

## Michael W. Liemohn · Professor

October 24 2018

Dr. Nicola Fox, Heliophysics Division Director National Aeronautics and Space Administration Heliophysics Division 300 E Street, SW Washington, DC 20546-0001

Dear Dr. Fox:

The Heliophysics Advisory Committee [HPAC] of the National Aeronautics and Space Administration [NASA] convened on 22 and 23 October via teleconference with NASA Headquarters [HQ]. The undersigned served as Chair for the meeting with the support of Janet Kozyra (HPAC Designated Federal Officer [DFO], NASA Heliophysics Division [HPD]). A quorum of HPAC members participated. Those in attendance on the telecon included Michael Liemohn (University of Michigan, HPAC Chair), Vassilis Angelopoulos (University of California, Los Angeles), Darko Filipi (Adcole Maryland Aerospace), George Ho (Johns Hopkins University Applied Physics Laboratory), Lynn Kistler (University of New Hampshire), Cora Randall (University of Colorado, Boulder), and Paul Cassak (West Virginia University). This letter summarizes the meeting outcomes.

The meeting was convened specifically to conduct the Government Performance and Results Act/Modernization Act [GPRAMA] annual performance evaluation of HPD. Jennifer Kearns briefed the HPAC about GPRAMA and the Heliophysics Science Performance Assessment of the Strategic Objectives. The HPAC was tasked to review the HPD Fiscal Year 2018 progress with focused attention on these three Annual Performance Indicators [APIs]:

API HE-18-1: Demonstrate progress in exploring the physical processes in the space environment from the Sun to Earth and throughout the solar system;

API HE-18-2: Demonstrate progress in advancing understanding of the connections that link the Sun, Earth, and planetary space environments, and the outer reaches of the solar system; and,

API HE-18-3: Demonstrate progress in developing the knowledge and capability to detect and predict extreme conditions in space to protect life and society and to safeguard human and robotic explorers beyond Earth.

Resulting from substantial deliberation under the leadership of Lynn Kistler (for 18-1), Cora Randall (for 18-2) and Darko Filipi (for 18-3), the HPAC voted unanimously for a "green" rating in all three APIs, finding "expectations for the research program fully met in context of resources invested." The specific summary text generated by HPAC for each of the APIs can be found in the three attached Word documents.

We thank the HPD staff for providing source material with highlights from the NASAsupported missions and research projects. This was most helpful in our assessment of the APIs for the GPRAMA review. We would also like to thank Ms. Vanessa Patrick for her service in coordinating the telecon, especially the Webex connection and her help with implementing committee-requested changes to our summary statements for the three APIs, it was a tremendous benefit to have a single point of contact for the iteration of these summaries.

We welcome any requests from NASA Heliophysics Division for clarification or elaboration on our findings.

Sincerely yours,

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Michael W. Liemohn

Cc: Janet Kozyra, HPAC Designated Federal Officer Margaret Luce, HPD Deputy Director (and recent HPD Acting Director)