



**HELIOPHYSICS EXPLORERS PROGRAM
ANNOUNCEMENT OF OPPORTUNITY (AO)**

2022 SMALL EXPLORER (SMEX)

**STEP 1
QUESTIONS & ANSWERS**

**Updated
May 25, 2022**

HELIOPHYSICS EXPLORERS PROGRAM ANNOUNCEMENT OF OPPORTUNITY

2022 SMALL EXPLORER (SMEX)

STEP 1 QUESTIONS & ANSWERS

Please submit your Questions to Dr. Moses, Mr. Florance, and Dr. Wu by email at:

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We will work to develop Answers your Questions, and post those Answers to this document. Please check back for the latest version, as you may not be notified that your Question has been answered.

Q&As 1 and 2 posted May 25, 2022.

Additions are in bold text and deletions are struck through in amendments.

Q1: The Community Announcement (released 22 December 2021) indicated that the target release dates for the draft and final SMEX AOs are March and June 2022, respectively. Does NASA have revised dates for the draft and final SMEX AO release?

A1: The target draft and final SMEX AO release dates are 3 June and 23 August 2022, respectively. The target due date for SMEX proposals is 21 November 2022.

Q2: The Community Announcement (released 22 December 2021) indicated that the NASA-provided launch options under the SMEX AO would utilize Launch Services Program (LSP) Venture-Class Acquisition of Dedicated and Rideshare (VADR) Launch Services. Is additional guidance and information available on VADR options?

A2: Heliophysics 2022 SMEX AO selections will have payload risk classifications of Class D as defined in NPR 8705.4A. The VADR launch services are specifically tailored to provide the NPD 8610.7D risk and NPD 8610.23C technical oversight required for NASA Class D missions,

and thus represent an appropriate cost to NASA for this SMEX opportunity. For the 2022 SMEX AO, the AO-Provided Launch Services options are projected to be as follows:

A Heliophysics Explorers investigation utilizing AO-Provided Launch Services will be launched on one or two launch vehicles (LVs) that NASA will provide as Government Furnished Equipment (GFE), utilizing either the Launch Services Program (LSP) Venture-Class Acquisition of Dedicated and Rideshare (VADR) Launch Services or Rideshare on Government Primary launches. Standard launch services utilizing a domestic launch vehicle certified as category 1, 2, or 3 per NPD 8610.7D, *NASA Launch Services Risk Mitigation Policy for NASA-Owned and/or NASA-Sponsored Payloads/Missions*, regardless of the payload classification, will be provided. There will typically be a charge against the PI-Managed Mission Cost for any launch services beyond the standard launch services offered. Applicable mission unique costs specifically identified in this AO or documents posted to the Program Library must be reflected as reductions to the Adjusted AO Cost Cap.

The *Launch Services Program Information Summary* describes categories of AO-Provided Launch Services being offered at no cost. The following table provides an overview of the performance options.

	Representative Orbit	Mass to Representative Orbit
1 or 2 × Option A	500 km Sun-Synchronous*	1 or 2 × 300 kg
1 × Option B	500 km Sun-Synchronous*	1 × 960 kg
1 or 2 × ESPA or ESPA Grande Port	Geosynchronous Transfer Orbit	1 or 2 × 220 kg per ESPA Port or 465 kg per ESPA Grande Port

* For other orbits, refer to the *Launch Services Program Information Summary*

An incentive of up to \$6M (Fiscal Year 2022), covering the proposed cost, is offered as an increase to the AO Cost Cap for missions utilizing Option A or B that require a PI-provided propulsive stage and have an operational semi-minor axis of at least two (2) R_E.

Missions will not be responsible for any costs that exceed those listed in this AO or the *Launch Services Program Information Summary* in the Program Library, or the impact to the mission of any launch delay caused by AO-provided access to space.

The *Launch Services Program Information Summary* will be posted to the Program Library before the release of the final 2022 SMEX AO. While the volume for Option A is projected to be similar to that offered for the 2016 SMEX AO, the volume for Option B is projected to approximately 70” in diameter × 100” in length.