October 3, 2022

Call for U.S. Scientists to Serve on a Review of NASA's Balloon Program Independent Review.

Dear Colleague,

The National Aeronautics and Space Administration (NASA) is soliciting applications and nominations for individuals affiliated with U.S. institutions to serve on an in-depth and comprehensive review of NASA's Scientific Balloon Program is managed by the Astrophysics Division for all of NASA's Science Mission Directorate. The purpose of the review is to assist NASA in maximizing the scientific yield and operational efficiency of the Balloon Program within the available funding and provide findings and recommendations. The review team will be required to provide the the following:

- Prioritized list of balloon technologies/capabilities needed to enable science investigations and technology maturations for future missions
- Prioritized list of launch site requirements and what constitutes a healthy campaign cadence and expected number of launches per campaign;
- For the Astrophysics Research and Analysis Program, a healthy number of balloon investigations and notional funding profiles;
- Capabilities of commercial suborbital flight providers and efficiency gains to be leveraged;
- Ways to reduce barriers to entry, particularly for new PIs and new (to the Balloon Program)
 organizations, including underrepresented people and organizations.

The Balloon Program provides rapid, low-cost access to a near-space environment through numerous annual launch campaigns, enabling important scientific discoveries and cutting edge research in a wide variety of NASA science. In addition, balloon borne investigations are an excellent training ground for the next generation of scientists and engineers as well as the maturation of technology but are integral pieces for future NASA space missions. Advancing Science, training the next generation of leaders and space technology maturation for future NASA missions are key core values of the suborbital program. Balloon payloads that can weigh up to 8000 pounds, can be flown up to 110,000-150,000 ft, and, following the stratospheric winds, can stay aloft from several hours to several days depending on the science requirements. Unlike space missions, balloon payloads can be recovered, refurbished, and reflown, allowing for lessons learned to be incorporated. Further details on the balloon program can be found here at the Balloon Program's website (https://sites.wff.nasa.gov/code820/).

The review is the result of a recommendation of the Decadal Survey on Astronomy and Astrophysics 2020 in its report, *Pathways to Discovery in Astronomy and Astrophysics for the 2020s*. which asked for "an external review of the balloon program to establish a framework for accomplishing the competing needs of achieving flight capabilities and launch rates that meet demands, ensuring adequate investment in payloads, and lowering barriers to entry." The terms of reference for this Balloon Program Independent Review can be found on the Universe Document webpage: https://science.nasa.gov/astrophysics/documents.

Nomination / Application Letters:

Applications and nominations to serve on the review should consist of a single PDF which includes a cover letter, including a statement of expertise pertinent to serving on the review, a 1-2 page resume / CV, and a statement of commitment to serve for the duration of the review (anticipated to be ~18

months starting in Spring 2023). Applications and nominations will be accepted for candidates affiliated with U.S. institutions; there is no citizenship requirement. Members appointed to the panel will be appointed as Special Government Employees.

Note that the cover letter should speak directly to the anticipated criteria for selection listed below.

Anticipated Criteria for Selection:

- Expertise and/or experience that will directly contribute to the goals of the review.
- Ability to bring a diversity of thought and fresh perspectives to the Balloon Program.
- Evidence of commitment to creative and implementable solutions for the type of objectives outlined for this review.

We will begin evaluating applications starting **Friday, Oct 21, 2022**. Only email applications of a single PDF file will be accepted. Please submit your application via email to Dr. Kartik Sheth (kartik.sheth@nasa.gov) with a cc to Dr. Thomas Hams (thomas.hams-1@nasa.gov)

We anticipate regular remote meetings and in-person meetings. The in-person meetings may require travel within the US. NASA will provide funding for the travel needed for the review.

Applications will be reviewed at NASA Headquarters. The Astrophysics Division Director will be the final selection official for the panel.

NASA Points of Contact:

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