2026 Astrophysics Small Explorer Program Solicitation Pre-Proposal Conference

PPC Goals and Introduction to the Announcement of Opportunity(AO) (NNH26ZDA011O)

AO: https://go.nasa.gov/APSMEX26

Web: https://explorers.larc.nasa.gov/APSMEX26/SMEX

June 30, 2026

Prepared by:
SMD APD Explorers Team & LaRC SOMA Team

Presented by:
Dan Moses (dan.moses@nasa.gov)
APSMEX26 AO Lead Program Scientist

Agenda: Pre-Proposal Conference 2026 Astrophysics Small Explorer (APSMEX26) Announcement of Opportunity (NNH26ZDA011O)

Time	Presentation	Speaker
10:00 AM	Welcome	Peg Luce, Deputy D.D., APD (NASA/HQ)
10:10 AM	PPC Goals & Introduction to AO	Dan Moses, APSMEX26 Lead PS, APD (NASA/HQ)
10:30 AM	Explorers Office	Sridhar Manthripragada, PM, EHPD (NASA/GSFC)
10:45 AM	Science Evaluation	Dan Moses, APSMEX26 PS, APD (NASA/HQ)
11:25 AM	TMC Evaluation	Omar Torres, APSMEX26 Lead Acquisition Manager, SOMA (NASA/LaRC)
11:55 AM	Expectations for Phase A&B	Lucien Cox, APSMEX26 PE, APD (NASA/HQ)
12:15 PM	Break	All
12:30 PM	AO-Provided Launch Services	Genevieve Futch, MM, NASA LSP (NASA/KSC)
12:45 PM	International Participation	Peyton Blackstock, OIIR (NASA/HQ)
1:00 PM	Space Communications & Navigation	Anum Ashraf, SCaN Program Office (NASA/HQ)
1:15 PM	Export Control	Michael Tu, OIIR (NASA/HQ)
1:30 PM	Writing L1 and L2 Requirements	Shaun Deacon, Aerospace Engineer, Space Mission Analysis Branch (NASA/LaRC)
1:55 PM	Conjunction Analysis & Collision Avoidance	Lauri Newman, CARA Program Officer (NASA/HQ)
2:10 PM	Question Time	All
2:25 PM	Closing Remarks	Dan Moses, APSMEX26 PS, APD (NASA/HQ)
2:30 PM	Adjourn	

Pre-Proposal Conference Goals:

- Provide an overview of the 2026 Astrophysics SMEX (APSMEX26) solicitation
- Provide an overview of the evaluation, categorization, and selection process

➢ **Collect questions concerning APSMEX26** via:

1. MS TEAMS Meeting Chat section or
2. E-mail to APD Explorers Team POC

➢ **Provide clarifications/answers** via:

1. PPC Question time or
2. Q&A page on the APSMEX26 web site: https://explorers.larc.nasa.gov/APSMEX26/SMEX

The Explorers Program is the oldest NASA orbital program

- Explorer I on January 31, 1958, was the first successful NASA orbital mission.
  - Achieved post-Sputnik entry of the United States into the space race.
- Over 100 missions have been flown.
- The Explorers Program science has contributed to two different Nobel Prizes:
  - UHURU (Giaconni 2002 - pioneering contributions to x-ray astrophysics)
  - COBE (Mather & Smoot 2005 - discovery of blackbody spectrum & anisotropy of CMB radiation)

Small Explorers Program (SMEX)

- The SMEX component of the Explorers program was initiated in 1988 as an internal GSFC program for early career engineering personnel development.
- By 1997, SMEX had transitioned into an openly competed, PI-led opportunity for **frequent access** to space for leading-edge space science research.
  - Frequent access is achieved by a Cost Cap, Class D risk posture, ~3year development (Phase C/D) and ≤3 years operations (Phase E)
  - Frequent access provides an agile response to developments in astrophysics and technology

Key Events Leading to the APD SMEX 2026 (APSMEX26) AO

- **January 13, 2025:** SMEX-25 draft AO released
  - AO Cost Cap $170M ($FY25) (Note: 2019 SMEX $145M ($FY20))
  - Final AO planned release was April 2025 with LRD May 2031
- **April 29, 2025:** AO release postponed to NET April 2026 due to uncertainty in APD budget projections
- **January 6, 2026:** Community Announcement: NASA intent to release SMEX-26 AO (NET April 2026)
- **June 9, 2026:** Release APSMEX26 AO

Charge from APD, SMD & Agency: Accelerate delivery of cutting-edge science

- Identify efficiencies to reduce the time between the AO release and LRDs
  - Identify the risks assumed by implementing these efficiencies
- Boundary conditions
  - Consideration of PI institutional resource commitments in responding to the draft APD SMEX-25 AO.
  - APSMEX26 AO must balance
    1. Maximizing efficiencies that are reasonable in context of time vs
    2. Institutional investments already made by science teams to mature their concepts

2026 Astrophysics SMEX AO Fact Sheet

- Principal Investigator (PI)-led Mission, Category 2 Launch Risk, Class D Mission Assurance
- PI-Managed Mission Cost (PIMMC): $190M ($FY26)
- Government Furnished NLS II Launch Service (see Information Summary in Program Library)
- There is no accompanying 2026 Astrophysics Mission of Opportunity (MO) AO
- Proposed investigations will be evaluated and selected through a single-step competitive process
- One investigation will be selected for formulation Phase A&B
- Mandatory Notices of Intent (NOI) to submit proposal are due July 21, 2026, by 11:59PM EDT
- Electronic Proposal Submittals, with Letters of Commitment, are due September 9, 2026, by 11:59PM EDT
- Selection Announcement *Target* is March 8, 2027 (pending number of proposal responses to AO)
- Proposed Launch Readiness Date (LRD) is required to be no later than (NLT) December 5, 2031

APSMEX26 Requirements

2026 APD SMEX AO is based on the SMD Standard AO template.

Requirements are identified, numbered, and specific.

- There are 105 requirements in the 2026 APSMEX26 AO main body to be addressed in proposal

Evaluation Factors are identified, numbered, and specific.

- 4 for Science Merit
- 6 for Scientific Implementation Merit and Feasibility
- 5 for Technical, Management, and Cost (TMC) Feasibility

Appendix B has numbered requirements on **Proposal Preparation**

- There are 84 specific requirements for the format and content of proposals

Highlights of the AO (1 of 4)
Changes from January 2025 Draft APD SMEX AO

1. **Streamlined Selection Process in response to Administrator Priorities:** NASA will utilize a single-step competitive process, selecting one investigation to proceed directly into a combined Phase A&B.

2. **Increased Cost Cap:** The PI-Managed Mission Cost (PIMMC) cap has been increased to $190M (FY26$), up from $170M (FY25$) in the Draft AO.
   - PIMMC increase addresses requirements on EVM, SCAN, CARA, Operational Reserve, etc..

3. **Phase A Funding Cap:** Although missions proceed directly into a combined Phase A&B, the Phase A portion of formulation is subject to a strict $3M cost cap.
   - One Step Process ⇨ Non-Competitive Phase A ⇨ No CSR document and No Site Visit
   - Focus on products for Class D, NPR 7120.5 KDP-B including SRR & MDR
   - Standing Review Board will be formed at time of selection
   - SMEX Project Office and SRB are fully engaged in Phase A, providing support for a successful KDP-B
     - In a 2-step process, fairness concerns limit NASA support during competitive Phase A

4. **Phase A & B contracts:** Despite being selected together, Phase A and Phase B contracts will be awarded separately. Furthermore, a streamlined Lifecycle Review and Key Decision Point (KDP) will take place at the end of Phase A to authorize the transition to Phase B.

Highlights of the AO (2/4)

5. **Launch Readiness Date (LRD):** No later than December 5, 2031.
   - The duration of Phase A-D is defined by selection date and LRD (~57 months)
   - Proposals requiring Technology Maturation can balance duration of Phase A&B vs Phase C & Phase D
6. **SCaN Nonrecurring Costs:** Any Space Communications and Navigation (SCaN) nonrecurring costs must be explicitly budgeted and will be treated as reductions to the Adjusted AO Cost Cap.
7. **Earned Value Management (EVM):** EVM is strictly required for both NASA in-house and contracted work if the proposed PIMMC is $120M (FY26$) or greater.
8. **Operations Reserves:** Proposals must maintain a minimum of 20% unencumbered cost reserves specifically for Phase E (Operations).
9. **Key Personnel:** Both the Project Manager (PM) and the Project System Engineer (PSE) must be explicitly named in the proposal.
10. **Future Opportunities (e.g., SEO & SC):** Descriptive text for elements like Science Enhancement Options (SEO) and Student Collaborations (SC) is included in the AO to inform proposers about future possibilities; however, these sections are not required in the Pre-Phase A proposal and are deferred to later phases.

Highlights of the AO (3/4) – Management and tailoring

11. **Baseline Compliance:** The core baseline investigation must remain fully compliant with standard NPR 7120.5 flight project requirements.

12. **Innovative tailoring Concepts:** The AO solicits innovative concepts for adjusting or tailoring NPR 7120.5 to improve efficiency.
    - Tailoring concepts are separate from the required baseline investigation identified in preceding point (#11).
    - Viable tailoring concepts will be thoroughly reviewed.
    - Meritorious ideas will be viewed as programmatic strengths during evaluation, may contribute to the selection decision (AO § 7.3), and may be officially adopted after selection.

13. **Deferred Requirements:** Requirements that are typically deferred to in a 2-step process to the Phase A concept study will instead, in this 1-step process, be evaluated during the combined Phase A&B.
    - In a 1-step process there are significantly fewer requirements that can be deferred compared to a 2-step process.

    Process Note: There is a trade between procurement speed, level of pre-selection insight, and proposal simplification.
    - The balance chosen in this AO will be evaluated as part of lessons learned exercise for future SMD AOs.

Highlights of APSMEX26 AO (4/4)

14. **Science and Mission Driving Requirements:** Proposals must explicitly provide the Level 1 Science Requirements and the Driving Level 2 Requirements in Section D.2 and Appendix J.15, respectively. The page count has been increased to account for the additional material. (PPC Presentation #11)

15. **Planetary Protection:** Strict Planetary Protection requirements apply to pertinent investigations to prevent forward or backward contamination.

16. **Collision Avoidance (CA):** Missions proposing orbit altitudes between 400 km and 1200 km are required to have the capability to execute at least three collision avoidance mitigation actions.
    - CARA program guidance anticipates 1 to 5 CA mitigation actions during mission lifetime. Three mitigation actions are deemed appropriate for a 2-3 year SMEX Phase E.
    - More information in CARA presentation this afternoon

17. **NASA requirement on post-mission de-orbit of LEO spacecraft may be reduced to 5 years.**
    - For the APSMEX-26 competition, proposers can assume a waiver on the 5year requirement
    - Discussion of the impact of the reduced requirement is a potential programmatic strength.

18. **Quad Chart Requirement:** A standardized, one-page Quad Chart summarizing mission details is now a mandatory inclusion in the proposal.

Schedule Summary

Event	Date
AO Release Date	9-Jun-26
Pre-Proposal Conference	30-Jun-26
Mandatory Notice of Intent to Propose Deadline	21-Jul-26 @ 11:59 p.m. Eastern Time
Electronic Proposal Submittal Deadline	9-Sep-26 @ 11:59 p.m. Eastern Time
Letters of Commitment Due (with Proposal)	9-Sep-26
Deadline for Augmented Submission	14-Sep-26 @ 4:30 p.m. Eastern Time
Selection Announcement	8-Mar-27 (target depending on # submissions)
AO-Required Launch Readiness Date	NLT December 5, 2031

Proposal Submission Requirements for Reference

Requirement B-5: ***Electronic proposals*** shall be a single unlocked (*e.g.*, without digital signatures) searchable Adobe Portable Document Format (PDF) file, composed of the main proposal, all tables (see Requirement B-57 and Requirement B-77), and all applicable proposal appendices (see Section J of this appendix). Images (*e.g.*, figures and scans) shall be converted into machine-encoded text using optical character recognition. Audio or video shall not be included. Electronic proposals shall be limited to 25 MB in size. Links to other parts of the proposal are permitted, but links to materials outside of the proposal are not. Once submitted, the document uploaded to NSPIRES will be considered the official submission.

Requirement B7: ***Augmented submission***s via the NASA Box service shall include electronic proposals specified in Requirement B-5, and shall additionally include Microsoft Excel files of tables (see Requirement B-57 and Requirement B-62), a Microsoft Excel file with the Master Equipment List (see Requirement B-77), a file with the table of start and end dates for all the tasks showing on the graphical schedule foldout (see Requirement B-45), trajectory files (see Requirement B-35), and internal documents if referenced (see Requirement B-83). If references contain ITAR/EAR material, they shall be made available via the augmented submission process (see Requirement B-84). Augmented submissions of proposals may additionally include up to 100 MB, higher resolution but otherwise identical, versions of electronic proposals uploaded to NSPIRES. In the event of a conflict between versions of electronic proposals, the version specified in Requirement B-5 shall take precedence.

Questions?

Please Submit in Chat or e-mail to:

Dan Moses, dan.moses@nasa.gov

Hannah Jang-Condell, hannah.jang-condell@nasa.gov

Omar Torres, omar.torres@nasa.gov

Reference

Evaluation Organization

Program Scientist
Dan Moses
Astrophysics Division, SMD, NASA Headquarters

Astrophysics Division, SMD	
Hannah Jang-Condell	Deputy Program Scientists
Doris Daou	
Amber Young	
Lucien Cox	Program Executive

SOMA	
Omar Torres	Acquisition Managers
Terry Nienaber	
Chauncey Wu	Backup Acquisition Managers
Bernie Luna	
Washito Sasamoto	

Science Panel (Forms A & B)
Chair: Dan Moses
Deputy Chair: Hannah Jang-Condell

TMC Panel (Form C)
Chair: Omar Torres
Co-chair: Terry Nienaber
Backup: Chauncey Wu

NASA Explorers Program

Solicits astrophysics proposal for expanding human knowledge through a spaceflight investigation addressing one or more NASA SMD astrophysics goals:

- How does the Universe work? Probe the origin and destiny of our universe, including the nature of black holes, dark energy, dark matter and gravity.
- How did we get here? Explore the origin and evolution of the galaxies, stars, and planets of our universe.
- Are we alone? Discover and study planets around other stars and explore whether they could harbor life.

The Astrophysics Explorers Program strives to:

- advance scientific knowledge of astrophysics processes and systems;
- add scientific data and other knowledge-based products to data archives for all scientists to access;
- lead to scientific progress and the publishing of results in the peer-reviewed literature to encourage, to the maximum extent possible, the fullest commercial use of the knowledge gained;
- implement technology advancements prepared in related programs; and
- announce scientific progress and results in popular media, scholastic curricula, and materials that can be used to inspire and motivate students to pursue careers in science, technology, engineering, and mathematics.