projects were selected from ten proposals submitted in response to the FY 2021 call. Each proposal was peer reviewed by a technical evaluation panel and examined closely by the Services and Office of the Secretary of Defense for mission relevance.
4. The HPCMP will allocate resources for each selected project with a planned start date of 1 October 2020. The HPCMP resource management team will evaluate the progress of each project on a quarterly basis. Each project will be required to regularly report its status. We have high expectations that all Frontier Projects will produce notable achievements and strong mission impacts.

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5. Please join me in congratulating the members of these new Frontier Projects. My point-of-contact for this activity is Mr. Michael Ausserer, Associate Director for Resource Management. He may be contacted by phone at 240-425-9057 or by e-mail at [michael.f.ausserer.civ@mail.mil](mailto:michael.f.ausserer.civ@mail.mil)

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