



# Ames Procedural Requirements

**APR 5100.2**

Effective Date: March 1, 2022

Expiration Date: March 1, 2027

**COMPLIANCE IS MANDATORY**

**Subject: Selection of Proposal Partners**

**Responsible Office: Code JA / Office of Procurement at Ames Research Center**

## CHANGE LOG

Status [Baseline /Revision /Cancelled]	Document Revision	Date of Change	Description
Baseline	0	7/7/2010	Initial Document
Revision	1	5/16/2018	Revision to the initial document to update Appendices A, B, C, and D.
Revision	2	3/1/2022	Revision to the initial document to update identification of the Government Point of Entry and URLs of linked documents, to reorder and update Appendices, and administrative updates.

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## **PREFACE**

### **P.1 PURPOSE**

a. This requirement defines the Ames Research Center (ARC) process for the selection of proposal partners when responding to a NASA Broad Agency Announcement (BAA), including an Announcement of Opportunity (AO) or NASA Research Announcement (NRA).

### **P.2 APPLICABILITY**

a. NASA Headquarters (HQ) issues BAAs that solicit proposals from a wide variety of interested parties, including Private Industry, Academia, NASA Centers, other Government Entities, and International Organizations. A NASA Investigator, when responding to a BAA, may team with one or more non-Government co-investigator(s). A NASA Investigator may also need to acquire support for the proposed investigation. At other times, a non-NASA individual may bring a proposal concept to a NASA employee for consideration (refer to Section 1.1). In all of these instances, the NASA employee coordinates with the New Opportunities Center (NOC) to enable support for the proposed investigation. If a proposal submitted by a NASA Center is selected, formal assembly of the team and acquisition of hardware and support services must be accomplished through the award of new Government contracts, unless existing Government contracts are available. The award of these new Government contracts must comply with procurement laws and regulations.

b. This directive applies to any proposal development activities responding to BAAs or resulting from non-NASA individual proposal concepts (as described in Paragraph P.2a) for which the Office of Procurement at ARC (Code JA) will be expected to award a contract(s) stemming from the issuance of a BAA (i.e., ARC proposal teaming/partnering as outlined in Appendix C). It does not apply to a proposal that would result in the award of one or more grants, cooperative agreements, or other funding mechanisms. Support service contractors, tasked and funded to support ARC proposal development activities (i.e., who perform ARC proposal support services as outlined in Appendix C), are not considered proposal partners.

c. This directive applies to contractors, grant recipients, or parties to agreements only to the extent specified or referenced in the appropriate contracts, grants, or agreements.

d. In this directive, all mandatory actions (i.e., requirements) are denoted by statements containing the term "shall." The terms "may" or "can" denote discretionary privilege or permission, "should" denotes a good practice and is recommended, but not required, "will" denotes an expected outcome, and "are/is" denotes descriptive material.

e. In this directive, all document citations are assumed to be the latest version unless otherwise noted.

### **P.3 AUTHORITY**

a. Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, 2 CFR pt. 1259

b. Federal Acquisition Regulation (FAR)<sup>1</sup>

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<sup>1</sup> FAR: <https://www.acquisition.gov>

- c. NASA FAR Supplement (NFS)<sup>2</sup>

#### **P.4 APPLICABLE DOCUMENTS AND FORMS**

- a. NASA Proposer's Guidebook<sup>3</sup>  
b. NASA Grant and Cooperative Agreement Manual (GCAM)<sup>4</sup>

#### **P.5 MEASUREMENT/VERIFICATION**

- a. Verification of conformance to requirements in this directive are measured through Center and Responsible Organizational management reviews, self-assessments, and subsequent analysis and reports of conformance to requirements, as well as periodic internal audits.
- b. Specifically, concurrent with issuance of the annual Sources Sought Special Notice synopsis, the New Opportunities Center (NOC) Manager will review a list of all HQ's AOs and NRAs to which ARC expects to respond to ensure that all are identified in the synopsis. The NOC Manager will conduct an annual review of all AO and NRA proposal submittals to ensure that all partners identified did in fact provide a response to the Sources Sought Special Notice and that their selection was appropriately documented.

#### **P.6 CANCELLATION**

- a. APR 5100.2, Selection of Proposal Partners, dated May 16, 2018.

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Eugene Tu  
Director

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#### **DISTRIBUTION STATEMENT:**

Internal and external distribution.

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<sup>2</sup> NFS: <https://www.hq.nasa.gov/office/procurement/regs/NFS.pdf>

<sup>3</sup> NASA Proposer's Guidebook: [https://www.nasa.gov/offices/ocfo/gpc/regulations\\_and\\_guidance](https://www.nasa.gov/offices/ocfo/gpc/regulations_and_guidance)

<sup>4</sup> GCAM: [https://www.nasa.gov/sites/default/files/atoms/files/nasa\\_gcama\\_revised\\_nov\\_12\\_2020.pdf](https://www.nasa.gov/sites/default/files/atoms/files/nasa_gcama_revised_nov_12_2020.pdf)

## CHAPTER 1 ROLES AND RESPONSIBILITIES

### 1.1 The NASA Investigator at NASA Ames Research Center or Ames Employee Contact for a Non-NASA Investigator shall:

- a. Initiate contact with the NOC as early as possible in the development of a Mission Proposal concept.

*Note: Contact may begin with the Director of the New Opportunities Center or, if vacant, the Deputy Director for Programs and Projects (Code P).*

### 1.2 The NASA Project Manager at NASA Ames Research Center shall:

- a. Examine his/her financial interests to verify that no personal conflict of interest exists and consult with the Office of the General Counsel at Ames Research Center, if necessary.
- b. Initiate contact with Code JA as soon as possible for acquisition planning for proposal requirements for supplies or services. Acquisition requirements for supplies or services that do not constitute research may be acquired through the standard acquisition process.
- c. Review the annual Sources Sought Special Notice (see example in Appendix D) and any subsequent modifications, in coordination with the NOC, to ensure it addresses the approved proposal development opportunity.
- d. Communicate the opportunity to submit a current response to the annual Sources Sought Special Notice to potential proposal partners.
- e. Evaluate all partnership proposals in accordance with the evaluation criteria contained in the Sources Sought Special Notice and submit documentation of the evaluation to the NOC prior to commencement of proposal development activities.

*Note: Questions about this submission may be directed to the Director of the New Opportunities Center or, if vacant, the Deputy Director for Programs and Projects (Code P).*

- f. Make potential teaming partners aware of proposal opportunities and allow potential partners to decide which proposals the contractor or companies desire to pursue. (Note: No NASA employee shall direct potential proposers to submit proposals. The decision to participate as a teaming partner shall be solely the prerogative of the potential teaming partner.)
- g. Not direct a contractor employee to provide proposal development support. The company or organization makes all staffing decisions.

### 1.3 The New Opportunities Center (NOC) shall:

- a. Initiate contact with Code JA by November 30 annually to request the issuance of the Sources Sought Special Notice for the next calendar year.
- b. Validate that the annual Sources Sought Special Notice includes all upcoming partnering opportunities, and where gaps are identified, coordinate with Code JA to modify the annual Notice to incorporate and communicate opportunities which were not anticipated at the time of annual Notice publication.

- c. Identify the potential for non-government partnerships for proposal research activity.
- d. Coordinate the receipt and the evaluation of all partnership proposals submitted in response to the Sources Sought Special Notice.
- e. Evaluate all responses from potential partners submitted for similar requirements and document, in coordination with the NASA Investigator, the rationale leading to their selection. The documentation shall address why one response is more highly rated than any other response submitted.
- f. Coordinate the evaluation of responses with the NASA Investigator and his/her designated team and ensure that evaluations align with, and adhere to, the evaluation criteria contained in the Sources Sought Special Notice.
- g. Request updated or additional information from respondents if it is determined that it would be beneficial prior to making a final decision, in accordance with the Sources Sought Special Notice. The NOC shall retain all documentation detailing the evaluation and selection of proposal partners and forward it to Code JA upon selection of the proposal.

**1.4 The Contracting Officer shall:**

- a. Review and provide input for the Sources Sought Special Notice to ensure that it adequately describes the requirements of the Government.
- b. Publicize the requirement through the Government-wide Point of Entry at <https://www.sam.gov>.
- c. Provide information to NASA Investigators regarding the use of existing contracts for non-research related supplies and services.
- d. Provide acquisition support for any new acquisitions or any Justification for Other than Full and Open Competition (JOFOC) documentation requirements.

## APPENDIX A. DEFINITIONS

Definitions for most terms used in this guideline are set forth in the FAR [primarily in Part 2 - Definitions of Words and Terms] or the NFS [primarily in Part 1802 - Definitions of Words and Terms]. Definitions unique to ARC are set forth below.

NASA Investigator	A participant in an investigation. May refer to the Principal Investigator, Co- Investigator, or lead member of an investigation team
New Opportunities Center (NOC)	The office in Code P responsible for reviewing, coordinating, and approving any new business opportunities at ARC.

## APPENDIX B. ACRONYMS

AO	Announcement of Opportunity
APR	Ames Procedural Requirement
ARC	Ames Research Center
B&P	Bid and Proposal
BAA	Broad Agency Announcement
CO	Contracting Officer
COR	Contracting Officer's Representative
FAR	Federal Acquisition Regulation
HQ	Headquarters
JOFOC	Justification for Other than Full and Open Competition
MOO	Mission of Opportunity
NFS	NASA FAR Supplement
NOC	New Opportunities Center
NRA	NASA Research Announcement
OCI	Organizational Conflict of Interest
OMB	Office of Management and Budget
PWS	Performance Work Statement
SOW	Statement of Work



**APPENDIX C. WHAT IS THE DIFFERENCE BETWEEN ARC PROPOSAL SUPPORT SERVICES AND ARC PROPOSAL TEAMING OR PARTNERING?**

	<b>ARC Proposal Support Services</b>	<b>ARC Proposal Teaming or Partnering</b>
Can NASA direct a contractor (company) to work on a proposal?	Yes, but only if the Statement of Work (SOW)/Performance Work Statement (PWS) (at contract or task order level) defines the requirement to provide ARC with proposal development support. The Contracting Officer (CO) must first determine that any proposed guidance to the contractor is “within scope” of the contract. Then, the CO or Contracting Officer Representative (COR), if such guidance falls within his/her defined and delegated responsibilities, shall provide written direction to the contractor to provide ARC with proposal development support.	No. The company or organization chooses/decides to partner with ARC on a proposal development effort.
Can an ARC proposal manager direct a contractor employee to provide proposal development support?	No. Contractor staffing decisions are the sole responsibility of the contract site manager/company management. Personal services must be avoided.	No. The company or organization makes all staffing decisions related to its own proposal development effort.
Is the company or organization working on the proposal guaranteed work if the proposal is selected?	No. To avoid Organizational Conflicts of Interest (OCI), the company or organization shall not be listed in the proposal as a team member. This company or organization shall not be included in the proposal as critical to mission execution. Support services required to execute the mission shall be procured post-selection through standard procurement processes.	Yes. The company or organization is listed in the proposal as a team member – the company is a key part of the team that will execute the mission if the proposal is selected. The company or organization must be eligible to receive a contract award. The company or organization’s work will be funded through a contract award if the proposal is selected. The award, if any, will be made in accordance with NASA procurement practices and regulations.

	<b>ARC Proposal Support Services</b>	<b>ARC Proposal Teaming or Partnering</b>
How is the proposal development effort scoped?	The contract/task order specifies the level of support required and authorized.	The share of effort to be dedicated to proposal development activities and the roles and responsibilities involved is determined by mutual agreement (not a contract) between ARC and the company/ proposal partner.
Who pays proposal development costs?	ARC pays direct costs to the contractor for support.	The company pays its own proposal development costs (i.e., bid and proposal, or B&P) costs
What is the process ARC uses to select proposal team members or partners?	N/A	Teaming arrangements should be made early and through a competitive process coordinated through ARC's New Opportunities Center (NOC).
Can the same company or organization provide proposal support services and also be a team member?	Companies/organizations considering both roles in a proposal must consult with their own management and their CO/COR to determine if there is a potential organizational conflict of interest (OCI). In almost all situations, the OCI clause in the contract will preclude the company from participating in both roles, even if the company/ organization proposes using separate offices or divisions to fulfill the two roles. If a company chooses to propose mitigation to the CO, it must be approved in advance, in accordance with the terms of the support service contract.	
Can NASA grantees or cooperative agreement recipients support ARC proposal development?	NASA employees shall neither require nor direct grantees or cooperative agreement recipients to provide the Government with proposal support services. The Government shall procure support services through contracts.	Grantees and cooperative agreement recipients may team with NASA on a proposal. The institution's proposal development costs are subject to the conditions in the grant or agreement, the NASA Grant and Cooperative Agreement Manual (GCAM), and Office of Management and Budget (OMB) cost principles as outlined in 2 CFR Part 200.
Why is it important to understand the difference between ARC proposal support services and ARC proposal teaming or partnering?	The use of government funds to pay a company (contractor) to compete with other organizations so that it can secure future government work is anti-competitive.	

## APPENDIX D. SAMPLE NASA SOURCES SOUGHT SPECIAL NOTICE



Follow

### SOURCES SOUGHT SPECIAL NOTICE 2021

#### Contract Opportunity

General Information

Classification

Description

Attachments/Links

Contact Information

History

ACTIVE

Contract Opportunity

#### Notice ID

80ARC021AOSS

#### Related Notice

#### Department/Ind. Agency

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

#### Sub-tier

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

#### Office

NASA AMES RESEARCH CENTER

### General Information

**Contract Opportunity Type:** Sources Sought (Original)

**All Dates/Times are:** (UTC-04:00) EASTERN STANDARD TIME, NEW YORK, USA

**Original Published Date:** Sep 02, 2021 05:26 pm EDT

**Original Response Date:** Dec 31, 2021 11:59 pm EST

**Inactive Policy:** 15 days after response date

**Original Inactive Date:** Jan 15, 2022

**Initiative:** None

### Classification

**Original Set Aside:**

**Product Service Code:** AR12 - Space R&D Services; Space flight, research and supporting activities; Applied Research

**NAICS Code:** 541715 - Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)

**Place of Performance:**

## Description

### SOURCES SOUGHT SPECIAL NOTICE 2021

NASA Ames Research Center (ARC) is seeking partners interested in developing competitive proposals in response to NASA Announcements of Opportunity (AOs), Broad Agency Announcements (BAAs), Missions of Opportunities (MoOs) and proposal calls from other government agencies. ARC is interested in identifying potential partners that can perform science investigations, research activities, and develop and demonstrate new technologies that are aligned with NASA's goals. Information is also sought regarding partners that, in addition to performing substantial research, can provide flight hardware (i.e. spacecraft, deployment systems, suborbital systems, ground support systems, equipment, or instrumentation) necessary to implement proposed science investigations, research activities or technology demonstration missions. This information is being sought from all interested parties, including all socioeconomic categories of Small Businesses and Historically Black Colleges and Universities (HBCU)/Minority Institutions (MI), and members of the underserved communities as defined by Executive Order 13985, Advancing Racial Equity And Support For Underserved Communities Through The Federal Government, for the purposes of determining the appropriate level of competition and/or small business subcontracting goals. The Government reserves the right to consider a Small, 8(a), Women-owned (WOSB), Service Disabled Veteran (SD-VOSB), Economically Disadvantaged Women-owned Small Business (EDWOSB) or HUBZone business set-aside based on responses received.

NASA often competitively selects scientific investigations, technology development and demonstration missions through solicitations or announcements posted on NSPIRES <http://nspires.nasaprs.com/external>. These missions are typically led by a single Principal Investigator (PI), Principal Technologist (PT), or Project Manager (PM). The PI, PT, or PM may be from Government or non-Government institutions, including academic institutions, industry or nonprofit entities, from one of NASA's nine field Centers, NASA's Jet Propulsion Laboratory (JPL), other federally funded research and development centers, or other U.S. Government agencies. Mission teams may be formed from any combination of these institutions including international partners. ARC may respond to an AO or other proposal calls in either a lead or supporting role.

ARC has a history of responding to a wide variety of NASA AOs including: planetary exploration AOs from the NASA New Frontiers Program (<https://www.nasa.gov/planetarymissions/newfrontiers.html>) and the NASA Discovery Program (<https://science.nasa.gov/solar-system/programs/discovery>); various AOs from the NASA Explorers Program (<https://explorers.gsfc.nasa.gov>) including MIDEX, SMEX, and Missions of Opportunity (MoO); and Research Opportunities in Space and Earth Sciences (ROSES) AOs. ARC anticipates responding to current and future AOs in these and other areas as well.

A full description of current, future, and past calls for proposals from SMD, STMD, HEOMD, and ARMD at NASA Headquarters can be found at <http://nspires.nasaprs.com/external>. Additional information is available at <http://science.nasa.gov/researchers>.

This synopsis/special notice is posted annually in anticipation of upcoming AOs, and may have subsequent specific updates as ARC seeks partners for specific proposal opportunities. ARC is currently considering responding to AOs from NASA's Science Mission Directorate (SMD), Space Technology Mission Directorate (STMD), and Human Exploration and Operations Missions Directorate (HEOMD).

Current NSPIRES AOs to which ARC may be interested in responding within the next year are listed below by NASA Mission Directorate. ARC may also be interested in responding to future NSPIRES AOs and AOs from other sources, such as NSF, NIH, and others within the next year.

Interested firms having the required capabilities necessary to meet the below requirement described herein should submit their responses indicating the ability to perform all aspects of the effort the firm interested in.

Additionally, in support of the Executive Order (EO) 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, NASA is seeking to advance equity or remove barriers for members of underserved communities related to this requirement. As defined in the EO, Underserved Communities refers to populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life, as exemplified by the list in the preceding definition of "equity." Equity means the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality.

NASA Ames seeks interest in the following areas:

### **Science Mission Directorate**

**Research Opportunities in Space and Earth Sciences 2021 (ROSES)** Solicitation: NNH21ZDA001N  
<https://solicitation.nasaprs.com/ROSES2021>

\*Note: There are a number of independent solicitations under this announcement. Of particular interest to Ames are those associated with: Earth Sciences, Heliophysics, Astrophysics, Instruments (Life Detection, SOFIA, etc.), and Small Innovative Missions for Planetary Exploration (SIMPLEX)

#### **Planetary Instrument Concepts for the Advancement of Solar System Observations:**

Solicitation: NNH21ZDA001N-PICASSO

<https://nspires.nasaprs.com/external/solicitations/summary.do?solId={A3C4E830-E305-C9C7-536E-A7744AEDECC0}&path=&method=init>

#### **Maturation of Instruments for Solar System Exploration:**

Solicitation: NNH20ZDA001N-MATISSE

<https://nspires.nasaprs.com/external/solicitations/summary!init.do?solId={3615460F-C821-2F77-85A9-394896D26698}&path=open>

**Note: The MatISSE Program is not soliciting proposal this year**

#### **Third Stand Alone Missions of Opportunity Notice (SALMON-3):**

Solicitation: NNH17ZDA004O

<https://nspires.nasaprs.com/external/solicitations/summary!init.do?solId=%7B15B90D1B-AD09-1306-4A3B-B905A85D11C2%7D&path=open&redirectURL=>

### **Science Technology Mission Directorate**

#### **Space Technology Research, Development, Demonstration, and Infusion-2021 (SpaceTech-REDDI-2021):**

Solicitation: 80HQTR20NOA01

<https://nspires.nasaprs.com/external/solicitations/summary!init.do?solId=%7B3920D2D3-E41A-9503-EE84-1C3692903243%7D&path=&redirectURL=>

## **Human Exploration Research Mission Directorate**

### **Human Exploration Research Opportunities (HERO):**

Solicitation: NNJ21ZSA001N

<https://nspires.nasaprs.com/external/solicitations/summary.do?solId=%7B0F432729-9D9C-B999-EDE8-78E76682B51B%7D&path=&method=init>

### **Current and Future SMD Solicitations**

The Science Office for Mission Assessments (SOMA) (<https://soma.larc.nasa.gov>) has released a planning list for current and future SMD solicitations through FY25 which can be found at:

[https://soma.larc.nasa.gov/StandardAO/pdf\\_files/Planning%20List%20for%20SMD%20Solicitations%202021081posting.pdf](https://soma.larc.nasa.gov/StandardAO/pdf_files/Planning%20List%20for%20SMD%20Solicitations%202021081posting.pdf)

Responders to this notice are encouraged to submit questions to the identified POC in writing. Pertinent information from questions and answers will be shared with all interested parties without disclosing the identity of the sources of the questions. Responses to this notice may be submitted at any time. However, ARC reserves the right to complete its evaluation of responses in a time frame necessary to support timely submission of an ARC proposal to a particular opportunity. ARC may hold optional oral presentations, meetings or written exchanges via email with potential proposal partners to obtain additional information. Oral presentations will have a specified period of time to present and for questions and answers.

Responses to this notice will not be returned. All responders to this notice should be aware that NASA support service contractors may have access to their responses to this notice and subsequent proposal information. All information received in response to this notice that is marked 'Proprietary' will be handled and protected accordingly. NASA support service contractors are obligated to protect third-party proprietary information. By submitting a response to this notice, the responder is deemed to have consented to release of proprietary information to such NASA support service contractors.

This synopsis is for information and planning purposes and is not to be construed as a commitment by the Government, nor will the Government pay for information solicited. Submitted responses will be maintained for possible future opportunities for 1 year after receipt.

Of the current and upcoming NASA AO calls described above, responders to this notice should identify which announcement(s) are appropriate for their capabilities. However, responses may be considered for partnering for any of the opportunities listed above, or other future opportunities. Additional information may be requested to determine potential partnering relationships. Responses to this sources sought notice should include the following information:

**Spacecraft systems including bus and/or subsystems:** 1) Describe spacecraft, bus, and/or subsystem mission element capabilities the responder has to offer. 2) Identify particularly critical or challenging areas that have been overcome in previous work. 3) Identify spacecraft, bus, and/or subsystem relevance and compliance to the applicable mission class (class A, B, C, or D) 4) Discuss current capabilities for Integration and Test (I&T) flow of the spacecraft, bus and/or subsystem(s). 5) List the skills available to support a spacecraft or subsystem(s) through all mission phases. 6) Identify responder's support facilities for a spacecraft and/or subsystem(s) e.g. fabrication, I&T, storage, etc. 7) Indicate the resources (skills and time) that would be allocated to the potential proposal development phase.

**Payload, instrumentation or subsystems:** 1) Address payload, instrumentation and/or subsystem(s) mission element capabilities the responder has to offer. 2) Identify particularly critical or challenging areas that have been overcome in previous work. 3) Identify payload, instrumentation, and/or subsystem relevance and compliance to the applicable mission class (class A, B, C, or D). 4) Discuss current capabilities for Integration and Test (I&T) flow for the payload(s), instrumentation, or subsystem(s). 5) List the skills available to support a payload through all

mission phases. 6) Identify responder's support facilities for payload(s) e.g. fabrication, I&T, storage, etc. 7) Indicate the resources (skills and time) that would be allocated to the potential proposal development phase.

Payload delivery capability to planetary surfaces: 1) Describe the planetary (Moon, Mars, etc.) payload delivery capability. 2) Describe the payload accommodation aspects of the delivery capability (e.g. payload mass, volume, power) and any relevant performance considerations, e.g. dependence on landing altitude. 3) Indicate any special aspects of the capability that might be relevant to NASA missions. 4) Discuss relevant spacecraft development and operations capabilities that the proposer has to offer. 5) Discuss current capabilities for integration and testing flow for the spacecraft and payload(s). 6) Identify support facilities (fabrication, I & T, storage, etc.) available for spacecraft and / or payload(s). 7) List the skills available to support the delivery capability through all mission phases. 8) Indicate the resources (skills and time) that would be allocated to a potential proposal development phase.

Drill, Excavator/Probe, and Sample Transfer Systems (one or multiple): Of special interest is payloads, instrumentation, or subsystems required for subsurface science. 1) Identify the Rough Order of Magnitude (ROM) cost for development and flight units. 2) Address depth capabilities [Very Shallow (<20cm), Shallow (20cm -3m), Moderate (3-5m), Deep (>5m)]. 3) Address the sample type provided at the top of the borehole [Powder, Mixed Cuttings, Core, Down-hole Measurements Only]. 4) Identify the range of operational gravity environments in which the system will function [Microgravity (e.g., Asteroids), Low Gravity (e.g., Moon, Europa), Medium Gravity (e.g., Mars)]. 5) Discuss the degree of human interactivity required for nominal and fault-recovery operations [Autonomous, Remote Tele-robotic, Real-time (local) Tele-robotic, Manual Control]. 6) Discuss the degree of physical/chemical cross-contamination inherent in the system. 7) Describe a planetary protection approach compatible with deployment in COSPAR Special Regions III or IV, and the degree of biological contamination of/by the system. 8) Address performance in making headway and maintaining borehole control in a variety of possibly-encountered strata [including Minimally Consolidated Soil/fines, Ice (min. 2cm thick 95% layers), Rock, Ice-indurated Regolith. 9) Identify the range of system performance through varying material strengths [Low <20MPa, Medium 20-130MPa, High >130MPa fracture toughness]. 10) Indicate the resources (skills and time) that would be allocated to the potential proposal development phase.

Scientific concepts, Technology Demonstration concepts or Mission Architecture: 1) Provide a research topic or mission concepts related to the particular solicitation of interest and why the topic is relevant to the solicitation. 2) Provide a concept of operations for the mission. 3) Identify existing or proposed partners, their role, the role of the responder's organization, and the role of NASA Ames in the proposed mission. 4) Identify the Rough Order of Magnitude (ROM) cost for the mission concept. 5) Address mission element capabilities the responder has to offer. 6) Indicate the resources (skills and time) that would be allocated to the potential proposal development phase.

Integration with Launch Services: 1) Address secondary launch system capabilities and launch dispensing systems for the spacecraft systems the responder has to offer. 2) Identify particularly critical or challenging areas that have been overcome in previous work. 3) Discuss current capabilities for Integration and Test (I&T). 4) Identify the Rough Order of Magnitude (ROM) cost. 5) Identify responder's support facilities for the launch and dispenser integration. 6) Indicate the resources (skills and time) that would be allocated to the potential proposal development phase.

For the purposes of determining potential partnership opportunities, ARC will evaluate the responses received based on: alignment with the Agency's goals, compliance with the announcement requirements, feasibility and suitability of the concept, and/or and its alignment and/or complementary nature with Ames' interests and capabilities. The criteria for consideration are listed below:

Ability to work as part of a government- industry team that may include other industrial partners, academia, and/or international partners.

Innovative technical and partnering approaches that could be used to minimize cost and/or schedules without increasing overall mission risk.

Demonstrated performance in a schedule-constrained environment and at the agreed upon cost. History of delivering spacecraft, payloads, or instruments with proven technical and cost performance. Also, if applicable, depth of experience in spacecraft bus and/or payload management/development, including but not limited to: systems engineering, bus and/or payload fabrication and test, subcontract management, quality management, safety management, materials and processes/contamination control, payload integration and test support, observatory functional and environmental testing, shipment to the launch site, launch vehicle integration support, preparations for and the conduct of launch and early orbit checkout operations, on-orbit operation support, and sustaining engineering support including flight software maintenance.

In order to receive consideration respondents must submit a response that includes all of the information requested in this notice, including answers to the relevant questions listed above for each proposed partnership. For each proposed partnership the response should specify the type of partnership the responder is interested pursuing, including specific opportunities if known, and a list of relevant partners/customers over the past five years, highlighting work performed.

The following requirements for the response must also be met:

1. The response must include:
  - a. The name, physical address, and website of the company or organization
  - b. A company point of contact (POC) who can answer questions from NASA
  - c. Address, email, and phone number of the company POC
2. The response must not exceed 10 pages (Arial font not smaller than 12-point) for each proposed partnership.
3. Send responses in PDF format by email to [John.P.Hazelrig@nasa.gov](mailto:John.P.Hazelrig@nasa.gov)
4. Include the synopsis number and company name in subject line of the email response.

If yours is a commercial firm, your response must also include: Size of business and number of employees; average annual revenue for past 3 years; ownership - large, small, small disadvantaged, 8(a), HUBZone, and/or woman-owned and whether the company is U.S. or internationally-owned; number of years in business; and affiliate information: parent company (US or international), and joint venture potential teaming partners (prime contractor if potential sub, or subcontractors if potential prime).

This notice should not be construed as a solicitation; therefore, please do not request a copy of a solicitation. It is the responder's responsibility to monitor the System for Award Management for any changes to this notice.

Point of Contact

John P. Hazelrig, New Opportunities Center, 650-604-4672, [john.p.hazelrig@nasa.gov](mailto:john.p.hazelrig@nasa.gov)

## **Attachments/Links**

No attachments or links have been added to this opportunity.

## **Contact Information**

### **Contracting Office Address**

Moffett Field, CA 94035 USA

### **Primary Point of Contact**

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