



JET PROPULSION LABORATORY
CALIFORNIA INSTITUTE OF TECHNOLOGY

REQUEST FOR PROPOSAL

REQUEST FOR PROPOSAL NO.: SPTT-102403

FOR:

**MARS SCIENCE LABORATORY (MSL)
SUBSONIC PARACHUTE TECHNOLOGY TASK (SPTT)
TEST SERIES I PARACHUTES**

PROPOSALS ARE TO BE RECEIVED AT JPL NO LATER THAN:

Date: 11/24/03

Local Time: 3:00 p.m.

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:	Rod Fowler	Mail Stop:	190-220
Title:	JPL Subcontract Manager	Phone:	(818) 354-2932
		Fax:	(818) 394-3494
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California Institute of Technology
Jet Propulsion Laboratory
4800 Oak Grove Drive
Pasadena, CA 91109-8099

Date of Issuance: 10/24/03

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2. 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. Hard copies of the Group B Attachments will be mailed by request only. Note that Group B Attachments are very important and may become requirements under the Contract.

World Wide Web: <http://acquisition.jpl.nasa.gov/e2000.htm>

3. Specimen Contract, Dated 10/14/03

GENERAL INSTRUCTIONS

1.0 PROPOSAL REQUIREMENT

- 1.1 The effort to be performed will be in accordance with the Specimen Contract; if you choose to submit more than one proposal for this effort, each proposal must be independently complete and under separate cover.

2.0 PACKAGING AND SUBMITTING YOUR PROPOSAL

2.1 Organization and Format.

- 2.1.1 Your proposal, which should be organized as closely as practicable to the format and sequence indicated in these proposal instructions, must be submitted as outlined below. Please note that JPL has assigned a recommended page limitation to the individual proposal volumes.

Volume No./Title	Page Limit	Number of Copies
Volume I Technical/Management	35 pages	8
Volume II Cost	No Page Limit	8

- 2.1.2 Unnecessarily elaborate brochures or presentation layouts, other than those sufficient to present a complete and effective proposal, are not desired. Except when specifically requested, mockups, models, samples, hardware, or software of any kind must not be furnished and will not be considered.

- 2.1.3 JPL reserves the right to retain all proposal information submitted in response to this RFP.

2.2 Address and Identification.

To help ensure timely receipt and processing of your proposal, please affix the enclosed yellow adhesive label to the envelope/container containing the complete original copy of your proposal. (NOTE: The yellow label is JPL's notification that the package you send is a proposal.) In case the mailing label is lost, address your proposal on a similar yellow label containing JPL's address, the name of the individual designated on the cover page of this RFP (including the mail stop) and the RFP number. All proposal envelopes/containers must be identified with the RFP number that appears on the RFP cover page.

2.3 Hand Carried Proposals.

Hand-carried proposals must be delivered to the California Institute of Technology/Jet Propulsion Laboratory (JPL) Visitor Control Center, at 4800 Oak Grove Drive, Pasadena, Building 249, where it will be received and time-stamped. Visitor Control is open to receive proposals only on working weekdays, between 7:30 a.m. and 4:30 p.m. (proposals are due at the time and date stated on the cover of this RFP).

2.4 E-mail, Facsimile, and other forms of electronic delivery.

Proposals delivered by e-mail, facsimile and other forms of electronic delivery will not be accepted or evaluated.

3.0 GENERAL INFORMATION

3.1 Proposal Preparation and Related Costs.

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.

3.2 Data.

If the proposal contains data that either you or your subcontractors do not wish to be disclosed for any purpose other than proposal evaluation, you must mark the cover sheet of each volume containing such information with the legend below:

“Data contained in pages _____ of this proposal furnished in connection with RFP No. (**) shall not be used or disclosed, except for evaluation purposes, provided that if a contract 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 contract. This restriction does not limit JPL’s right to use or disclose any data obtained from another source without restriction.”

(** insert RFP number)

3.3 Requests for Clarification/RFP Addenda.

During the proposal preparation period, all requests for clarification and/or additional information, must be submitted in writing to the individual referenced by “Attention:” on the cover page of this RFP. When appropriate, responses to requests, as well as any JPL initiated changes, will be provided to all prospective proposers in writing as addenda to the RFP. (NOTE: You must include reference to all addenda on your Acknowledgment to this RFP [Attachment A-1].)

4.0 LATE PROPOSALS

Any proposal, portion of a proposal, or unrequested proposal revision received at JPL after the time and date specified on the cover page of this RFP is late. Any volume of a proposal received after the time and date specified will cause the entire proposal to be late. Late proposals will not be considered for award, except under the following circumstances:

4.1 JPL determines that the late receipt was due solely to a delay by the U.S. postal service for which the offeror was not responsible. Timely postmark or receipt of registered, certified, or express mail "next-day service," establishing the time of deposit must be evidenced.

4.2 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.

4.3 No acceptable proposals are received in a timely manner.

NOTE TO PROPOSERS: If an emergency or unanticipated event interrupts normal JPL processes so that solicitation responses cannot be received at the JPL office designated for receipt by the exact time specified in the solicitation, and urgent JPL requirements preclude amendment of the solicitation closing date, the time 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 processes resume.

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7.0 SOURCE EVALUATION AND SELECTION PROCESS

7.1 Source Evaluation.

Proposals will be evaluated in the areas of technical and management as described in paragraph 9 below. Although price will not be scored, it is of approximately equal importance to the combined technical and management areas; therefore, price is a substantial factor in source selection. JPL plans to make source selection based on the offeror(s) whose proposal(s) are determined to represent the best value to JPL. JPL will award up to two contracts to two separate bidders for this work. The decision of whether to award one or two contracts will be made after ranking all of the offers using the process outlined in the rest of paragraph 7.1. The decision will be based upon whether or not the total of the proposed prices of the two highest ranked offers remains within the JPL internally established budget.

JPL's best value source selection is based on the following: If all offers, in the competitive range, are of approximately equal qualitative merit, JPL will select for negotiations the offer with the lowest price. However JPL may select for negotiations a contractor whose proposal offers a higher qualitative merit if the difference in price is commensurate with added value. Conversely, JPL may select for negotiations a contractor whose proposal offers a lower qualitative merit if JPL determines that the price differential between it and other offers so warrants. JPL will evaluate the proposals utilizing the following process:

- 7.1.1 Before issuing the RFP, JPL establishes specific criteria and their weighting for the evaluation. After receipt at JPL, the proposals are evaluated against the pre-set criteria outlined in Non-Price Criteria and Instructions.
- 7.1.2 Price proposals are reviewed for mathematical accuracy, rate application, price omissions, and price reasonableness. If the Buy American Act, the Balance of Payment Program, or rent free use of Government-furnished property applies, the prices will be adjusted as required for the purpose of evaluation.
- 7.1.3 Responsibility (i.e., consideration of matters such as contractor financial capability, past performance record, adequacy of facilities, etc.) is assessed within the meaning of Federal Acquisition Regulation 9.1. Award will not be made to a Contractor deemed to be nonresponsible.
- 7.1.4 Initial Proposal Evaluation:
 - 7.1.4.1 Results of the initial proposal evaluation are used to determine which proposals are within the competitive range (i.e., those having a reasonable chance of being selected for award). Proposals determined not to be within the competitive range are eliminated from further consideration, and the proposers are notified accordingly.
 - 7.1.4.2 JPL may, at its discretion, conduct limited communications with one or more proposer(s) for the purpose of determining whether the proposer should be included in the competitive range. Such pre-competitive range communications may be conducted to enhance JPL understanding of proposal(s) and may be used to:
 - 7.1.4.2.1 Validate the proposed price; and
 - 7.1.4.2.2 Clarify omissions, ambiguities and uncertainties in the proposer's supplemental business/cost information; and
 - 7.1.4.2.3 Clarify relevant past performance information.

- 7.1.4.3 JPL reserves the right to make a competitive range determination without conducting such communications. Further, JPL, at its discretion, may waive minor informalities and minor irregularities in proposals received.
- 7.1.5 JPL may make source selection after the initial proposal evaluation or may conduct discussions with the proposers determined to be within the competitive range. The purpose of the discussions is to assist the evaluators in fully understanding each proposal by:
 - 7.1.5.1 Discussing those aspects of each proposal which contain omissions, ambiguities and uncertainties;
 - 7.1.5.2 Verifying and identifying strengths and weaknesses which could affect work performance;
 - 7.1.5.3 Verifying the validity of the proposed price; and
 - 7.1.5.4 Assessing the proposed personnel and the proposer's capabilities for performing the work.
- 7.1.6 After discussions, JPL may request price proposal deltas in order to correct errors, omissions or ambiguities in the proposal. Only those deltas requested by JPL will be accepted. (NOTE: JPL will not request best and final offers (BAFOs).)
- 7.1.7 Finally, the initial evaluation findings are reviewed and ratings are assigned which incorporate the results of the discussions and/or any price proposal deltas.
- 7.2 Selection Process.

The results of the final evaluation are submitted to the JPL Source Selection Official, who selects the Contractor(s) for negotiation.
- 7.3 JPL reserves the right to reject all proposals, to award a contract based on initial proposals (without proposal clarifications) or to conduct oral discussions prior to making source selection.

8.0 EXCEPTIONS TO GENERAL PROVISIONS AND ADDITIONAL GENERAL PROVISIONS

- 8.1 A large number of exceptions or one or more significant exceptions to the General Provisions and/or Additional General Provisions may make your proposal unacceptable for evaluation. **You must provide a detailed explanation, including the rationale, for any exceptions you take.** Proposers who submit proposals with exceptions may be selected for negotiations; however if an agreement cannot be negotiated, your proposal may be rejected.

9.0 TECHNICAL AND MANAGEMENT CRITERIA

The technical and management criteria and the weight for each are listed below. The factors shown under the criteria are not weighted for evaluation purposes and are not listed in any particular order of importance.

Criterion T-1. DESIGN AND TEST APPROACH - 400 Maximum Points

The degree to which the proposer's technical approach will lead to the production of a parachute system that will operate satisfactorily in the specified environments, meeting or exceeding the applicable specifications and functional requirements of the Specimen Contract and Exhibit I.

- Factor 1.** Design and Development Methodology
- Factor 2.** Heritage
- Factor 3.** Product Assurance

Criterion M-1. MANAGEMENT APPROACH - 300 Maximum Points

The degree to which the proposer's management approach provides for effective organization, implementation and monitoring and control of the effort.

- Factor 1.** Program/Project Manager's Authority and Responsibility
- Factor 2.** Implementation Approach

Criterion M-2. RESOURCES - 300 Maximum Points

The degree to which the proposer possesses the personnel, facilities and equipment necessary to successfully conduct this effort.

- Factor 1.** Capability of Key Personnel
- Factor 2.** Availability of Qualified Personnel
- Factor 3.** Suitability and Availability of Facilities and Equipment
- Factor 4.** Related Experience

VOLUME I - TECHNICAL INSTRUCTIONS

1.0 INTRODUCTION

This portion of the proposal instructions sets forth the requirements to be followed in preparing the Technical Proposal. The following specific information must be included to permit an evaluation of your technical capabilities:

Criterion T1 – TECHNICAL MERIT

400 points

The degree to which the proposer's technical approach will lead to the production of a parachute system that will operate satisfactorily in the specified environments, meeting or exceeding the applicable specifications and functional requirements of the Specimen Contract and Exhibit I.

1.1 Design and Development Methodology

Describe your methodology for the design and development of the Parachute Decelerator System (PDS) with particular reference as to how your approach will lead to a PDS which meets or exceeds the requirements of Exhibit I. Describe in detail the proposed design for both the Ringsail main parachute and the drogue parachute, with specific reference to literature or other flight tests of similar designs. Highlight any potential problems of fabricating a complex parachute at this scale and describe your plans to mitigate them.

Describe your proposed approach to design analysis and any uncertainties inherent in that analysis. Provide a detailed discussion of any unresolved design/development issues and propose resolutions to these issues. Explain what impact if any you believe these issues will have on your ability to meet the schedule in the Specimen Contract and how you would resolve any schedule problem.

Describe your manufacturing approach including steps for the fabrication of the components of the PDS.

1.2 Heritage

List any proven design and process heritage that you plan to use. Describe how it will enable you to mitigate technical risk. Address any concerns associated with scaling and adapting the heritage to this effort.

1.3 Product Assurance

Provide a copy of your Product Assurance Plan/Procedures as a separate attachment to the proposal and discuss how they are currently implemented.

VOLUME I - MANAGEMENT INSTRUCTIONS

1.0 INTRODUCTION

This portion of the proposal instructions sets forth the requirements to be followed in preparing the Management Proposal. The following specific information must be included to permit an evaluation of your management capabilities:

Criterion M1 – Management Approach **300 points**

The degree to which the proposer's management approach provides for effective organization, implementation and monitoring and control of the effort. Factors to be considered are:

- 1.1 **Program/Project Manager's Authority and Responsibility.**
Describe the authority and responsibility of the project manager. Explain how the project manager will resolve resource conflicts.
- 1.2 **Implementation Approach**
Describe your implementation approach including reference to any critical path or high schedule risk tasks.

Criterion M2 – Resources **300 points**

The degree to which the proposer possesses the personnel, facilities and equipment necessary to successfully conduct this effort.

- 1.1 **Capability of Personnel**
List the Key Personnel and the percentage of time each will devote to this effort. Describe the responsibilities of each key person and provide a resume for each Key Person. Describe the experience and educational background of non-key technical staff who will be assigned to this effort.
- 1.2 **Availability of Qualified Personnel**
Provide a staffing chart showing the number of staff assigned to the project over time by months.
- 1.3 **Suitability and Availability of Facilities and Equipment**
List the facilities and equipment you intend to use for this effort. Describe your plan for obtaining any necessary facilities or equipment which you do not currently possess.
- 1.4 **Related Experience**
List and describe similar work efforts your company has undertaken in the past five years or is currently working on. Explain how those efforts are relevant to the complexity and extraterrestrial nature of this effort.

VOLUME II - COST INSTRUCTIONS

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

2.0 PROPOSAL PRICING

Provide a total price for the effort.

2.1 PARTIAL PAYMENTS

Partial Payments will not be allowed under this Contract.

2.2 PROGRESS PAYMENTS

Progress payments will be allowed under this Contract in accordance with the Additional General Provision entitled "Progress Payments" or "Progress Payments (Small Business)" incorporated into the Specimen Contract.

2.3 (THIS PARAGRAPH IS INTENTIONALLY LEFT BLANK)

2.4 SPECIAL TOOLING AND SPECIAL TEST EQUIPMENT

Describe each item of Special Tooling and Special Test Equipment proposed; indicate where and when each item is to be used and the extent of usage.

2.5 (THIS PARAGRAPH IS INTENTIONALLY LEFT BLANK)

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2.7 SUPPLEMENTAL BUSINESS/COST INFORMATION

2.7.1 Financial Statement

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 such as an established line of credit or other financial resource.

2.7.2 License and Royalty Information

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

2.7.3 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 only and can be accessed via the electronic address provided below. Hard copies of the Group B Attachments will be mailed by request only. Note that the Group B Attachments are very important and may be required under the Contract.



ATTACHMENTS TO THE SOLICITATION

The following attached forms and documents are organized into two major groupings:

NOTE TO PROPOSERS: Forms and documents listed below are not applicable unless the box preceding the Attachment Number is marked .

GROUP A - Complete and return as part of your quotation/cost proposal, as applicable:

Attachment Number	Title and Form Number
<input checked="" type="checkbox"/> A-1	Acknowledgment (form JPL 2384)
<input type="checkbox"/> A-2	Cost Accounting Standards (form JPL 2842)
<input type="checkbox"/> A-3	Government Property Questionnaire (form JPL 0544)
<input type="checkbox"/> A-4	(RESERVED)
<input type="checkbox"/> A-5	(RESERVED)
<input type="checkbox"/> A-6	Notice of Total Small Business Set-Aside (form JPL 4022)
<input type="checkbox"/> A-7	Notice of Total Small Business Set-Aside - Modified (form JPL 4023)
<input type="checkbox"/> A-8	(RESERVED)
<input type="checkbox"/> A-9	(RESERVED)
<input type="checkbox"/> A-10	(RESERVED)
<input type="checkbox"/> A-11	(RESERVED)
<input type="checkbox"/> A-12	Foreign Acquisitions - Certification of Eligibility for Exemption from/Certain JPL General Provisions, Additional General Provisions, and Certifications (form JPL 2881)
<input type="checkbox"/> A-13	(RESERVED)
<input checked="" type="checkbox"/> A-14	Past Performance (form JPL 0358)
<input type="checkbox"/> A-15	Cost Element Breakdown (form JPL 0549)
<input type="checkbox"/> A-16	Determination of Lowest Overall Price - Time-and-Material Proposals (form JPL 0359)
<input type="checkbox"/> A-17	Determination of Lowest Overall Price - Labor Hour Proposals (form JPL 0363)
<input type="checkbox"/> A-18	Determination of Lowest Overall Price - Labor-Hour Proposals to JPL-Provided Rate Ranges (form JPL 0364)
<input type="checkbox"/> A-19	Cost Elements Breakdown (Short Form) (form JPL 0549-1)

GROUP B - For information only:

Attachment Number	Title and Form Number
<input checked="" type="checkbox"/> B-1	Waiver of Rights to Inventions (form JPL 62-301)
<input type="checkbox"/> B-2	Summary Work Breakdown Structure (no form number)
<input type="checkbox"/> B-3	Notice to Offerors (form JPL 2843)
<input type="checkbox"/> B-4	Instructions for Patent Agreement for Use in Support Service Contracts (form JPL 2844) Patent Agreement (form JPL 1929)
<input type="checkbox"/> B-5	Notice of Requirement of Pre-award On Site Equal Opportunity Compliance Review (form JPL 3553)
<input type="checkbox"/> B-6	Requirements for A Subcontracting Plan (form JPL 0294)
<input type="checkbox"/> B-7	Security Requirements for a Classified Contract (form JPL 2891)
<input type="checkbox"/> B-8	Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity(Executive Order 11246) (form JPL 2899)
<input type="checkbox"/> B-9.1	Notice to Prospective Contractors of Requirement for an Environmental Audit of the Lease Facilities (form JPL 2896)
<input type="checkbox"/> B-9.2	Notice to Prospective Contractors of Requirement for an Environmental Audit of the Lease Facilities – Alternate (form JPL 2896-1)
<input type="checkbox"/> B-10	Certificate of Current Cost or Pricing Data (form JPL 2496)
<input type="checkbox"/> B-11	Standards of Conduct and Procedures for Handling Contractor Personnel Problems, Discipline, and Separation (form JPL 4412)
<input type="checkbox"/> B-12	(RESERVED)
<input type="checkbox"/> B-13	Claims for Exceptions to Cost or Pricing Data (form JPL 2703)
<input type="checkbox"/> B-14	Billing Instructions – Cost Type Contract (form JPL 2716)
<input type="checkbox"/> B-15	Billing Instructions – CREI Contract (form JPL 2717)
<input type="checkbox"/> B-16	Billing Instructions – Labor-Hour/Time-and-Material Contract (form JPL 2718)
<input type="checkbox"/> B-17	JPL Contractor Safety and Health Notification (form JPL 2885)