

Jet Propulsion Laboratory

California Institute of Technology

4800 Oak Grove Drive

Pasadena CA 91109-8099

Date: September 17, 2020

Attn: Prospective Bidders

Subject: JPL Competitive Request for Proposal (RFP) No. MJ-2692-1044666 for Participation of the Starshade Exoplanet Data Challenge

Reference: Enclosures

The Jet Propulsion Laboratory (JPL) invites your organization to submit a written proposal in conformance with the instructions contained in this letter and its enclosures, which comprise the RFP for JPL’s acquisition of the subject effort in support of a data challenge of exoplanet imaging and spectroscopy using a starshade in formation flight with a space telescope. The intent is to develop image-processing algorithms to detect planets and extract their spectra from synthetic images to validate the flow down of requirements from science to key instrument performance parameters and to quantify the required accuracy of noisy background calibration.

The attached RFP provides further information on proposal preparation and submission instructions, description of the selection process, and reporting requirements. The broad topics of this RFP are image processing algorithms needed for planet detection and background calibration based on synthetic images of starshade-enabled exoplanet observations, and research and analyses to determine the detection limit of planets vis-à-vis instrument parameters.

Based on your response to the RFP and the needs of JPL, successfully selected proposals will be funded as JPL-issued subcontracts. It is planned to award multiple subcontracts valued up to $50,000 each for up to nine (9) months and will be negotiated on a case by case basis.

The RFP is available at the following website:

[Https://www.jpl.nasa.gov/acquisition/opportunities/](https://www.jpl.nasa.gov/acquisition/opportunities/)

This RFP does not commit JPL or the Government of the United States to pay any costs incurred in submitting your proposal, making studies or designs for preparing the proposal, or in procuring or subcontracting for services or supplies related to the proposal.

Further, JPL has not yet received funding to support this acquisition and anticipates, but cannot guarantee, that funding will be forthcoming. This RFP is being issued at this time in order to maintain project schedule and to allow for timely award of a subcontract if the anticipated funding arrives in a timely fashion.

Provide the name of your cognizant Government Audit Agency (i.e., DCAA, etc.), if any, their phone number and point of contact, and any copy of a letter that indicates their approval of your organization’s direct and indirect rates. Submit your proposal by email to be undersigned.

Please note that your proposal is due at JPL no later than October 16, 2020 3:00 PM PDT.

As a convenience to JPL, you are requested to provide the undersigned, by no later than September 28, 2020, an email statement that you do or do not intend to submit a proposal.

Should you have any questions, please address them to the undersigned by phone or e mail.

Sincerely,

Maria A Jaquez

Subcontracts Manager

Phone No.: (818) 354-2839

E-mail: Maria.A.Jaquez@jpl.nasa.gov

Enclosures: RFP consisting of:

• Cover Sheet and Table of Contents

• General Instructions

• Technical/Management Instructions

• Cost Instructions

• RFP Attachments

Specimen Contract consisting of:

• Specimen Contract

• Referenced GPs & AGPs

• Referenced Exhibits



 JET PROPULSION LABORATORY

 CALIFORNIA INSTITUTE OF TECHNOLOGY

**REQUEST FOR PROPOSAL**

REQUEST FOR PROPOSAL NO.: MJ-2692-1044666

FOR:

PARTICIPATION OF THE STARSHADE EXOPLANET DATA CHALLENGE

**PROPOSALS ARE TO BE RECEIVED AT JPL NO LATER THAN:**

Date: October 16, 2020

3:00 p.m. PDT

**COMMUNICATIONS IN REFERENCE TO THIS RFP**

It is requested that any communication in reference to this RFP be in writing and directed to the attention of:

Name: Maria A Jaquez Phone: (818) 354-2839

Title: Subcontracts Manager E-Mail Maria.A.Jaquez@jpl.nasa.gov

California Institute of Technology

Jet Propulsion Laboratory

4800 Oak Grove Drive

Pasadena, CA 91109-8099

Date of Issuance: September 17, 2020

**TABLE OF CONTENTS**

RFP No.: MJ-2692-1044666

**1. REQUEST FOR PROPOSAL**

Pages

**GENERAL INSTRUCTIONS.……………………………………………………………………. 1**

 1.0 GENERAL REQUIREMNTS/INFORMATION

2.0 LATE E-MAIL PROPOSALS

3.0 RESERVED

4.0 RESERVED

 5.0 RESERVED

6.0 SOURCE EVALUATION AND SELECTION PROCESS

7.0 RESTRICTIVE MARKINGS

8.0 EXCEPTIONS/DECLINATIONS

**TECHNICAL/MANAGEMENT PROPOSAL INSTRUCTIONS …………………………… 4**

 1.0 MANDATORY QUALIFICATION(s)

2.0 OPTION EVALUATION

 3.0 TECHNICAL/MANAGEMENT PROPOSAL INSTRUCTIONS

**COST INSTRUCTIONS …………………………………………………………………………. 8**

1.0 DATA SUBMITTAL

2.0 PROPOSAL PRICING

3.0 COST ELEMENTS SUPPORTING DATA

4.0 RESERVED

5.0 RESERVED

6.0 RESERVED

7.0 SUPPLEMENTAL BUSINESS/COST INFORMATION

**ATTACHMENTS TO THE SOLICITATION.** See form JPL 2839 for a list of Attachments

This Section of this RFP consists of those forms and documents containing information applicable to this RFP. Group A Attachments must be completed and attached to your proposal. Group B Attachments consist of forms and documents for informational purposes only. *Both A and B Attachments can be found through the electronic address identified below***.** Note that Group B Attachments are very important and may become requirements under the Subcontract.

World Wide Web: https://www.jpl.nasa.gov/acquisition/terms-conditions

**2. SPECIMEN SUBCONTRACT for Cost Plus Fixed Fee, Dated 09/03/2020**

 **SPECIMEN SUBCONTRACT for COST-REIMBURSEMENT WITH AN**

**SPECIMEN SUBCONTRACT for Cost-Reimbursement with an Educational Institution (University or College), Dated 09/03/2020**

**GENERAL INSTRUCTIONS**

**1.0 GENERAL REQUIREMENTS/INFORMATION**

The effort to be performed will be in accordance with the Specimen Subcontract; if you choose to submit more than one proposal for this effort, each proposal must be responsive to JPL’s requirements, independently complete and under separate cover. JPL reserves the right to retain all proposal information submitted in response to this RFP.

This RFP does not commit the California Institute of Technology (including its operating division, JPL) or the United States Government to pay any proposal preparation or other costs related to the submission of a proposal(s). Proposers shall participate in this RFP process solely at their own risk and expense. JPL reserves the right to cancel this RFP and to reject any or all proposals.

**1.1 Reserved**

**1.2 Reserved**

**1.3 Data**

If the proposal contains data that are not to be disclosed for any purpose other than for proposal evaluation, you must place on the cover sheet of each proposal volume the following wording:

“Data contained in pages \_\_\_\_\_\_\_\_\_\_\_\_\_ of this proposal furnished in connection with RFP No.

MJ-2692-1044666 shall not be used or disclosed, except for evaluation purposes, provided that if a subcontract is awarded to this offeror as a result of or in connection with the submission of this proposal, JPL and the Government shall have the right to use or disclose this data to the extent provided in the subcontract. This restriction does not limit JPL’s right to use or disclose any data obtained from another source without restriction.”

**1.4 Requests for Clarification/RFP Addenda**

During the proposal preparation period, all requests for clarification and/or additional information, must be submitted in writing or by e-mail to the Subcontracts Manager referenced by “Attention:” on the RFP cover page. When appropriate, responses to requests, as well as any JPL initiated changes, will be provided to any prospective proposer(s) as addenda to the RFP.

In addition, JPL will host a Question & Answer session on September 24, 2020, 10am Pacific Time, via WebEx. Prospective proposers are encouraged to attend the meeting. The questions and answers from the meeting will be provided to all proposers as addenda to the RFP.

Sept. 24, 10am PT = 1pm ET

Meeting ID: 199 590 2752

Meeting password: sip

Audio: 844-575-9329

**1.5 Compliance with Export Control Laws and Regulations**

In the performance of this RFP, JPL anticipates no exchange information or other technology which may be subject to the export control laws and regulations of the United States, including the International Traffic in Arms Regulations (ITAR), 22 C.F.R. 120-130 and the Export Administration Act Regulations (EAR), 15 C.F.R. 730-774.

**1.6 Proposals via E-Mail Only**

Proposals are to be submitted **only** as an attachment(s) to an e-mail, and must:

 • Have a scanned signature or an e-signature.

 • Be limited to one or more of the following file formats:

• “.pdf” (preferred)

• “.doc” or “.docx” for Word files,

• “.xls” or “.xlsx” for Excel files

• “.ppt” or “.pptx” for PowerPoint files.

• **Not** be an “.exe” or encrypted file or have multiple file extensions (e.g., doc.pdf). JPL IT

 Security system may reject multiple file extensions for suspected malicious content.

 • Be sent to the Subcontracts Manager referenced by “Attention:” on the RFP cover page.

• Include one file containing only the 3 page proposal, the 1 page CV(s), full journal-style reference list (including paper title), and a one page budget summary. This file must be less than 2 MB in total size. (Note this is the file that will be sent to the reviewers.)

• **BE 20MB OR LESS in total size for the entire e-mail (including all attachments,**

 **signatures, text contained in the body of the e-mail, company logos, etc.). If your email**

 **exceeds 20MB, the proposal must be sent in more than one e-mail.**

 • **If any spreadsheets exceed 8 ½ x 11” forward hard copies.**

Notify the Subcontracts Manager referenced on the JPL RFP Cover Page if multiple e-mails are needed for a given volume of your proposal (e.g., technical/Management, Cost, or Past Performance [if any]).

**If the submission of more than one e-mail is required, then ALL e-mails must be received by the time and date stated on the RFP cover sheet.**

**2.0 LATE E-MAIL PROPOSALS:**

Any proposal, portion of a proposal, or unrequested proposal revision received at JPL after the date(s) and time(s) specified on the cover page of this RFP will not be considered for evaluation and award, except under any of the following circumstances:

2.1 It was received at the initial point of entry to the JPL infrastructure not later than 5:00 P.M. one working day prior to the date specified for receipt of proposals.

2.2 JPL determines that the proposal was late due solely to mishandling by JPL after receipt at JPL, provided that the timely receipt at JPL is evidenced by JPL records.

2.3 No acceptable proposal(s) are received as of the proposal due date(s) and time.

2.4 If any emergency or unanticipated event interrupts normal JPL operations so that proposals cannot be received by JPL by the date(s) and time(s) specified on the cover page of this RFP, and urgent JPL requirements preclude amendment of the solicitation closing date, the date(s) and time(s) specified for receipt of proposals will be extended to the same time of day specified in the solicitation on the first work day on which normal JPL operations resume.

**3.0 RESERVED**

**4.0 RESERVED**

**5.0 RESERVED**

**6.0 SOURCE EVALUATION AND SELECTION PROCESS**

The basis of source selection is predicated on the following (JPL, at its discretion, may waive minor informalities and minor irregularities in proposals received):

6.1 The responsive, responsible offeror with the lowest cost; or lowest overall cost with a technically acceptable proposal. Responsibility will be determined within the meaning of Federal Acquisition Regulation 9.1. JPL reserves the right to conduct a pre-award survey to help determine responsibility.

6.2 Proposals will be evaluated against the criteria set forth in the Technical/Management Proposal Instructions on an acceptable/unacceptable basis.

6.3 JPL may determine that a proposal is unacceptable if the costs proposed are materially unbalanced (significantly over/under-stated) for items which JPL will make separate payments or between costs/prices of the basic subcontract vs. any options, even if the overall cost is acceptable.

**7.0 RESERVED**

**8.0 EXCEPTIONS/DECLINATIONS**

Any exceptions to either the RFP and/or Specimen Subcontract (including its exhibits), or a declination to provide Cost Instruction-requested rate information, may make your proposal unacceptable for evaluation. **For each and every exception or declination you must provide a detailed explanation and associated full rationale; place in a special section of your proposal entitled “Exceptions/Declinations.”**

**TECHNICAL/MANAGEMENT PROPOSAL INSTRUCTIONS**

Present and organize your proposal in accordance with the following:

**1.0 MANDATORY QUALIFICATION(s)**

1.1 There are no Mandatory Qualification Criteria for this RFP.

**2.0 OPTION EVALUATION**

2.1 The Specimen Subcontract does not contain an Option Article.

**3.0 ELIGIBILITY OF APPLICANTS**

3.1 Prospective investigators from any category of organizations or institutions, U.S or non-U.S., are welcome to respond to this solicitation. Specific categories of organizations and institutions that are welcome to respond include, but are not limited to, educational, industrial, and not-for-profit organizations, Federally Funded Research and Development Centers (FFRDCs), University Affiliated Research Centers (UARCs), NASA Centers, the Jet Propulsion Laboratory (JPL), and other Government agencies. Historically Black Colleges and Universities (HBCUs), Other Minority Universities (OMUs), small disadvantaged businesses (SDBs), veteran-owned small businesses, service disabled veteran-owned small businesses, HUBZone small businesses, and women-owned small businesses (WOSBs) are encouraged to apply.

3.2 Participation by non-U.S. organizations in this program is welcome but subject to NASA’s policy of no exchange of funds, in which each government supports its own national participants and associated costs.

## **4.0 SUBCONTRACT AWARDS**

### 4.1 JPL anticipates issuing multiple Cost-Reimbursement with Commercial Organizations Subcontract or Cost-Reimbursement with an Educational Institution (CREI) Subcontract valued approximately at $50,000 for up to nine (9) months.

BUDGETS

It is not required, but a budget page is allowed if your institution requires it; this budget page does not count against the three page limit and will not be used as part of the evaluation process. (If your institution requires a budget, we recommend using a January 01, 2021 start date.)

JPL anticipates making multiple awards.

Successfully selected proposals will be initially funded a total amount per support not to exceed $50,000.

The Period of Performance (POP) is approximately nine (9) months beginning around January 2021.

4.2 JPL anticipates making selection notifications on or around November 16, 2020 and may make additional awards later in the year, depending upon availability of funding.

**5.0 VOLUME I: TECHNICAL/MANAGEMENT PROPOSAL INSTRUCTIONS INTRODUCTORY**

**INSTRUCTIONS**

***JPL will evaluate Volume I of your proposal based on the information asked for in the below table and subsequent “Technical/Management Criteria and Factors,” in respect to the degree to which your proposal meets the requirements/needs of the specified tasks herein. The degree to which the requirements/needs are met may include any number of considerations, such as the suitability of the various areas of the technical/management approach(es), the level of understanding of the requirements, the extent of insight into the technical/management challenges and their solution(s), the effectiveness of management structure, the relevancy of corporate and/or personnel experience, etc., as is appropriate for each area of evaluation.***

|  |
| --- |
| **VOLUME I - TECHNICAL/MANAGEMENT EVALUATION CRITERIA AND ORGANIZATION** |
| TECHNICAL/MANAGEMENT CRITERIA AND THEIR WEIGHTING |
| Criteria |  Weighting |
|
| **TECHNICAL/MANAGEMENT CRITERIA** |  |
| 1. Responsiveness to the technical requirements of the Tasks specified in the RFP and Specimen Subcontract
 | 50% |
| 1. Qualifications of the proposing team
 | 50% |
| Total Score Possible: | 1,000 |

Proposers may submit one or multiple proposals addressing the requested task (A described below). Each proposal may answer all or part of the task. Proposals must describe how the task will be addressed (method), how the data products will be produced and validated, the schedule for their production, and demonstrate the proposing team has the knowledge, background, and experience to produce them. The body of the proposal is limited to 3 pages. In addition to these 3 pages, the proposal should include a one-page CV for each investigator, a full journal-style reference list (including paper title), and a one-page budget summary in accordance with Volume II – Cost Instructions herein. Page limits will be strictly enforced. A page is each face of a piece of paper containing substantive, evaluable information; page size: 8 ½” x 11”; any drawings/photos are included; single spacing minimum; font size not less than 12 points; all margins 1” or greater. Additional administrative detail such as your institution cover letter or explained budget detail should be provided in a second pdf file with no page limits.

**Statement of Work:**

Starshade (or External Occulter) is one of the starlight suppression technologies for high contrast imaging of exoplanets and is baselined for large- and probe-class mission concepts funded by the NASA Astrophysics Division and being assessed by the Astro2020 Decadal Survey[[1]](#footnote-1),[[2]](#footnote-2). The Astrophysics Division authorized the Exoplanet Exploration Program (ExEP) to execute a directed technology development activity to advance starshades to Technology Readiness Level (TRL) 5 to enable potential future exoplanet science missions. The Starshade Technology Development Activity to TRL5, or S5[[3]](#footnote-3), follows an approved Technology Development Plan[[4]](#footnote-4) with technology milestones that respond to documented mission performance requirements. Specifically, S5 includes experiments and analyses to demonstrate small-scale starshade masks that could reach 10-10 instrument contrast at the inner working angle at a flight-like Fresnel number, to develop an optical edge for the starshade petals that would limit scattered sunlight (i.e., solar glint) to acceptable levels, to demonstrate the ability to sense the lateral offset between the starshade and the telescope, and to demonstrate the ability to design, manufacture and deploy the starshade mechanical elements that could meet the contrast requirement. Together with S5, ExEP has chartered a Science and Industry Partnership (SIP) to engage the science and technology communities during the execution of the S5 activity.

Given the completion of most of S5’s technology milestones on instrument contrast, solar glint, and formation flying, we are motivated to evaluate the noise budget of starshades’ application in exoplanet observations using synthetic images that capture all instrument effects, i.e., the data challenge. The purpose of the data challenge is to validate the flow down of requirements from science to key performance parameters based on synthetic images, quantify the accuracy of calibration of noisy backgrounds dominated by solar glint and exozodiacal light, and prepare the science community for analyzing starshade exoplanet observations. Specifically, the solar glint varies with the solar angle and the starshade’s position and orientation and an exoplanetary dust disk may have structures created by dynamical interactions with embedded planets. Both would need to be calibrated to high precision to avoid significant adverse impact on the detection and spectral characterization of small exoplanets. In addition, the expected use of slit-prism spectroscopy by the Roman’s Coronagraph Instrument may create complexity in spectral extraction together with the background.

This solicitation seeks help in the following 1 task area:

A. Image processing algorithms are needed for testing the ability to retrieve faint exoplanet signals from instrumental artifacts and quantifying the precision needed of background calibration. The data challenge will be based on synthetic images of starshade-enabled exoplanet observations. These images will simultaneously include multiple background noise terms, including but not limited to residual starlight, solar glint and other stray light sources, exozodiacal light, detector noise, as well as variability resulted from starshade’s motion and telescope jitter. The synthetic images will be made available approximately 30 days from the award selection when the study shall begin. It is anticipated that a few hundred images will be provided to explore the algorithm in extracting information from a handful of representative star and planet scenarios, as well as the impacts of varied instrument performance parameters. The algorithm should determine from the images the number of the planets, the brightness of each planet, and show a capability to extract extended dust structures. When possible, the algorithm should also extract the planets’ spectra from the images. Multiple-epoch observations will be included for some star and planet scenarios. The analyses of the synthetic images should determine the detection limit of planets vis-à-vis instrument parameters and indicate how well image processing can subtract the background to the photon-noise limit. It is anticipated that the participating teams will document and disseminate the methods developed to the general science community. It is expected that the study will take up to nine (9) months and the final report due by September 2021.

1. **ADDITIONAL REQUIRED REPORTING DELIVERABLES**
	1. Participate in Starshade Data Challenge Teleconferences, which will be nominally monthly during the performance period.
	2. Provide a Final Report by September 2021 along with abstracts of papers submitted and descriptions of derived data products delivered. The report shall include a summary of research activities and findings to date, a bibliography of papers submitted, descriptions of derived data products to be delivered, and a figure that illustrates the investigation or results obtained.
	3. Provide a final version of algorithms in a form suitable for archiving on the ExEP’s starshade technology website.
	4. Provide JPL with electronic copies of all technical papers published as a result of this work.

**COST INSTRUCTIONS**

 (Cost Type RFPs)

This portion of the proposal instructions outlines the requirements to be followed in preparing the cost proposal.

***Failure to provide any requested direct labor and indirect rates requested below may render your bid non-responsive.***

**1.0 DATA SUBMITTAL**

At the beginning of your cost proposal, state if your accounting system is adequate for accumulating costs. If yes, provide one of the following:

• A DCAA accounting system certification

• A third party accounting system certification

• A letter from your accounting firm stating that the firm is aware of the adequacy of your

 accounting system for accumulating costs under cost-type subcontracts

Provide the applicable data requested in paragraphs 1.1 and 1.2, below. Note that if any of the current information requested below has been previously submitted to JPL, resubmittal is not necessary; simply reference the applicable JPL RFQ or RFP number under which the data was submitted.

1.1 Provide the cost breakdown information requested on Attachment A-19, “Cost Elements Breakdown (Short Form).” Proposers may provide the requested information, as applicable, on an alternate computer generated form.

1.2 You are required to provide the following information, and the information of Paragraphs 2.0 and 3.0, subsequent to the submission of your proposal, if requested by the JPL Subcontract Manager. This information must be received by JPL within (\*) working days from the date of the request for the information to be further considered. Failure to provide this information in a timely manner may result in the elimination of the proposal from further consideration.

 OR

1.2 You are required to provide the following information, and the information of Paragraphs 2.0 and 3.0, with the submission of your proposal.

(\* Subcontracts Manager provides number of days schedule will permit, case-by-case)

NOTE TO SUBCONTRACTS MANAGER: The following are some examples of when you should request supporting cost data as referenced in paragraph 1.2. above: competition was initially anticipated but not realized (see Acquisition Instructions); from the sources within the competitive range, if more data is needed to make source selection; from the selected source, if more data is needed to adequately negotiate estimated cost and fee or monitor anticipated changes or potential overrun; when the proposal(s) value differs significantly from the amount anticipated by JPL; or when any value on Attachment A-19 indicates that the proposer(s) may have incorrectly estimated cost.

1.2.1 The cost information requested in paragraphs 2 and 3 below. (NOTE: If the price of a purchased item is based on adequate price competition as defined in FAR Part 15, the cost elements supporting data addressed in paragraph 3 is not required for that item.)

1.2.2 A letter authorizing the release of rate and other relevant information to the Jet Propulsion Laboratory

**2.0 PROPOSAL PRICING**

2.1 Submit the cost information requested under item 2.2 below, summarized by cost element and time phased by month. Labor should be proposed by work hour not work month. This information should be submitted using Attachment A-15, “Cost Elements Breakdown,” or your computer generated equivalent. If possible, include a copy of the data in an Excel or Excel-compatible format (e.g., Dbase, etc.). If the proposal includes separate phases or options, a time-phased summary must be submitted for each.

2.1.1 RESERVED

2.2 Submit the following cost information as described in item 2.1, above.

2.2.1 Total Effort – WBS level 1

2.2.2 Report Items – WBS level 2 (items subject to monthly financial reporting).

 2.2.3 Tasks – WBS level 3 (one WBS level below report items).

2.2.4 Work Items - WBS level 4 (lowest level of the expanded WBS).

If selected for negotiations, you may be required to submit a cost estimate for all or selected work item(s) at the lowest level of the expanded WBS. Only a direct labor-hour estimate and a total dollar estimate for all elements of direct costs are necessary.

**3.0 COST ELEMENTS SUPPORTING DATA**

**3.1 Direct Labor**.

3.1.1 Explain the basis of the labor-hour estimates by classification. Show all calculations in detail, including the development of any factored hours and the base to which the factor is applied.

3.1.2 Discuss the development of the labor rates, including all escalation factors. Include a summary rate table by classification and lowest fiscal distribution (i.e., by quarter if rates change quarterly). If available, submit evidence of Government approval of direct labor rates for each labor classification.

3.1.3 Be sure to indicate whether, and how much of (dollars and hours), the direct labor is from within your own organization vs. that of any other division, or sub-tier to your organization, if any.

**3.2 Material**.

3.2.1 Submit a breakdown of raw materials and purchased parts, including: basis of estimates, part number, description, quantity, unit price, extended price, and source of supply. Describe any pricing factors proposed, such as scrap, rework, and usage.

3.2.2 Be sure to indicate whether the material, and its quantities and dollars, is from within your own organization vs. that of any other division, or sub-tier to your organization, if any.

**3.3 Subcontracts.**

Identify each effort to be subcontracted. List the selected subcontractor’s name, location, amount proposed and type of subcontract. Explain any adjustment made to the subcontractor’s proposed costs. Describe the cost or price estimates for each subcontract.

**3.4 Other Direct Costs**.

3.4.1 Travel and Relocation

3.4.1.1 Indicate the destination, duration and purpose of each trip proposed. Detail the development of each cost element included in the per trip cost.

3.4.1.2 Submit current company policy regarding the reimbursement of travel relocation costs and the accounting of such costs as a direct or indirect expense.

3.4.2 Special Tooling and Special Test Equipment.

3.4.2.1 Special Tooling and Special Test Equipment are defined in JPL form 0968 entitled “Management of Government Property in the Possession of Subcontractors,” which is incorporated into the Specimen Subcontract. Describe each item of Special Tooling and Special Test Equipment you proposed; explain how it meets the definition referenced above; indicate where and when each item is to be used and the extent of usage.

3.4.2.2 Explain the Basis of Estimate and furnish supporting data for each item of Special Tooling and Special Test Equipment in accordance with the requirements of the paragraphs entitled “Direct Labor,” “Material” and “Subcontracts” above.

3.4.3 Computer Usage.

Describe the proposed computer usage, extent of usage, rate(s), and the total cost. Explain the development of the rate(s).

3.4.4 Consultants.

Indicate the specific task requiring consultant services. Identify the proposed consultants, state the proposed hourly/daily rate, the estimated number of hours/days, and any associated costs (such as travel). State whether the consultant has been compensated at the quoted rate for similar services performed in connection with Government contracts.

3.4.5 Licensing and Royalty Information.

If your proposal contains costs for royalties or licenses, indicate the amount and be ready to furnish details.

3.4.6 Be sure to indicate whether the other direct costs (and the figures thereof) are from within your own organization vs. that of any other division or sub-tier to your organization, if any.

3.4.7 Other.

Explain and support any additional other direct costs included in the proposal.

**3.5 Indirect Costs**.

3.5.1 Discuss the development of each proposed indirect expense rate (e.g., labor overhead, material overhead, off-site burden, general and administrative [G&A]). Specifically identify the cost elements included in the base to which each rate is applied. List the indirect expense rates experienced for the past two years. Explain any significant variance between the experienced and proposed rates. Submit evidence of Government approval of each indirect rate, if available.

3.5.2 Identify separately any independent research and development expenses included in the G&A rate.

3.5.3 Be sure to indicate whether the indirect costs (and the figures thereof) are from within your own organization vs. that of any other division or sub-tier to your organization, if any.

**4.0 RESERVED**

**5.0 RESERVED**

**6.0 RESERVED**

**7.0 SUPPLEMENTAL BUSINESS/COST INFORMATION**

**7.1 Financial Statement/Responsibility**

Submit a copy of your annual financial statements for the last three years and any information regarding additional resources required to perform the proposed effort.

Include a copy of a letter of credit from your bank, if available or applicable, showing how much credit was initially granted to you and how much is available.

Identify any third parties who may have security liens on your intellectual property, personal property, or general intangibles. Identify the nature of the liens and the source of the liens (e.g. court judgment, security agreement, factor agreement, etc.)

Demonstrate you have the financial resources to handle a subcontract of the dollar value anticipated.

**7.2 Accounting Calendar**.

The proposer will furnish its accounting calendar for each year in which work is anticipated.

**7.3 Attachments**

The Section of this RFP entitled “Attachments” consists of those forms and documents containing information applicable to this RFP. Group A Attachments must be completed and attached to your cost proposal. Group B Attachments consist of forms and documents for informational purposes. Note that the Group B Attachments are very important and may be required under the Subcontract.

|  |
| --- |
| **Attachments to the Solicitation***(unless otherwise indicated, below forms are found at:* [*http://www.jpl.nasa.gov/acquisition/terms-conditions/*](https://www.jpl.nasa.gov/acquisition/terms-conditions/)*)* |
| ***GROUP A – Complete and return as part of your quotation/proposal those marked with an “X”*** |

|  |
| --- |
| ***Non-Construction and Construction Solicitation Types:*** |
| [X]A-1 | Acknowledgment (Form JPL 2384-A1) |
| [ ]A-2 | Cost Accounting Standards (CAS) Notice and Certification (Form JPL 2455-A2) |
| [ ]A-3 | Government Property (Form JPL 0544-A3) |
| [ ]A-4 | Commercial Items or Services (Form JPL 2384-A4) |
| [X]A-5 | Acknowledgment of CREI/FPEI (Form JPL 2384-A5) |
| [ ]A-6 | Notice of Small Business Set-Aside (Form JPL 4022-A6) |
| [ ]A-7 | Notice of Small Business Set-Aside – Modified (Form JPL 4022-A7) |
| [ ]A-8 | Acknowledgment of RSA Subcontract (Form JPL 2384-A8) |
| [ ]A-14 | Past Performance (Form JPL 0358-A14) |
| [ ]A-15 | Cost Element Breakdown - Long Form (Form JPL 0549-A15) |
| [ ]A-16 | Determination of Lowest Overall Price (Form JPL 0359-A16) |
| [X]A-19 | Cost Elements Breakdown - Short Form (Form JPL 0549-A19) |
| [ ]A-20 | Evidence of Adequacy of Accounting System (Form JPL 7370-A20) |
| [ ]A-21 | Supplier Information Request (Form JPL 7255-A21) |
| ***Construction Solicitation Type Only:*** |
| [ ]A-30 | Bid Form (Form JPL 3107-A30) NOTE: This Attachment is found in the Solicitation/Bid Package sent to you |
| [ ]A-31 | Bid Bond (Form JPL 1825-A31) |
| [ ]A-32 | Price Breakdown Form (no form no.) |
| [ ]A-33 | Experience Modification Rate (EMR), Recordable Incident Rate, Lost Time Incident Rate (JPL 7245-A33) |
| ***GROUP B – Those marked with an “X” are for use in preparing your quotation/proposal:*** |

|  |
| --- |
| ***Non-Construction and Construction Solicitation Types:***  |
| [ ]B-1 | Waiver of Rights to Inventions (Form JPL 62-301-B1) |
| [ ]B-2 | Summary Work Breakdown Structure (no Form number) |
| [ ]B-4 | ° Instructions for Patent Agreement for Use in Support Service Subcontracts (Form JPL 2844-B4) |
|  | ° Patent and Copyright Agreement (Form JPL 1929-B4) |
| [ ]B-5 | Notice of Requirement of Pre-award On-Site Equal Opportunity Compliance Review (Form JPL 3553-B5) |
| [ ]B-6 | Subcontracting Plan Requirements |
| [ ]B-7 |  Security Requirement for a Classified Subcontract |
| [ ]B-8 | Notice of Reqs. for Affirmative Action to Ensure Equal Employment Oppt. (E.O. 11246) (Form JPL 2899-B8) |
| B-9 | [ ]Notice to Prospective Subcontractors of Req. for an Environ. Audit of the Lease Facilities JPL 2896-B9) |
|  | [ ]Notice to Prospective Subcontractors of Req. for an Environ. Audit of the Lease Fac.- Alt. (JPL 2896-B9-ALT) |
| [ ]B-10 |  Certificate of Current Cost or Pricing Data (Form JPL 2496-B10) |
| [ ]B-11 |  Stds of Conduct & Proc. for Handling Subcontr. Personnel Problems, Discipline, & Separation (JPL 4412) |
| [ ]B-12 |  Unescorted Access - Subcontractor Badging Instructions and Reqs (during time of solicitation) (7394-B12) |
| [ ]B-13 |  Claims for Exceptions to Cost or Pricing Data (Form JPL 2703-B13) |
| [ ]B-17 | JPL Subcontractor Environmental, Safety, and Health Plan Requirements (Form JPL 2885) |
| [ ]B-18 | Experience Modification Rate (EMR) / Recordable Incident Rate / Lost Time Incident Rate (JPL 7245-B18) |
| [ ]B-19 | Additional General Provision (AGP) “Safety and Health” (If applicable, plan required before award); see AGP Set. |
| ***Construction Solicitation Type Only:*** |
| [ ]B-31 | Notice to Offerors (Form JPL 2843-B31) |
| [ ]B-32 | Payment Bond (Form JPL 1826-B32) |
| [ ]B-33 | Performance Bond (Form JPL 1827-B33) |
| [ ]B-34 | Notice of Award (letter) (Form JPL 0141-B34) |
| [ ]B-35 | Notice to Proceed (Form JPL 0474-B35) |

|  |
| --- |
| Acknowledgement*(RFP Attachment A-1)**(This completed acknowledgement must accompany your offer)* |

|  |
| --- |
| **Offeror Identification/Point of Contact** |

**1**. Offeror name:

***Note****: Include the full name of the firm (not just any operating division) that would be required by you to appear on a subcontract, if one were to be awarded to your firm.*

**2**. Name and telephone number of persons authorized to conduct negotiations:

Name:       Phone Number:

Name:       Phone Number:

|  |
| --- |
| **Offeror Information** |

**3**. Please indicate your Business Classification and Organization Type:

|  |
| --- |
| **Business Classification***(check all appropriate boxes in the left* ***OR*** *right column)* |
| [ ]  Large Business [ ]  Nonprofit Organization [ ]  Foreign Business/Institution[ ]  Government[ ]  Educational Institution [ ]  Historically Black Colleges & Universities/Other Minority Institutions (HBCU/MI) | [ ]  Small Business (SB)*(plus any of the below, if appropriate)*[ ]  Small Disadvantaged Business (SDB)[ ]  Woman-Owned (WOSB)[ ]  HUBZone (HUB)[ ]  Veteran-Owned (VOSB)[ ]  Service-Disabled VO (SDVOSB)  |

|  |
| --- |
| **Organization Type***(check the appropriate type)* |
| **[ ]** Individual/Sole proprietor, under the laws of the State of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. [ ]  Partnership, under the laws of the State of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. [ ]  Corporation; incorporated under the laws of the State of ­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.[ ]  Non-profit [ ]  Government [ ]  Tax Exempt payee[ ]  Limited Liability Company (LLC) --- *If “LLC” is checked, you must also select one of the following tax classifications:* [ ]  *D=disregarded [ ]  C=corporation [ ]  P=partnership*  |

|  |
| --- |
| **Offeror Income Tax Information** |

4. To comply with CA Revenue and Taxation Code 18662 and CA Franchise Tax Board FTB Publ. 1023, and Internal *Revenue Code 1441, JPL must determine if any tax reporting and tax withholding requirements are applicable. See “Notice of Potential Tax Withholding” in the “Subcontracts Form Set” located at:* [*http://www.jpl.nasa.gov/acquisition/terms-conditions/*](http://www.jpl.nasa.gov/acquisition/terms-conditions/)*for additional information.*

Type(s) of Proposed Items*(please check all that apply):*

[ ]  Goods (commercial off-the-shelf items, no customization)

[ ]  Customized Goods (goods made or modified for JPL use)

[ ]  Services (R&D, consulting, contract labor, training services, etc.)

[ ]  Rents/Leases (tangible or real property)

[ ]  Royalty/Software

***If ONLY the “Goods” box is checked in the above “Type(s) of Proposed Items,” skip the “Offeror Information” and “Source of Income” questions below and proceed to***

***Paragraph 5.***

|  |
| --- |
|  ***Offeror Information*** |
| 1. Is the payee a ***non-***U.S. Resident (i.e., foreign) individual or supplier?
 | [ ]  Yes | [ ]  No  |
| 1. Is the payee a ***non-***California resident individual or supplier?
 | [ ]  Yes | [ ]  No |
| 1. Has the legal name of your organization changed, or the Taxpayer ID changed, or the organization type changed since your last order/subcontract with JPL?
 | [ ]  Yes | [ ]  No |
|  |
| ***Source of Income*** |
| 1. Is the purchase for U.S. sourced income payment?

 *(U.S. sourced income exists if the location of any labor performed or rental/lease of property or use of software is in the U.S.)* | [ ]  Yes | [ ]  No  |
| 1. Is the purchase for State of California sourced income payment?

 *(CA sourced income exists if the location of any labor performed or rental/lease of property or use of software is in the State of California)* | [ ]  Yes | [ ]  No  |

|  |
| --- |
| **Terms and Conditions** |

**5**. The Offeror acknowledges that the offer will be valid for      days after the date for receipt of offers specified on the cover page of this solicitation.

**6.** Your submittal of a proposal or quotation certifies your compliance with the requirements specified in form JPL 2892, “Certifications,” attached to the General Provisions.

**7.** Can you supply the requested items through a Federal Supply Schedule (GSA) Contract?

[ ]  Yes If yes, list FSS (GSA) Contract No.:      ; skip No. 8.

[ ]  No If no, complete the remainder of this form.

**8**. The Offeror ***[ ]*** *acknowledges* ***[ ]*** *does not acknowledge* the following are acceptable with no modifications, additions, or deletions in case of subcontract award: the Specimen Subcontract and its: Schedule/Articles, any exhibits and attachments, General Provisions (GPs) Set\*, Additional General Provisions (AGPs) Set\* (if applicable), and Subcontract Forms Set.\* (\*can be found at: [*http://www.jpl.nasa.gov/acquisition/terms-conditions/*](http://www.jpl.nasa.gov/acquisition/terms-conditions/)

 ***Note:*** *Many of the GPs and AGPs cannot be altered without NASA approval.* ***If you answer “does not acknowledge” above, attach a detailed explanation of the exception(s), including a thorough rationale for each exception.***

|  |
| --- |
| **Buy American Act** |

**9**. Preference will be given to United States (U.S.) domestic end products under the Buy American Act (BAA) for those items to be used in the U.S.

 *The Offeror certifies that each end product/service to be supplied is domestic, as defined in the BAA, except for those which the Offeror has listed, with country of origin shown, on a separate attachment to this Acknowledgment and that components of unknown origin were considered by the Offeror to have been mined, produced, or manufactured outside the U.S. The Offeror also certifies whether the offeror qualifies for any special treatment as a signator to any international agreements, such as designated country status under the Trade Agreements Act.*

|  |
| --- |
| **Audit/EEO Information** |

**10**. Name, address, phone number of cognizant Government Audit Agency representative:

Name:

Address:

Phone:

**11**. (A) Audit Reports. The Offeror agrees that all Government audit reports directly related to its offer(s) and subcontract, if any, resulting from this solicitation are authorized to be released to JPL. [ ] Yes [ ] No

(B) Is your organization a State or Local Government or Nonprofit Organization subject to Uniform Guidance 2 CFR200? [ ]  Yes [ ]  No

If yes, the “year ending” date of the most recent report is:       *(Attach a copy of the most recent report, unless previously submitted to JPL)*.

**12**. All prospective procurements (excluding construction) with an estimated contract value of $10,000,000 or more require that a determination be made by the Department of Labor (DOL) regarding a prospective domestic subcontractor’s Equal Employment Opportunity (EEO) status. A determination that the Offeror is either in compliance or is able to comply with EEO laws is a prerequisite to the Offeror’s eligibility for award.

If the offer is for $10,000,000 or more, the Offeror acknowledges that it [ ]  has [ ]  has not successfully survived an EEO survey within two years of the anticipated award date. *(If the “has” box is checked, a copy of the EEO Clearance should* *be included with the offer).*

|  |
| --- |
| **Earned Value Management (EVM)** |

**13**. Does your organization have a validated earned value management (EVM) system?

[ ] Yes [ ]  No

 If yes, validation certified by:

[ ]  Government Agency name:

[ ]  Self-Certified

[ ]  Dollar threshold at which your organization’s internal policy requires EVM:

|  |
| --- |
| **Offeror Certification** |

I, the undersigned, hereby declare that I am a duly authorized representative of the organization below, and I can certify and commit the organization regarding the information on this form, including the total offer amount sub­mitted in response to RFQ/RFP No.      .

Further, the Offeror acknowledges receiving the following Addenda No(s). to the RFQ/RFP:

***Note****: Failure to acknowledge receipt of all Addenda may result in your offer being rejected.*

Organization:

***Note****: Insert legal name of the organization, not operating division. Such legal name is the name used on income tax filings.*

Authorized Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Type/Print Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Phone: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| Acknowledgment – CREI/FPEI Subcontracts *(RFP Attachment A-5)**(This completed acknowledgement must accompany your offer)* |

|  |
| --- |
| **Offeror Information** |

**1**. Offeror Name:

***Note****: Include the full name of the firm (not just any operating division) that would be required by you to appear on a subcontract, if one were to be awarded to your firm.*

**2**. Name and telephone number of the person authorized to conduct negotiations:

 Name:       Phone Number:

**3**. Business Classification *(please check all that apply)*:

[ ]  Educational Institution [ ]  Non-profit Organization [ ]  HBCU/OMI Business

|  |
| --- |
| **Terms and Conditions** |

**4**. The Offeror ***[ ]*** *acknowledges* ***[ ]*** *does not acknowledge* the following are acceptable with no modifications, additions, or deletions in case of subcontract award: General Provisions (GPs) Set, Additional General Provisions (AGPs) Set (if applicable), and Subcontract Forms Set (all can be found at<http://www.jpl.nasa.gov/acquisition/terms-conditions/>).

***Note 1:*** *For educational institutions, the applicable General Provisions Set can either be for a cost-reimbursable or a fixed-price subcontract type; take note which applies.*

***Note 2:*** *Many of the GPs and AGPs cannot be altered without NASA approval.* ***If you answer “does not acknowledge” above, attach a detailed explanation of the exception(s), including a thorough rationale for each exception.***

**5**. The submittal of a proposal/quotation certifies your organization’s compliance with the requirements specified in form JPL 2892, “Certifications” found in the above-referenced “Subcontract Forms Set.”

|  |
| --- |
| **Audit Information** |

**6**. a. Audit Reports. Your Institution agrees that all Government audit reports directly related to its offer(s) and subcontract, if any, are authorized to be released to JPL. [ ]  Yes [ ]  No

b. Is your organization a State or Local Government or Nonprofit Organization subject to Uniform Guidance 2 CFR200? [ ]  Yes [ ]  No (If yes, the “year ending” date of the most recent report is:       *(Attach a copy of the most recent report, unless previously submitted to JPL)*.

|  |
| --- |
| **Offeror Certification** |

I, the undersigned, hereby declare that I am a duly authorized representative of the organization below, and I can certify and commit the organization regarding the information submitted on this form and in our proposal dated       .

Authorized Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Type/Print Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

RFP Attachment A-19

**Cost Elements Breakdown – Short Form**

|  |  |
| --- | --- |
| **Cost Element** | Hours, Rates, Extension |
| **Hours** | **Rate** | **Extension** |
| **Direct Labor** *(by labor category)* |
|  |  | $ | $ |
|  |  | $ | $ |
|  |  | $ | $ |
|  |  | $ | $ |
|  |  | $ | $ |
|  |  | $ | $ |
|  |  | $ | $ |
|  |  | $ | $ |
|  |  | $ | $ |
|  |  | $ | $ |
|  |  | $ | $ |
| **Total Labor Costs:** |  |  | $ |
| **Overhead** |
|  | **Base** |  |  |
|  |  | % | $ |
|  |  | % | $ |
| **Total Overhead Costs:** |  |  | $ |
| **Other Direct Costs** *(provide a separate attachment explaining ODC items)* |
| Material |  |  |  |
| Material Burden |  | % | $ |
| Lower-Tier Subcontract(s) |  |  |  |
| Lower-Tier Subcontract(s) Burden |  | % | $ |
| Travel |  |  | $ |
| Misc. |  |  | $ |
| **Total ODC Costs:** |  |  | $ |
| **Total Costs Thru ODC:**  |  |  | $ |
| **General & Administrative** |
|  | **Base** |  |  |
|  |  | % | $ |
|  |  | % | $ |
| **Total G&A:** |  |  | $ |
| **Total Cost, Profit/Fee, and Total Price** |
| **Total Costs Thru G&A:**$$ | $ |
| Profit/Fee: | % | $ |
| **TOTAL PRICE:** | $ |

1. <https://smd-prod.s3.amazonaws.com/science-red/s3fs-public/atoms/files/Starshade2.pdf> [↑](#footnote-ref-1)
2. <https://www.jpl.nasa.gov/habex/> [↑](#footnote-ref-2)
3. <https://exoplanets.nasa.gov/exep/technology/starshade/>

4 <https://exoplanets.nasa.gov/internal_resources/1208/> [↑](#footnote-ref-3)
4. [↑](#footnote-ref-4)