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The purposes of the amendment are (1) to provide additional questions and answers and (2) make revisions to the RFP.								
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NSN 7540-01-152-8070 PREVIOUS EDITIONS UNUSABLE NASA - Langley Overprint (DEC 1986)

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STANDARD FORM 30 (Rev 19-33) Prescribed by GSA FAR (48 CFR) 53 243 The Installation-Provided Government Property listed in Exhibit A will be available for use by the contractor's on-site work force. NASA will make every effort to provide physical separation of contractor and civil service personnel, with a goal of eventually providing one or more dedicated on-site facilities for the ART contractor. The contractor shall not maintain a near-site facility for its direct labor work force in the local commuting area (35 mile radius from Langley Research Center).

- B. The contractor may perform under task orders with direct labor forces located in existing facilities outside the local commuting area."
- C. The location of contractor employees on-site does not relieve the contractor of its day-to-day management responsibilities for those employees and the work they are performing."

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The purpose of the amendment is to make revisions to the RFP.								
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STANDARD FORM 30 (Rev 10-83) Prescribed by GSA FAR (48 CFR) 53-243

- 1. Paragraph F.5 of Section L.35, Proposal Preparation and Submission-Special Instructions, on page 116 of the RFP is hereby deleted in its
 entirety and the following is replaced in lieu thereof:
 - "5. For the purposes of determining the extent of installation provided property as defined in Section G.2 of this solicitation, the offeror can assume that 100% of the work performed under this contract will be on-site at NASA LaRC."

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NASA - Langley Overprint (DEC 1986)

- Q-1 Are the % of LOE Hours by Labor Classifications provided in the RFP Attachment 6, SKILL MATRIX applicable to each contract period covered including the option periods or only the total contract? Does the Government anticipate different percentages of hours by classification in the course of contract downsizing? If so, can the Government provide additional data relating to their estimate of classification percentages by contract period?
- A-1 Each of the option periods plus the base period compose the total contract period. The LOE is anticipated to decline over each of these periods in accordance with L.35.F.3 (page 115) of the solicitation. The percentage of LOE hours per labor classification contained in Attachment 6 should be applied to the anticipated decline in LOE over the base period and each option period as stated in L.35.F.3. The offeror cannot propose on the total contract without breaking out the base and option periods separately. Each offeror is reminded that Attachment 6 is provided for information purposes only.
- Q-2 Is the Business Proposal required to be double spaced?
- A-2 Yes.

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Prescribed by GSA FAR (48 CFR) 53 243

The following is provided for information and guidance:

Enclosure 1: Revisions to RFP

Enclosure 2: Questions and Answers

11,14

Enclosure 4: Copies of Preproposal Conference Visual Slides

ENCLOSURE I
REVISIONS TO RFP

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Revisions to RFP 1-132-D.1166

The following changes or corrections are hereby made:

- 1. The number of proposals listed on the cover sheet to the RFP listed in paragraph 5 is changed from eight to nine.
- 2. The first two award fee periods listed in Article B.3, Award Fee Availability Schedule are deleted in their entirety and the following is replaced in lieu thereof:
 - "July 1, 1996 December 31, 1996 January 1, 1997 - June 30, 1997"
- 3. The dates listed in L.35.F.3, page 115 of the RFP are deleted in their entirety and the following is replaced in lieu thereof:

"7/01/96 - 6/30/97 7/01/97 - 6/30/98 7/01/98 - 6/30/99 7/01/99 - 6/30/00 7/01/00 - 6/30/01 7/01/01 - 12/31/01"

- 4. Article F.3, Place(s) of Performance (LaRC 52.212-98) (OCT 1992) is deleted in its entirety and the following is replaced in lieu thereof:
 - "F.3 PLACES(S) OF PERFORMANCE (Larc 52.212-98) (OCT 1992)

The place(s) of performance shall be:

NASA, Langley Research Center, Hampton, Virginia; the Contractor's facility; and other sites as may be designated by task orders."

- 5. Section I Clauses 52.215-22, Price Reduction for Defective Cost or Pricing Data and 52.215-24, Subcontractor Cost or Pricing Data are deleted and FAR clauses 52.215-23, Price Reduction for Defective Cost or Pricing Data Modifications and 52.215-25, Subcontractor Cost or Pricing Data Modifications are hereby added to the Solicitation.
- 6. The term "fabrication" is hereby deleted from paragraph 2 of Section 3.1, Aeronautics Systems Analysis, and from paragraph 4 of Section 3.2, Hypersonic Vehicle Design, Systems Analysis and Computational Studies, of the Statement of Work.

- 7. NHB 5102.6 listed in M.2.B, <u>Factor 2 Cost</u>, is changed to NHB 5103.6.
- 8. Section L.35.E.4, <u>Subfactor 4 Cost Realism</u>, is deleted in its entirety, and the following is replaced in lieu thereof:

"4. <u>Subfactor 4 - Cost Realism</u>

Cost realism is the degree to which all costs for total contract reflect the proposed approach to achieving the technical objectives. Paragraph F of Section L.35 requires the offeror to submit a cost proposal for the overall contract. This cost proposal will be the primary source for determining realistic costs as discussed in the criteria in Section M.3, Paragraph C. A separate discussion concerning cost realism is not required."

9. Section M.2.A.4, <u>Subfactor 4 - Cost Realism</u>, is deleted in its entirety, and the following is replaced in lieu thereof:

"4. Subfactor 4 - Cost Realism

Cost realism is the degree to which all costs for total contract reflect the proposed approach to achieving the technical objectives. The offeror's cost proposal will be evaluated for cost realism in accordance with the guidelines contained in M.3, Paragraph C."

10. The last sentence of Section M.2.C, <u>Factor 3 - Relevant</u> <u>Experience and Past Performance</u> is deleted in its entirety and the following is replaced in lieu thereof:

"You are cautioned that omissions or an inaccurate or an inadequate response to this evaluation factor will have a negative effect on your overall evaluation."

11. The last sentence of Section L.35.E.1, <u>Subfactor 1 - Understanding the Requirements and Technical Approach</u> is hereby deleted in its entirety, and the following is replace in lieu thereof:

"In addition, the offeror shall provide a general discussion on their understanding of and approach to performing work in the following areas: aeronautics systems analysis, hypersonic vehicle design, systems analysis and computational studies, spacecraft mission and system performance analysis, flight project design, engineering and development, project planning, aircraft and aircraft systems maintenance and operations, and ground test systems, and test technique development."

- 12. The last sentence of Section M.2.A.1, <u>Subfactor 1 Understanding the Requirements and Technical Approach</u> is hereby deleted in its entirety, and the following is replace in lieu thereof:
- "In addition, the offeror's understanding of and approach for performing work related to aeronautics systems analysis, hypersonic vehicle design, systems analysis and computational studies, spacecraft mission and system performance analysis, flight project design, engineering and development, project planning, aircraft and aircraft systems maintenance and operations, and ground test systems and test technique development will be evaluated."
- 13. The following clause is hereby added to Section I of the solicitation as I.15.
- I.15 SECURITY REQUIREMENTS FOR UNCLASSIFIED AUTOMATED INFORMATION RESOURCES (NASA 18-52.204-76) (SEP 1993)
- (a) In addition to complying with any functional and technical security requirements set forth in the schedule and the clauses of this contract, the Contractor shall initiate personnel screening checks and obtain user responsibility agreements, as required by this clause, for each Contractor employee requiring unescorted or unsupervised physical access or electronic access to all limited or controlled areas, systems, programs and data:
- (1) The Contractor shall submit a personnel security questionnaire (NASA Form 531, Name Check Request, for National Agency Check (NAC) investigations and Standard Form 85P, Questionnaire for Public Trust Positions, for specified sensitive positions) and a Fingerprint Card (FD-258 with NASA overprint in Origin Block) to the installation Security Officer for each Contractor employee who requires access. The required forms may be obtained from the installation security office. Employees may have finger-prints taken at the NASA Contract Badge and Pass Office, located at 1 Langley Boulevard (Building No. 1228), only between the hours of 6:30 a.m. and 4:30 p.m., Monday through Friday, or at any police department.

(i) Several months may be required for completion of complex personnel screening investigations. Background screening may not be required for employees with recent or current Federal Government investigations.

(ii) When employee access is necessary prior to completion of personnel screening, each Contractor employee requiring access may be considered for escorted access. The installation Security Officer will establish the eligibility of proposed escorts.

- (2) The Contractor shall ensure that each Contractor employee requiring access executes any user responsibility agreements required by the Government prior to access. The Contractor shall provide signed copies of the agreements to the installation Security Officer for inclusion in the employee's security file. Unauthorized access is a violation of law and punishable under the provisions of 18 U.S.C. 1029, 18 U.S.C. 1030 and other applicable statutes.
- (3) The Contractor shall notify the installation AIS Manager no later than the end of the day of the termination for cause of an authorized employee's access. The Contractor shall notify the COTR no later than 10 days after an authorized employee no longer requires access for any other type of termination. Verbal notifications shall be confirmed in writing within 30 days.
- (b) The Contractor shall incorporate this clause in all subcontracts where the requirements identified in paragraph (a) of this clause are applicable to performance of the subcontract.
- 14. FAR Clause 18.52.237-71, Pension Portability, is hereby deleted in its entirety.
- 15. Attachment 6, page 147, is hereby deleted in its entirety, and the following is replaced in lieu thereof:

Attachment 6

Skill Matrix

The following charts are to assist in preparing your business proposal. The first chart reflects the percentage of the Level-of-Effort (LOE) which each labor classification is expected to perform on this contract (See Section L). The second chart defines the "Labor Experience Levels" used in the "Incumbent Experience Tables". The third set of charts (Incumbent Experience Tables) demonstrates the incumbent labor experience and their average labor rate for that level of experience. (These rates are current as of September 1, 1995.) This is followed by "Examples of Incumbent Skill Classifications" table which is the incumbent direct labor position titles from which the experience tables were composed. The data was supplied by the incumbent contractors and reflects their designated titles and positions. You are not required to propose these individual "position titles". These details are provided for informational purposes only.

In your proposal, explain how your skill mix's experience differs from the "Experience Tables" provided herein and how those changes might occur over time, if applicable.

SKILL MIX (to be used in the business proposal. Explain any differences, if applicable.):

<u>Labor</u>	% of LOE
Classification	Hours
Engineer	61%
Support	14%
Personnel	
Technician	25%

LABOR EXPERIENCE LEVELS:

Category I -- Senior Professional (Ph.D. and Ú3 years related experience, or Masters degree and >6 years experience, or Bachelors degree and >10 years experience)

Category II -- Journeyman Professional (Ph.D. and <3 years., or Masters

degree and 3 - 6 year experience, or Bachelors degree and 5 - 10 years experience)

Category III --- Junior Professional (Masters degree and <3 years

experience, Bachelors degree and <5 years experience)

Category IV -- Associate (High School diploma or equivalent)

**

ENCLOSURE 2
QUESTIONS AND ANSWERS

Responses to Questions Submitted for Solicitation No. 1-132-D.1166 Systems Analysis and Engineering Research Support -- SAERS

- Q-1 The next three questions refer to <u>FAR Supplement Clause 18-52.237-71</u>, <u>Pension Portability</u> This clause is not statutory. Could this clause be deleted from the awarded contract if the contractor has in place a pension plan that has vesting and portability features different from those required under this clause?
 - A-1 Clause 18-52.237-71, Pension Portability has been deleted..
- Q-2 What would be NASA's position if a contractor stated in its proposal that it could not accept this clause because of the structure of its current pension plan?
 - A-2 Clause 18-52.237-71, Pension Portability has been deleted..
- Q-3 Is the working of this clause negotiable? Could the current working regarding the vesting or portability requirements be changed? Could the requirement for written contracting officer's approval be change to notification instead?
 - A-3 Clause 18-52.237-71, Pension Portability has been deleted..
- Q-4 Will estimates for ODC's be provided?
 - A-4 No
- Q-5 What degree of project completion is encompassed by the DDT&E program to be specified and costed by the sample task? For example, would fabrication of a proto-flight aircraft be included in the DDT&E program?
 - A-5 The offeror needs to have access to industry standard costing algorithms to price a project at the conceptual level. Yes, fabrication of a proto-flight aircraft will be included in the DDT&E program.
- Q-6 We assume that the Government will provide all materials and equipment necessary to maintain and operate the aircraft for which the contractor has M&O responsibility. Is this assumption correct?
 - A-6 Yes, the Government will provide all materials and equipment necessary to maintain and operate the aircraft.
- Q-7 There appears to be no performance evaluation plan necessary for the distribution of the Award Fee.
 - A-7 The Award Fee Evaluation Plan will be developed by the Award Fee Board at contract award with input from the successful offeror.
- Q-8 What facilities will the government provide for <u>fabrication</u> and testing (SOW section 3.1, paragraph 2; SOW Section 3.2, paragraph 4)? If the contractor must provide fabrication equipment, what is required?
 - A-8 The references to fabrication have been removed in accordance with enclosure 1 to this amendement.
- Q-9 For each aircraft to be maintained under SAERS, please provide an estimate of the number of flight hours each aircraft will be operated per year.
 - A-9 7B-80 150 hours, T-34C 100 hours, T-38A 100 hours, UH-1H 100 hours, B-200 300 hours.

- Q-10 For each aircraft for which the contractor is required to supply pilots to function as co-pilots, please supply both the Seating Capacity and the number of flight hours anticipated each year.
 - A-10 B-757 seating 50 seats(approx).. Flight hours 100 per year. B-737 seating 35 (max.), Flight hours 100 per year
- Q-11 The task ordering procedure stated in G.3 does not address situations where the CO/COTR do not agree upon the value of a Task Order. Does this mean that the CO may unilaterally issue Task Orders?
 - A-11 The CO uses the COTR's recommendations to determine a fair and reasonable price; however, the CO ultimately has the authority to issue Task Orders.
- Q-12 Option to Purchase Contractor, Provided Vehicles and Equipment, provides for a government credit, should assets be sold for more than their depreciated value. Does this mean the government will pay the difference if they are sold at less than their depreciated value?

A-12 No

- Q-13 Option to Purchase Contractor- Provided Vehicles and Equipment Does this option apply only to equipment purchased and used exclusively on the SAERS contract, or does it apply to equipment previously purchased and partially depreciated which is then used on the SAERS contract; and/or to equipment jointly used on SAERS and other contracts?
 - A-13 This option applies only to equipment purchased and used exclusively on the SAERS contract.
- Q-14 How do we cost replacement of existing government facilities when they have reached their useful life? Section 4.14, page 18 states that "Facilities that reach the end of the their useful life... will not be replaced by the government nor will the government provide funds for the purchase of new facilities.
 - A-14 Page 116, Section L.35, paragraph F.4 indicates that each offeror should assume a replacement cost of \$100,000 for the basic contract and \$100,000 for each of the 1-year option periods as the basis for forecasting depreciation expenses.
- Q-15 For the SAERS solicitation, there is a mandatory 40% SDB participation goal, which is to be tracked by semi-annual reports trained in Exhibit F. The SAERS solicitation is also a small business set-aside; what is the mechanism for insuring compliance with this requirement? Is there a requirement that the PRIME contractor perform at least 50% of the work? If so, is this requirement based on hours or costs, and over what time interval is it evaluated?
 - A-15 See Page 19, clause 52.219-14, <u>Limitations on Subcontracting</u>. The clause states that "at least 50 percent of the cost of contract performance incurred for personnel shall be expended for employees of the concern."
- Q-16 For the purpose of responding to the Sample Task Orders specified in the RFP, should the proposer assume that contractor efforts during the period specified will result in the submission of "approval copies" as defined in Part III, Section J, Exhibit E of the RFP? Please clarify the period specified in the sample task in relation to the LaRC review and approval cycle.
 - A-16 The reports under sample task orders are of an informal nature and not subject to the requirements of Exhibit E.
- Q-17 <u>List of Installation</u> <u>Provided Government Property</u>, there is no property listed which is located in Building 1232. Does this imply that NONE of the computer hardware, software, and video equipment will be available to on-site contractors for production of computer generated videos?
 - A-17 The property is available in 1232T as listed in the property list.

- Q-18 Where and how does the RFP request the Reps and Certs (Section K) to be submitted?
 - A-18 The Reps and Certs are in Section K of the RFP and should be submitted as part of the business proposal.
- Q-19 <u>Test of Source Selection Procedures</u> It appears that if there are discussions, and prior to a BAFO being requested, there may be a *second* competitive range cut since you state "...a BAFO will be requested from all offerors <u>still within</u> (emphasis added) the competition range." Is this correct? If possible clarify evaluation process to be used for the SAERS solicitation.
 - A-19 No, there will not be a second competitive range cut.
- Q-20 (a) The last sentence of L.23 paragraph (a) requires the inclusion of supporting information, such as national and regional compensation surveys, used in establishing the total compensation structure. We assume that this supporting information will be excluded from the Volume I page count. Is this assumption correct?
 - A-20 Yes, You may include this information as an appendix to Volume II
- Q-21 Sect. L.30 states that the submission of cost or pricing data is not required. Therefore, shouldn't Section I include the clauses at 52.215-23 and -25 in lieu of -22 and -24, respectively? Please clarify.
 - A-21 Yes, these changes have been made as set forth in Enclosure 1.
- Q-22 How does the proposer gain access to contractor reports generated as a result of the contractor tasks sighted in the bidder's library for the SAERS contract?
 - A-22 If a Contractor Report has been published and contains a NASA report number then it can be obtained at the National Technical Information Center in Springfield, VA or the National Center for Aerospace Information located in Baltimore, Maryland
- Q-23 By "setting forth salaries and fringe benefits", are we not providing cost data in the technical proposal?
 - A-23 Yes, however it is to determine if each offeror has an adequate compensation plan. It will not be used for cost evaluation purposes.
- Q-24 What cost information for Sample Task Orders is necessary in the Technical Volume as opposed to the Business Volume?
 - A-24 All cost information necessary to permit a full and complete evaluation of sample task orders shall be included in the technical volume. No cost information should be included in the business volume related to the sample task orders.
- Q-25 What cost data should be presented relative to Total Compensation Plan and how does this relate to the Business Volume cost section(s)?
 - A-25 Yes, however it is to determine if each offeror has an adequate compensation plan. It will not be used for cost evaluation purposes.
- Q-26 Do graphics have to be full page width or are "1 column" graphics acceptable? If not, is it permissible to put text around a graphic which does not use the full width of a page?
 - A-26 Graphics imbedded in the text are acceptable.
- Q-27 Para D, <u>Page Limitation</u> -Is the requirement for 12 point type size with double-spacing satisfied by using standard word processor (MS Word or WordPerfect) font size (e.g. Times Roman 12) and space and a half line spacing?
 - A-27 No. Double spacing is required. Any 12 point font is acceptable, but it must be double spaced.

- Q-28 Para E, <u>Technical Proposal (Volume 1) Instructions</u>- requires a general discussion on the offeror's understanding of and approach to performing work in the area of Aircraft and Aircraft Systems Maintenance and Operations (Statement of Work Section 4.3). Will any of the Langley support aircraft require FAA certification? Will aircraft mechanics be required to maintain FAA certification (license)? Will an FAA flight certification station be required at Langley under this contract? What are the approximate number of hours per year the co-pilots (1st Officers) will be required?
 - A-28 Yes, There will be two NASA support aircraft that require FAA certification while at Langley. Aircraft mechanic certification is required for someone on the aircraft to sign off work, but the entire mechanic workforce does not presently require a A&P certification. FAA/NASA Langley are reviewing the pro's and con's now for Langley to become a repair station for the B-80 and B-200 aircraft, but no resolution has occurred as of today.
- Q-29 E. <u>Technical Proposal Factor 1</u>, Mission Suitability The 2nd and 3rd sentence of the first paragraph asks for a discussion of proposal risk associated with cost, schedule, and performance or technical aspects of the program. The 4th (and last) sentence of the paragraph states "The Mission Suitability Subfactors to be considered and discussed are set forth below:". We assume that this statement is only a lead-in to the Subfactors and does not mean that the offerer is also to discuss risk for each subfactor and each element of each subfactor as well. Is this assumption correct?
 - A-29 No, the discussion relating to proposal risk should be at the subfactor level.
- Q-30 The second sentence of Subfactor 2 requires the inclusion of a copy of the contractor's policies and procedures relative to uncompensated overtime. We assume that this material will be excluded from the Volume I page count. Is this assumption correct?
 - A-30 Yes, you may include this information as an appendix to Volume II.
- Q-31 Are the bidders allowed to place material, such as Page Number, Corporate/Team Logos, Nondisclosue Statements, outside of the 1" border?

A-31 Yes

- Q-32 E.1--offerors are instructed to respond to the sample tasks and provide general discussion of their understanding of and approach to performing work in the aeronautics systems analysis (SOW 3.1), project planning (SOW 4.2), and aircraft and aircraft systems maintenance and operations (SOW 4.3). Is it therefore, not necessary for the offeror to discuss their understanding of and approach to SOW Sections 3.2, 3.3, 4.1, and 4.4 outside of the sample tasks?
 - A-32 The offeror should provide a general discussion of their understanding of and approach to performing work in all areas covered by the SOW, including those represented by sample task orders. In addition, offerors should provide specific responses to sample task orders. The RFP will be modified in a subsequent amendment to reflect these changes.
- Q-33 The offeror would like to know whether the cost and pricing information to be provided in the business proposal are to be provided in specific forms or can the offeror develop their own forms. If specific forms are available, are they available in diskette forms?
 - A-33 The offeror can and should develop their own cost forms.
- Q-34 Para F, <u>Business Proposal (Volume 2) Instructions</u>- requires the submission of cost or pricing data. If so, why are offerors instructed to submit a Standard Form (SF) 1448, which is used when cost or pricing data are not required? Should not a SF 1411 be required instead?
 - A-34 L.35 Requests cost information not cost data. New FASA regulations prevent us from requesting Standard Form 1411.

- Q-35 F.3 Should we assume that the hours/cost for the contractor's Program Manager, i.e. the contractor's single point of contact for the entire contract, are included in the "direct labor hours" specified?
 - A-35 No. The program manager does not meet the definition of direct labor hours as specified in the RFP, (page 115, paragraph 3).
- Q-36 E.4 Will the "cost realism adjustment" be computed separately for the total contract, and for each sample task? How will the "adjustment" be weighted among these computations? For example, suppose a proposal was within $\pm 1.5\%$ for the contract and for three of the sample task order, and was $\pm 50\%$ for the fourth sample task order. What would be the computed "cost realism adjustment"?
 - A-36. The cost realism evaluation will apply only to the business proposal. These changes have been made as set forth in Enclosure 1.
- Q-37 F.3 Is the contractor required to propose the same skill mix as shown in Attachment 6?
 - A-37 No. Attachment 6 is for information purposes only.
- Q-38 F.3 Is the contractor required to propose the same rate shown in Attachment 6?
 - A-38 Attachment 6 is for information purposes only.
- Q-39 F.3 Other Cost and Pricing Information Required In view of the extension of the current research contracts to 6/30/96, please confirm the SAERS contract period of performance.
 - A-39 It is anticipated the SAERS contract will start on July 1st.
- Q-40 Regarding on-site vs. off-site performance L.35.F.5, does the RFP mean that 15% of the staff will be based in contractor supplied facilities? How does this compare with F.3 which states performance will be at LaRC?
 - A-40 It is anticipated that 15% of the staff will be based in contractor facilities. These changes have been made as set forth in Enclosure 1.
- Q-41 F.4 Would the contractor be required to replace obsolete property in excess of \$100,000?
 - A-41 No, the \$100,000 plug figure has been included to assist offerors in estimating depreciation expenses.
- Q-42 F.6e Does a narrative explanation have to be provided for both the list of the three firms receiving a REPP form and the list of other relevant contracts?

A-42 Yes

- Q-43 One of the evaluation criteria under Factor 1: <u>Mission Suitability</u>. Sub-factor 1: Understanding the Requirements and Technical Approach, is the offerors proposed schedule. In responding to the Sample Tasks, must the proposed schedule length be consistent with the period of performance listed with each Sample Task?
 - A-43 Base the duration of each task on your best estimate of the time it takes to complete the task but do not exceed the given duration limit.
- Q-44 How will the proposor's technical approach be used to define or modify the "cost realism adjustment"?
 - A-44 The Government evaluation will focus on the degree to which the proposed cost reflects the technical approach. Disparities between the technical approach and the proposed cost will initiate cost realism adjustments (see paragraph M.3.C of page 121 of the RFP)
- Q-45 Evaluation Factors (Factor 1, Subfactor 1)- The offeror's proposed costs for the sample task orders will be evaluated and reflected in the scoring for Factor 1, Subfactor 1. In addition, the proposed costs for the sample task orders will be evaluated for cost realism under Factor 1,

- Subfactor 4. Doesn't this constitute evaluating and scoring offerors for essentially the same thing (task order cost efficiency) under separate subfactors? Is this consistent with NASA and/or FAR evaluation and scoring techniques? At the preproposal conference please expand on the evaluation process for the SAERS solicitation.
 - A-45 The sample task orders will <u>not</u> be used in the cost realism evaluation. These changes have been made as set forth in Enclosure 1.
- Q-46 Is there any requirement to address Mission Suitability criteria in Section C-Description/Specifications/Work Statement, paragraphs 3.2 (Hypersonic Vehicle Design), 3.3 (Spacecraft Mission and System Performance Analysis), 4.1 (Flight Project Design), and 4.4 (Ground Test Systems) other than responding to the four Sample Tasks?
 - A-46 The offeror should provide a general discussion of their understanding of and approach to performing work in all areas covered by the SOW, including those represented by sample task orders. In addition, offerors should provide specific responses to sample task orders.
- Q-47 For proposal evaluation purposes, do the response to the Sample Task Orders cover totally the requirements of SOW sections 3.2, 3.3, 4.1, 4.4 even though not all SOW paragraph elements in these sections are covered in the Sample Task Orders?
 - A-47 The offeror should provide a general discussion of their understanding of and approach to performing work in all areas covered by the SOW, including those represented by sample task orders. In addition, offerors should provide specific responses to sample task orders.
- Q-48 Evaluation Factors (Factor 1, Subfactor 4) In evaluating the cost realism for the sample task orders under Factor 1, Subfactor 4, will the cost realism adjustment described in Paragraph C be assessed under the Basic Contract and not under the Options? If so, should the point total for the Basic Contract be greater than in each of the option years?
 - A-48 The sample task orders will <u>not</u> be used in the cost realism evaluation. The RFP will be modified to reflect this change in a subsequent amendment. The cost realism adjustment scheme remains unchanged.
- Q-49 Does NASA desire to see resumes of key personnel in either the Technical Proposal or the Business Proposal? Should key personnel be listed by name in responding to the Sample Tasks? Are key personnel considered in the evaluation process?
 - A-49 No, to all questions.
- Q-50 Since the Sample Task Orders are significantly different in scope and duration, how will the "cost realism adjustment" be computed and weighted?
 - A-50 Same as #36, The cost realism evaluation applies only to the business proposal.
- Q-51 How can the incumbent skill classifications be mapped into the incumbent experience tables in attachment 6 and to wage and salary data?
 - A-51 We have provided all the information we can in Attachment 6 without divulging propriety contract cost data.
- Q-52 In Attachment 6 Skill Mix: what happened to the "Scientist/Researcher" Experience table that was included in the request for incumbent direct charge labor costs surveyed in the August 1995 memo from David Jones, Contracting Officer? How should the category "Scientist/Researcher" be reflected in the proposed skill mix categories?
 - A-52 That data was collected for the ART RFP and does not apply.

- Q-53 Solicitation cover sheet, fifth paragraph, refers to original and eight copies of the proposal to be submitted. SF 33, Block 9, and RFP Section L.35.A require original and nine copies. Are we to assume that the SF 33 and RFP requirements take precedence, and that nine copies are desired?
 - A-53 Nine copies are required
- Q-54 How are the various incumbent skill classifications given in Attachment 6 defined?
 - A-54 The incumbent contractors were requested to provide their current skill mix, full-time-equivalent (FTE) staffing, and "position titles" relative to this effort. The "position titles" were to be provided under the three broad "skill classification" headings given in Attachment 6 -- "Engineer", "Support Personnel", or "Technician". Hence, the "position titles" in Attachment 6 are provided to give examples of the types of positions/skills used to develop the Experience Tables and Skill Mix table, and are incumbent contractor designated. They are not defined in the RFP. They are provided for informational proposes only. Your business proposal is not intended to contain the actual "position titles". Attachment 6, page 147, has been amended.
- Q-55 Is there a consistent standard required for stating skill classifications in the proposal?

A-55 No

- Q-56 Please verify the planned start date (May 1, 1996) and the expected delivery date (May 17, 1996) for Sample Task 3.2 are correct. Is this a typo or is the expected period of performance 17 days?
 - A-56 The planned period of performance is 17 days.
- Q-57 Page 32 (m) Are any of the current incumbent employees under a collective bargaining agreement? If so, which agreement?

A-57 No.

- Q-58 Page 66 (1a1) A 533m is required for each task along with a summary report. Will a single 533m with a line item for each task suffice?
 - A-58 A complete 533m is required for each task order. A single 533m with a line item for each task is insufficient.
- Q-59 Page 121 (c) How will the "cost realism adjustment" over the base and four options (60 points/period) be correlated to the cost of the sample task? (ref. subfactor 4, p113)
 - A-59 The sample task orders will not be used in the cost realism evaluation as revised in enclosure 1 to this evaluation.
- Q-60 Page 121 How will the "percent cost realism adjustment" be calculated?
 - A-60 The cost realism adjustment will be based on the offerors overall cost proposal in accordance with M.3.C of the solicitation.

- Q-61 What LaRC organization is supported by the RFP Section 4.4 (Ground Test)
 - A-61 Experimental Testing Technology Division (ETTD).
- Q-62 Page 138, Attach 5, Bidder's Library Index Item 11, LHB 7910.1 is not available and is not listed in the index resident in the Library. How can we get this document?
 - A-62 LHB 7910.1 is now included in the SAERS Bidders Library.
- Q-63 Sections L and M. <u>Technical Proposal</u>, Subfactor 2 require the offeror to provide a total compensation plan setting forth salaries and fringe benefits proposed for the professional and nonprofessional employees who will work under the contract. Paragraph L.25 requires that <u>subcontractors</u> having a value in excess of \$500,000 provide a total compensation plan as part of their proposals. Is the subcontractor compensation information specified in L.24 required in the offerors technical proposal or is it to be included in the subcontractors cost proposal which is normally submitted by the subcontractor directly to the government or in a separate sealed package. We assume subcontractor total compensation information submitted separately does not count as part of the 50 page Technical Proposal.
 - A-63 The subcontractors total compensation plan (primarily salaries and fringe benefits) can be submitted separately to protect proprietary data. The direct discussion of the subcontractors total compensation plan will be included in the prime offerors page count; however, the additional supporting information, such as national and regional compensation surveys, used in establishing the total compensation structure may be included as an appendix to volume II of the proposal. The correct page limitation for the Technical Proposal is 75 pages.
- Q-64 You have added the information required by adding "General Discussion" of SOW tasks with a sample task. Will you allow an appropriate page count increase to accommodate this?
 - A-64 The page count limitation remains unchanged.
- Q-65 Page 117, L.35 F.6 The solicitation requests completed REPP forms from current or previous customers.
- 1) Does this allow more than 1 customer on a large, relevant contract (e.g., one which may have several technical task monitors)? Or is this a "one customer per contract" request?
- 2) Is the customer (e.g., a technical task monitor) allowed or expected to solicit information from other sources to respond to evaluation factors he/she may be unaware of, e.g. overhead and G&A yearly growth?
- A-65 The REPP forms should be requested on a "one customer per contract" basis. The customer is allowed to solicit information from other sources to respond to the REPP form.
- Q-66 F.3 Is the off-site work primarily of the computational type or will it require laboratory and/or fabrication and H/W test capabilities?
 - A-66 Primarily of a computational type. See A-67.

Q-67 F.3 Is there a breakout of the on-site/off-site % of work by SOW area/topic paragraph?

A-67	On-site	Off-site
3.0 Systems Analysis and Integration Studies		
3.1 Aeronautics Systems Analysis	12%	0%
3.2 Hypersonic Vehicle Design, Systems Analysis, an	d	
Computational Studies	12%	0%
3.3 Spacecraft Mission and System Performance		
Analysis	10%	10%
4.0 Engineering and Operations Support		
4.1 Flight Project Design, Engineering and Developm	ent 23%	5%
4.2 Project Planning	11%	0%
4.3 Aircraft and Aircraft Systems Maintenance and		
Options	16%	0%
4.4 Ground Test Systems and Test Technique Devel.	1%	1%

However, this is based on today's current environment and budgetary limitations.

Q-68 Page 116, L.34 Page 116 and 5 states that about 15% of the work will be off-site. Please identify the off-site work in terms of the work distribution percentages presented during the briefing.

A-68 See A-67.

ENCLOSURE 3

LIST OF ATTENDEES AT PREPROPOSAL CONFERENCE

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ENCLOSURE 4

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SAERS

Systems Analysis and Engineering Research Support

Preproposal Conference RFP 1-132-D.1166

Friday, January 26,1996

Pearl I. Young Theater Building 1202A





Outline

- Agenda
- General Guidance
- Langley Today
- Centers of Excellence and Core Competencies
- Relation of SAERS to Core Competencies
- Consolidation Strategy
- Introductions
- Schedule
- Performance Based Contracts
- Award Without Discussion
- SAERS Scope of Work
 - 3.0 Systems Analysis and Integration Studies
 4.0 Engineering and Operations Support
- Government Furnished Facilities
- Contract Management
- **Questions and Answers**
- Summary

Agenda

9:00	Conference Guidelines	Scott Wagner
9:10	Welcoming Remarks	Dr. Belinda Adams
9:20	Introductions	Panice Clark
9:30	Statement of Work - Section 3.0	Fred Staggs
10:00	Break	
10:15	Statement of Work - Section 4.0	Fred Staggs
10:45	Question and Answer Session	Tom Weih
noon	Adjourn	All
	9:10 9:20 9:30 10:00 10:15 10:45	9:10 Welcoming Remarks 9:20 Introductions 9:30 Statement of Work - Section 3.0 10:00 Break 10:15 Statement of Work - Section 4.0 10:45 Question and Answer Session





- All questions and answers, copies of all vugraphs, and an attendance list will be forwarded to all firms on the bidders list, as Amendment 1, following this conference.
- All revisions to the RFP will be in writing; nothing said here today should be construed as a revision unless subsequently confirmed by written amendment.
- Written questions will be collected during the break and at the conclusion of this conference.
- Previously submitted questions will be addressed in the question and answer session at the conclusion of this conference.
- All communications about this RFP must be directed to C. Thomas Weih, Contract Specialist (see Section L.28, p. 109 in the RFP), or in his absence, Panice Clark, Head, Grants and Services Contracts Branch.

Langley Today

A vital part of NASA, integrally linked to the NASA Strategic Plan

- Langley is heavily involved in the Aeronautics Strategic Enterprise
- Langley conducts system analysis/independent assessment in support of all Agency Enterprises
- Langley is key participant in Mission to Planet Earth Enterprise
- Langley supports agency Space Access and Technology Enterprise in selected technology areas synergistic with aeronautics expertise and capabilities











Centers of Excellence and Core Competencies

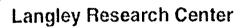
Centers of Excellence

Airframe Systems (Aeronautics)

Systems Analysis and selected Space Technology (HEDS, ST, MTPE, SCI) Earth Radiation and Atmospheric Chemistry/Dynamics (MTPE)

Core Competencies

Systems Analysis/Integration			
Aerodynamics & Aerothermodynamics incl. Hypersonic Propulsion	Structures & Materials	Airborne Systems & Crew Station	Atmospheric Sciences
Wind Tunnels/Labs/Computers/Simulators/Aircraft			



Relation of SAERS to Core Competencies

Systems Analysis and Engineering Research Support Contract - SAERS

Aerodynamics & Aerothermodynamics incl. Hypersonic Propulsion Aerothermodynamics incl. Hypersonic Propulsion Structures & Structures & Systems & Crew Station Airborne Systems & Crew Station Structures & Systems & Crew Station Wind Tunnels/Labs/Computers/Simulators/Aircraft



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- Parts of the LME&S contract and 10 small Research Service Contracts will be consolidated into the SAERS contract.
- SAERS will provide a conduit for performance based Task
 Orders that provide support in the areas of mission/systems
 analysis; and engineering to support research, and aircraft
 operations.
- This consolidation will eliminate overlapping scopes, aid performance-basing, and prevent situations which could lead to personal services.
- The performance based Task Orders will specify results, schedule, cost limitations, and measures of success.





Introductions

- Contracting Officer
 - Panice Clark
- Contract Specialist
 - Tom Weih
- Contracting Officer's Technical Representative
 - Fred Staggs
- Source Evaluation Board Members
 - Scott Wagner, Chair IOG
 - Lenwood Clark SASPG
 - Bob Pegg HVO
 - Anita Thomas IOG
 - Tom Weih IOG
 - Donna Jones, Recorder IOG
- Source Selection Official
 - H. Lee Beach, Jr.



Schedule

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12-January RFP Release and Communications Blackout

A

26-January Preproposal Conference

F

26-February Proposals due

Selection (target)

early June

late May

Award (target)

early July

Start-up (target)



Performance Based Contracts

- OMB issued guidance in both 1991 and 1994.
- NASA signed a formal OMB pledge to increase the use of PBC and report on specific PCB procurements.
- Administrator committed to \$100-220M in savings through use of PBC -- reductions first reflected in FY-96 budget.
- Administrator directed use of "objective" contracting -identical to PBC in many respects.
 - Results oriented acquisition.
 - Clearly and crisply define what results are needed and also define what is acceptable quality.
 - Structure contract to motivate contractor to deliver what is needed at specified level of quality.
 - Contractor determines how to achieve specified results and quality.

Award Without Discussion

- To streamline the procurement process, the Government intends to award the contract resulting from this solicitation without discussions.
- Situations where proposals include substantive exception should be avoided.
- Exceptions, questions, or additions to the proposed contract terms and conditions should be raised prior to the proposal due date.
- The Government will comment to all offerors on the acceptability or nonacceptability of any exceptions using solicitation Amendments prior to the due date.
- In the event that the Government later determines that discussion are necessary, the Contractors' attention is directed to Section L, L.22, Test of Source Selection Procedures.









SAERS Scope of Work

- 3.0 Systems Analysis and Integration Studies
 - 3.1 Aeronautics Systems Analysis
 - 3.2 Hypersonic Vehicle Design, Systems Analysis, and Computational Studies
 - 3.3 Spacecraft Mission and System Performance Analysis
- 4.0 Engineering and Operations Support
 - 4.1 Flight Project Design, Engineering, and Development
 - 4.2 Project Planning
 - 4.3 Aircraft and Aircraft Systems Maintenance and Operations
 - 4.4 Ground Test Systems and Test Technique Development
 - √ Sample Task Order

3.1 Aeronautics Systems Analysis

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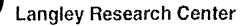




SAERS Distribution of Effort*

3.0	Systems Analysis and Integration Studies 44%	
	3.1 Aeronautics Systems Analysis	12%
	3.2 Hypersonic Vehicle Design, Systems Analysis, and Computational Studies	12%
	3.3 Spacecraft Mission and System Performance Analysis	20%
4.0	Engineering and Operations Support56%	
	4.1 Flight Project Design, Engineering, and Development	28%
	4.2 Project Planning	11%
	4.3 Aircraft and Aircraft Systems Maintenance and Operations	16%
	4.4 Ground Test Systems and Test Technique Development	1%

*Anticipated start-up levels



3.1 Aeronautical Systems Analysis

- The contractor shall perform systems analysis for advanced military and civil aircraft designs.
- Tasks will include:
 - Conceptual design studies of aircraft concepts, components, and subsystems and investigation of the impact/interaction of the key technologies on the survivability of the aircraft concept.
 - Evaluation and mission studies identifying and assessing critical and high payoff technologies.
 - Aerodynamic and sonic boom studies on candidate High-Speed Research Program configurations.
 - Aerodynamic integration, structural analysis, packaging, mission performance, and acoustic studies of High-Speed Civil Transport concepts.
 - Multi-disciplinary systems studies of unique military aircraft configurations.



3.2 Hypersonic Vehicle Design, Systems Analysis, and Computational Studies

- The contractor shall perform airframe and engine design/ performance tasks.
- Tasks will include:
 - Hypersonic vehicle conceptual/preliminary design and systems studies.
 - Optimization of vehicle performance.
 - Analyses to predict the complete aerodynamic and propulsive performance including thermal balance and the effects on high temperature structures for high-speed and hypersonic vehicles.
 - Computational fluid dynamics studies to predict overall vehicle performance



3.2 Hypersonic Vehicle Design, Systems Analysis, and Computational Studies



3.3 Spacecraft Mission and System Performance Analysis

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- The contractor shall perform systems analysis for advanced International Space Station, future Earth-orbiting spacecraft, and in-space experiments.
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- Task will include:
 - Use analysis techniques and tools to simulate 6-degree of freedom dynamics and control for Space Station, future spacecraft, and in-space experiments.
 - Use scientific visualization techniques and tools to facilitate the understanding of complex engineering analyses.
 - Develop and maintain satellite mission analysis techniques and tools to mathematically and visually simulate spacecraft.
 - Perform detailed design and systems analyses of remote sensing instrument concepts.
 - Provide technical and administrative expertise for Independent Readiness Reviews and assessments of NASA space missions.

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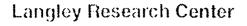
3.3 Spacecraft Mission and System Performance Analysis

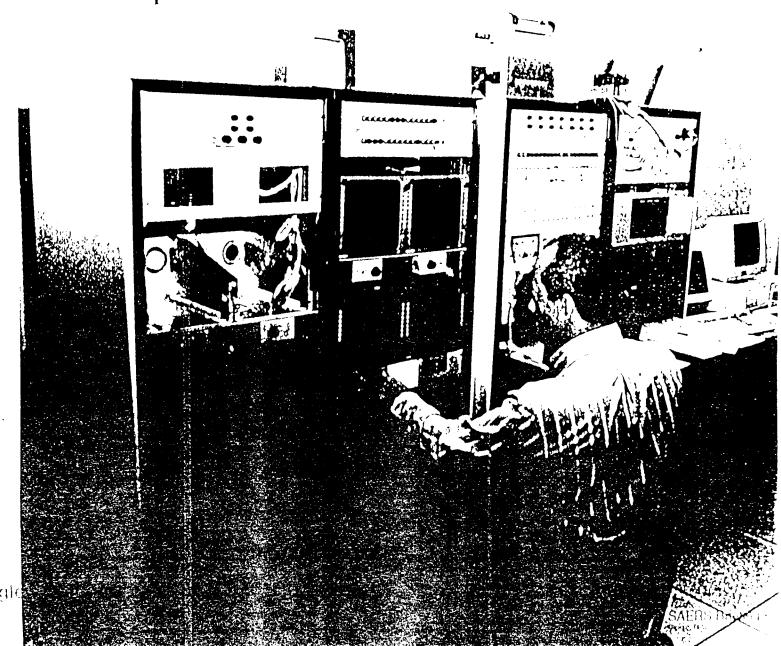


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- The contractor shall perform engineering analyses for aeronautics and space flight programs.
- · Tasks will include:
 - Design, development, testing, integration, operation, and data retrieval of flight experiments.
 - Development of state-of-the-art measurement techniques, data retrieval, and data processing systems.
 - Design and analysis for systems that may form a part of larger systems. Specific requirements include:
 - Mechanical design/engineering
 - Electronic design/engineering
 - Controls
 - Thermal and structural analysis and design
 - Electro-optics sensor and detector design/engineering



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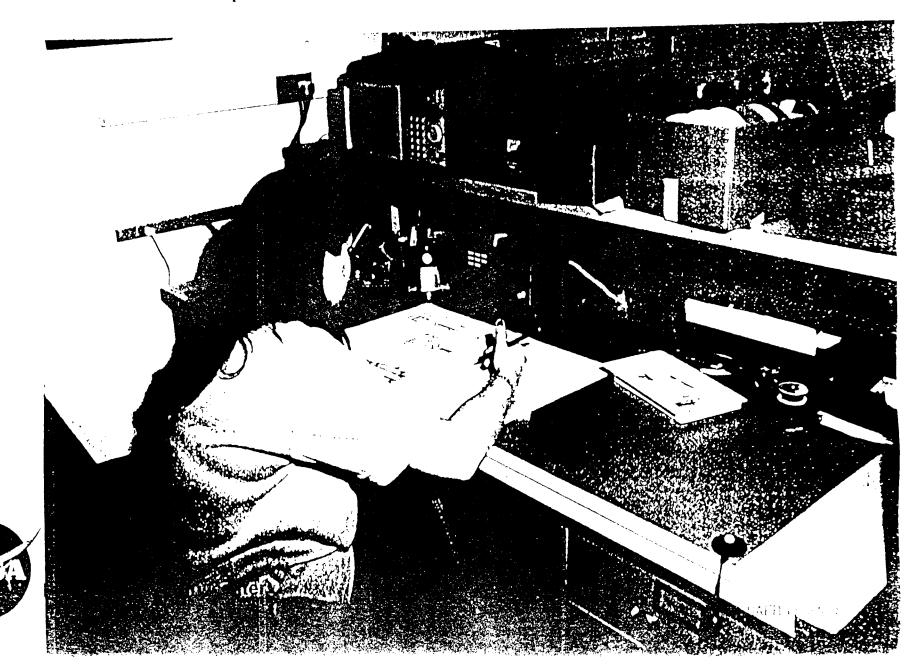




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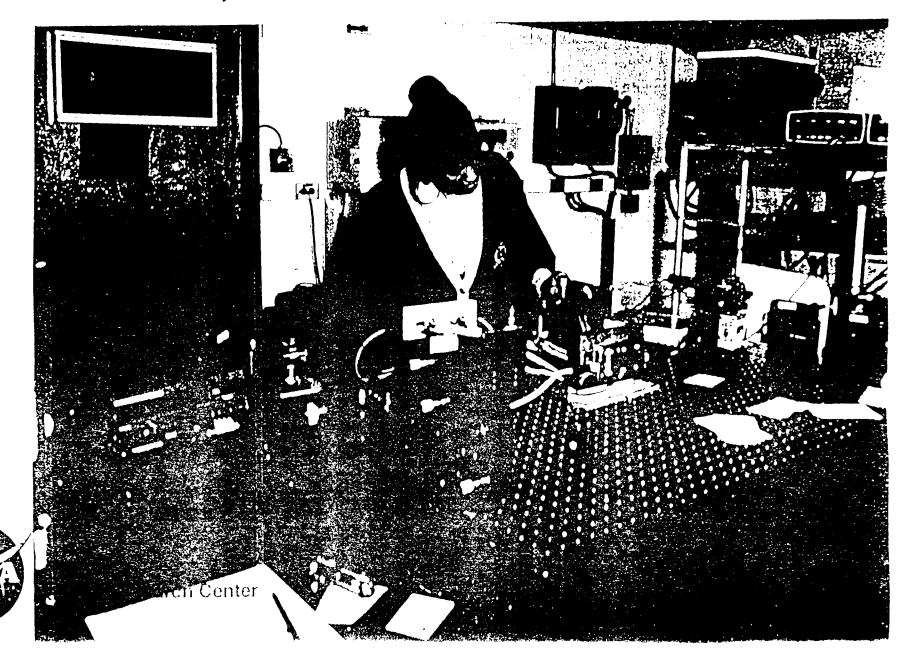


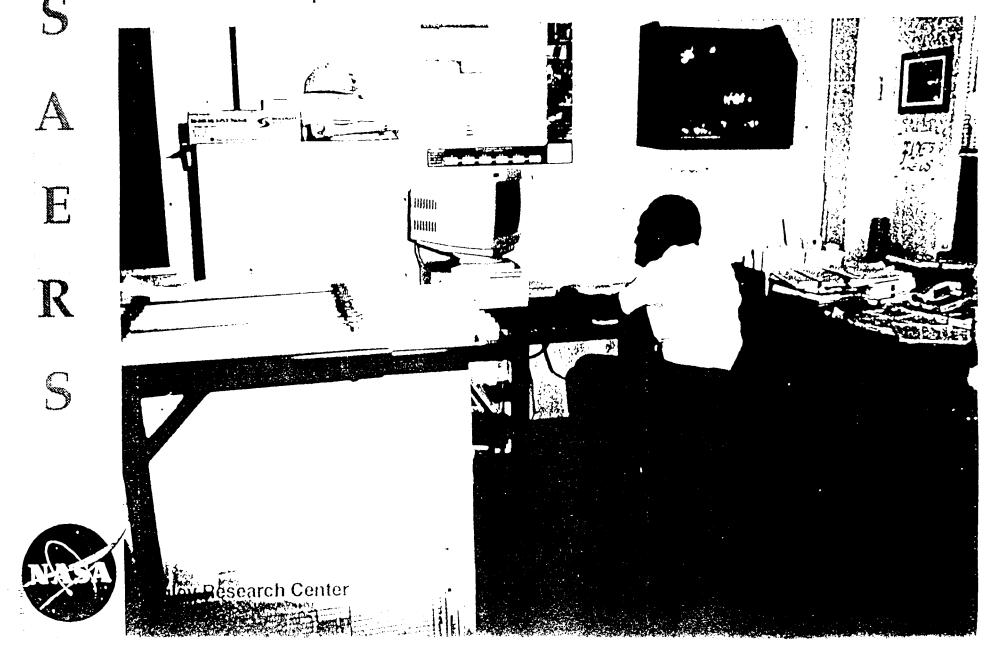




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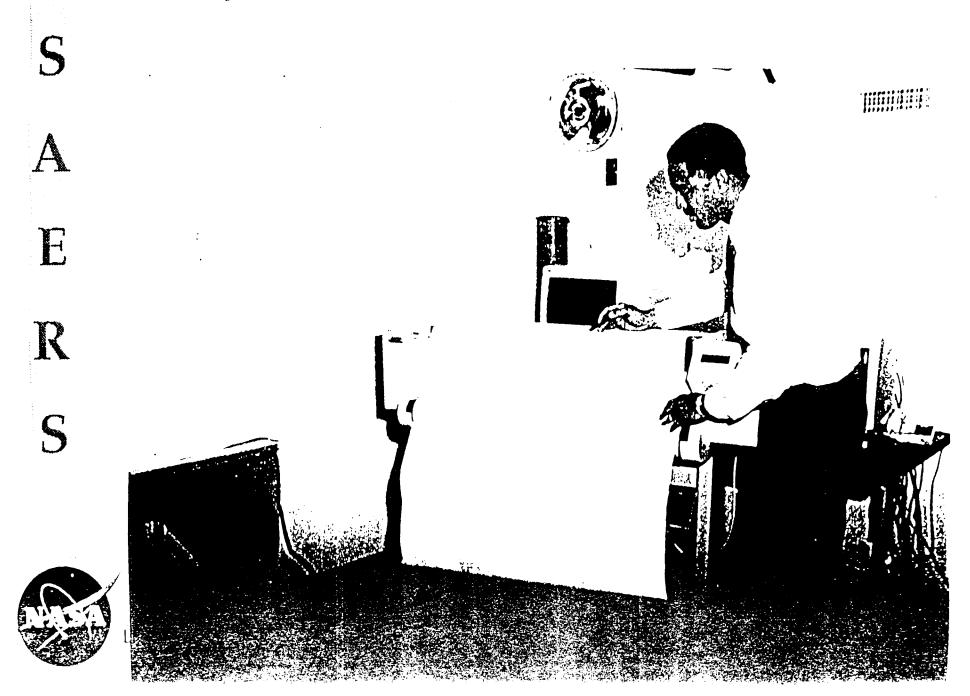
4.2 Project Planning

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- The contractor shall provide scheduling for aeronautics, space, and facility construction projects.
- Tasks will include:
 - Schedules and plans for research projects, technology projects, facility tests, flight operations, space projects, and facility construction projects.
 - These will be a component of each project's performance measurement system.
 - Parametric cost estimates for comparison with grassroots bottoms-up estimates.



4.2 Project Planning



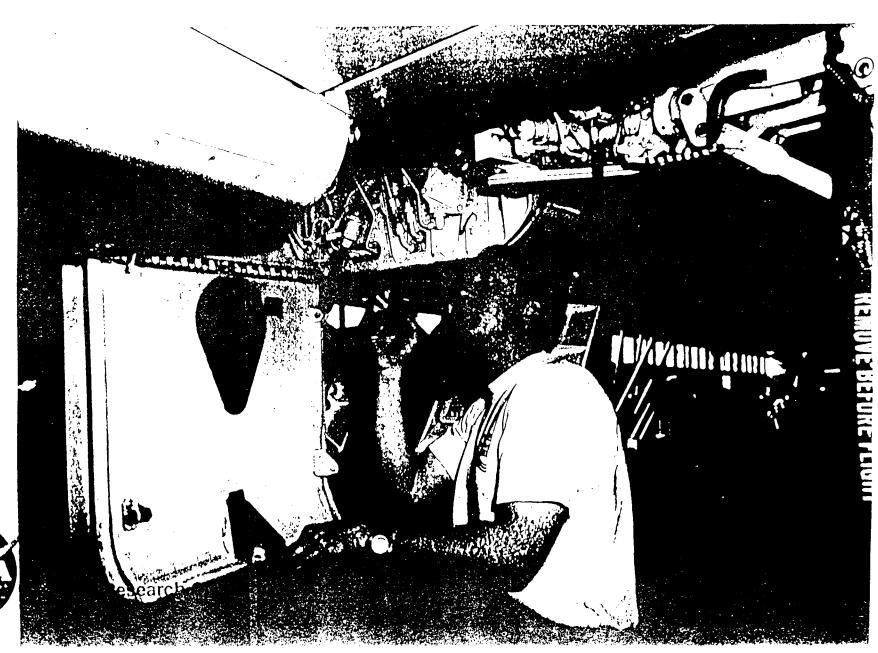
4.3 Aircraft and Aircraft Systems Maintenance and Operations

- The contractor shall perform maintenance, modification, and repair for all support aircraft and support flight operations.
- Tasks will include:
 - Maintenance and operation of the experimental systems of the Langley Transport Systems Research Vehicles (TSRV) and the Experimental Avionics Systems Integration Laboratory Vehicles (EASILY).
 - Minor maintenance and repair of aircraft including avionics and electrical equipment.
 - Operation, minor maintenance, and repair of the Langley Flight
 Control Center.
 - Qualified and current co-pilots for research aircraft as needed.

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4.3 Aircraft and Aircraft Systems Maintenance and Operations

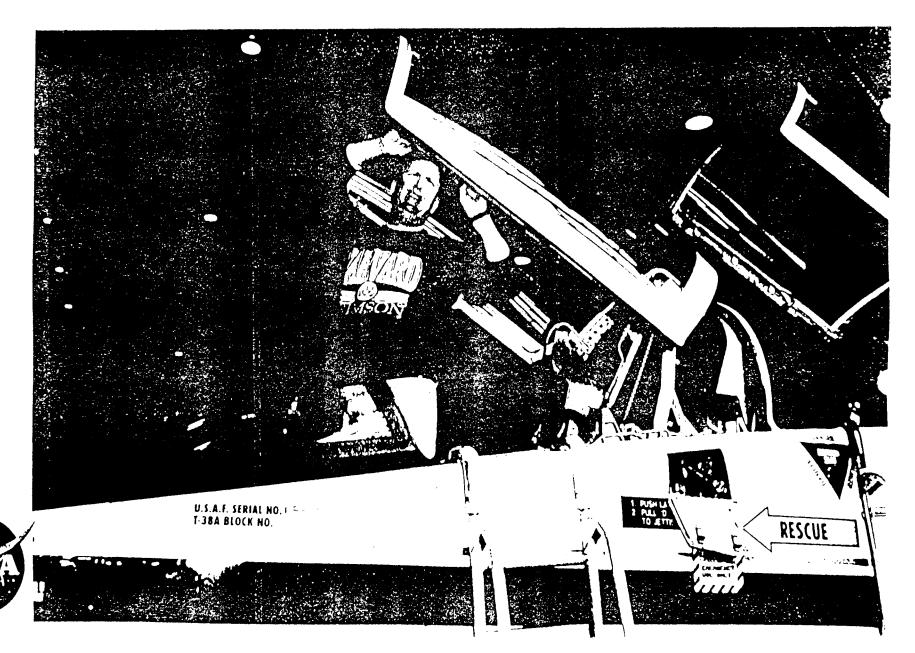
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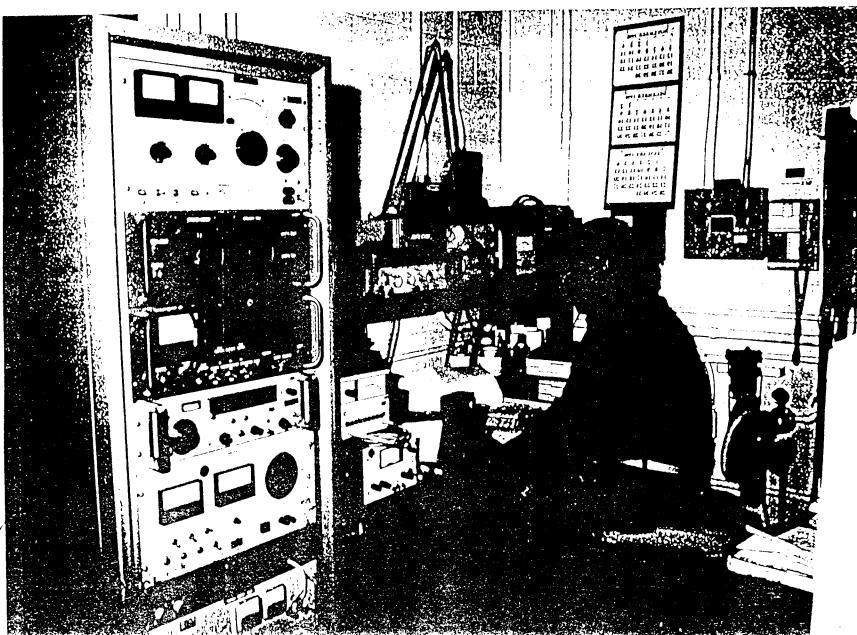
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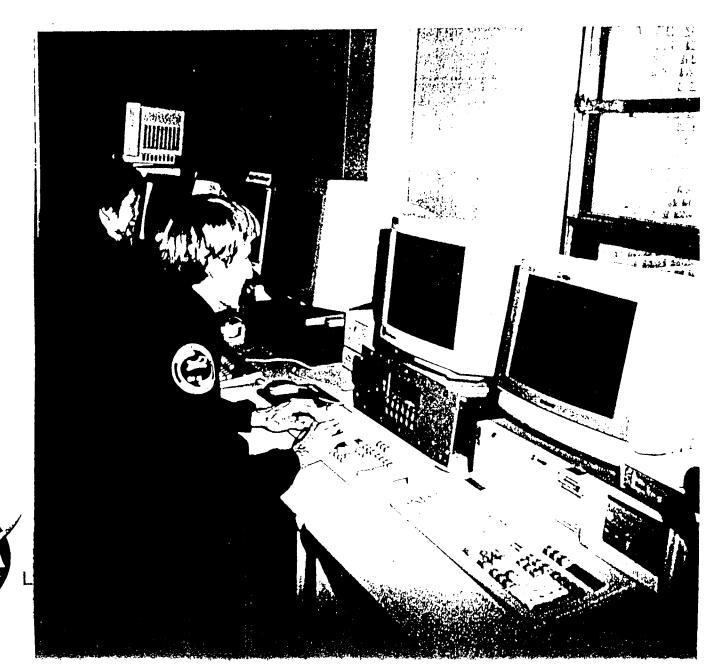


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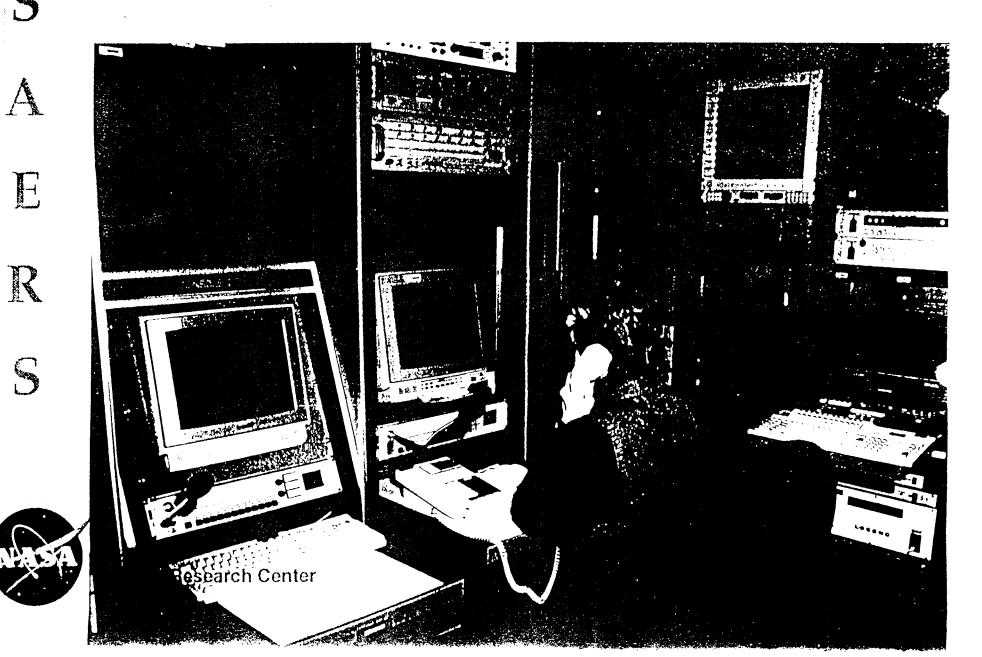
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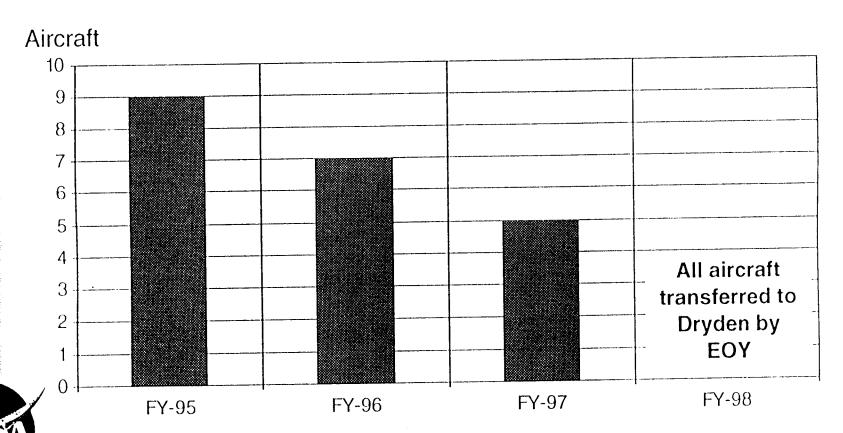


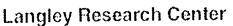
SAEHS Briefing -



Flight Operations Consolidation

- Number of Langley aircraft at end-of-year -- current plan.
- However, Langley will continue to modify and operate experimental systems to meet program research objectives.





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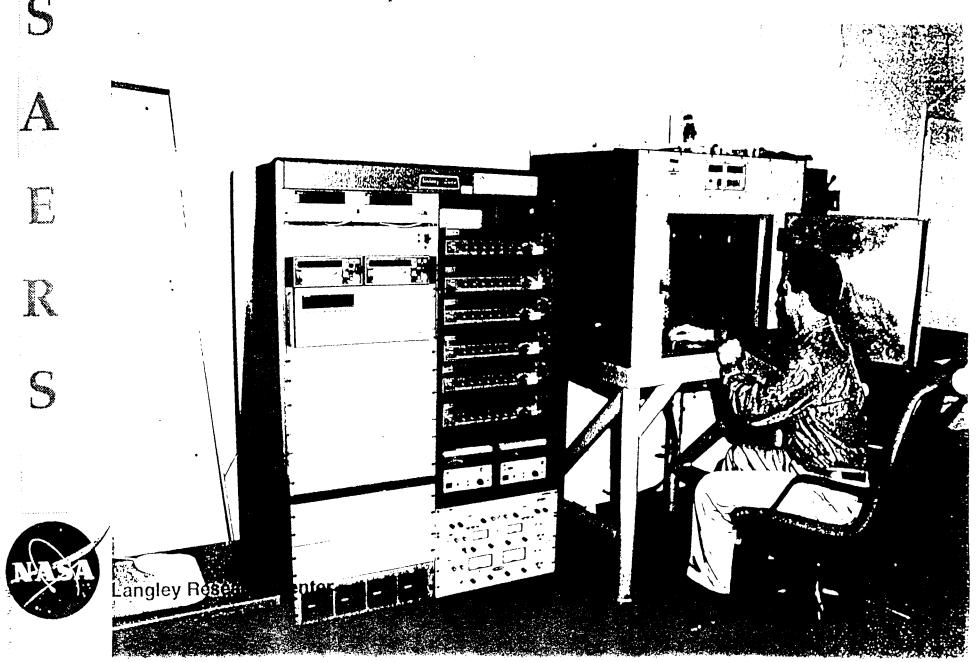
4.4 Ground Test Systems and Test Technique Development

- The contractor shall design and implement data acquisition and reduction systems, instrument systems, and test processes for use in wind tunnels and laboratories.
- Tasks will include:
 - Use state-of-the-art technology to develop innovative test techniques, test hardware, and systems.
 - Complete design analyses, fabricate/procure subsystems, assemble, test, and document system performance.



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4.4 Ground Test Systems and Test Technique Development



Government Furnished Facilities

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- No Government facilities or equipment will be provided for off-site use.
 - see RFP Section H, paragraph H.14
- Existing Installation-provided Government property will be provided on-site
 - Laboratory space
 - Office space
 - Furniture
 - Equipment
- Any of the existing equipment listed in Exhibit A that expires during this contract will not be replaced nor will funds be provided for new or replacement equipment.
 - see RFP Section H, paragraph H.14



Contract Management

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Performance based Task Orders will be used.

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Process for new Task Orders:

- Requesting organization provides task definition/requirements, schedule, cost limitations, and measures of success.
- COTR reviews Task Order, ensures it is within scope, and written in performance based terms.
- COTR requests contractor work plan, schedule, cost estimate, and measures of success.
- Requesting organization reviews plan and provides COTR with feedback.
- COTR forwards Task Order to Contracting Officer.
- Contracting Officer issues Task Order.
- Semi annual award fee evaluation process.



Langley Research Center

Questions and Answers

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- Following RFP release, Contract Specialist received 46 questions by fax and mail prior to COB 23-January.
 - Answers to these questions will be provided in this conference.
- Answers to these questions and those received today will be combined and provided with the Amendment to the RFP.

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Langley Research Center

Summary

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- Solicitation process changed to streamline procurement.
- Services are being acquired in a dynamic environment where the NASA budget is subject to continual changes.
- Performance and accountability are stressed in the performance based contracting approach.
- Flexibility will also be necessary.





National Aeronautics and Space Administration

Langley Research Center Hampton, Virginia 23681-0001

SOLICITATION

1-132-D.1166

REQUIREMENT:

SYSTEMS ANALYSIS & ENGINEERING RESEARCH SUPPORT (SAERS)

IMPORTANT NOTICE:

The resultant contract will be a Small Business Set-Aside with a mandatory 40% Small Disadvantaged Business (SDB) participation goal (at the prime and/or subcontract level). (See L.35, Proposal Preparation and Submission--Special Instructions.) The goal also includes participation by small business concerns owned and controlled by women, Historically Black Colleges and Universities and other minority institutions. Offerors will be evaluated on the proposed SDB participation goal in comparison to the 40% goal, as an element under the Management Operations subfactor under the Mission Suitability factor, in accordance with M.2.A.3 of the solicitation.

The Government intends to award the contract resulting from this solicitation without discussions (See Section L clause entitled Contract Award, FAR 52.215-16 (OCT 1995).—Alternate II (OCT 1995)). We would like to avoid situations where proposals include substantive exceptions to the proposed contract terms and conditions which might be unacceptable to the Government and therefore preclude award. Therefore, it is requested and strongly recommended that you bring to the Government's attention prior to the proposal due date any exceptions, questions, or additions you have to the proposed contract terms and conditions. This will allow the Government to comment to all offerors on the acceptability or nonacceptability of these exceptions (e.g., additions, deletions, changes) by use of solicitation amendments prior to proposal receipt. The resolution of any exceptions to terms and conditions prior to proposal receipt will aid the Government in its intention to award without discussions and thus streamline the procurement process.

In the event that the Government later determines that discussions are necessary, the Contractor's attention is hereby directed to Section L. L.22. Test of Source Selection Procedures. This section defines the FAR procedures that will be used in lieu of the traditional NASA FAR Supplement procedures.

The resultant contract will be a cost-plus-award-fee task order contract. Any of the individual task orders issued under the contract may be placed on a "cost reimbursable, completion form" basis, but none will be level-of-effort term.

In addition to the original and eight copies of your proposal to be received in accordance with Block 9 of the Standard Form (SF) 33, one copy shall be sent directly to the cognizant DCAA office with a cover sheet referencing the solicitation number in Block 3 of the SF 33.

A bidder's library has been established for prospective offerors and will remain open through the proposal due date. Although attendance at the bidder's library is not mandatory to bid this procurement, it is highly encouraged. See L.32 for details.

A pre-proposal conference will be held at Langley Research Center on January 26, 1996. See L.26 for details.

It is anticipated that approximately eight Top Secret Clearances (six direct labor personnel and two supervisory level personnel) will be required at contract start to perform task order(s) related to Section 3.1, Aeronautics Systems Analysis of the Statement of Work (SOW). These requirements, however, are subject to change as new task orders are issued and others are completed.

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PART I - THE SCHEDULE

SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS

B.1 SUPPLIES AND/OR SERVICES TO BE FURNISHED (NASA 18-52.210-72) (DEC 1988)

The Contractor shall provide all resources (except as may be expressly stated in this contract as furnished by the Government) necessary to furnish the required supplies and/or services in accordance with the Description/Specifications/Work Statement in Section C.

B.2 ESTIMATED COST, AWARD FEE AND FIXED FEE

The estimated cost of this contract, is \$, exclusive of the award fee of \$, and fixed fee* of \$0. Total estimated cost and maximum award fee are \$.

B.3 AWARD FEE AVAILABILITY SCHEDULE

The award fee available for each evaluation period will be determined based on the task orders performed during that period. If a task order is started and completed during a particular evaluation period, then the award fee for that particular task order will be included in the award fee available for that period only. If a task order is started in a particular evaluation period and extends beyond that period, then the award fee for that particular task will be distributed by the Government (with input from the Contractor) across the appropriate evaluation periods, considering the work to be performed in each impacted period. At the end of each evaluation period, the total available award fee pool will be added to the contract by modification.

Period

Available Award Fee

May 1, 1996 - October 31, 1996 November 1, 1996 - April 30, 1997

- B.4 CONTRACT FUNDING (NASA 18-52.232-81) (JUN 1990)
- (a) For purposes of payment of cost, exclusive of fee, in accordance with the Limitation of Funds clause, the total amount allotted by the Government to this contract is \$. This allotment is for and covers the following estimated period of performance:
- (b) An additional amount of \$\ is obligated under this contract for payment of fee.

^{*}A fixed fee amount will be inserted if the Government exercises any of the six one-month options to extend the contract term as set forth in H.3, Options.

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.1 STATEMENT OF WORK--SYSTEMS ANALYSIS AND ENGINEERING RESEARCH SUPPORT CONTRACT (SAERS)

1.0 Purpose

This statement of work defines the NASA Langley Research Center requirement for engineering services to support research on aerospace physical phenomena. These requirements include, but are not limited to, technical tasks in the functional areas of systems analysis and integration studies; and engineering and operation support.

2.0 Scope

The Contractor shall support Langley aeronautical and space research systems analysis and engineering activities. Specific requirements will be defined in task orders issued by the Contracting Officer. Some of these task orders may be classified (up to Top Secret). The scope and diversity of these task orders will encompass the broad scope of the mission responsibilities of the Langley's Aerospace research systems analysis and engineering activities and programs. The general categories of work to be performed under the task orders are outlined below.

3.0 Systems Analysis and Integration Studies

3.1 <u>Aeronautics Systems Analysis</u> - The Contractor shall perform systems analysis and conceptual studies for advanced military and civil aircraft designs. The output of these systems analysis and integration studies will be used by NASA to evaluate the technical content of ongoing and proposed vehicle research programs.

The Contractor shall perform conceptual design studies of future aircraft components and subsystems and shall investigate the impact and interaction of the key technologies on the survivability of the aircraft concept. Key technical issues shall be addressed through analysis and/or experimental testing. The Contractor shall perform other tasks that include analysis, design, fabrication, and testing of high temperature structures for supersonic vehicles as well as applied computational fluid dynamics (CFD) analyses for interpretation of supersonic experimental results.

The Contractor shall conduct evaluations and mission studies for advanced aircraft including large passenger transports, very large cargo transports, and general aviation aircraft concepts with the purpose of identifying and assessing critical and high payoff technology requirements that would need further research before final acceptance by NASA end-users. The Contractor shall also support future aeronautical requirements and the benefits associated with research programs to meet those requirements.

The Contractor shall conduct aerodynamic and sonic-boom research studies on candidate High-Speed Research Program (HSR) configurations. The Contractor shall perform computational fluid dynamics (CFD) optimization and

analysis of High-Speed Civil Transport (HSCT) geometries in order to reduce the sonic-boom level while maintaining aerodynamic efficiency. Geometry of optimized HSCT configurations shall be developed in sufficient detail to allow for wind-tunnel model construction. Additionally, the Contractor shall validate standard and newly developed steady-state primary-carpet sonic-boom propagation codes and higher order analysis methods by utilizing flight test data from aircraft such as the SR-71, XB-70, as well as other flight experiments. Accuracy of the ground sonic-boom level in both psf and PLdB shall be verified along with the rate of shock coalescence through the atmosphere.

The Contractor shall complete tasks for Langley Aerospace Research programs by conducting aerodynamic integration, structural analysis, packaging, mission performance and acoustic studies of High-Speed Civil Transport (HSCT) aircraft concepts. These studies shall be performed to determine the optimum aerodynamic, weight and cost characteristics of these vehicles. Technology integration studies shall be performed by the Contractor to determine the relative merits and risks of emerging technologies applicable to a HSCT. Experimental data, as available, shall be incorporated into these studies. A suite of computer programs shall be utilized for these studies. The Contractor shall maintain these programs and make modifications necessary to reflect the state-of-the-art and to improve the study results.

The Contractor shall conduct multi-disciplinary systems studies that examine unique military aircraft configurations, evaluate the application of advanced research technologies to military aircraft, and develop or modify methodology necessary to analyze same. (Information regarding military aircraft will be provided with each task order when it is issued to the Contractor.) The Contractor shall be responsible for generating or analyzing the configuration layout, aerodynamics, weights, propulsion, performance, and sizing of advanced military configurations including both fighter/attack and military airlift transport aircraft.

3.2 <u>Hypersonic Vehicle Design, Systems Analysis and Computational Studies</u> - The Contractor shall perform airframe and engine design/performance tasks. These include engine/airframe integration, to explore, resolve, and establish the hypersonic airbreathing vehicle design/performance/technology matrix for advanced endoatmospheric and space-access concepts and assessing advanced transportation systems. These designs shall include Mach 4 to 8 cruise missiles, Mach 4 to 12 cruise airplanes, Mach 0 to 25 Single-Stage-to-Orbit (SSTO) vehicles, and Two-Stage-to-Orbit (TSTO) vehicles. Resolution of the vehicle design/performance sensitivities is required to establish and prioritize NASA's research activities. A goal is to perform the vehicle design/performance tasks with enhanced fidelity, resolution and efficiency while evolving the design, performance and optimization methods.

The Contractor shall develop hypersonic vehicle conceptual/preliminary designs and conduct systems studies which require numerous, detailed engineering analyses to adequately resolve performance for these vehicles. The Contractor shall perform multidisciplinary analysis in a synergistic manner in order to account for the numerous interactions and sensitivities among the design parameters of this vehicle class. Optimization of vehicle performance will be a major thrust of analytical efforts; this requires discipline methods enhancement

and synthesis development. Each subtask shall be accomplished in sufficient detail to establish design and performance characteristics, meet specific subtask requirements, and deliver an appropriate level of accuracy.

The objective of the computational studies for Hypersonics is to provide applied analytical and numerical support of high speed and hypersonic vehicle studies and hypersonic propulsion technology experimental studies in support of the research programs at Langley. The Contractor may be required to conduct analyses associated with prediction of the complete aerodynamic and propulsive performance including thermal balance and their effect on high temperature structures for high-speed and hypersonic vehicles. The Contractor shall provide analyses to assist in interpretation of complex 3-D internal and external flow fields associated with hypersonic experimental programs.

The Contractor shall apply computational fluid dynamics (CFD) for predicting overall vehicle performance (powered and unpowered) at hypersonic speeds. Experimental, analytical, and CFD studies shall be used by the Contractor to advance methodologies for flight scaling at hypersonic speeds. Some of these studies are: parametric CFD studies of propulsion flowpaths including forebody, inlet, combustor, and nozzle; experimental, analytical, and/or CFD studies of basic fluid physics phenomena, including boundary-layer transition and their effect on structures. The Contractor shall provide, improve, and calibrate the tools and techniques necessary for analysis of hypersonic flight test vehicle designs and other hypersonic configurations. The Contractor shall perform other tasks that will include analysis, design, fabrication, and testing of high-temperature structures for hypersonic vehicles as well as applied CFD for interpretation of hypersonic experimental results.

3.3 <u>Spacecraft Mission and System Performance Analysis</u> - The Contractor shall apply state-of-the-art analysis techniques and tools to mathematically simulate six degrees of freedom dynamics and control of the international Space Station, future spacecraft, and in-space experiments in order to derive and/or verify mission and operations requirements and procedures. The Contractor shall assess the impacts of incorporating advanced guidance, navigation, and control technologies and/or operations on spacecraft mission requirements and performance and overall spacecraft systems designs.

The Contractor shall apply state-of-the-art scientific visualization techniques and tools to facilitate the understanding of complex engineering analysis. Methods of visual presentation shall be developed by the Contractor in order to derive and or verify mission and operations requirements and procedures for the international Space Station, future spacecraft, and inspace experiments. The Contractor shall visually demonstrate the impacts of differing guidance, navigation and control techniques, mechanical operations and remote sensing technologies on spacecraft mission requirements, performance and overall spacecraft systems design.

The Contractor shall develop and maintain state-of-the-art satellite mission analysis techniques and tools to be used for both mathematically and visually simulating Earth-orbiting spacecraft. These techniques and tools should at a minimum provide the capability to fully address Earth-orbiting spacecraft trajectory design along with sensor and communications coverage.

The Contractor shall perform detailed design and systems analysis of remote sensing instrument concepts. The Contractor shall review concepts for ability to meet science research and development requirements, use of new technology, overall size, mass, power, data rates, data processing requirements, etc. The Contractor shall develop remote sensing instrument simulation models and provide assessments of technology design and analysis to meet performance in remote sensing instruments used for commercial applications.

The Contractor shall perform Communication and Tracking (C&T) system sizing and conceptual designs for pre-phase A/Phase A spacecraft studies. The Contractor shall support C&T software design and analysis tool development, maintenance, and utilization. The Contractor shall develop and maintain C&T component data bases. The Contractor shall identify necessary technologies for future C&T research and development programs.

The Contractor shall complete tasks in engineering, systems analysis and information management for the development of space experiments and for utilization and accommodation analyses. The Contractor shall complete tasks for NASA's Technology Experiment and Microgravity Experiment Programs to ensure that the technical and science objectives of the flight experiments are met.

The Contractor shall provide disciplinary expertise for analysis of specific configurations of spacecraft and space transportation vehicles. The primary disciplines include geometry, packaging, weights and sizing, aerodynamics, aeroheating, propulsion, performance, structures, costs, communications, command and data handling, power, thermal control, guidance, navigation and control, and operations.

The Contractor shall provide technical and logistics support for External Independent Readiness Reviews and assessments of major NASA space missions. The review technical areas include optics, science instruments (including detectors and electronics), science instrument accommodations, structures and dynamics, computers and software, spacecraft subsystems, propulsion, systems engineering, launch vehicle accommodations, and mission operations.

The Contractor shall provide improvements in the computer-aided design and engineering (CADE) techniques for conceptual modeling, design, optimization, and analysis of the systems/subsystems, environments, and physical hardware and phenomena relevant to advanced spacecraft and transportation vehicles.

4.0 Engineering and Operations Support

4.1 Flight Project Design, Engineering, and Development - The Contractor shall provide the design, development, testing, integration, operation, and data retrieval for aeronautics and space flight programs, including the support of mechanical and electronic design of systems for both ground-based and flight (balloon, rotorcraft, aircraft, and spacecraft) use. The Contractor shall develop state-of-the-art measurement techniques, data retrieval and data processing systems required in current and future Langley projects. The Contractor shall complete technical design and analysis tasks such as mechanical

design/engineering, electronic design/engineering, controls, thermal and structural analysis and design, electro-optics sensor and detector design/engineering for systems that may form a part of larger systems. The Contractor shall use electronic design and analysis tools that are consistent with those used by the government so that output can be consolidated with higher level processes.

4.2 <u>Project Planning</u> - The Contractor shall complete tasks involving focused technology projects, basic research projects, facilities test planning, flight operations and space projects, and construction of facility projects. The scheduling system provided by the Contractor shall be a component of the project performance measurement plans. The Contractor shall prepare standard analytical reports which include critical path analysis, contingency evaluation schedules, status impact assessments, problem analysis, and recommended solutions. The Contractor shall develop planning/scheduling software applications which include menus for user friendly access and data entry, standard tabular reports and graphics for data output. The Contractor shall develop routines for the exchange of data between different software packages. The Contractor shall prepare parametric cost estimates for comparison with grassroots bottoms-up estimates for various Langley technical projects.

4.3 Aircraft and Aircraft Systems Maintenance and Operations

The Contractor shall perform tasks involving the maintenance and operation of the experimental systems of the Langley Transport Systems Research Vehicles (TSRV) and the Experimental Avionics Systems Integration Laboratory (EASILY). Specific tasks will address navigation, flight controls and software engineering, digital avionics systems interfaces, and experimental systems documentation. The Contractor shall maintain configuration control and documentation for all experimental systems.

The Contractor shall complete specific tasks involving flight operations by performing maintenance, modification, and repair for all support aircraft assigned to Langley. This maintenance will cover all activities associated with routine and unscheduled maintenance and servicing of all aircraft systems including avionics and electrical equipment. The Contractor shall conduct routine and unscheduled maintenance on assigned aircraft as well a ground support equipment. The Contractor shall supply and maintain an adequate inventory of spare parts and supplies for the assigned aircraft to achieve a high degree of aircraft operational readiness. The Contractor shall be responsible for the quality of the aircraft maintenance, products produced, or general services provided. Other task areas of aircraft operations include the operation, minor maintenance, and repair for the Langley Flight Control Center and meteorology office. The Contractor shall operate flight survival equipment, maintenance and issuance operations in support of Langley flight vehicles.

The Contractor shall provide qualified and current pilots to function as the copilot (1st Officer) on for the Langley B-737/100 and the B-757/200 aircraft on an "on-call" basis when required to meet project commitments. Such pilots must meet FAA requirements for basic aircraft qualification and meet FAA currency requirements in the aircraft.

4.4 Ground Test Systems and Test Technique Development

The Contractor shall design and implement data acquisition and reduction systems, instrumentation systems and test processes for research testing in wind tunnel and laboratory environments. The Contractor shall use knowledge of the state-of-the-art in instrumentation and measurement systems, data acquisition and reduction methodology, and processing systems to support new and on-going programs in acoustical, structural, and aerodynamic research programs.

The Contractor shall use the state-of-the-art in test technology to develop innovative test techniques, test hardware, and systems to support the ground facility testing at Langley. Test techniques/systems will be used in laboratory as well as wind tunnel test environments. The Contractor shall complete technical design, analysis, and fabrication tasks in mechanical, electrical and or electronic, thermal, chemical and optical measurement systems to support aerodynamic, structural and acoustical testing.

SECTION D - PACKAGING AND MARKING

- D.1 PACKAGING AND MARKING (ALTERNATE I) (NASA 18-52.210-75) (SEP 1990)
- (a) The Contractor shall preserve, pack, and mark for shipment all items deliverable under this contract in accordance with good commercial practices and adequate to ensure both acceptance by common carrier and safe transportation at the most economical rate(s).
- (b) The Contractor's markings on shipping containers shall be clearly legible from a distance of 36 inches. The Contractor may mark by stencil, rubber stamp, or lacquer over a coated gummed label.
 - (c) The Contractor shall place identical requirements on all subcontracts.

<u>SECTION E - INSPECTION AND ACCEPTANCE</u>

E.1 FINAL INSPECTION AND ACCEPTANCE (LaRC 52.246-94) (OCT 1992)

Final inspection and acceptance of all items specified for delivery under this contract shall be accomplished by the Contracting Officer or his duly authorized representative at destination as specified in task orders.

SECTION F - DELIVERIES OR PERFORMANCE

F.1 PERIOD OF PERFORMANCE - TASK ORDERS

- A. The period of performance for issuance of task orders is 12 months from the effective date of this contract, which is the date of signature by the Contracting Officer of NASA Langley Research Center.
- B. Any task orders issued prior to the expiration of the period of performance for issuance of task orders shall be completed, subject to the limitations specified in B.2; provided that the Contractor will not be required to

perform any work beyond 12 months after the period of performance for issuing task orders.

F.2 PLACE OF DELIVERY (LaRC 52.212-92) (OCT 1992)

Delivery shall be f.o.b. destination as specified in task orders.

F.3 PLACE(S) OF PERFORMANCE (LaRC 52.212-98) (OCT 1992)

The place(s) of performance shall be:

NASA, Langley Research Center, Hampton, Virginia; and other sites as may be designated by task orders.

<u>SECTION G - CONTRACT ADMINISTRATION DATA</u>

- G.1 SUBMISSION OF VOUCHERS FOR PAYMENT (NASA 18-52.216-87) (DEC 1988)
- (a) Public vouchers for payment of costs and fee shall include a reference to this contract NAS1-TBD and be forwarded to:

NASA Langley Research Center Attn: Financial Management Division, MS 175 Hampton, VA 23681-0001

This is the designated paying office for cost and fee vouchers for purposes of the Prompt Payment clause of this contract.

Cost vouchers shall be submitted through

Fee vouchers shall be submitted through

- (b) The Contractor shall prepare vouchers as follows:
- (1) One original Standard Form (SF) 1034, SF 1035, or equivalent Contractor's attachment.
- (2) Two copies of SF 1034A, SF 1035A, or equivalent Contractor's attachment.
- (3) The Contractor shall mark SF 1034A copies 1, 2, 3, 4, and such other copies as may be directed by the Contracting Officer by insertion in the memorandum block the names and addresses as follows:
 - (i) Copy 1 NASA Contracting Officer;
 - (ii) Copy 2 Auditor;
 - (iii) Copy 3 Contractor
 - (iv) Copy 4 Contract administration office; and
- (v) Copy 5 Project management office (when required by the NASA Contracting Officer).

- (c) In the event that amounts are withheld from payment in accordance with provisions of this contract, a separate voucher for the amount withheld will be required before payment for that amount may be made.
- G.2 LIST OF INSTALLATION-PROVIDED PROPERTY AND SERVICES (NASA 18-52.245-77) (MAR 1989)

In accordance with the Installation Provided Government Property clause of this contract, the Contractor is authorized use of the types of property and services listed below, to the extent they are available, while on-site at the NASA installation.

- (a) Office space, work area space, utilities and existing furniture. The Contractor shall use Government telephones for official purposes only.
- (b) Existing general- and special-purpose equipment.
- (1) Existing equipment to be made available to the Contractor for use in performance of this contract on-site is listed in Exhibit A. The Government retains accountability for this property under the Installation-Provided Government Property clause, regardless of its authorized location.
- (2) The Contractor shall not acquire property as a direct cost under this contract, unless written authorization is granted by the Contracting Officer. When authorized, this property also shall become accountable to the Government upon its entry into the NASA Equipment Management System (NEMS) in accordance with the property-reporting requirements of this contract.
- (3) The Contractor shall advise the Contracting Officer, in writing, before it brings property owned or leased by the Contractor, or other property that the Contractor is accountable for under any other Government contract, on-site for use on this contract.
- (c) Publications and blank forms stocked by the installation.
- (d) Institutional fire and security protection necessary to protect NASA facilities.
- (e) Medical treatment of a first-aid nature for Contractor personnel injuries or illnesses sustained during on-site duty.
- (f) Cafeteria privileges for Contractor employees during normal operating hours.
- (g) Building maintenance for facilities occupied by Contractor personnel.
- (h) Moving and hauling of Government property.
- (i) The responsibilities of the Contractor as contemplated by paragraph (a) of the Installation-Provided Government Property clause are defined in the following property management directives and installation supplements to these Directives:
 - (1) NHB 4200.1, NASA Equipment Management Manual.

- (2) NHB 4200.2, NASA Equipment Management System (NEMS) User's Guide for Property Custodians.
- (3) NHB 4300.1, NASA Personal Property Disposal Manual.
- (4) NHB 4100.1, NASA Materials Inventory Management Manual.

G.3 TASK ORDERS

- A. As part of the procedures for issuing a task order, the Contractor shall normally submit, within 15 calendar days after receipt of each draft task order, a written Contractor task plan. The Contractor's task plan shall contain the information discussed below, which will be used in preparation of the final task order.
 - 1. Discussion of the technical approach for performing the work.
- 2. Estimated date of commencement of work and any changes proposed to the schedule of performance.
 - 3. Direct Labor Estimate
 - 4. The travel and material estimates.
 - 5. An estimate for subcontractors and consultants.
 - 6. Estimated computer use time required, if applicable.
- 7. Other pertinent information, such as indirect costs and interdivisional transfers.
- 8. The total estimated cost and fee, where appropriate, for completion of the task order. If a particular task order extends beyond a particular award fee evaluation period then the Contractor shall propose the appropriate distribution of award fee that is applicable for each period. Appropriate justification shall support the distribution of award fee.
- 9. The task plan represents the baseline to be used for reporting in Columns 7b and 7d of NASA Form 533M (See Exhibit B, Paragraph I.A.1).
- B. The Contracting Officer and the COTR will review the Contractor's task plan. The Contracting Officer will negotiate any necessary changes with the Contractor. Written task orders will be issued solely by the Contracting Officer, and will contain the following information:
 - 1. Task order number and date
 - 2. Description of work and/or deliverable items.
 - 3. Total cost limitation
 - 4. Required completion date and/or delivery schedule
 - 5. Appropriate special instructions or information

- 6. Evaluation metrics for deliverables
- C. The Contracting Officer may modify task orders in the same manner they are issued.
- D. In the event that there is a conflict between the requirements of the task order and the Contractor's task plan, the task order shall prevail.
- E. A copy of each task order shall be furnished to the Contractor. To acknowledge receipt, the Contractor shall sign the "Acknowledgment" enclosed and return it to the Contracting Officer.

G.4 TASK ORDER LIMITATIONS

Each task order shall specify a total cost limitation. Notwithstanding the Limitation of Funds clause, the Contractor shall not exceed the authorized cost set forth in each task order. If it becomes necessary to increase the cost limitation, the Contracting Officer will do so in writing via a task order modification.

G.5 CONTRACT CLOSEOUT (LaRC 52.242-90) (JUN 1988)

- A. Reassignment--After receipt, inspection, and acceptance by the Government of all required articles and/or services, and resolution of any pending issues raised during the Period of Performance, this contract will be reassigned to the NASA Langley Research Center "Contracting Officer for Contract Closeout." All transactions subsequent to the physical completion of the contract should, therefore, be addressed to the said Contracting Officer at NASA Langley Research Center, Mail Stop 126, who may be reached by telephone at (804) 864-7765.
- B. "Quick Closeout"--Paragraph (f) of the Allowable Cost and Payment clause of this contract addresses the "Quick Closeout Procedure" delineated by Subpart 42.7 of the Federal Acquisition Regulation (FAR). It should be understood that the said procedure applies to the settlement of indirect costs for a specific contract in advance of the determination of final indirect cost rates when the amount of unsettled indirect cost to be allocated to the contract is relatively insignificant. Therefore, the "Quick Closeout" procedure does not preclude the provisions of paragraph (d) of the Allowable Cost and Payment clause nor does it constitute a waiver of final audit of the Contractor's Completion Voucher.
- C. Completion Voucher Submittal--Notwithstanding the provisions of the Allowable Cost and Payment clause, as soon as practicable after settlement of the Contractor's indirect cost rates applicable to performance of the contract, the Contractor shall submit a Completion Voucher as required by the aforesaid clause. The Completion Voucher shall be supported by a cumulative claim and reconciliation statement and executed NASA Forms 778, Contractor's Release, and 780, Contractor's Assignment of Refunds, Rebates, Credits, and Other Amounts. Unless directed otherwise by the Contracting Officer for Contract Closeout, the Contractor shall forward the said Completion Voucher directly to the cognizant Government Agency to which audit functions under the contract have been delegated.

SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.1 RIGHTS TO PROPOSAL DATA (TECHNICAL) (FAR 52.227-23) (JUN 1987)

Except for data contained on pages ______, it is agreed that as a condition of award of this contract, and notwithstanding the conditions of any notice appearing thereon, the Government shall have unlimited rights (as defined in the "Rights in Data - General" clause contained in this contract) in and to the technical data contained in the proposal dated _______, upon which this contract is based.

H.2 LIMITATION OF FUTURE CONTRACTING (NASA 18-52.209-71) (DEC 1988)

- (a) The Contracting Officer has determined that this acquisition may give rise to a potential organizational conflict of interest. Accordingly, the attention of all prospective offerors is invited to FAR Subpart 9.5--Organizational Conflicts of Interest.
- (b) The nature of this conflict in the performance of task orders involves: the management of the evaluation of Announcements of Opportunity (AO) process; the management of External Readiness Reviews and assessment processes, the evaluation of the Contractor's own products; access to other companies proprietary data; and participation by the Contractor in the development of requirements and specifications for both software and hardware systems.
- (c) The restrictions upon future contracting are as follows:
- (1) If the Contractor, under the terms of this contract, or through the performance of tasks pursuant to this contract, is required to develop specifications or statements of work that are to be incorporated into a solicitation, the Contractor shall be ineligible to perform the work described in that solicitation as a prime or first-tier subcontractor under an ensuing NASA contract. This restriction shall remain in effect for a reasonable time, as agreed to by the Contracting Officer and the Contractor, sufficient to avoid unfair competitive advantage or potential bias (this time shall in no case be less than the duration of the initial production contract). NASA shall not unilaterally require the Contractor to prepare such specifications or statements of work under this contract.
- (2) To the extent that the work under this contract requires access to proprietary, business confidential, or financial data of other companies, and as long as such data remains proprietary or confidential, the Contractor shall protect these data from unauthorized use and disclosure and agrees not to use them to compete with those other companies.

H.3 OPTIONS

A. Priced Options/Extended Services

Pursuant to the Section I clause entitled "Option to Extend the Term of the Contract (MAR 1989)," and FAR 37.111, the Contractor hereby grants to the Government options to extend the term of the contract by four one-year periods and six one-month periods. The first through fourth option periods are to be exercisable by issuance of a unilateral modification no later than 30 calendar days prior to the expiration of the contract. The fifth through tenth option periods are to be exercisable by issuance of a unilateral modification prior to

the expiration of the contract. Upon exercise of such option(s) by the Government, the following items will be increased by the amounts specified below for each option period.

<u>Item</u>	First Option Period	Second Option Period	Third Option Period	Fourth Option Period
Period of Perform- ance (Ref. F.1)	12 months	12 months	12 months	12 months
Estimated Cost (Ref. B.2)	\$	\$	\$	\$
*Award Fee (Ref. B.2)	\$	\$	\$	\$
Overtime Premium (Ref. Section I Clause 52.222-2)	\$	\$	\$	\$
**Small Disadvantaged Business Goal	\$	\$	\$	\$
B. Fifth throu	gh Tenth Optio	n Periods		

	Fifth Option <u>Period</u>	Sixth Option <u>Period</u>	Seventh Option Period	Eighth Option <u>Period</u>	Ninth Option <u>Period</u>	Tenth Option <u>Period</u>
Period of Performance (Ref. F.1)	1 month	1 month	1 month	1 month	1 month	1 month
Estimated Cost (Ref. B.2)	\$	\$	\$	\$	\$	\$
Fixed Fee (Ref. B.2)	\$	\$	\$	\$	\$	\$

H.4 PROCUREMENT AUTHORITY (201-39.5202-3) (OCT 90 FIRMR)

This acquisition is being conducted under the regulatory delegation of GSA's exclusive procurement authority for FIP resources. The specific GSA DPA case number is not applicable.

^{*}The award fee available for each evaluation period will be determined in accordance with Provision B.3, Award Fee Availability Schedule.

^{**}The Small Disadvantaged Business (SDB) Goal is not applicable if an award is made to a SDB Contractor.

H.5 CONTRACTOR EMPLOYEE'S SECURITY CLEARANCE (LaRC 52.204-90) (OCT 1992)

By virtue of their particular work assignment, certain Contractor employees, may be required to have a security clearance granted in accordance with DOD 5220.22M, "Department of Defense Industrial Security Manual for the Safeguarding of Classified Information (ISM)". Clearances will be issued by the Department of Defense (DOD). Within 10 working days after an employee is identified by the Government and/or the Contractor as requiring a SECRET or higher clearance, the Contractor shall submit to the Contracting Officer evidence of the submittal of a request for clearance to DOD for such employee. If the clearance for an employee has not been issued by DOD within 120 calendar days of the submittal of the request for clearance to DOD, the Contractor may be required to remove the employee from the contract.

H.6 SECURITY PROGRAM/FOREIGN NATIONAL EMPLOYEE INVESTIGATIVE REQUIREMENTS (LaRC 52.204-91) (NOV 1991)

Prior to reporting to Langley Research Center (LaRC) to perform under a contract or grant, each Foreign National shall have approval for access to LaRC facilities from NASA Headquarters, International Relations Division (Code IR). A copy of the access authorization request shall be provided to the LaRC Chief of Security. Additionally, an investigation by the Government shall be completed on each Foreign National contractor prior to reporting to LaRC to perform under a contract or grant. A properly executed "Name Check Request" (NASA Form 531) and a completed "applicant" fingerprint card shall be submitted to the LaRC Security Office, Mail Stop 182, for each Foreign National contractor at least 75 days prior to the estimated entry on duty date. The NF 531 and fingerprint card may be obtained from the LaRC Security Office. If the access approval is obtained from NASA Headquarters prior to completion of the investigation, and the Contracting Officer requires a Foreign National to work on LaRC, an escort request may be considered by the LaRC Chief of Security. If necessary, an escort request shall be submitted by the employer of the foreign national. The LaRC Chief of Security will review this request and determine if an escort is appropriate and applicable. If approved, the specific escort will be performed by an individual designated by the LaRC Security Officer that meets U.S. citizenship and other suitability standards.

H.7 WORK SCHEDULE--ON-SITE ONLY

In order that the necessary and proper inspection of the Contractor's work may be effectively accomplished, and to assure the availability of required Government interface, the Contractor shall schedule work performance hereunder so as to be compatible with the established workweek and hours of work observed by the Government organization having cognizance over the work being performed.

H.8 OBSERVATION OF REGULATIONS AND IDENTIFICATION OF CONTRACTOR'S EMPLOYEES (LaRC 52.212-104) (MAR 1992)

A. Observation of Regulations--In performance of that part of the contract work which may be performed at Langley Research Center or other Government installation, the Contractor shall require its employees to observe the rules and

regulations as prescribed by the authorities at Langley Research Center or other installation.

B. Identification Badges--At all times while on LaRC property, the Contractor shall require its employees, subcontractors and agents to wear badges which will be issued by the NASA Contract Badge and Pass Office, located at 1 Langley Boulevard (Building No. 1228). Badges shall be issued only between the hours of 6:30 a.m. and 4:30 p.m., Monday through Friday. Contractors will be held accountable for these badges, and may be required to validate outstanding badges on an annual basis with the NASA LaRC Security Office. Immediately after employee termination or contract completion, badges shall be returned to the NASA Contract Badge and Pass Office.

H.9 INCORPORATION OF REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS BY REFERENCE

Pursuant to FAR 15.406-1(b), the completed Representations, Certifications and Other Statements of Offerors dated is hereby incorporated by reference.

H.10 VIRGINIA AND LOCAL SALES TAXES (LaRC 52.229-92) (APR 1992)

To perform this contract, the Contractor must be knowledgeable of relevant state and local taxes when making purchases of tangible personal property. The Contractor shall refrain from paying nonapplicable taxes or taxes where an exemption exists, but shall pay applicable taxes that are reimbursable pursuant to FAR 31.205-41, Taxes. Even though title to property purchased under this contract may pass to the Government and the price is reimbursable under contract cost principles, such transactions do not in themselves provide tax immunity to the Contractor. Therefore, within 30 days after the effective date of this contract, the Contractor shall request from the Virginia State Tax Commission a ruling on any tax exemptions that may be applicable to purchases made under this contract. The Contractor shall provide all facts relevant to the situation and shall pursue an interpretation of the law that is most favorable to both the Contractor and the Government.

H.11 OPTION TO PURCHASE CONTRACTOR-PROVIDED VEHICLES AND EQUIPMENT

At the end of the contract period of performance, the Contractor grants the Government options for the following: (1) The Contractor agrees to sell any Contractor-owned property used in performance of this contract to a successor Contractor at its depreciated value based on the Contractor-owned property used in performance of this contract to the Government at its depreciated value based on the Contractor's depreciation schedule; or (3) The Contractor agrees to utilize the depreciated property on a follow-on contract if the Contractor is the successor Contractor; or (4) The Contractor agrees to sell the property for fair market value within 120 days after the end of the period of performance and will credit the contract for the amount of any excess of the sale price minus the depreciated value and selling expenses. The Government may exercise one of the above options by unilateral modification issued to the Contractor not later than 30 days after the end of the contract period of performance.

H.12 EVIDENCE OF INSURANCE

The Contractor shall submit evidence of the insurance coverage, required by the NASA Clause 18-52.228-75 in Section I entitled "Minimum Insurance Coverage" (i.e., a Certificate of Insurance or other confirmation), to the Contracting Officer at contract award. In the event the Government exercises its options to extend the term of the contract, the Contractor shall also present such evidence to the Contracting Officer prior to commencement of performance under the extension.

H.13 STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES (FAR 52.222-42) (MAY 1989)

In compliance with the Service Contract Act of 1965, as amended, and the regulations of the Secretary of Labor (29 CFR Part 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

THIS STATEMENT IS FOR INFORMATION ONLY: IT IS NOT A WAGE DETERMINATION

Employee Class	Monetary Wage
Computer Operator I Computer Operator II Programing Assistant Technical Illustrator Electronic Systems Development Technician I Electronic Systems Development Technician II	\$ 8.34/hr. \$ 9.33/hr. \$10.40/hr. \$11.56/hr. \$11.56/hr. \$12.80/hr.

FRINGE BENEFITS

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- Receives 13 days paid leave for service up to 3 years; 20 days for 3 to 15 years service; and 26 days for 15 years service or over.

Sick Leave

- Receives 13 days paid leave per year.

Holidays

- Receives 10 paid holidays per year.

<u>Health Insurance</u>

- Government pays up to 60% of health insurance.

Group Life Insurance - Government pays two-thirds of life insurance rate premiums.

Retirement

- The Government provides three retirement plans identified as the Civil Service Retirement System (CSRS), the Federal Employees Retirement System (FERS), and the CSRS Offset. Under the CSRS, the Government contributes 7% of the employees' base pay towards the retirement benefit and 1.45% towards Medicare. Under the FERS, the Government contributes 11.4% of the employees' base pay towards a

basic benefit plan, 6.2% to Social Security, 1.45% towards Medicare, and 1% (plus matching contributions of up to 4% of basic pay, depending on employees' contributions) to a thrift savings plan. Under the CSRS Offset, the Government contributes 0.8% of the employees' base pay towards the retirement benefit, 6.2% to Social Security, and 1.45% towards Medicare.

Part-time Federal employees receive pro rata annual leave, sick leave, holiday leave, health insurance, and group life insurance benefits based on the number of hours worked.

H.14 PROVIDING FACILITIES TO CONTRACTORS

In accordance with FAR 45.302-1, it is the policy of the Government that Contractors shall furnish all facilities required for performing Government contracts. "Facilities" include real property and plant equipment. Plant equipment includes personal property such as general purpose off-the-shelf equipment, machine tools, test equipment, furniture and vehicles. "Facilities" do not include material, special test equipment, special tooling or agency-peculiar property.

In keeping with the policy set forth in FAR 45.302-1, the Government will not provide NEW "facilities."

However, the Government will provide EXISTING facilities as listed in Exhibit A for use on-site at Langley Research Center. Any of these existing facilities that reach the end of their useful life during the contract period, or which are beyond economical repair, will not be replaced by the Government, nor will the Government provide funds for the purchase of new facilities (including equipment), to the Contractor. If the facilities are still needed for contract performance, they must be replaced by the Contractor. Such replacement shall be made with Contractor-owned facilities.

PART II - CONTRACT CLAUSES

SECTION I - CONTRACT CLAUSES

I.1 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (JUN 1988)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

I.2 LISTING OF CLAUSES INCORPORATED BY REFERENCE:

NOTICE: The following solicitation provisions and/or contract clauses pertinent to this section are hereby incorporated by reference.

FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES

CLAUSE NUMBER	TITLE AND DATE
52.202-1	Definitions (OCT 1995)
52.203-3	Gratuities (APR 1984)
52.203-5	Covenant Against Contingent Fees (APR 1984)
52.203-6	Restrictions on Subcontractor Sales to the Government (OCT 1995)
52.203-7	Anti-Kickback Procedures (JUL 1995)
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity (SEP 1990)
52.204-2	Security Requirements (APR 1984)
52.204-4	Printing/Copying Double-Sided on Recycled Paper (MAY 1995)
52.207-3	Right of First Refusal of Employment (NOV 1991)
52.208-8	Helium Requirement Forecast and Required Sources for Helium (FEB 1995)
52.209-6	Protecting the Government's Interest when Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment (JUL 1995)
52.211-5	New Material (MAY 1995)
52.211-7	Other than New Material, Residual Inventory, and Former Government Property (OCT 1995)
52.211-15	Defense Priority and Allocation Requirements (SEP 1990)
52.212-13	Stop-Work Order (AUG 1989) Alternate I (APR 1984)
52.215-2	Audit and Records - Negotiation (OCT 1995)
52.215-22	Price Reduction for Defective Cost or Pricing Data (OCT 1995)
52.215-24	Subcontractor Cost or Pricing Data (OCT 1995)
52.215-27	Termination of Defined Benefit Pension Plans (SEP 1989)
52.215-33	Order of Precedence (JAN 1986)
52.215-39	Reversion or Adjustment of Plans for Postretirement Benefits Other Than Pensions (FEB 1995)
52.215-40	Notification of Ownership Changes (FEB 1995)
52.215-41	Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data (OCT 1995)
52.216-7	Allowable Cost and Payment (JUL 1991)
52.216-8	Fixed Fee (APR 1984)
52.219-6	Notice of Total Small Business Set-Aside (OCT 1995)
52.219-8	Utilization of Small Disadvantaged and Women Owned Business Concerns (OCT 1995)
52.219-14	Limitations on Subcontracting (JAN 1991)
52.222-1	Notice to the Government of Labor Disputes (APR 1984)
52.222-3	Convict Labor (APR 1984)
52.222-4	Contract Work Hours and Safety Standards Act - Overtime Compensation (JUL 1995)
52.222-26	Equal Opportunity (APR 1984)
52.222-28	Equal Opportunity Preaward Clearance of Subcontracts (APR 1984)
52.222-35	Affirmative Action for Special Disabled and Vietnam Era Veterans (APR 1984)
52.222-36	Affirmative Action for Handicapped Workers (APR 1984)

52.222-37	Employment Reports on Special Disabled Veterans and
50,000,0	Veterans of the Vietnam Era (JAN 1988)
52.223-2	Clean Air and Water (APR 1984)
52.223-6	Drug-Free Workplace (JUL 1990)
52.223-14	Toxic Chemical Release Reporting (OCT 1995)
52.225-11	Restrictions on Certain Foreign Purchases (MAY 1992)
52.225-19	European Community Sanction for Services (MAY 1993)
52.227-1	Authorization and Consent (JUL 1995)
52.227-2	Notice and Assistance Regarding Patent and Copyright Infringement (APR 1984)
52.227-14	Rights in Data - General (JUN 1987) Alternate III (JUN 1987)as modified by NASA FAR Supplement 18-52.227-14
52.228-7	Insurance - Liability to Third Persons (APR 1984)
52.232-9	Limitation on Withholding of Payments (APR 1984)
52.232-17	Interest (JAN 1991)
52.232-22	Limitation of Funds (APR 1984)
52.232-23	Assignment of Claims (JAN 1986)
52.232-28	Electronic Funds Transfer Payment Methods (APR 1989)as
	modified by NASA FAR Supplement 18-32.908
52.233-1	Disputes (OCT 1995) Alternate I (DEC 1991)
52.233-3	Protest After Award (OCT 1995) Alternate I (JUN 1985)
52.237-2	Protection of Government Buildings, Equipment and Vegetation (APR 1984)
52.237-3	Continuity of Services (JAN 1991)
52.242-1	Notice of Intent to Disallow Costs (APR 1984)
52.242-3	Penalties for Unallowable Costs (OCT 1995)
52.243-2	ChangesCost-Reimbursement (AUG 1987)
52.244-2	Subcontracts (Cost-Reimbursement and Letter Contracts) (JUL 1995) Alternate I (JUL 1995)
52.244-5	Competition in Subcontracting (APR 1984)
52.244-6	Subcontracts for Commercial Items and Commercial Components (OCT 1995)
52.245-1	Property Records (APR 1984)
52.245-5	Government Property (Cost-Reimbursement, Time-and-Material,
32.243-3	or Labor-Hour Contracts) (JAN 1986)
52.246-5	Inspection of Services - Cost-Reimbursement (APR 1984)
52.246-25	Limitation of Liability Services (JUL 1995)
52.248-1	Value Engineering (MAR 1989)
52.249-6	Termination (Cost-Reimbursement) (MAY 1986)
52.249-14	Excusable Delays (APR 1984)
52.251-1	Government Supply Sources (APR 1984)
52.253-1	Computer Generated Forms (JAN 1991)
	Sompace, deficitated Forms (Only 1991)

NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	TITLE AND DATE
18-52.204-77	Submission of Security Plan for Unclassified Federal
18-52.204-78	Computer Systems (Sep 1993) Security Plan for Unclassified Federal Computer Systems (SEP 1993)
18-52.208-81	Restrictions on Printing and Duplicating (AUG 1993)

18-52.212-70 18-52.215-84 18-52.216-75 18-52.216-76 18-52.219-74 18-52.219-76 18-52.219-77 18-52.223-70 18-52.228-71 18-52.228-75 18-52.228-75 18-52.237-70 18-52.237-70 18-52.242-70 18-52.242-71 18-52.242-71	Notice of Delay (DEC 1988) Ombudsman (OCT 1995) Payment of Fixed Fee (DEC 1988) Award Fee for Service Contracts (SEP 1993) Allowable Cost and Payment (APR 1994) Use of Rural Area Small Businesses (SEP 1990) NASA Small Disadvantaged Business Goal (JUL 1991) NASA Mentor-Protege Program (JAN 1994) Safety and Health (SEP 1993) Aircraft - Flight Risks (DEC 1988) Minimum Insurance Coverage (OCT 1988) Emergency Evacuation Procedures (DEC 1988) Pension Portability (NOV 1994) Technical Direction (SEP 1993) Travel Outside of the United States (DEC 1988) Observance of Legal Holidays (AUG 1992)Alternate I
18-52.242-72	Observance of Legal Holidays (AUG 1992)Alternate I (SEP 1989)
18-52.242-72	Observance of Legal Holidays (AUG 1992) Alternate II (SEP 1989)
18-52.242-73	NASA Contractor Financial Management Reporting (APR 1994)
18-52.245-70	Acquisition of Centrally Reportable Equipment (MAR 1989)
18-52.245-71	Installation-Provided Government Property (MAR 1989)

I.3 CLAUSES IN FULL TEXT

The clauses listed below follow in full text:

52.203-9	Requirement for Certificate of Procurement Integrity - Modification (SEP 1995)
52.203-12	Limitation on Payments to Influence Certain Federal Transactions (JAN 1990)
52.217-9	Option to Extend the Term of the Contract (MAR 1989)
52.222-2	Payment for Overtime Premiums (JUL 1990)
52.222-41	Service Contract Act of 1965, as Amended (MAY 1989)
52.232-25	Prompt Payment (MAR 1994)
52.242-4	Certification of Indirect Costs (OCT 1995)
52.242-13	Bankruptcy (JUL 1995)
52.252-6	Authorized Deviations in Clauses (APR 1984)
18-52.204-75	Security Classification Requirements (SEP 1989)
18-52.245-73	Financial Reporting of Government-Owned/Contractor-Held Property (JUL 1994)

- I.4 REQUIREMENT FOR CERTIFICATE OF PROCUREMENT INTEGRITY--MODIFICATION (FAR 52.203-9) (SEP 1995)
- (a) Definitions. The definitions set forth in FAR 3.104-4 are hereby incorporated in this clause.
- (b) The Contractor agrees that it will execute the certification set forth in paragraph (c) of this clause when requested by the contracting officer in connection with the execution of any modification of this contract.
- (c) Certification. As required in paragraph (b) of this clause, the officer or employee responsible for the modification proposal shall execute the following

certification. The certification in paragraph (c)(2) of this clause is not required for a modification which procures commercial items.

CERTIFICATE OF PROCUREMENT INTEGRITY -- MODIFICATION (SEP 1995)

(1) I,
[Name of certifier]
am the officer or employee responsible for the preparation of this modification proposal and hereby certify that, to the best of my knowledge and belief, with the exception of any information described in this certification, I have no information concerning a violation or possible violation of subsections 27(a), (b), (d), or (f) of the Office of Federal Procurement Policy Act, as amended* (41 U.S.C. 423), (hereinafter referred to as "the Act"), as implemented in the FAR, occurring during the conduct of this procurement
(contract and modification number). (2) As required by subsection 27(e)(1)(B) of the Act, I further certify that, to the best of my knowledge and belief, each officer, employee, agent, representative, and consultant of
[Name of Offeror] who has participated personally and substantially in the preparation or submission of this proposal has certified that he or she is familiar with, and will comply with, the requirements of subsection 27(a) of the Act, as implemented in the FAR, and will report immediately to me any information concerning a violation or possible violation of subsections 27(a), (b), (d), or (f) of the Act, as implemented in the FAR, pertaining to this procurement. (3) Violations or possible violations: (Continue on plain bond paper if
necessary and label Certificate of Procurement IntegrityModification (Continuation Sheet), ENTER NONE IF NONE EXIST)
[Signature of the officer or employee responsible for the modification proposal and date]
[Typed name of the officer or employee responsible for the modification proposal]

*Subsections 27(a), (b), and (d) are effective on December 1, 1990. Subsection 27(f) is effective on June 1, 1991.

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION

MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER TITLE 18, UNITED STATES CODE. SECTION 1001.

(End of certification)

- In making the certification in paragraph (2) of the certificate, the officer or employee of the competing Contractor responsible for the offer or bid, may rely upon a one-time certification from each individual required to submit a certification to the competing Contractor, supplemented by periodic training. These certifications shall be obtained at the earliest possible date after an individual required to certify begins employment or association with the Contractor. If a Contractor decides to rely on a certification executed prior to suspension of Section 27 (i.e., prior to December 1, 1989), the Contractor shall ensure that an individual who has so certified is notified that Section 27 has been reinstated. These certifications shall be maintained by the Contractor for a period of 6 years from the date a certifying employee's employment with the company ends or, for an agency, representative, or consultant, 6 years from the date such individual ceases to act on behalf of the Contractor.
- The certification required by paragraph (c) of this clause is a material representation of fact upon which reliance will be placed in executing this modification.
- I.5 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (FAR 52.203-12) (JAN 1990)

(a) Definitions. "Agency," as used in this clause, means executive agency as defined in 2.101. "Covered Federal action," as used in this clause, means any of the following Federal actions:

- (1)The awarding of any Federal contract.
- The making of any Federal grant. (2) The making of any Federal loan.
- (4) The entering into of any cooperative agreement.

The extension, continuation, renewal, amendment, or modification of any

Federal contract, grant, loan, or cooperative agreement.

"Indian tribe" and "tribal organization," as used in this clause, have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450B) and include Alaskan Natives.

"Influencing or attempting to influence," as used in this clause, means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

"Local government," as used in this clause, means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

"Officer or employee of an agency," as used in this clause, includes the following individuals who are employed by an agency:

(1) An individual who is appointed to a position in the Government under title 5, United States Code, including a position under a temporary appointment.

- (2) A member of the uniformed services, as defined in subsection 101(3), title 37, United States Code.
- (3) A special Government employee, as defined in section 202, title 18, United States Code.
- (4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, title 5, United States Code appendix 2.

"Person," as used in this clause, means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Reasonable compensation," as used in this clause, means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

"Reasonable payment," as used in this clause, means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

"Recipient," as used in this clause, includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Regularly employed," as used in this clause, means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within one year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within one year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

"State," as used in this clause, means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, a territory or possession of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) Prohibitions.

(1) Section 1352 of title 31, United States Code, among other things, prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; or the modification of any Federal contract, grant, loan, or cooperative agreement.

(2) The Act also requires Contractors to furnish a disclosure if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a

Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement.

(3) The prohibitions of the Act do not apply under the following conditions:

(i) Agency and legislative liaison by own employees.

(Å) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of a payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action if the payment is for agency and legislative liaison activities not directly related to a covered Federal action.

(B) For purposes of subdivision (b)(3)(i)(A) of this clause, providing any information specifically requested by an agency or Congress is

permitted at any time.

(C) The following agency and legislative liaison activities are permitted at any time where they are not related to a specific solicitation for any covered Federal action:

(1) Discussing with an agency the qualities and characteristics (including individual demonstrations) of the person's products or

services, conditions or terms of sale, and service capabilities.

(2) Technical discussions and other activities regarding the application or adaptation of the person's products or services for an agency's use.

(D) The following agency and legislative liaison activities are permitted where they are prior to formal solicitation of any covered Federal action - (1) Providing any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;

(2) Technical discussions regarding the preparation of an

unsolicited proposal prior to its official submission; and

(3) Capability presentations by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95-507, and subsequent amendments.

(E) Only those services expressly authorized by subdivision

(b)(3)(i)(A) of this clause are permitted under this clause.

(ii) Professional and technical services.

(A) The prohibition on the use of appropriated funds, in

subparagraph (b)(1) of this clause, does not apply in the case of -

(1) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.

(2) Åny reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other

than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.

- For purposes of subdivision (b)(3)(ii)(A) of this clause, "professional and technical services" shall be limited to advice and analysis directly applying any professional or technical discipline. For example, drafting of a legal document accompanying a bid or proposal by a lawyer is allowable. Similarly, technical advice provided by an engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation of a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed lawyer) or a technical person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise and unless the advice or analysis is rendered directly and solely in the preparation, submission or negotiation of a covered Federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this section since the engineer is providing technical services but not directly in the preparation, submission or negotiation of a covered Federal action.
- (C) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.
- (D) Only those services expressly authorized by subdivisions (b)(3)(ii)(A)(1) and (2) of this clause are permitted under this clause.
- (E) The reporting requirements of FAR 3.803(a) shall not apply with respect to payments of reasonable compensation made to regularly employed officers or employees of a person.

(iii) Disclosure.

- (A) The Contractor who requests or receives from an agency a Federal contract shall file with that agency a disclosure form, OMB standard form LLL, Disclosure of Lobbying Activities, if such person has made or has agreed to make any payment using nonappropriated funds (to include profits from any covered Federal action), which would be prohibited under subparagraph (b)(1) of this clause, if paid for with appropriated funds.
- (B) The Contractor shall file a disclosure form at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any disclosure form previously filed by such person under subparagraph (c)(1) of this clause. An event that materially affects the accuracy of the information reported includes -
- (1) A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or
- (2) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or
- (3) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.

- (C) The Contractor shall require the submittal of a certification, and if required, a disclosure form by any person who requests or receives any subcontract exceeding \$100,000 under the Federal contract.
- (D) All subcontractor disclosure forms (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall submit all disclosures to the Contracting Officer at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.
- (iv) Agreement. The Contractor agrees not to make any payment prohibited by this clause.
 - (v) Penalties.
- (A) Any person who makes an expenditure prohibited under paragraph (a) of this clause or who fails to file or amend the disclosure form to be filed or amended by paragraph (b) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.
- (B) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.
- (vi) Cost allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any of the provisions.
- I.6 OPTION TO EXTEND THE TERM OF THE CONTRACT (FAR 52.217-9) (MAR 1989)
- (a) The Government may extend the term of this contract by written notice to the Contractor within 30 days.
- (b) If the Government exercises this option, the extended contract shall be considered to include this option provision.
- (c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 78 months which represents a maximum of 66 months for issuance of task orders plus an additional 12 months for task order completion.
- I.7 PAYMENT FOR OVERTIME PREMIUMS (FAR 52.222-2) (JUL 1990)
- (a) The use of overtime is authorized under this contract if the overtime premium cost does not exceed ______ or the overtime premium is paid for work -
- (1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature;
- (2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting:
- (3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or
 - (4) That will result in lower overall costs to the Government.

(b) Any request for estimated overtime premiums that exceeds the amount specified above shall include all estimated overtime for contract completion and shall -

(1) Identify the work unit; e.g., department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit the Contracting Officer to evaluate the necessity for the overtime;

(2) Demonstrate the effect that denial of the request will have on the

contract delivery or performance schedule;

(3) Identify the extent to which approval of overtime would affect the performance or payments in connection with other Government contracts, together with identification of each affected contract; and

(4) Provide reasons why the required work cannot be performed by using

multishift operations or by employing additional personnel.

I.8 SERVICE CONTRACT ACT OF 1965, AS AMENDED (FAR 52.222-41) (MAY 1989)

(a) **Definitions**. "Act," as used in this clause, means the Service Contract Act of 1965, as amended (41 U.S.C. 351, et seq.).

"Contractor," as used in this clause or in any subcontract, shall be deemed to refer to the subcontractor, except in the term "Government Prime Contractor."

"Service employee," as used in this clause, means any person engaged in the performance of this contract other than any person employed in a bona fide executive, administrative, or professional capacity, as these terms are defined in Part 541 of Title 29, Code of Federal Regulations, as revised. It includes all such persons regardless of any contractual relationship that may be alleged to exist between a Contractor or subcontractor and such persons.

(b) Applicability. This contract is subject to the following provisions and to all other applicable provisions of the Act and regulations of the Secretary of Labor (29 CFR Part 4). This clause does not apply to contracts or subcontracts administratively exempted by the Secretary of Labor or exempted by 41 U.S.C. 356,

as interpreted in Subpart C of 29 CFR Part 4.

(c) Compensation.

(1) Each service employee employed in the performance of this contract by the Contractor or any subcontractor shall be paid not less than the minimum monetary wages and shall be furnished fringe benefits in accordance with the wages and fringe benefits determined by the Secretary of Labor, or authorized representative, as specified in any wage determination attached to this contract.

(2) (i) If a wage determination is attached to this contract, the Contractor shall classify any class of service employee which is not listed therein and which is to be employed under this contract (i.e., the work to be performed is not performed by any classification listed in the wage determination) so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed class of employees shall be paid the monetary wages and furnished the fringe benefits as are determined pursuant to the procedures in this paragraph (c).

(ii) This conforming procedure shall be initiated by the Contractor prior to the performance of contract work by the unlisted class of employee. The Contractor shall submit Standard Form (SF) 1444, Request For Authorization of Additional Classification and Rate, to the Contracting Officer no later than 30 days after the unlisted class of employee performs any contract

work. The Contracting Officer shall review the proposed classification and rate and promptly submit the completed SF 1444 (which must include information regarding the agreement or disagreement of the employees' authorized representatives or the employees themselves together with the agency recommendation), and all pertinent information to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor. The Wage and Hour Division will approve, modify, or disapprove the action or render a final determination in the event of disagreement within 30 days of receipt or will notify the Contracting Officer within 30 days of receipt that additional time is necessary.

(iii) The final determination of the conformance action by the Wage and Hour Division shall be transmitted to the Contracting Officer who shall promptly notify the Contractor of the action taken. Each affected employee shall be furnished by the Contractor with a written copy of such determination or it shall be posted as a part of the wage determination.

(iv) (A) The process of establishing wage and fringe benefit rates that bear a reasonable relationship to those listed in a wage determination cannot be reduced to any single formula. The approach used may vary from wage determination to wage determination depending on the circumstances. Standard wage and salary administration practices which rank various job classifications by pay grade pursuant to point schemes or other job factors may, for example, be relied upon. Guidance may also be obtained from the way different jobs are rated under Federal pay systems (Federal Wage Board Pay System and the General Schedule) or from other wage determinations issued in the same locality. Basic to the establishment of any conformable wage rate(s) is the concept that a pay relationship should be maintained between job classifications based on the skill required and the duties performed.

(B) In the case of a contract modification, an exercise of an option, or extension of an existing contract, or in any other case where a Contractor succeeds a contract under which the classification in question was previously conformed pursuant to paragraph (c) of this clause, a new conformed wage rate and fringe benefits may be assigned to the conformed classification by indexing (i.e., adjusting) the previous conformed rate and fringe benefits by an amount equal to the average (mean) percentage increase (or decrease, where appropriate) between the wages and fringe benefits specified for all classifications to be used on the contract which are listed in the current wage determination, and those specified for the corresponding classifications in the previously applicable wage determination. Where conforming actions are accomplished in accordance with this paragraph prior to the performance of contract work by the unlisted class of employees, the Contractor shall advise the Contracting Officer of the action taken but the other procedures in subdivision (c) (ii) of this clause need not be followed.

(C) No employee engaged in performing work on this contract shall in any event be paid less than the currently applicable minimum wage specified under section 6(a)(1) of the Fair Labor Standards Act of 1938, as amended.

(v) The wage rate and fringe benefits finally determined under this subparagraph (c)(2) of this clause shall be paid to all employees performing in the classification from the first day on which contract work is performed by them in the classification. Failure to pay the unlisted employees the compensation agreed upon by the interested parties and/or finally determined by

the Wage and Hour Division retroactive to the date such class of employees commenced contract work shall be a violation of the Act and this contract.

- (vi) Upon discovery of failure to comply with subparagraph (c)(2) of this clause, the Wage and Hour Division shall make a final determination of conformed classification, wage rate, and/or fringe benefits which shall be retroactive to the date such class or classes of employees commenced contract work.
- (3) Adjustment of Compensation. If the term of this contract is more than 1 year, the minimum monetary wages and fringe benefits required to be paid or furnished thereunder to service employees under this contract shall be subject to adjustment after 1 year and not less often than once every 2 years, under wage determinations issued by the Wage and Hour Division.

(d) **Obligation to Furnish Fringe Benefits.** The Contractor or subcontractor may discharge the obligation to furnish fringe benefits specified in the attachment or determined under subparagraph (c)(2) of this clause by furnishing equivalent combinations of bona fide fringe benefits, or by making equivalent or differential cash payments, only in accordance with Subpart D of 29 CFR Part 4.

(e) Minimum Wage. In the absence of a minimum wage attachment for this contract, neither the Contractor nor any subcontractor under this contract shall pay any person performing work under this contract (regardless of whether the person is a service employee) less than the minimum wage specified by section 6(a)(1) of the Fair Labor Standards Act of 1938. Nothing in this clause shall relieve the Contractor or any subcontractor of any other obligation under law or

contract for the payment of a higher wage to any employee.

(f) Successor Contracts. If this contract succeeds a contract subject to the Act under which substantially the same services were furnished in the same locality and service employees were paid wages and fringe benefits provided for in a collective bargaining agreement, in the absence of the minimum wage attachment for this contract setting forth such collectively bargained wage rates and fringe benefits, neither the Contractor nor any subcontractor under this contract shall pay any service employee performing any of the contract work (regardless of whether or not such employee was employed under the predecessor contract), less than the wages and fringe benefits provided for in such collective bargaining agreement, to which such employee would have been entitled if employed under the predecessor contract, including accrued wages and fringe benefits and any prospective increases in wages and fringe benefits provided for under such agreement. No Contractor or subcontractor under this contract may be relieved of the foregoing obligation unless the limitations of 29 CFR 4.1b(b) apply or unless the Secretary of Labor or the Secretary's authorized representative finds, after a hearing as provided in 29 CFR 4.10 that the wages and/or fringe benefits provided for in such agreement are substantially at variance with those which prevail for services of a character similar in the locality, or determines, as provided in 29 CFR 4.11, that the collective bargaining agreement applicable to service employees employed under the predecessor contract was not entered into as a result of arm's length negotiations. Where it is found in accordance with the review procedures provided in 29 CFR 4.10 and/or 4.11 and Parts 6 and 8 that some or all of the wages and/or fringe benefits contained in a predecessor Contractor's collective bargaining agreement are substantially at variance with those which prevail for services of a character similar in the locality, and/or that the collective bargaining agreement applicable to service employees employed under the predecessor contract was not entered into as a result of arm's length negotiations, the Department will issue a new or revised wage determination

setting forth the applicable wage rates and fringe benefits. Such determination shall be made part of the contract or subcontract, in accordance with the decision of the Administrator, the Administrative Law Judge, or the Board of Service Contract Appeals, as the case may be, irrespective of whether such issuance occurs prior to or after the award of a contract or subcontract (53 Comp. Gen. 401 (1973)). In the case of a wage determination issued solely as a result of a finding of substantial variance, such determination shall be effective as of the date of the final administrative decision.

- (g) Notification to Employees. The Contractor and any subcontractor under this contract shall notify each service employee commencing work on this contract of the minimum monetary wage and any fringe benefits required to be paid pursuant to this contract, or shall post the wage determination attached to this contract. The poster provided by the Department of Labor (Publication WH 1313) shall be posted in a prominent and accessible place at the worksite. Failure to comply with this requirement is a violation of Section 2(a)(4) of the Act and of this contract.
- (h) Safe and Sanitary Working Conditions. The Contractor or subcontractor shall not permit any part of the services called for by this contract to be performed in buildings or surroundings or under working conditions provided by or under the control or supervision of the Contractor or subcontractor which are unsanitary, hazardous, or dangerous to the health or safety of the service employees. The Contractor or subcontractor shall comply with the safety and health standards applied under 29 CFR Part 1925.
- (i) Records. (1) The Contractor and each subcontractor performing work subject to the Act shall make and maintain for 3 years from the completion of the work, and make them available for inspection and transcription by authorized representatives of the Wage and Hour Division, Employment Standards Administration, a record of the following:
 - (i) For each employee subject to the Act -
 - (A) Name and address and social security number;
- (B) Correct work classification or classifications, rate or rates of monetary wages paid and fringe benefits provided, rate or rates of payments in lieu of fringe benefits, and total daily and weekly compensation;
 - (C) Daily and weekly hours worked by each employee; and
 - (D) Any deductions, rebates, or refunds from the total

daily or weekly compensation of each employee.

- (ii) For those classes of service employees not included in any wage determination attached to this contract, wage rates or fringe benefits determined by the interested parties or by the Administrator or authorized representative, under the terms of paragraph (c) of this clause. A copy of the report required by subdivision (c)(2)(ii) of this clause will fulfill this requirement.
- (iii) Any list of the predecessor Contractor's employees which had been furnished to the Contractor as prescribed by paragraph (n) of this clause.
- (2) The Contractor shall also make available a copy of this contract for inspection or transcription by authorized representatives of the Wage and Hour Division.
- (3) Failure to make and maintain or to make available these records for inspection and transcription shall be a violation of the regulations and this contract, and in the case of failure to produce these records, the Contracting Officer, upon direction of the Department of Labor and notification to the

Contractor, shall take action to cause suspension of any further payment or advance of funds until such violation ceases.

(4) The Contractor shall permit authorized representatives of the Wage and Hour Division to conduct interviews with employees at the worksite during

normal working hours.

- (j) Pay Periods. The Contractor shall unconditionally pay to each employee subject to the Act all wages due free and clear and without subsequent deduction (except as otherwise provided by law or Regulations, 29 CFR Part 4), rebate, or kickback on any account. These payments shall be made no later than one pay period following the end of the regular pay period in which the wages were earned or accrued. A pay period under this Act may not be of any duration longer than semi-monthly.
- (k) Withholding of Payment and Termination of Contract. The Contracting Officer shall withhold or cause to be withheld from the Government Prime Contractor under this or any other Government contract with the Prime Contractor such sums as an appropriate official of the Department of Labor requests or such sums as the Contracting Officer decides may be necessary to pay underpaid employees employed by the Contractor or subcontractor. In the event of failure to pay any employees subject to the Act all or part of the wages or fringe benefits due under the Act, the Contracting Officer may, after authorization or by direction of the Department of Labor and written notification to the Contractor, take action to cause suspension of any further payment or advance of funds until such violations have ceased. Additionally, any failure to comply with the requirements of this clause may be grounds for termination of the right to proceed with the contract work. In such event, the Government may enter into other contracts or arrangements for completion of the work, charging the Contractor in default with any additional cost.
- (1) Subcontracts. The Contractor agrees to insert this clause in all subcontracts subject to the Act.
- (m) Collective Bargaining Agreements Applicable to Service Employees. If wages to be paid or fringe benefits to be furnished any service employees employed by the Government Prime Contractor or any subcontractor under the contract are provided for in a collective bargaining agreement which is or will be effective during any period in which the contract is being performed, the Government Prime Contractor shall report this fact to the Contracting Officer, together with full information as to the application and accrual of such wages and fringe benefits, including any prospective increases, to service employees engaged in work on the contract, and a copy of the collective bargaining agreement. Such report shall be made upon commencing performance of the contract, in the case of collective bargaining agreements effective at such time, and in the case of such agreements or provisions or amendments thereof effective at a later time during the period of contract performance such agreements shall be reported promptly after negotiation thereof.
- (n) Seniority List. Not less than 10 days prior to completion of any contract being performed at a Federal facility where service employees may be retained in the performance of the succeeding contract and subject to a wage determination which contains vacation or other benefit provisions based upon length of service with a Contractor (predecessor) or successor (29 CFR Part 4.173), the incumbent Prime Contractor shall furnish the Contracting Officer a certified list of the names of all service employees on the Contractor's or subcontractor's payroll during the last month of contract performance. Such list shall also contain anniversary dates of employment on the contract either with the

current or predecessor Contractors of each such service employee. The Contracting Officer shall turn over such list to the successor Contractor at the commencement of the succeeding contract.

(o) Rulings and Interpretations. Rulings and interpretations of the Act are contained in Regulations, 29 CFR Part 4.

Contractor's Certification.

- (1) By entering into this contract, the Contractor (and officials thereof) certifies that neither it (nor he or she) nor any person or firm who has substantial interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of the sanctions imposed under section 5 of the Act.
- No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract under section 5 of the Act.

(3) The penalty for making false statements is prescribed in the U.S.

Criminal Code, 18 U.S.C. 1001.

- (q) Variations, Tolerances, and Exemptions Involving Employment. Notwithstanding any of the provisions in paragraphs (b) through (o) of this clause, the following employees may be employed in accordance with the following variations, tolerances, and exemptions, which the Secretary of Labor, pursuant to section 4(b) of the Act prior to its amendment by Public L. 92-473, found to be necessary and proper in the public interest or to avoid serious impairment of the conduct of Government business.
- (1) Apprentices, student-learners, and workers whose earning capacity is impaired by age, physical or mental deficiency, or injury may be employed at wages lower than the minimum wages otherwise required by section 2(a)(1) or 2(b)(1) of the Act without diminishing any fringe benefits or cash payments in lieu thereof required under section 2(a)(2) of the Act, in accordance with the conditions and procedures prescribed for the employment of apprentices, studentlearners, handicapped persons, and handicapped clients of sheltered workshops under Section 14 of the Fair Labor Standards Act of 1938, in the regulations issued by the Administrator (29 CFR Parts 520, 521, 524, and 525).
- The Administrator will issue certificates under the Act for the employment of apprentices, student-learners, handicapped persons, or handicapped clients of sheltered workshops not subject to the Fair Labor Standards Act of 1938, or subject to different minimum rates of pay under the two acts, authorizing appropriate rates of minimum wages (but without changing requirements concerning fringe benefits or supplementary cash payments in lieu thereof), applying procedures prescribed by the applicable regulations issued under the Fair Labor

Standards Act of 1938 (29 CFR Parts 520, 521, 524, and 525).

(3) The Administrator will also withdraw, annul, or cancel such certificates in accordance with the regulations in 29 CFR Parts 525 and 528.

Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed and individually registered in a bona fide apprenticeship program registered with a State Apprenticeship Agency which is recognized by the U.S. Department of Labor, or if no such recognized agency exists in a State, under a program registered with the Bureau of Apprenticeship and Training, Employment and Training Administration, U.S. Department of Labor. Any employee who is not registered as an apprentice in an approved program shall be paid the wage rate and fringe benefits contained in the applicable wage determination for the journeyman classification of work actually performed. The wage rates paid apprentices shall not be less than the wage rate for their level of progress set forth in the registered program,

expressed as the appropriate percentage of the journeyman's rate contained in the applicable wage determination. The allowable ratio of apprentices to journeymen employed on the contract work in any craft classification shall not be greater than the ratio permitted to the Contractor as to his entire work force under the registered program.

- (s) **Tips.** An employee engaged in an occupation in which the employee customarily and regularly receives more than \$30 a month in tips may have the amount of tips credited by the employer against the minimum wage required by section 2(a)(1) or section 2(b)(1) of the Act, in accordance with section 3(m) of the Fair Labor Standards Act and Regulations 29 CFR Part 531. However, that the amount of credit shall not exceed \$1.34 per hour beginning January 1, 1981. To use this provision -
- (1) The employer must inform tipped employees about this tip credit allowance before the credit is utilized:
- (2) The employees must be allowed to retain all tips (individually or through a pooling arrangement and regardless of whether the employer elects to take a credit for tips received);
- (3) The employer must be able to show by records that the employee receives at least the applicable Service Contract Act minimum wage through the combination of direct wages and tip credit; and
- (4) The use of such tip credit must have been permitted under any predecessor collective bargaining agreement applicable by virtue of section 4(c) of the Act.
- (t) Disputes Concerning Labor Standards. The U.S. Department of Labor has set forth in 29 CFR Parts 4, 6, and 8 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

I.9 PROMPT PAYMENT (FAR 52.232-25) (MAR 1994)

Notwithstanding any other payment clause in this contract, the Government will make invoice payments and contract financing payments under the terms and conditions specified in this clause. Payment shall be considered as being made on the day a check is dated or an electronic funds transfer is made. Definitions of pertinent terms are set forth in 32.902. All days referred to in this clause are calendar days, unless otherwise specified.

(a) Invoice Payments.

- (1) For purposes of this clause, "invoice payment" means a Government disbursement of monies to a Contractor under a contract or other authorization for supplies or services accepted by the Government. This includes payments for partial deliveries that have been accepted by the Government and final cost or fee payments where amounts owed have been settled between the Government and the Contractor.
- (2) Except as indicated in subparagraph (a)(3) and paragraph (c) of this clause, the due date for making invoice payments by the designated payment office shall be the later of the following two events:
- (i) The 30th day after the designated billing office has received a proper invoice from the Contractor.

- (ii) The 30th day after Government acceptance of supplies delivered or services performed by the Contractor. On a final invoice where the payment amount is subject to contract settlement actions, acceptance shall be deemed to have occurred on the effective date of the contract settlement. However, if the designated billing office fails to annotate the invoice with the actual date of receipt, the invoice payment due date shall be deemed to be the 30th day after the date the Contractor's invoice is dated, provided a proper invoice is received and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.
- (3) The due date on contracts for meat, meat food products, or fish; contracts for perishable agricultural commodities, contracts for dairy products, edible fats or oils, and food products prepared from edible fats or oils, and contracts not requiring submission of an invoice shall be as follows:
- (i) The due date for meat and meat food products, as defined in Section 2(a)(3) of the Packers and Stockyard Act of 1921 (7 U.S.C. 182(3)) and further defined in Pub. L. 98-181 to include any edible fresh or frozen poultry meat, any perishable poultry meat food product, fresh eggs, and any perishable egg product, will be as close as possible to, but not later than, the 7th day after product delivery.

(ii) The due date for fresh or frozen fish, as defined in Section 204(3) of the Fish and Seafood Promotion Act of 1986 (16 U.S.C. 4003(3)), will be as close as possible to, but not later than, the seventh day after product delivery.

(iii) The due date for perishable agricultural commodities, as defined in section 1(4) of the Perishable Agricultural Commodities Act of 1930 (7 U.S.C. 499a(44)), will be as close as possible to, but not later than, the 10th day after product delivery, unless another date is specified in the contract.

(iv) The due date for dairy products, as defined in section 111(e) of the Dairy Production Stabilization Act of 1983 (7 U.S.C. 4502(e)), edible fats or oils, and food products prepared from edible fats or oils, will be as close as possible to, but not later than, the 10th day after the date on which a proper invoice has been received.

- (v) If the contract does not require submission of an invoice for payment (e.g., periodic lease payments), the due date will be as specified in the contract.
- (4) An invoice is the Contractor's bill or written request for payment under the contract for supplies delivered or services performed. An invoice shall be prepared and submitted to the designated billing office specified in the contract. A proper invoice must include the items listed in subdivisions (a)(4)(i) through (a)(4)(viii) of this clause. If the invoice does not comply with these requirements, then the Contractor will be notified of the defect within 7 days after receipt of the invoice at the designated billing office (3 days for meat, meat food products, or fish, and 5 days for perishable agricultural commodities, edible fats or oils, and food products prepared from edible fats or oils). Untimely notification will be taken into account in the computation of any interest penalty owed the Contractor in the manner described in subparagraph (a)(6) of this clause.
 - (i) Name and address of the Contractor.
 - (ii) Invoice date.
- (iii) Contract number or other authorization for supplies delivered or services performed (including order number and contract line item number).

(iv) Description, quantity, unit of measure, unit price, and extended

price of supplies delivered or services performed.

(v) Shipping and payment terms (e.g., shipment number and date of shipment, prompt payment discount terms). Bill of lading number and weight of shipment will be shown for shipments on Government bills of lading.

(vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of

assignment).

(vii) Name (where practicable), title, phone number and mailing address of person to be notified in event of a defective invoice.

(viii) Any other information or documentation required by other

requirements of the contract (such as evidence of shipment).

(5) An interest penalty shall be paid automatically by the Government, without request from the Contractor, if payment is not made by the due date and the conditions listed in subdivisions (a)(5)(i) through (a)(5)(iii) of this clause are met, if applicable.

A proper invoice was received by the designated billing office.

(ii) A receiving report or other Government documentation authorizing payment was processed and there was no disagreement over quantity, quality, or

Contractor compliance with any contract term or condition.

(iii) In the case of a final invoice for any balance of funds due the Contractor for supplies delivered or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

- (6) The interest penalty shall be at the rate established by the Secretary of the Treasury under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) that is in effect on the day after the due date, except where the interest penalty is prescribed by other governmental authority. This rate is referred to as the "Renegotiation Board Interest Rate," and it is published in the Federal Register semiannually on or about January 1 and July 1. The interest penalty shall accrue daily on the invoice payment amount approved by the Government and be compounded in 30-day increments inclusive from the first day after the due date through the payment date. That is, interest accrued at the end of any 30-day period will be added to the approved invoice payment amount and be subject to interest penalties if not paid in the succeeding 30-day period. If the designated billing office failed to notify the Contractor of a defective invoice within the periods prescribed in paragraph (a)(4) of this clause, then the due date on the corrected invoice will be adjusted by subtracting the number of days taken beyond the prescribed notification of defects period. Any interest penalty owed the Contractor will be based on this adjusted due date. Adjustments will be made by the designated payment office for errors in calculating interest penalties, if requested by the Contractor.
- (i) For the sole purpose of computing an interest penalty that might be due the Contractor, Government acceptance shall be deemed to have occurred constructively on the 7th day (unless otherwise specified in this contract) after the Contractor delivered the supplies or performed the services in accordance with the terms and conditions of the contract, unless there is a disagreement over quantity, quality, or contractor compliance with a contract provision. In the event that actual acceptance occurs within the constructive acceptance period, the determination of an interest penalty shall be based on the actual date of acceptance. The constructive acceptance requirement does not, however, compel Government officials to accept supplies or services, perform contract

administration functions, or make payment prior to fulfilling their responsibilities.

(ii) The following periods of time will not be included in the

determination of an interest penalty:

(A) The period taken to notify the Contractor of defects in invoices submitted to the Government, but this may not exceed 7 days (3 days for meat, meat food products, or fish, and 5 days for perishable agricultural commodities, dairy products, edible fats or oils, and food products prepared from edible fats or oils).

(B) The period between the defects notice and resubmission of

the corrected invoice by the Contractor.

(iii) Interest penalties will not continue to accrue after the filing of a claim for such penalties under the clause at 52.233-1, Disputes, or for more

than 1 year. Interest penalties of less than \$1.00 need not be paid.

(iv) Interest penalties are not required on payment delays due to disagreement between the Government and Contractor over the payment amount or other issues involving contract compliance or on amounts temporarily withheld or retained in accordance with the terms of the contract. Claims involving disputes, and any interest that may be payable, will be resolved in accordance with the clause at 52.233-1, Disputes.

(7) An interest penalty shall also be paid automatically by the designated payment office, without request from the Contractor, if a discount for prompt payment is taken improperly. The interest penalty will be calculated as described in subparagraph (a)(6) of this clause on the amount of discount taken for the period beginning with the first day after the end of the discount period through

the date when the Contractor is paid.

(8) If this contract was awarded on or after October 1, 1989, a penalty amount, calculated in accordance with regulations issued by the Office of Management and Budget, shall be paid in addition to the interest penalty amount if the Contractor -

(i) Is owed an interest penalty;

(ii) Is not paid the interest penalty within 10 days after the date the invoice amount is paid; and

(iii) Makes a written demand, not later than 40 days after the date

the invoice amount is paid, that the agency pay such a penalty.

(b) Contract Financing Payments.

(1) For purposes of this clause, "contract financing payment" means a Government disbursement of monies to a Contractor under a contract clause or other authorization prior to acceptance of supplies or services by the Government. Contract financing payments include advance payments, progress payments based on cost under the clause at 52.232-16, Progress Payments, progress payments based on a percentage or stage of completion (32.102(e)(1)) other than those made under the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, or the clause at 52.232-10, Payments Under Fixed-Price Architect-Engineer Contracts, and interim payments on cost type contracts.

(2) For contracts that provide for contract financing, requests for payment shall be submitted to the designated billing office as specified in this contract or as directed by the Contracting Officer. Contract financing payments shall be made on the 30th day after receipt of a proper contract financing request by the designated billing office. In the event that an audit or other review of a specific financing request is required to ensure compliance with the terms and

conditions of the contract, the designated payment office is not compelled to make payment by the due date specified.

- (3) For advance payments, loans, or other arrangements that do not involve recurrent submissions of contract financing requests, payment shall be made in accordance with the corresponding contract terms or as directed by the Contracting Officer.
- (4) Contract financing payments shall not be assessed an interest penalty for payment delays.
- (c) If this contract contains the clause at 52.213-1, Fast Payment Procedure, payments will be made within 15 days after the date of receipt of the invoice.
- I.10 CERTIFICATION OF INDIRECT COSTS (FAR 52.242-4) (OCT 1995)

(a) The Contractor shall -

(1) Certify any proposal to establish or modify billing rates or to establish final indirect cost rates;

(2) Use the format in paragraph (c) of this clause to certify; and

- (3) Have the certificate signed by an individual of the Contractor's organization at a level no lower than a vice president or chief financial officer of the business segment of the Contractor that submits the proposal.
- (b) Failure by the Contractor to submit a signed certificate, as described in this clause, shall result in payment of indirect costs at rates unilaterally established by the Government.
- (c) The certificate of indirect costs shall read as follows:

CERTIFICATE OF INDIRECT COSTS

This is to certify that to the best of may knowledge and belief:

- 1. I have reviewed this indirect cost proposal;
- 2. All costs included in this proposal (identify proposal and data) to establish billing or final indirect costs rates for (identify period covered by rate) are allowable in accordance with the requirements of contracts to which they apply and with the cost principles of the Federal Acquisition Regulation (FAR) and its supplements applicable to those contracts:
- 3. This proposal does not include any costs which are unallowable under applicable cost principles of the FAR or its supplements, including, but not limited to: advertising and public relations costs, contributions and donations, entertainment costs, fines and penalties, lobbying costs, defense of fraud proceedings, and goodwill; and
- 4. All costs included in this proposal are properly allocable to Government contracts on the basis of a beneficial or causal relationship between the expenses incurred and the contracts to which they are allocated in accordance with applicable acquisition regulations.

I	declare	under	penalty	of	perjury	that	the	foregoing	is	true	and	correct.	
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Solicitation	No.	1-132-D.	1166
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Signatu	^e:	
Name of	Certifying Official:	
Title:		
Date of	Execution:	

I.11 BANKRUPTCY (FAR 52.242-13) (JUL 1995)

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

- I.12 AUTHORIZED DEVIATIONS IN CLAUSES (FAR 52.252-6) (APR 1984)
- (a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.
- (b) The use in this solicitation or contract of any NASA/FAR Supplement (48 CFR Chapter 18) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.
- I.13 SECURITY CLASSIFICATION REQUIREMENTS (NASA 18-52.204-75) (SEP 1989)

Performance under this contract will involve access to and/or generation of classified information, work in a security area, or both, up to the level of TOP SECRET. See Federal Acquisition Regulation clause 52.204-2 in this contract and DD Form 254, Contract Security Classification Specification, Exhibit D.

- I.14 FINANCIAL REPORTING OF GOVERNMENT-OWNED/CONTRACTOR-HELD PROPERTY (NASA 18-52.245-73) (JUL 1994)
- (a) The Contractor shall prepare and submit annually a NASA Form 1018, Report of Government-Owned/Contractor-Held Property, in accordance with 18-45.505-14 and the instructions on the form and in Section 18-45.7101 of the NASA FAR Supplement, except that the reporting of space hardware shall be required only as directed in clause 18-52.245-78, Space Hardware Reporting, of this contract, if applicable. (b) If administration of this contract has been delegated to the Department of Defense, the original of NASA Form 1018 shall be submitted to the NASA Installation Financial Management Officer and three copies shall be sent concurrently through the DOD Property Administrator to the NASA office identified below. If the contract is administered by NASA, the original of NASA Form 1018

shall be submitted to the installation Financial Management Officer and three copies shall be sent concurrently to the following NASA office:

ATTN INDUSTRIAL PROPERTY OFFICE NASA LANGLEY RESEARCH CENTER MAIL STOP 377 HAMPTON VA 23681-0001

- (c) The annual reporting period shall be from October 1 of each year to September 30 of the following year. The report shall be submitted by October 31.
- (d) The Contractor agrees to insert the reporting requirement in all first-tier subcontracts, except that the requirement shall provide for the submission of the subcontractors' reports to the Contractor, not to the Government. The Contractor shall require the subcontractors' reports to be submitted in sufficient time to meet the reporting date in paragraph (c) above.
- (e) The Contractor's report shall consist of a consolidation of the subcontractors' reports and the Contractor's own report.

PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

SECTION J - LIST OF ATTACHMENTS

Exhibit A	Installation-Provided Government Property, 24 pages
Exhibit B	Contract Documentation Requirements, 5 pages
Exhibit C	Register of Wage Determination and Fringe Benefits, June 20, 1995, 9 pages
Exhibit D	Contract Security Classification Specification, DD Form 254, 2 pages
Exhibit E	Procedures for the Preparation and Approval of Contractor Reports for Langley Research Center, Form PROC./P-72, May 1992, 4 pages
Exhibit F	Semi-Annual Progress Report for Small Disadvantaged Business

Exhibit F Semi-Annual Progress Report for Small Disadvantaged Business (SDB) Goals, 1 page

The following are located after the last section of this solicitation:

Attachment 1 Sample Task Orders, 24 pages

Attachment 2 Contract Pricing Proposal Cover Sheet, Standard Form 1448, October 1995, 1 page

Attachment 3 FAR Provision 52.203-8, Requirement for Certificate of Procurement Integrity (SEP 1995) Alternate I (SEP 1990), 2 pages

Attachment 4 Relevant Experience and Past Performance Evaluation Instructions/Questionnaire, 4 pages

Attachment 5 SAERS Bidders Library Index, 9 pages

Attachment 6 Skill Matrix, 3 pages

EXHIBIT A

(LIST OF INSTALLATION-PROVIDED GOVERNMENT PROPERTY)

LARC EMS REPORT IPGPLIST EQUIPMENT ASSIGNED TO SPECIFIC ON SITE CONTRACTORS

DATA AS OF 12/04/95 MODEL NO BLDG ROOM DESCRIPTION MANUFACTURER 1084812 COMPUTER, MICRO
APPLE COMPUTER INC
M5525(11FX)
641
1083985 DISPLAY UNIT
RADIUS INC
GDM1950
641
0060872 INTERFACE, SCANNER
MICROTEK LAB INC MICROTEK GOVE
MS-SCSI/G
641
0080534 PRINTER, ADP
APPLE COMPUTER INC
M6000
641
0080533 SCANNER, COMPUTER
MICROTEK LAB INC MICROTEK GOVE
MSF300GS
641
0427492 RECORDER, CHART, STRIP
GOULD INC RECORDING SYS DIV
2007-8878-00MODIF.
720
0080734 POWER SUPPLY
RTE DELTEC CP F-GOULD ELECTR
7038-4
720
0411198 RECEIVER, TEST, TELEMETER
FIGGIE INT'L F-NEMS-CLARKE
TR711
720
0550572 ANALYZER SPECTRUM IF SECTION HEWIETT-DACKARD CO
730 215A 641 215A 215A 215A 215A 210 . 105 . 210 .210 N1044 5620C SW1000A SW1000A D/PAD MK-II 286 N1044 /20 720 N1527 N1527 O404027 DECOMMUTATION SYSTEM
O142320 COMPUTER, MICRO
O138884 COMPUTER, MICRO
O138885 COMPUTER, MICRO
O284093 COMPUTER, MICRO
O057141 COMPUTER, MICRO
O138286 DISPLAY UNIT
O142324 DISPLAY UNIT
O142324 DISPLAY UNIT
O143086 DISPLAY UNIT
O143087 DISPLAY UNIT
O14401P3A
O138938 MODEM, COMMUNICATIONS
O140704

COMPUADD

COMPUAD

COMPUADD

COMPU WYLE LORAL CORP 0404027 DECOMMUTATION SYSTEM HOME HOME HOME HOME HOME HOME HOME

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PROCESS DATE 12/04/95 PAGE NUMBER 1

HOME HOME HOME HOME HOME DATA AS DE 12/04/95

LARC EMS REPORT IPGPLIST EQUIPMENT ASSIGNED TO SPECIFIC ON SITE CONTRACTORS

PROCESS DATE 12/04/95 PAGE NUMBER 2

MODEL NO BLDG ROOM E C N DESCRIPTION MANUFACTURER LARC EMS REPORT IPGPLIST EQUIPMENT ASSIGNED TO SPECIFIC ON SITE CONTRACTORS
DATA AS OF 12/04/95

PROCESS DATE 12/

PAGE NUMBER

E C N	DESCRIPTION	MANUFACTURER	MODEL NO	BLDG	
1427289	TRANSPORT, MAGNETIC TAPE	HEWLETT-PACKARD CO TEKTRONIX INC DORNIER GMBH ZWEIGWERK DATUM INC F-PERIPHERAL WAVETEK SAN DIEGO INC EXOTECH INC COMPAQ COMPUTER CORP COMPAQ COMPUTER CORP EXOTECH INC EPSON AMERICA INC HEWLETT-PACKARD CO TEKTRONIX INC NETWORK COMPUTING DEVICES INC HEWLETT-PACKARD CO	C1552A	1202	146
0035572	GENERATOR, WAVEFORM	TEKTRONIX INC	VX4790A	1202	148
0426594	TESTER, AIRCRAFT SPEED	DORNIER GMBH ZWEIGWERK	218	1202	148
0473948	GENERATOR, TIME CODE, PORTABLE	DATUM INC F-PERIPHERAL	9 150 - 15 15	1202	150
0035605	MULTIMETER, DIGITAL	WAVETEK SAN DIEGO INC	850	1202	150
0020014	AMMETER	EXOTECH INC	A82-222	1202	209
0846898	COMPUTER, MICRO	COMPAQ COMPUTER CORP	2572	1202	209
0848899	DISPLAY UNIT	COMPAQ COMPUTER CORP	420	1202	209
0055338	MULTIMETER, DIGITAL	EXOTECH INC	380972	1202	209
0848337	PRINTER, ADP	EPSON AMERICA INC	LQ2550P24MA	1202	209
1088364	PRINTER, ADP	HEWLETT-PACKARD CO	2225A	1202	218
1180018	DISPLAY UNIT	HITACHI MFG CO	HM4419D	1202	222
0473115	OSCILLOSCOPE, GENERAL PURPOSE	TEKTRONIX INC	7904	1202	222
1180015	TERMINAL, DATA PROCESSING	NETWORK COMPUTING DEVICES INC	88K	1202	222
1088448	ANALYZER, LOGIC	HEWLETT-PACKARD CO	16500A	1202	223
0060916	COMPUTER, MICRO	JOIN DATA TECHNOLOGY	386	1202	227
1282554	COMPUTER, MINI	SUN MICROSYSTEMS INC	447	1202	227
0846953	DISPLAY UNIT	COMPAQ COMPUTER CORP	420	1202	227
0060917	DISPLAY UNIT	NEC INFORMATION SYSTEMS INC	JC1402HMA	1202	227
1262555	DISPLAY UNIT	SUN MICROSYSTEMS INC	GDM20D10	1202	227
0846886	PRINTER, ADP	EPSON AMERICA INC	LQ510	1202	227
0057273	PRINTER, ADP	EPSON AMERICA INC	P78PA(LQ500)	1202	227
0848766	COMPUTER, MICRO	COMPUADO	A000	1202	2271
1255398	PRINTER, ADP	HEWLETT-PACKARD CO	C2114A	1202	251
1424918	DETECTOR, INFRARED	ELECTRO-OPTICAL SYSTEMS INC	ISO20LN6STS	1202	259
1258270	POWER SUPPLY, LASER	LASER PHOTONICS INC	L5830	1202	259
1256862	GENERATOR, FUNCTION	STANFORD RESEARCH SYSTEMS INC	DS345/1	1202	266
1257079	DISPLAY UNIT	GATEWAY 2000	CS1572FS	1202	. 114
1092932	COMPUTER, MICRO	ANS COMPUTER SYSTEMS, INC	V6A9	1202	. 117
0058453	COMPUTER, MICRO	COMPUADD	286	1202	. 117
1422956	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	XPSP9OMT	1202	. 117
0292855	COMPUTER, MICRO	IRONICS INC	IV1600S	1202	. 117
1084561	COMPUTER, MICRO	MARKET WEST COMPUTER GROUP	GP486-25	1202	. 117
1088322	COMPUTER, MINI	SUN MICROSYSTEMS INC	147B4/75FGX16P40	1202	. 117
0530657	CONTROLLER; OSCILLOSCOPE	HEWLETT-PACKARD CO HITACHI MFG CO TEKTRONIX INC NETWORK COMPUTING DEVICES INC HEWLETT-PACKARD CO JOIN DATA TECHNOLOGY SUN MICROSYSTEMS INC COMPAQ COMPUTER CORP NEC INFORMATION SYSTEMS INC SUN MICROSYSTEMS INC EPSON AMERICA INC COMPUADD HEWLETT-PACKARD CO ELECTRO-OPTICAL SYSTEMS INC LASER PHOTONICS INC STANFORD RESEARCH SYSTEMS INC GATEWAY 2000 ANS COMPUTER SYSTEMS, INC COMPUADD DELL COMPUTER CORP F-PC'S LTD IRONICS INC MARKET WEST COMPUTER GROUP SUN MICROSYSTEMS INC SUNDSTRAND DATA CTL F-ENDEVCO NEC INFORMATION SYSTEMS INC	204-2	1202	. 117
1088324	DISK DRIVE UNIT	SUN MICROSYSTEMS INC	411	1202	. 117
G079861	DISK DRIVE UNIT	SUN MICROSYSTEMS INC	X558H	1202	. 117
1242985	DISK DRIVE UNIT	SUN MICROSYSTEMS INC	811	1202	. 117
1085968	DISK DRIVE UNIT	SUNDSTRAND DATA CTL F-ENDEVCO	980-0509-001	1202	. 117
0058454	DISDLAY HNIT	NEC INFORMATION SYSTEMS INC	JC1402HMA	1202	117

DESCRIPTION MANUFACTURER BLDG ROOM | 1088323 DISPLAY UNIT | SONY CORP | GDM1662B | 1202 | 117 | 1090081 EXPANSION BOX, CHASSIS | ELMA ENGINEERING | 32V68416T12H-P350T | 1202 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1204 | 117 | 1205 | 117 | 1205 | 117 | 1205 | 117 | 1205 | 117 | 1205 | 117 | 1205 | 117 | 1205 | 117 | 1205 | 117 | 1205 | 117 | 1205 | 117 | 1205 | 117 | 1205 | 117 | 1205 | 117 | 1205 | 117 | 1205 | 117 | 1205 | 117 | 1205 | 117 | 1205 | 117 | 1205 | 117 | 1205 | 117 | 1205 | 1205 | 117 | 1205 | 1205 | 117 | 1205 | 1205 | 1205 | 1205 | 117 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1205 | 1202 .117 1202 .117 1202 .117 1202 .117 1202 .117C 0474420 VOLTMETER, DIGITAL, DC
1261743 CHASSIS, EXPANSION
1 TEKTRONIX INC
1263382 CHASSIS, EXPANSION
1 TEKTRONIX INC
1260937 COMPUTER, MICRO
1260937 COMPUTER, MICRO
1260938 C

ECN	DESCRIPTION	MANUFACTURER	MODEL NO	BLDG	ROOM
0803851	MODULE MODULE OSCILLOSCOPE	HEWLETT-PACKARD CO HEWLETT-PACKARD CO	E1431A	1202	. 117C
0803852	MODULE	HEWLETT-PACKARD CO	E1431A 2230	1202	1170
0055316	OSCILLOSCOPE	TEKTRONIX INC	2230	1202	
1262352	OSCILLOSCOPE PRINTER, ADP PRINTER, ADP PRINTER, ADP TRANSPORT, MAGNETIC TAPE TRANSPORT, MAGNETIC TAPE TRANSPORT, MAGNETIC TAPE AMPLIFIER, LOCK-IN AMPLIFIER, LOCK-IN AMPLIFIER, SELECTIVE ANALYZER, SPECTRUM ANALYZER, SPECTRUM ANALYZER, SPECTRUM, IF SECTION	HEWLETT-PACKARD CO	C2001A	1202	. 117C
1262335	PRINTER, ADP	HEWLETT-PACKARD CO	C2001A	1202 1202 1202 1202	. 117C
1261593	PRINTER, ADP	TEKTRONIX INC	4684	1202	. 117C
0803396	TRANSPORT, MAGNETIC TAPE	CONTEMPORARY CYBERNETICS GROUP	CY-ASP5	1202	. 117C
0802187	TRANSPORT, MAGNETIC TAPE	EXABYTE CORP	8500C	1202 1202	. 117C
1091118	TRANSPORT, MAGNETIC TAPE	SUN MICROSYSTEMS INC	411	1202	. 117C
0849322	AMPLIFIER, LOCK-IN	ITHACO INC	393-01MODIFIED	1202	. 122
0465289	AMPLIFIER, LOCK-IN	PRINCETON APPLIED RESEARCH	186	1202	. 122
0465285	AMPLIFIER, SELECTIVE	PRINCETON APPLIED RESEARCH	189	1202	. 122
0465309	ANALYZER, SPECTRUM	HEWLETT-PACKARD CO	141T	1202	. 122
0465308	ANALYZER, SPECTRUM	SCI ATLNTA F-SPECTRAL DYNAMICS	SD330A	1202	. 122
0019927	ANALYZER, SPECTRUM ANALYZER, SPECTRUM, IF SECTION ANALYZER, SPECTRUM, RF SECTION CALIBRATOR, VOLTAGE/CURRENT COMPUTER, MICRO CONVERTER, FREQUENCY COUNTER, FREQUENCY COUNTER, FREQUENCY GENERATOR, FUNCTION METER, POWER, RF METER, POWER, RF OSCILLOSCOPE, PORTABLE	HEWLETT-PACKARD CO	8552B	1202	. 122
0019926	ANALYZER, SPECTRUM, RF SECTION	HEWLETT-PACKARD CO	8554B	1202	. 122
0485294	CALIBRATOR, VOLTAGE/CURRENT	FLUKE JOHN MFG CO INC	382A	1202 1202	. 122
0532863	COMPUTER, MICRO	HEWLETT-PACKARD CO	HP85A	1202	. 122
0532574	CALIBRATOR, VOLTAGE/CURRENT COMPUTER, MICRO CONVERTER, FREQUENCY COUNTER, FREQUENCY COUNTER, FREQUENCY GENERATOR, FUNCTION METER, POWER, RF METER, POWER, RF OSCILLOSCOPE, PORTABLE PLOTTER, GRAPHICS AMPLIFIER, LOCK-IN AMPLIFIER, SPECTRUM CAMERA, STILL PICTURE	HEWLETT-PACKARD CO	5255A	1202	. 122
0468988	COUNTER, FREQUENCY	HEWLETT-PACKARD CO	5245L	1202 1202	. 122
0465259	COUNTER, FREQUENCY	HEWLETT-PACKARD CO	5342A	1202	. 122
0547884	GENERATOR, FUNCTION	WAVETEK SAN DIEGO INC	275	1202	. 122
0465258	METER, POWER, RF	HEWLETT-PACKARD CO	436A	1202	. 122
0485261	METER, POWER, RF	HEWLETT-PACKARD CO	436A	1202 1202	. 122
0465184	OSCILLOSCOPE, PORTABLE	TEKTRONIX INC	465R465	1202	. 122
0141619	PLOTTER, GRAPHICS	HEWLETT-PACKARD CO	7440A	1202	. 122
0465183	AMPLIFIER, LOCK-IN	ITHACO INC	465R465 7440A 393-01MODIFIED	1202	. 123
0464621	AMPLIFIER, LOCK-IN	ITHACO INC	393	1202 1202 1202	. 123
0465292	AMPLIFIER, LOCK-IN	PRINCETON APPLIED RESEARCH	186	1202	. 123
0465333	AMPLIFIER, LOCK-IN	PRINCETON APPLIED RESEARCH	186	1202	. 123
G075508	AMPLIFIER, LOCK-IN	STANFORD RESEARCH SYSTEMS INC SPECTRA-PHYSICS INC LASER ANAL	SR510	1202	. 123
0259488	AMPLIFIER, POWER, RF	SPECTRA-PHYSICS INC LASER ANAL	NONE	1202	. 123
1088395	ANALYZER, SPECTRUM	STANFORD RESEARCH SYSTEMS INC	SR760	1202	. 123
0533297	CAMERA, STILL PICTURE	AMERICAN OPTICAL CO	679A	1202	. 123
0143054	COMPUTER, MICRO	COMPAQ COMPUTER CORP	286 (101710)	1202	. 123
1085261	COMPUTER, MICRO	GRID SYSTEMS CORP SUB OF TANDY	1535	1202	. 123
0465312	COMPUTER, MICRO	HEWLETT-PACKARD CO	HP85A	1202	. 123
0802228	CONTROLLER, INTERFACE	IOTECH	PERSONAL488NB	1202	. 123
1255248	ANALYZER, SPECTRUM CAMERA, STILL PICTURE COMPUTER, MICRO COMPUTER, MICRO COMPUTER, MICRO CONTROLLER, INTERFACE DETECTOR, INFRARED	ELECTRO-OPTICAL SYSTEMS INC	ISO20E73LN6	1202 1202 1202 1202 1202 1202	. 123
ハック18ちょ	DEWAR, LIQUID NITROGEN	QUANTUM ASSOCIATES INC	I N2 - 1	1202	. 123

LARC EMS REPORT IPGPLIST EQUIPMENT ASSIGNED TO SPECIFIC ON SITE CONTRACTORS

PROCESS DATE 12/04/95 PAGE NUMBER 6

E C N DESCRIPTION MANUFACTURER MODEL NO BLDG | 1085282 DISK DRIVE UNIT | GRID SYSTEMS CORP SUB OF TANDY 3401 | 1202 | 123 | 115881.1 GENERATOR. FUNCTION | STANFORD RESEARCH SYSTEMS INC DS345 | 1202 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 123 | 1 LARC EMS REPORT IPGPLIST EQUIPMENT ASSIGNED TO SPECIFIC ON SITE CONTRACTORS PROCESS DATE 12/0
DATA AS DF 12/04/95 PAGE NUMBER

ECN		MANUFACTURER	MODEL NO		
1088313	DISK DRIVE UNIT	ALPHATRONIX NEC CORP SUNDSTRAND DATA CTL F-ENDEVCO ALPHATRONIX ALPHATRONIX DELL COMPUTER CORP F-PC'S LTD NANAO-USA NEC INFORMATION SYSTEMS INC SAMSUNG ELECTRONICS SUN MICROSYSTEMS INC VIEWSONICS INC VIEWSONICS INC HEWLETT-PACKARD CO HEWLETT-PACKARD CO OKIDATA CORP SUN MICROSYSTEMS INC TEKTRONIX INC SHARP ELECTRONICS CORP NICOLET SCIENTIFIC F-FEDERAL HEWLETT-PACKARD CO BECKMAN INDUSTRIAL CORP FLUKE JOHN MFG CO INC FLUKE JOHN MFG CO INC HEWLETT-PACKARD CO TEKTRONIX INC TEKTRONIX INC TEKTRONIX INC TEKTRONIX INC HEWLETT-PACKARD CO VECCO INSTR INC LAMBDA ELECTR PAROSCIENTIFIC INC	INSPIRE-IPAIO	1202	. 148
0803559	DISK DRIVE UNIT	NEC CORP	CDR600	1202	. 148
1262424	DISK DRIVE UNIT	SUNDSTRAND DATA CTL F-ENDEVCO	980-0510-001	1202	. 148
1158209	DISK STORAGE UNIT	ALPHATRONIX	INSPIRE-IPA20D	1202	. 148
G077231	DISK STORAGE UNIT	ALPHATRONIX	INSPIRE	1202	. 148
1422957	DISPLAY UNIT	DELL COMPUTER CORP F-PC'S LTD	M1728U	1202	. 148
1257572	DISPLAY UNIT	NANAO-USA	MA2073	1202	. 148
G074940	DISPLAY UNIT	NEC INFORMATION SYSTEMS INC	JC1404HMA-I	1202	. 148
1084580	DISPLAY UNIT	SAMSUNG ELECTRONICS	CVB4581	1202	. 148
1424346	DISPLAY UNIT	SUN MICROSYSTEMS INC	GDM20D10	1202	. 148
1255097	DISPLAY UNIT	VIEWSONICS INC	TX1713MV	1202	. 148
1259473	DISPLAY UNIT	VIEWSONICS INC	2182	1202	. 148
1255358	PRINTER, ADP	HEWLETT-PACKARD CO	C2001A	1202	. 148
G078841	PRINTER, ADP	HEWLETT-PACKARD CO	33471A11P	1202	. 148
G077740	PRINTER, ADP	OKIDATA CORP	391	1202	. 148
1424347	PRINTER, ADP	SUN MICROSYSTEMS INC	NEWSPRINTER CL+	1202	. 148
1281517	PRINTER, ADP	TEKTRONIX INC	4684	1202	. 148
1261348	SCANNER, COMPUTER	SHARP ELECTRONICS CORP	JX325	1202	. 148
0777892	CONTROLLER, OSCILLOSCOPE	NICOLET SCIENTIFIC F-FEDERAL	206-2	1202	. 150
1261667	GENERATOR, SIGNAL, RF	HEWLETT-PACKARD CO	8657B	1202	. 150
0143357	MULTIMETER, DIGITAL	BECKMAN INDUSTRIAL CORP	4410	1202	. 150
G078139	MULTIMETER, DIGITAL	FLUKE JOHN MFG CD INC	8842A	1202	. 150
0801571	MULTIMETER, DIGITAL	FLUKE JOHN MFG CO INC	87	1202	. 150
1160337	OSCILLOSCOPE	HEWLETT-PACKARP CO	54600A	1202	. 150
1255216	OSCILLOSCOPE	TEKTRONIX INC '	2232	1202	. 150
1422653	OSCILLOSCOPE, DIGITAL	TEKTRONIX INC	TDS684A	1202	. 150
0777929	OSCILLOSCOPE, PORTABLE	TEKTRONIX INC	465R465	1202	. 150
0141133	PLOTTER, GRAPHICS	HEWLETT-PACKARD CO	7475A	1202	. 150
0284819	POWER SUPPLY, LO VOLT/HI CURR	VEECO INSTR INC LAMBDA ELECTR	LGS-EEA280VR	1202	. 150
0527516	PRESSURE MEASURING SYSTEM	PAROSCIENTIFIC INC	MODEL600MODIFIED	1202	. 150
0533241	PRINTER, ADP	HEWLETT-PACKARD CO	2225A	1202	. 150
0548788	PRINTER, ADP	HEWLETT-PACKARD CO	2225A	1202	. 150
0020259	PRINTER, ADP	OKIDATA CORP	GE5253A	1202	. 150
0284815	RECORDER, TAPE, ANALOG	BELL & HOWELL CO	MARS 1000	1202	. 150
0284817	SYSTEM, DATA ACQUISITION	TELEDYNE CONTROLS TELEDYNE IND	NONE	1202	. 150
0140286	THERMOMETER, DIGITAL	INSTRULAB INC	4202-13-14-6	1202	. 150
G079398	COMPUTER, MICRO	HEWLETT-PACKARD CO VEECO INSTR INC LAMBDA ELECTR PAROSCIENTIFIC INC HEWLETT-PACKARD CO HEWLETT-PACKARD CO OKIDATA CORP BELL & HOWELL CO TELEDYNE CONTROLS TELEDYNE IND INSTRULAB INC COMPAQ COMPUTER CORP NEC INFORMATION SYSTEMS INC HEWLETT-PACKARD CO	2585(386/33L)	1202	. 152
G078700	DISPLAY UNIT	NEC INFORMATION SYSTEMS INC	JC1403HMA	1202	. 152
0138890	COMPUTER, MICRO	HEWLETT-PACKARD CO	45940A	1202	. 266
0138892	DISPLAY UNIT	HEWLETT-PACKARD CO	35743A	1202	. 266

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E C N	DESCRIPTION	MANUFACTURER	MODEL NO	BLDG	ROOM
0053049	PRINTER. ADP	MANUFACTURER HEWLETT-PACKARD CO BELL & HOWELL ROCHESTER FILM TELEDYNE CONTROLS TELEDYNE IND LOGITEK INC HEWLETT-PACKARD CO SOLTEC CORP DELL COMPUTER CORP F-PC'S LTD DELL COMPUTER CORP F-PC'S LTD LIDDELL-BIRMINGHAM TRAILER CO DELL COMPUTER CORP F-PC'S LTD HEWLETT-PACKARD CO DELL COMPUTER CORP F-PC'S LTD HEWLETT-PACKARD CO CROWN INTERNATIONAL CORP GRASS VALLEY GROUP INC THE TEAC CORP OF AMERICA GRASS VALLEY GROUP INC THE SONY CORP AMPEX CORP F-INVAR ELECTR CORP SONY CORP TEAC CORP OF AMERICA NETWORK COMPUTING DEVICES INC NETWORK COMPUTING DE	2225C	1202	. 266
0284814	RECORDER, TAPE, ANALOG	BELL & HOWELL ROCHESTER FILM	MARS 1000	1202	HALL
0284816	SYSTEM, DATA ACQUISITION	TELEDYNE CONTROLS TELEDYNE IND	NONE	1202	HALL
0282405	POWER METER	LOGITEK INC	YMA3412D	1202	LOFT
0472793	OSCILLOSCOPE, STORAGE	HEWLETT-PACKARD CO	1741A	1202	N1846
0533213	RECORDER, CHART, STRIP	SOLTEC CORP	3314MF	1202	WYLE
1424018	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	433S/LN	1209	127
1424018	DISPLAY UNIT	DELL COMPUTER CORP F-PC'S LTD	VC8BN	1209	127
1159324	TRAILER	LIDDELL-BIRMINGHAM TRAILER CO	202WD	1209	NOC
1424019	DISPLAY UNIT	DELL COMPUTER CORP F-PC'S LTD	VC8BN	1209T	T6
1424017	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	433S/LN	1209T	T6
1255965	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	450L	1209T	306
1255970	DISPLAY UNIT	DELL COMPUTER CORP F-PC'S LTD	VC8N	1209T	306
1158065	PRINTER, ADP	HEWLETT-PACKARD CO	33449A	1209T	306
1255963	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	450L	1229	102
1255969	DISPLAY UNIT	DELL COMPUTER CORP F-PC'S LTD	VC8N	1229	102
1156715	PRINTER, ADP	HEWLETT-PACKARD CO	C2 106A	1229	102
1087750	AMPLIFIER, AUDIO FREQUENCY	CROWN INTERNATIONAL CORP	D75	1232T	
1088788	CONVERTER, VIDEO SIGNAL	GRASS VALLEY GROUP INC THE	CV2OT	1232T	
1087751	DISK DRIVE UNIT	TEAC CORP OF AMERICA	CD401	1232T	
1088789	GENERATOR	GRASS VALLEY GROUP INC THE	SCB 100N	1232T	
1088542	MONITOR, TELEVISION	SONY CORP	PVM1340	1232T	
1087621	RECORDER-REPRODUCER SET, VIDEO	AMPEX CORP F-INVAR ELECTR CORP	CVR75	1232T	
1088543	RECORDER, CASSETTE, VIDEO	SONY CORP	SV0160	1232T	
1087749	RECORDER, STUDIO	TEAC CORP OF AMERICA	488	1232T	
0259689	TERMINAL, DATA PROCESSING	TEKTRONIX INC	4107A	1232T	•
1160154	COMPUTER, MICRO	NETWORK COMPUTING DEVICES INC	NCD88K	1237T	208
1160169	DISPLAY UNIT	NETWORK COMPUTING DEVICES INC	NCD19C	1237T	208
1160163	COMPUTER, MICRO	NETWORK COMPUTING DEVICES INC	NCD88K	1237T	211
1180180	DISPLAY UNIT	NETWORK COMPUTING DEVICES INC	NCD19C	1237T	211
1160185	DISPLAY UNIT	NETWORK COMPUTING DEVICES INC	NCD19C	1237T	. 212
1344809	DISPLAY UNIT	NEC ELECTRONICS USA INC	JC1531VMA3	1244	121
1344610	DISPLAY UNIT	NEC ELECTRONICS USA INC	JC1531VMA3	1244	121
1260201	CONTROL, INERTIAL NAVIGTN UNIT	ROCKWELL INTL COLLINS AVIONICS	C11020/ASN	1244	121A
0531685	DISPLAY UNIT, (IME	SYSTRON-DONNER CORP	8580	1244	121A
0057202	COMPUTER, MICRO	LOOP	286	1244	132
1428975	COMPUTER, MICRO	MICROMAX DISTRIBUTION	NONE (VERIFIED)	1244	132
1426973	COMPUTER, MICRO	MICROMAX DISTRIBUTION	NONE (VERIFIED)	1244	132
1426974	COMPUTER, MICRO	MICROMAX DISTRIBUTION	NONE (VERIFIED)	1244	132
0057204	DISPLAY UNIT	SAMSUNG ELECTRONICS	CM4531	1244	132

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1426978	DISPLAY UNIT	TECHMEDIA TECHMEDIA TECHMEDIA TECHMEDIA HITACHI MFG CO A T I INDUSTRIES F- AIRCRAFT SONY CORP AT AND T INFORMATION SYSTEMS HITACHI MFG CO INTERNATIONAL BUSINESS MACHINE GATEWAY 2000 MATSUSHITA ELEC INDUS CO JOHNSON E F CO COMCO/COMM DIV JOHNSON E F CO COMCO/COMM DIV JOHNSON E F CO COMCO/COMM DIV MATSUSHITA ELEC INDUS CO SONY CORP EASTMAN KODAK CO SONY CORP CHRIS DOMACK SUN MICROSYSTEMS INC LANGLEY RESEARCH CENTER TEXAS MICROSYSTEMS INC LANGLEY RESEARCH CENTER LANGLEY RESEARCH CENTER LANGLEY RESEARCH CENTER TIMEX CORP UNITED TECHNOLOGIES HAM STD DV	TCM1448G	1244	132
1426976	DISPLAY UNIT	TECHMEDIA	TCM1448G	1244	132
1426977	DISPLAY UNIT	TECHMEDIA	TCM1448G	1244	132
0019673	MONITOR, TELEVISION	HITACHI MFG CO	V099U	1244	132
0531230	PROCESSOR. AUDIO	A T I INDUSTRIES F- AIRCRAFT	EM1000-1	1244	132
1256851	RECORDER. TAPE. AUDIO	SONY CORP	TCK96R	1244	132
1345270	TERMINAL	AT AND T INFORMATION SYSTEMS	DDM-PLUS	1244	132
0019676	VECTORSCOPE	HITACHI MFG CO	V099U	1244	132
0283291	COMPUTER MICRO	INTERNATIONAL BUSINESS MACHINE	5170-099	1244	135B
1424874	COMPUTER MICRO	GATEWAY 2000	AM424I25	1244	137
1424873	DISPLAY UNIT	GATEWAY 2000	PMV14VC	1244	137
1424872	PRINTER ADP	MATSUSHITA ELEC INDUS CO	KX-P1124	1244	137
3530177	TRANSCRIVER RADIO	JOHNSON E F CO COMCO/COMM DIV	732	1244	137
0530178	TRANSCEIVER RADIO	JOHNSON E F CO COMCO/COMM DIV	732	1244	137
0404141	MONITOR TELEVISION	MATSUSHITA ELEC INDUS CO	CT 1920M	1244	219
0404637	RECORDER TAPE VIDEO	SONY CORP	V05850	1244	219
1092873	PRINTER AND	EASTMAN KODAK CO	XL7700	1244	219A
0404636	RECORDER TAPE VIDEO	SONY CORP	V05800	1244	221
0547784	DISPLAY THRUST VECTOR FIGHTER	CHRIS DOMACK	THRUST VECTOR	1244	. 110A
1091210	COMPLITER MICRO	SUN MICROSYSTEMS INC	147B	1244	. 111
0488291	CONTROLLER AC PAGS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	. 111
1090545	DISPLAY LINIT	TEXAS MICROSYSTEMS INC	1006R	1244	. 111
1090548	DISPLAT GALT	TEXAS MICROSYSTEMS INC	1006R	1244	. 111
1138415	DISTRIBUTOR 115/28VAC PARS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	. 111
1531692	ENDMATTER TOU PARS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	. 111
0531572	FORMATTER TOU PARS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	. 111
0284973	GYPO ANGLILAR RATE	TIMEX CORP	115/100	1244	. 111
0531184	GYPO ANGILLAR RATE	TIMEX CORP	P/N304640	1244	. 111
0531104	CYPO ANGLI AP PATE	TIMEX CORP	E529	1244	. 111
0529804	GYPO ANGLI AP PATE	TIMEX CORP	E529	1244	. 111
0523504	GYRO ANGILAR RATE	TIMEX CORP	115/100P/N304585	1244	. 111
0531658	GYRO ANGLI AR RATE	TIMEX CORP	304450	1244	.111
0531659	GYRO ANGULAR RATE	TIMEX CORP	304450	1244	.111
0531637	GYRO ANGULAR RATE	TIMEX CORP	E529	1244	. 111
0529702	GYRO ATTITUDE	GUIDANCE TECHNOLOGY INC	676	1244	. 111
0531644	GYRO RATE	UNITED TECHNOLOGIES CORP	10-08100-019	1244	, 111
0531645	GYRO RATE	UNITED TECHNOLOGIES HAM STD DV	10-08100-019	1244	.111
0531855	GYRO RATE	UNITED TECHNOLOGIES HAM STD DV	10-08100-015	1244	. 111
0531658	GYPO PATE	UNITED TECHNOLOGIES HAM STD DV	10-08100-015	1244	111
	WIND, MAIL	CITATED ILVINORUGED INVIGIO DI	10 00 100 0 10	12.7.4	

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0531624	TRANSLATOR, RF, PADS	LANGLEY RESEARCH CENTER	NASA SPECS JG7044A	1244	. 111
0531193	TRANSMITTER, ANGULAR VELOCITY	HONEYWELL INC AEROSPACE DIV	JG7044A	1244	. 111
	TRANSMITTER, ANGULAR VELOCITY	HONEYWELL INC AEROSPACE DIV	JG7044A	1244	. 111
	TRANSPORT, MAGNETIC TAPE	CONTEMPORARY CYBERNETICS GROUP CONTEMPORARY CYBERNETICS GROUP	CY8500SO-L	1244 1244	. 111
	TRANSPORT, MAGNETIC TAPE	CONTEMPORARY CYBERNETICS GROUP	CY8500SD-L	1244	. 111
	MULTIPLEXER, ANALOG, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	. 112
	MULTIPLEXER, ANALOG, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244 1244	. 112
	MULTIPLEXER, DIGITAL, PADS	LANGLEY RESEARCH CENTER	NASA SPECS NASA SPECS	1244	. 112
	SIGNAL CONDITIONER, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	
	SIGNAL CONDITIONER, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	. 112
	TRANSMITTER, FLOW DIRECTION	LANGLEY RESEARCH CENTER	NASA SPECS JOB ORDER HBF212	1244	. 112
	TRANSMITTER, FLOW DIRECTION	LANGLEY RESEARCH CENTER	52D	1244	. 112
	TRANSMITTER, FLOW DIRECTION	LANGLEY RESEARCH CENTER	52D	1244	. 112
	CALIBRATOR, PRESSURE	DDECCHDE CYCTEMS INC	780B	1244	. 113
0053302	INDICATOR, ANGLE, DIGITAL	NORTH ATLANTIC INDUSTRIES INC	8810F1110	1244	. 113
	INDICATOR, ANGLE, DIGITAL	NORTH ATLANTIC INDUSTRIES INC	8810-06	1244	. 113
	INDICATOR, ANGLE, DIGITAL INDICATOR, ANGLE, POSITION	NORTH ATLANTIC INDUSTRIES INC	8300	1244	. 113
	INDICATOR, STRAIN	MEASUREMENTS GP F-VISHAY INC	1550A	1244	. 113
0055314	INDICATOR, STRAIN GAGE, DGTL	MEASUREMENTS GP F-VISHAY INC	P3500	1244	. 113
	OSCILLOSCOPE, PORTABLE	TENTERNITY INC	335	1244	113
	POWER SUPPLY, KLYSTRON	TEKTRONIX INC SYSTRON-DONNER F-DATAPULSE DIV	M15-50AOVX	1244	. 113
0284803	PRESSURE MEASURING SYSTEM	PAPOSCIENTIFIC INC	600	1244	. 113
	TESTER, FLIGHT LINE	TELEDVAE CONTROLS TELEDVAE IND	838963	1244	. 113
	_ ·	PAROSCIENTIFIC INC TELEDYNE CONTROLS TELEDYNE IND LANGLEY RESEARCH CENTER	NASA SPECS	1244	. 114
	CALIBRATOR, SYSTEM, PADS CALIBRATOR, SYSTEM, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	. 114
	CALIBRATOR: SYSTEM, PADS	I ANGLEY DESEARCH CENTER	NASA SPECS	1244	114
	DISPLAY UNIT, TIME	LANGLEY RESEARCH CENTER SYSTRON-DONNER CORP	8181-9	1244	. 114
	MULTIMETER, DIGITAL	BECKMAN INDUSTRIAL CORP	310	1244	. 114
	PLUG-IN, MODULAR, INVERTER	AVIONIC INSTRUMENTS INC	18800-1G	1244	. 114
	PLUG-IN, MODULAR, INVERTER	AVIONIC INSTRUMENTS INC	310 1B800-1G 1B800-1G DPP-Q7A2	1244	. 114
	PRINTER, ADP	GENERAL ELECTRIC-DATEL DIV OF	DPP-07A2	1244	. 114
	DISK DRIVE OPTICAL	CHEROKEE DATA SYSTEMS INC.	8822	1244	. 116
	SIGNAL CONDITIONING SYSTEM	METRADIEY CORP	8822 381MODIFIED	1244	. 119
	MONITOR, TELEVISION, COLOR	MATCHCHITA FIFC INDIC CO	CT2083VY	1244	. 120
	MONITOR, TELEVISION, COLOR	MATSUSHITA ELEC INDUS CO MATSUSHITA ELEC INDUS CO ROSEMOUNT INC OF EMERSON ELEC ROSEMOUNT INC OF EMERSON ELEC	CT2083VY	1244	. 121
	· · · · · · · · · · · · · · · · · · ·	POSEMOUNT THE OF EMERSON FLEC	840E2E0-10K	1244	. 12 1A
	ALTIMETER	POSEMOINT INC OF EMERSON FLEC	RAOF 1F	1244	. 12 1A
	ALTIMETER	ROSEMOUNT INC OF EMERSON ELEC	840F6F0-40K	1244	. 12 1A
	ALTIMETER	ROSEMOUNT INC OF EMERSON ELEC	0405050 401	1244	. 12 1A
	ALTIMETER		ALT501-10K	1244	. 12 1A
0529705	ALTIMETER, INDICATING	LION PRECISION F-MINITECH LAB	WE 130 1- IOK	1244	. IZ IA

		MANUFACTURER			
0529708	ALTIMETER, INDICATING	LION PRECISION F-MINITECH LAB BOEING CO THE TELEVIDEO CORP LANGLEY RESEARCH CENTER OPTOTECH INC NEC INFORMATION SYSTEMS INC PRESSURE SYSTEMS INC TIMEX CORP BECKMAN INDUSTRIAL CORP BECKMAN INDUSTRIAL CORP FLUKE JOHN MFG CO INC TELEDYNE CONTROLS TELEDYNE IND TELEDYNE CONTROLS TELEDYNE IND TELEDYNE CONTROLS TELEDYNE IND TELEDYNE CONTROLS TELEDYNE IND TEKTRONIX INC ABBOTT TRANSISTOR LABORATORIES	ALT501-10K	1244	. 121A
0021258	CALIBRATOR, SENSOR	BOEING CO THE	F72786-101	1244	. 121A
0058869	COMPUTER, MICRO	TELEVIDEO CORP	FS386	1244	. 121A
0488278	CONTROLLER, AC, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	. 121A
0142182	DISK DRIVE UNIT	OPTOTECH INC	5984	1244	. 121A
0139660	DISPLAY UNIT	NEC INFORMATION SYSTEMS INC	JC1401P3A	1244	. 121A
0138940	GAGE, PRESSURE RESISTANCE	PRESSURE SYSTEMS INC	3200	1244	. 121A
0143135	GAGE, PRESSURE RESISTANCE	PRESSURE SYSTEMS INC	3200	1244	. 121A
0284974	GYRO, ANGULAR RATE	TIMEX CORP	115/100	1244	. 121A
0548787	MULTIMETER, DIGITAL	BECKMAN INDUSTRIAL CORP	3020B	1244	. 121A
0530717	MULTIMETER, DIGITAL	BECKMAN INDUSTRIAL CORP	310	1244	. 121A
0529723	MULTIMETER, DIGITAL	FLUKE JOHN MFG CO INC	8600A	1244	. 121A
0531627	MULTIPLEXER SYSTEM, REMOTE	TELEDYNE CONTROLS TELEDYNE IND	838030-10	1244	. 121A
0531631	MULTIPLEXER SYSTEM, REMOTE	TELEDYNE CONTROLS TELEDYNE IND	838030-4	1244	. 121A
0531613	MULTIPLEXER SYSTEM, RMDV	TELEDYNE CONTROLS TELEDYNE IND	838030-10	1244	. 121A
0778613	OSCILLOSCOPE, STORAGE, PORTABL	TEKTRONIX INC	214	1244	. 121A
0259810	POWER SUPPLY	ABBOTT TRANSISTOR LABORATORIES	S6A27A40	1244	. 121A
0259809	POWER SUPPLY	ABBOTT TRANSISTOR LABORATORIES	S6A27A40	1244	. 121A
0531814	POWER SUPPLY	TELEDYNE CONTROLS TELEDYNE IND	842756-5	1244	. 121A
0549135	POWER SUPPLY	VEECO INSTR INC LAMBDA ELECTR	MLGS6-280V	1244	. 121A
0549968	POWER SUPPLY, LAMBDA	KEY RESOURCES LTD	MLGS6-280V	1244	. 121A
0549619	PRINTER, ADP	INTERNATIONAL BUSINESS MACHINE	5152-002	1244	. 121A
0550060	PRINTER, ADP	OKIDATA CORP .	MICROLINE82A	1244	. 121A
0139783	SCANNER, ANALOG	PRESSURE SYSTEMS INC	RAMM30	1244	. 121A
0139782	SCANNER, ANALOG	PRESSURE SYSTEMS INC	RAMM30	1244	. 121A
0055244	SCANNER, ANALOG	PRESSURE SYSTEMS INC	RM30	1244	. 121A
0531570	SIGNAL CONDITIONER, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	. 121A
0137736	TRANSMITTER, FLOW DIRECTION	LANGLEY RESEARCH CENTER	51	1244	. 121A
0531660	TRANSMITTER, FLOW DIRECTION	TEKTRONIX INC ABBOTT TRANSISTOR LABORATORIES ABBOTT TRANSISTOR LABORATORIES TELEDYNE CONTROLS TELEDYNE IND VEECO INSTR INC LAMBDA ELECTR KEY RESOURCES LTD INTERNATIONAL BUSINESS MACHINE OKIDATA CORP PRESSURE SYSTEMS INC PRESSURE SYSTEMS INC PRESSURE SYSTEMS INC LANGLEY RESEARCH CENTER	JOB ORDER HBF212	1244	. 121A
0531881	TRANSMITTER, FLOW DIRECTION	LANGLEY RESEARCH CENTER	JOB ORDER HBF212	1244	. 121A
0846964	COMPUTER, MICRO	AUSTIN SCIENCE ASSOCIATES INC	386/20	1244	. 121B
0410849	DISCRIMINATOR, SUBCARRIER	PHILMONT ELECTRONICS INC	34-29	1244	. 121B
1092324	DISK DRIVE UNIT	CHEROKEE DATA SYSTEMS INC.	M8822	1244	. 121B
0846963	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	XC-1429C	1244	. 121B
0777898	OSCILLOSCOPE, PORTABLE	LANGLEY RESEARCH CENTER AUSTIN SCIENCE ASSOCIATES INC PHILMONT ELECTRONICS INC CHEROKEE DATA SYSTEMS INC. MITSUBISHI ELECTRIC CORP TEKTRONIX INC DIGITAL EQUIPMENT CORP LORAL CORP DATAMETRICS CORP SYSTRON-DONNER CORP SYSTRON-DONNER CORP	465R465	1244	. 121B
0142755	TERMINAL, DATA PROCESSING	DIGITAL EQUIPMENT CORP	VT220D2	1244	. 121B
0059977	DECOMMUTATION SYSTEM	LORAL CORP	ADS 100	1244	. 121C
0530782	GENERATOR, TIME CODE	DATAMETRICS CORP	SP380	1244	. 121C
0530769	GENERATOR, TIME CODE	SYSTRON-DONNER CORP	8420	1244 1244 1244	. 121C
0530774	GENERATOR, TIME CODE	SYSTRON-DONNER CORP	8420	1244	. 121C

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E C N	DESCRIPTION	MANUFACTURER	MODEL NO	BLDG	ROOM
1089648	PRINTER, ADP PRINTER, ADP RECEIVER, WEATHER WEATHER STATION CODER-DECODER, VIDEO COMPUTER, MICRO COMPUTER, MICRO COMPUTER, MICRO COMPUTER, MICRO COMPUTER, MINI DISPLAY UNIT INTERCOM, STATION MODEM, COMMUNICATIONS MODEM, COMMUNICATIONS MODEM, COMMUNICATIONS MODITOR, TELEVISION MONITOR, TELEVISION MONITOR, TELEVISION MONITOR, TELEVISION PRINTER, ADP RECORDER, CHART, THERMAL TIP RECORDER, CHART, THERMAL TIP RECORDER, CHART, THERMAL TIP RECORDER, CHART, THERMAL TIP ANALYZER, AUDIO CONFOLLER, AUDIO/VIDEO CONVERTER, MULTICHANNEL A TO D DISPLAY UNIT DISPLAY UNIT EXTENDER, INPUT/OUTPUT	C.ITOH CO LTD IND ELECT DIV	CI5000	1244	. 136A
1091325	PRINTER, ADP	HEWLETT-PACKARD CO	3630A	1244	. 136A
G074941	RECEIVER, WEATHER	MAINSTREAM DATA	NONE	1244	. 136A
0530187	WEATHER STATION	KAVOURAS INC	1000	1244	. 136A
1259077	CODER-DECODER, VIDEO	COMPRESSION LABS INC	REMBRANDT	1244	. 137
0054850	COMPUTER, MICRO	APPLE COMPUTER INC	M5000	1244	. 137
1258460	COMPUTER, MICRO	MICROSERVE	486/33	1244	. 137
1258461	COMPUTER, MICRO	MICROSERVE	486/33	1244	. 137
1422783	COMPUTER. MINI	SILICON GRAPHICS INC	CMNB007Y75	1244	. 137
0061145	DISPLAY UNIT	AMDEK CORP	VIDEO310A	1244	. 137
0055171	DISPLAY UNIT	E-MACHINES INC	1008	1244	. 137
G078705	DISPLAY UNIT	SONY CORP	GVM1300	1244	. 137
1422784	DISPLAY UNIT	SONY CORP	GDM20D11	1244	. 137
1258467	DISPLAY UNIT	SONY CORP	GVM1311Q	1244	. 137
1158593	DISPLAY UNIT	SONY CORP	GVM1310	1244	. 137
1158544	DISPLAY UNIT	SONY CORP	GVM1310	1244	. 137
1158590	DISPLAY UNIT	SONY CORP	GVM1310	1244	. 137
1158591	DISPLAY UNIT	SONY CORP	GVM1310	1244	. 137
0801952	INTERCOM, STATION	CLEAR-COM INTERCOM SYSTEM	ICS 100	1244	. 137
0802398	INTERCOM, STATION	CLEAR-COM INTERCOM SYSTEM	ICS 100	1244	. 137
0802399	INTERCOM, STATION	CLEAR-COM INTERCOM SYSTEM	ICS 100	1244	. 137
0802392	INTERCOM, STATION	CLEAR-COM INTERCOM SYSTEM	ICS 100	1244	. 137
0801956	INTERCOM, STATION	CLEAR-COM INTERCOM SYSTEM	ICS 100	1244	. 137
1159323	INTERCOM, STATION	CLEAR-COM INTERCOM SYSTEM	ICS2000	1244	. 137
1150862	MODEM, COMMUNICATIONS	A T & T TECHNOLOGIES GOVT SYS	2096A	1244	. 137
1077514	MODEM. COMMUNICATIONS	A T & T TECHNOLOGIES GOVT SYS	2098A	1244	. 137
1150902	MODEM, COMMUNICATIONS	A T & T TECHNOLOGIES GOVT SYS	2096A	1244	. 137
1158804	MONITOR, TELEVISION	MATSUSHITA ELEC INDUS CO	DT2700MS	1244	. 137
1158805	MONITOR, TELEVISION	MATSUSHITA ELEC INDUS CO	DT2700MS	1244	. 137
1158398	MONITOR, TELEVISION	SONY CORP	PVM2530	1244	. 137
0140387	PRINTER, ADP	EPSON AMERICA INC	P82AA(F86E)	1244	. 137
0425729	RECORDER, CHART, THERMAL TIP	HEWLETT-PACKARD CO	7418A	1244	. 137
0425730	RECORDER, CHART, THERMAL TIP	HEWLETT-PACKARD CO	7418A	1244	. 137
0404825	ANALYZER, AUDIO	LEADER INSTRUMENTS CORP	LAS550	1244	. 138
0140895	COMPUTER, MICRO	AMERICAN RESEARCH CORP	AT	1244	. 138
1083939	CONTROLLER, AUDIO/VIDEO	MATSUSHITA ELEC INDUS CO	AG-RM800	1244	. 138
0215229	CONVERTER, MULTICHANNEL A TO D	LYNCH CORP	B325D3	1244	. 138
1158592	DISPLAY UNIT	SONY CORP	GVM1310	1244	. 138
1084147	DISPLAY UNIT	SONY CORP	GVM1300	1244	. 138
0307195	EXTENDER INPUT/OUTPUT	HEWLETT-PACKARD CO	37203A	1244	128

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E C N	DESCRIPTION	MANUFACTURER	MODEL NO	BLDG	ROOM
0215488	PRINTER, ADP	HEWLETT-PACKARD CO PESA INDUSTRIES DECOM SYSTEMS INC AYDIN CONTROLS	2671G	1244	. 139
1180070	SWITCHER, AUDIO/VIDEO	PESA INDUSTRIES	RM5000	1244	. 139
1085880	TELEMETRY DATA PROCESSOR	DECOM SYSTEMS INC AYDIN CONTROLS HEKIMIAN LABORATORIES INC MATSUSHITA ELEC INDUS CO MATSUSHITA ELEC INDUS CO LANGLEY RESEARCH CENTER LANGLEY RESEARCH CENTER LANGLEY RESEARCH CENTER INTERNATIONAL BUSINESS MACHINE EPSON AMERICA INC COPP INDUSTRIAL MFG INC LANGLEY RESEARCH CENTER NAVY ELECTR SUPPLY OFFICE SONY CORP SONY CORP NEC INFORMATION SYSTEMS INC SONY CORP MATSUSHITA ELEC INDUS CO MATSUSHITA ELEC INDUS CO MATSUSHITA ELEC INDUS CO MATSUSHITA ELEC INDUS CO	7192-01020-0201	1244	. 139
0184612	TEST SET, DECODER-RECEIVER	AYDIN CONTROLS	604M	1244	. 139
0646464	TEST SET, TRANSMISSION/REFLECT	HEKIMIAN LABORATORIES INC	4101	1244	. 139
0021544	TRANSCODER	MATSUSHITA ELEC INDUS CO	UTP2	1244	. 139
0801860	TRANSCODER	MATSUSHITA ELEC INDUS CO	UTP2	1244	. 139
0531848	STATISCOPE, RECORDING	LANGLEY RESEARCH CENTER	FLIGHT TYPE	1244	. 140
0531649	STATISCOPE, RECORDING	LANGLEY RESEARCH CENTER	FLIGHT TYPE	1244	. 140
0531650	STATISCOPE, RECORDING	LANGLEY RESEARCH CENTER	FLIGHT TYPE	1244	. 140
0404836	DISPLAY UNIT	INTERNATIONAL BUSINESS MACHINE	5151-001	1244	. 142
0140388	PRINTER, ADP	EPSON AMERICA INC	P82AA(F86E)	1244	. 144A
1282113	TEST STAND, HYDRAULIC	COPP INDUSTRIAL MFG INC	A/M27T6	1244	. 144A
0138487	SENSOR, AIRSPEED	LANGLEY RESEARCH CENTER	JO R2701	1244	. 144B
0530048	BINOCULARS	NAVY ELECTR SUPPLY OFFICE	MARK30	1244	. 150
1087313	DISPLAY UNIT	SONY CORP	GDM 1602T 16	1244	. 150
0802204	MONITOR, TELEVISION	SONY CORP	FDL370	1244	. 150
G074358	PRINTER, ADP	NEC INFORMATION SYSTEMS INC	LC08LC890	1244	. 213
0848055	DISPLAY UNIT	SONY CORP	GDM 1604 - 15	1244	. 214
1423129	MUNITOR, TELEVISION	MATSUSHITA ELEC INDUS CO	CT2084VY	1244	. 232A
1254990	MUNITUR, TELEVISION, COLOR	MATSUSHITA ELEC INDUS CO MATSUSHITA ELEC INDUS CO MATSUSHITA ELEC INDUS CO MATSUSHITA ELEC INDUS CO APPLE COMPUTER, INC A C ELECTRONICS INC A C ELECTRONICS INC A C ELECTRONICS INC BECKMAN INDUSTRIAL CORP LANGLEY RESEARCH CENTER	C12083VY	1244	. 241
1255004	MONITUR, TELEVISION, COLOR	MATSUSHITA ELEC INDUS CO	CT2083VY	1244 1244	. 241
1254997	MONITOR, TELEVISION, COLOR	MATSUSHITA ELEC INDUS CO	CT2083VY	1244	. 243
1423522	COMPUTER, MICRO	APPLE COMPUTER, INC	M1350	1244	. 249
0529724	INERTIAL NAVIGATION UNIT	A C ELECTRONICS INC	7888444	1244	ANNEX
0531612	INERTIAL NAVIGATION UNIT	A C ELECTRONICS INC	7888444	1244	ANNEX
0138971	INERTIAL NAVIGATION UNIT	A C ELECTRONICS INC	7888444	1244	ANNEX
0529725	MULTIMETER, DIGITAL	BECKMAN INDUSTRIAL CORP	310	1244	ANNEX
0531697	TRANSMITTER, FLOW DIRECTION	LANGLEY RESEARCH CENTER	56	1244	ANNEX
			34323	1244	ANNEX
0801958	INTERCOM, STATION	CLEAR-COM INTERCOM SYSTEM		1244	CAB
0802398	INTERCOM, STATION INTERCOM, STATION MONITOR, TELEVISION	CLEAR-COM INTERCOM SYSTEM	ICS 100	1244	CAB
1423128	MONITOR, TELEVISION	MATSUSHITA ELEC INDUS CO	CT2084VY	1244	HALL
1149723	MODEM, COMMUNICATIONS	A T & T TECHNOLOGIES GOVT SYS	2096A	1244	NOC
1195070	MODEM, COMMUNICATIONS	A T & T TECHNOLOGIES GOVT SYS	2096AL1	1244	NOC
1191677	MODEM, COMMUNICATIONS	A T & T TECHNOLOGIES GOVT SYS	2096AL1	1244	NOC
1262165	TUG, AIRCRAFT	INTERNATIONAL HARVESTER CO	T180F	1244	N1132
0404760	TERMINAL, DATA PROCESSING	TEKTRONIX INC	4107	1244	N1528
0531894	CONTROL, HEATER, 28V, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	N5 15
0531568	CONTROLLER, AC, PADS	MATSUSHITA ELEC INDUS CO A T & T TECHNOLOGIES GOVT SYS A T & T TECHNOLOGIES GOVT SYS A T & T TECHNOLOGIES GOVT SYS INTERNATIONAL HARVESTER CO TEKTRONIX INC LANGLEY RESEARCH CENTER LANGLEY RESEARCH CENTER	NASA SPECS	1244	N515

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		LORAL CORP LANGLEY RESEARCH CENTER MATSUSHITA ELEC INDUS CO ALLEN R C INC DIV OF UNITED GENERAL EASTERN INSTRUMENTS CO MARATHON POWER TECHNOLOGIES FLUKE JOHN MFG CO INC TELEDYNE CONTROLS TELEDYNE IND AVIONIC INSTRUMENTS INC TELEDYNE CONTROLS TELEDYNE IND GENERAL EASTERN INSTRUMENTS CO LANGLEY RESEARCH CENTER LANGLEY			
0404009	DECOMMUTATION SYSTEM	LORAL CORP	ADS 100	1244	N5 15
0531178	FORMATTER, TCU, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	NS 15
0531571	FORMATTER, TCU, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	N5 15
0531889	MULTIPLEXER, ANALOG, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	N5 15
0530715	MULTIPLEXER, DIGITAL, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	N5 15
0530713	SIGNAL CONDITIONER, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	N5 15
0531638	SIGNAL CONDITIONER, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	N5 15
0531573	SIGNAL CONDITIONER, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	N5 15
0531575	SIGNAL CONDITIONER, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	N5 15
0531576	SIGNAL CONDITIONER, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	N5 15
0801861	TRANSCODER	MATSUSHITA ELEC INDUS CO	UTP2	1244	N515
0531565	GYROSCOPE, RATE	ALLEN R C INC DIV OF UNITED	F2880	1244	N524
0801157	INDICATOR, TEMP/HUMIDITY	GENERAL EASTERN INSTRUMENTS CO	1011B	1244	N524
1090510	INVERTER, DC TO AC	MARATHON POWER TECHNOLOGIES	PC16	1244	N524
0281747	MULTIMETER, DIGITAL	FLUKE JOHN MFG CO INC	8060A	1244	N524
0531742	MULTIPLEXER, DIGITIZER	TELEDYNE CONTROLS TELEDYNE IND	838030-2	1244	N524
1092201	PLUG-IN, MODULAR, INVERTER	AVIONIC INSTRUMENTS INC	1B800-1G	1244	N524
0531625	POWER SUPPLY	TELEDYNE CONTROLS TELEDYNE IND	842756-5	1244	N524
0531826	POWER SUPPLY	TELEDYNE CONTROLS TELEDYNE IND	838943	1244	N524
1156643	POWER SUPPLY, HYGROMETER	GENERAL EASTERN INSTRUMENTS CO	1011B	1244	N524
0531574	SIGNAL CONDITIONER, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	N524
0488279	SIGNAL CONDITIONER, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244	N524
0531698	TRANSMITTER, FLOW DIRECTION	LANGLEY RESEARCH CENTER	51	1244	N524
0138970	TRANSMITTER, FLOW DIRECTION	LANGLEY RESEARCH' CENTER	51	1244	N524
0138424	TRANSMITTER, FLOW DIRECTION	SPACE-AGE CONTROL INC	56	1244	N524
1262162	LIGHT SOURCE	AIR FORCE LOGISTICS COMMAND	NONE (VERIFIED)	1244	RAMP
1282161	LIGHT SOURCE	AIR FORCE LOGISTICS COMMAND	NONE (VERIFIED)	1244	RAMP
1158629	ENCLOSURE, W/CAMERA & LENS	PULNIX AMERICA INC	EH8008	1244	ROOF
1158623	PAN/TILT, TELEVISION CAMERA	PULNIX AMERICA INC	PT 1280SL	1244	ROOF
1084562	DISPLAY UNIT	SAMSUNG ELECTRONICS	CVB4581	1244	T 2
0021126	CAMERA, TELEVISION	MATSUSHITA ELEC INDUS CO	WV-CL300	1244	T4
0144531	MONITOR, TELEVISION	MATSUSHITA ELEC INDUS CO	CT 1020M	1244	T4
0144532	MONITOR, TELEVISION	MATSUSHITA ELEC INDUS CO	CT 1020M	1244	T4
0144534	MONITOR, TELEVISION	MATSUSHITA ELEC INDUS CO	CT 1020M	1244	T4
0144538	MONITOR, TELEVISION	MATSUSHITA ELEC INDUS CO	CT 1020M	1244	T4
0549008	MUNITOR, TELEVISION	SONY CORP	PVM1220	1244	T4
0473271	MUNITUR, TELEVISION, COLOR	SONY CORP	PVM1211	1244	T4
0144112	PROCESSOR, AUDIO	A T I INDUSTRIES F- AIRCRAFT	EM1000-1	1244	T4
0398497	PROCESSOR, AUDIO	AUDIO TECHNOLOGIES INC	EM1000-1	1244	T4
0284492	RECORDER, CASSETTE, VIDEO	MATSUSHITA ELEC INDUS CO	NV8950	1244	T4

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0144193		MATCHCUTTA ELEC TAIDUC CO	NV8950	1244	T4
0425735	RECORDER, CASSETTE, VIDEO RECORDER, CHART, THERMAL TIP	HEWLETT-PACKARD CO HEWLETT-PACKARD CO AIR FORCE LOGISTICS COMMAND	74184	1244	T4
0425736	RECORDER, CHART, THERMAL TIP	HEWLETT-PACKARD CO AIR FORCE LOGISTICS COMMAND DATAMETRICS CORP KATO ENGINEERING SYSTRON-DONNER CORP CHEROKEE DATA SYSTEMS INC. ASHTECH INC GATEWAY 2000 INTERNATIONAL BUSINESS MACHINE INTERNATIONAL BUSINESS MACHINE OKIDATA CORP LANGLEY RESEARCH CENTER TRUE TIME INC FRMLY KINEMETRIC ROSEMOUNT INC OF EMERSON ELEC ASHTECH INC SYSTRON-DONNER CORP ASHTECH INC MAXON INDUSTRIES INC MAXON INDUSTRIES INC	7418A	1244	T4
1262160	I IGHT SOURCE	AIR FORCE LOGISTICS COMMAND	NONE (VERIFIED)	1244	WOODS
0530763	GENERATOR. TIME CODE	DATAMETRICS CORP	SP380	1244	WYLE
0531392	MOTOR GENERATOR SET	KATO ENGINEERING	60RC203	1244	YARD
0531688	DISPLAY UNIT. TIME	SYSTRON-DONNER CORP	8580	1244	121A
G078857	DISK DRIVE OPTICAL	CHEROKEE DATA SYSTEMS INC.	8822	1244	121B
1159794	RECEIVER GPS	ASHTECH INC	P12	1244C	. 160
0846487	DISPLAY UNIT	GATEWAY 2000	CM1495	1244T	4
0140474	COMPUTER MICRO	INTERNATIONAL BUSINESS MACHINE	5170-339	1244T	. 04
0140476	DISPLAY UNIT	INTERNATIONAL BUSINESS MACHINE	5154-001	1244T	. 04
1084503	PRINTER ADP	OKIDATA CORP	391GE8290P	1244T	. 04
0529827	CALIBRATOR, SYSTEM, PADS	LANGLEY RESEARCH CENTER	NASA SPECS	1244T	. 114
0530758	CLOCK DIGITAL	TRUE TIME INC FRMLY KINEMETRIC	468DC MODIFIED	1244T	. 114
0280091	ALTIMETER	ROSEMOUNT INC OF EMERSON ELEC	1241A6BC	1244T	. 121A
1159796	ANTENNA	ASHTECH INC	L1/L2	1244T	. 121A
1159795	ANTENNA	ASHTECH INC	L1/L2	1244T	. 121A
0777930	DISPLAY UNIT TIME	SYSTRON-DONNER CORP	8580	1244T	. 121A
1159793	RECEIVER GPS	ASHTECH INC	P12	1244T	. 121A
1159797	TRANSCEIVER FM	MAXON INDUSTRIES INC	SM3010H	1244T	. 121A
1159798	TRANSCEIVER FM	MAXON INDUSTRIES INC	SM3010H	1244T	. 121A
1255332	PRINTER AND	HEWLETT-PACKARD CO	C2001A	1244T	. 207
0848027	COMPUTER MICEO	SUN MICROSYSTEMS INC	147(4/60FC8)	1244T	. 400
0848035	COMPUTER MICRO	SUN MICROSYSTEMS INC	147(4/BOFC8)	1244T	. 400
C075783	COMPUTER MICEO	SHN MICROSYSTEMS INC	147B4/65FC8	1244T	. 400
00/3/03	COMPUTER MICEO	SHIN MICROSYSTEMS INC	147(4/60FCR)	1244T	. 400
6076768	COMPUTER, MICRO	SHN MICROSYSTEMS INC	147R4/65FC8	1244T	.400
6075772	DICH AV HATT	SONY CORP	GDM1604A15	1244T	. 400
00/3//2	DISCLAI DILI	SONY CORP	GDM1604-15	1244T	. 400
6078933	NICOLAY INIT	SUNA CUBB	GDM1604B15	1244T	. 400
CO75789	OTEDIAV INIT	SUNA CUBB	GDM1604415	1244T	. 400
0848041	OTERIAY INIT	SUNA CUBB	GDM1604-15	1244T	. 400
0848043	DISPLAT UNIT	SUNA CUBB	GDM 1604 - 15	1244T	. 400
0547762	DISPLAT UNIT	CHDIC DUMACK	EMERGING	1244T	. 400
0143000	DISTENI, EMERGING TECH FIGHTER	ASHTECH INC MAXON INDUSTRIES INC MAXON INDUSTRIES INC MAXON INDUSTRIES INC HEWLETT-PACKARD CO SUN MICROSYSTEMS INC SONY CORP SONY CORP SONY CORP SONY CORP SONY CORP SONY CORP CHRIS DOMACK MARTIN MARIETTA CORP	AVIATION	1244T	. 400
0143008	DISTLAT, GENERAL AVIATION	MADTIN MARIFITA CORP	RIISTNESSIFT	1244T	. 400
1257022	DITALED AND DESTRESS OF	ADDIE COMDITTED INC	Meddo	1244T	. 400
123/032	CENERATOR TIME CORE	DATIM THE F-DEDIDHEDAL	9310-773MOD1F1FD	1244T	N515
0524672	OCCALLOCADA	SONY CORP SONY CORP SONY CORP CHRIS DOMACK MARTIN MARIETTA CORP MARTIN MARIETTA CORP APPLE COMPUTER INC DATUM INC F-PERIPHERAL GOULD INC RECORDING SYS DIV	2800M001FTED	1277; 1244T	N515
05311/3	DOCTEFORKAPH	GOOFD THE RECORDING 212 DIA	ZOVMUDIFIED	14771	N3 13

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0531174	OSCILLOGRAPH	GOULD INC RECORDING SYS DIV TEKTRONIX INC OKIDATA CORP GOULD INC RECORDING SYS DIV GATEWAY 2000 GATEWAY 2000 MICRO EXPRESS MICROGEN QUANTA CORP CTX INTL GATEWAY 2000 NANAO-USA SCI SYSTEMS INC SCI SYSTEMS INC FLUKE JOHN MFG CO INC HEWLETT-PACKARD CO EPSON AMERICA INC HEWLETT-PACKARD CO INTERNATIONAL BUSINESS MACHINE OKIDATA CORP PHILIPS INFORMATION SYSTEMS SONY CORP SPACE-AGE CONTROL INC FLUKE JOHN MFG CO INC SUN MICROSYSTEMS INC TRIMM INDUSTRIES INC TRIMM INDUSTRIES INC NETWORK COMPUTING DEVICES INC HITACHI MFG CO FLUKE JOHN MFG CO INC SUN MICROSYSTEMS INC CLUB AMERICAN TECHNOLOGIES INC NET UNFORMATION SYSTEMS INC ANVIL CASES INC SUB OF ZERO CO RECORTEC INC SUN MICROSYSTEMS INC APPLE COMPUTER INC	2800MODIFIED	1244T	NS 15
0527417	OSCILLOSCOPE, PORTABLE	TEKTRONIX INC	211	1244T	N5 15
0054428	PRINTER. ADP	OKIDATA CORP	192	1244T	NS 15
0533458	RECORDER, CHART, STRIP	GOULD INC RECORDING SYS DIV	2800S	1244T	N5 15
0849165	COMPUTER. MICRO	GATEWAY 2000	386	1244T	TR.2
1158115	COMPUTER. MICRO	GATEWAY 2000	486DX2/50	1244T	TR.2
0847569	COMPUTER. MICRO	MICRO EXPRESS	REGAL II	1244T	TR.2
0847580	COMPUTER MICRO	MICROGEN QUANTA CORP	286	1244T	TR.2
0847581	DISPLAY UNIT	CTX INTL	2431P	1244T	TR.2
1158116	DISPLAY UNIT	GATEWAY 2000	CS1572FS	1244T	TR.2
1089767	DISPLAY UNIT	NANAO-USA	90801	1244T	TR.2
0802854	INTERFACE UNIT F-18XI-1	SCI SYSTEMS INC	2692027-1	1244T	TR.2
0802855	MODILE MILTIPLEXER	SCI SYSTEMS INC	2692300-1	1244T	TR.2
1180358	MILTIMETED DIGITAL	FLUKE JOHN MEG CO INC	8062A	1244T	TR.2
0140947	PLOTTER GRAPHICS	HEWLETT-PACKARD CO	7475A	1244T	TR.2
0053093	PRINTER AND	EPSON AMERICA INC	P82AA(FX86E)	1244T	TR.2
1083855	POINTED AND	HEWLETT-PACKARD CO	33449H	1244T	TR.2
0404097	DRINTER AND	INTERNATIONAL BUSINESS MACHINE	5152-002	1244T	TR.2
0284098	DOINTED AND	OKIDATA CORP	192	1244T	TR.2
02840080	DOINTED AND	PHILIPS INFORMATION SYSTEMS	P5040	1244T	TR.2
0404839	SYSTEM EDITING VIDEO	SONY CORP	RM440	1244T	0003T
0531701	TRANSMITTED FIRM DIRECTION	SPACE-AGE CONTROL INC	56	1250	114
0931701	MILTIMETED DIGITAL	FILIKE JOHN MEG CO INC	FLUKF87	1250	180
0802807	COMPLIED MICEO:	SUN MICROSYSTEMS INC	147(4/60FC8)	1251	HALL
G075068	TRANSPORT MAGNETIC TARE	TOTAM THOUSTOIRS THE	SP1	12684	2101
1159993	COMPLIED MICEO	NETWORK COMPUTING DEVICES INC	NCD88K	1299	106
1150005	DICOLAY HINTT	HITACHI MEG CO	HM4419D	1299	106
1083584	MILTIMETED DIGITAL	FLUKE JOHN MEG CO INC	75	1299	106
0472711	ASCILLASCAPE STAPAGE	TEKTRONIX INC	7623A/R7623A	1299	106
1088117	COMPLITED MICEO	CLUB AMERICAN TECHNOLOGIES INC	F1433T616	1299	. 216
1088407	DISDLAY IMIT	NEC INFORMATION SYSTEMS INC	JC1601VMA2	1299	. 216
1088351	CASE BACK	ANVIL CASES INC SUB OF ZERO CO	NONE	1299	BASM
1087158	DISPLAY UNIT	RECORTEC INC	RMM2 1 1	1299	BASM
1424689	DISPLAT CIVIT	SUN MICROSYSTEMS INC	M19P114	1300	05
0057198	COMPUTER MICRO	APPLE COMPUTER INC	M5000	1300	10
1088448	COMPUTER MICRO	APPLE COMPUTER INC	M5780	1300	10
6075945	COMPUTER MICRO	APPLE COMPUTER INC	M5650IICX	1300	10
0057995	COMPLITED MICEO	APPLE COMPUTER INC	M5000	1300	10
0037933	DICDI AV LINIT	APPLE COMPUTER INC	M0401	1300	10

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ECN	DESCRIPTION	MANUFACTURER	MODEL NO	BLDG	ROOM
		APPLE COMPUTER INC SONY CORP APPLE COMPUTER INC APPLE COMPUTER INC HEWLETT-PACKARD CO BROTHER INTERNATIONAL CORP APPLE COMPUTER INC APPLE COMPUTER INC APPLE COMPUTER INC APPLE COMPUTER INC GATEWAY 2000 MASS MICROSYSTEMS INC GATEWAY 2000 SONY CORP SONY CORP SONY CORP APPLE COMPUTER INC HEWLETT-PACKARD CO TEKTRONIX INC APPLE COMPUTER INC GATEWAY 2000 NANAO-USA HEWLETT-PACKARD CO GATEWAY 2000 MITSUBISHI ELECTRIC CORP HEWLETT-PACKARD CO TEXAS INSTRUMENT DIGITAL SYS SUPERMAC TECHNOLOGY HEWLETT-PACKARD CO SUN MICROSYSTEMS INC ANDATACO SUN MICROSYSTEMS INC TRIMM INDUSTRIES INC SUPERMAC TECHNOLOGY APPLE COMPUTER INC INTERNATIONAL BUSINESS MACHINE APPLE COMPUTER INC INTERNATIONAL BUSINESS MACHINE APPLE COMPUTER INC			
1257883 DISPI	AY UNIT	APPLE COMPUTER INC	M1212	1300	10
1088447 DISPL	AY UNIT	SUNY CURP	GDM1950	1300	10
058080 PRIN	IER, ADP	APPLE COMPUTER INC	M6000	1300	10
282194 PRIN	TER, ADP	APPLE COMPUTER INC	1100	1300	10
083631 PRIN	IER, ADP	HEWLETT-PACKARD CO	33449A	1300	11
848230 PRIN	TER, ADP	BROTHER INTERNATIONAL CORP	HL8E	1300	16
256114 COMPL	JTER, MICRO	APPLE COMPUTER INC	M4440	1300	160
089855 COMPL	JTER, MICRO	APPLE COMPUTER INC	MACINIUSHIIFX	1300	160
422517 COMPL	JTER, MICRO	APPLE COMPUTER INC	M1688	1300	160
085522 COMPL	JTER, MICRO	GATEWAY 2000	38625DX	1300	16C
083711 DISK	DRIVE UNIT	MASS MICROSYSTEMS INC	DATAPAKII	1300	16C
087031 DISPI	AY UNIT	GATEWAY 2000	90700	1300	16C
264454 DISPL	AY UNIT	SONY CORP	0461	1300	16C
089856 DISPL	AY UNIT	SONY CORP	GDM 1950	1300	16C
090608 PRINT	TER, ADP	APPLE COMPUTER INC	M6000	1300	16C
262410 PRINT	TER, ADP	HEWLETT-PACKARD CO	C2007A	1300	16C
087516 PRINT	TER, ADP	TEKTRONIX INC	4694	1300	16C
257313 SCAN	NER, COMPUTER	APPLE COMPUTER INC	M5813	1300	16C
282438 COMPL	JTER, MICRO	GATEWAY 2000	NEW TOWER	1300	17A
262439 DISPL	AY UNIT	NANAO-USA	MA1760	1300	17A
060470 PRINT	TER, ADP	HEWLETT-PACKARD CO	33447A	1300	17A
086634 COMPL	JTER, MICRO	GATEWAY 2000	386/33DXC	1300	178
086635 DISPL	AY UNIT	MITSUBISHI ELECTRIC CORP	HL6935ATK	1300	17B
138128 PLOTI	TER, GRAPHICS	HEWLETT-PACKARP CO	7550A	1300	18
254804 PRINT	TER, ADP	TEXAS INSTRUMENT DIGITAL SYS	MICROLASER PLUS	1300	20C
055111 DISK	DRIVE UNIT	SUPERMAC TECHNOLOGY	XP60	1300	114A
141847 PRINT	TER, ADP	HEWLETT-PACKARD CO	82143A	1300	227
091639 COMPL	JTER, MICRO	SUN MICROSYSTEMS INC	47B(4/40CN8)	1300	.01
088890 DISK	DRIVE UNIT	ANDATACO	ADT702D	1300	.01
091840 DISPI	LAY UNIT	SUN MICROSYSTEMS INC	GDM 1662B	1300	.01
424483 TRANS	SPORT, MAGNETIC TAPE	TRIMM INDUSTRIES INC	SP 1H009	1300	.01
143334 DISK	DRIVE UNIT	SUPERMAC TECHNOLOGY	XP60	1300	.010
848230 COMPL	JTER, MICRO	APPLE COMPUTER INC	M5840	1300	.011
143333 DISK	DRIVE UNIT	SUPERMAC TECHNOLOGY	XP60	1300	.011
848231 DISPI	LAY UNIT	APPLE COMPUTER INC	MO401	1300	.011
281488 DISPI	_AY UNIT	DELL COMPUTER CORP F-PC'S LTD	VC8BN	1300	.011
089318 PRIN	TER, ADP	APPLE COMPUTER INC	M6000	1300	.011
283311 PRIN	TER, ADP	INTERNATIONAL BUSINESS MACHINE	4201	1300	.011
142543 COMPL	JTER, MICRO	APPLE COMPUTER INC	M5000	1300	.012
085519 COMPL	STER MICRO	GATEWAY 2000	38625DX	1300	012

ECN	DESCRIPTION	MANUFACTURER	MODEL NO	BLDG	
0055113	DISK DRIVE UNIT	SUPERMAC TECHNOLOGY APPLE COMPUTER INC NANAO-USA RADIUS INC APPLE COMPUTER INC SUN MICROSYSTEMS INC DELL COMPUTER CORP F-PC'S LTD DELL COMPUTER CORP F-PC'S LTD DELL COMPUTER CORP F-PC'S LTD SONY CORP HEWLETT-PACKARD CO APPLE COMPUTER INC PRIME COMPUTER INC APPLE COMPUTER INC	XP60	1300	.012
0142547	DISPLAY UNIT	APPLE COMPUTER INC	MO400	1300	.012
1086998	DISPLAY UNIT	NANAO-USA	9070U	1300	.012
1093491	DISPLAY UNIT	RADIUS INC	TPD	1300	.012
0055238	PRINTER, ADP	APPLE COMPUTER INC	MO320	1300	.012
1091638	COMPUTER, MICRO	SUN MICROSYSTEMS INC	47B(4/40CN8)	1300	. 03
0847286	DISK/TAPE DRIVE	SUN MICROSYSTEMS INC	EXP2	1300	. 03
1091641	DISPLAY UNIT	SUN MICROSYSTEMS INC	GDM1662B	1300	. 03
G077580	COMPUTER, MICRO	SUN MICROSYSTEMS INC	147B4/60MI8	1300	. 0 5
1158932	COMPUTER, MICRO	SUN MICROSYSTEMS INC	47B	1300	. 05
0847345	COMPUTER, MICRO	SUN MICROSYSTEMS INC	147(4/60M1-8P4	1300	. O 5
0847347	DISPLAY UNIT	SUN MICROSYSTEMS INC	M	1300	. 05
1158930	DISPLAY UNIT	SUN MICROSYSTEMS INC	GDM1962B	1300	. 05
G074393	COMPUTER, MICRO	APPLE COMPUTER INC	M5780	1300	. 06
G076196	COMPUTER, MICRO	SUN MICROSYSTEMS INC	147B4/65M2-8	1300	. 06
0847344	COMPUTER, MICRO	SUN MICROSYSTEMS INC	147(4/60M1-8P4	1300	. 06
1158931	COMPUTER, MICRO	SUN MICROSYSTEMS INC	47B	1300	. 06
G074394	DISK DRIVE UNIT	MASS MICROSYSTEMS INC	DATAPAK	1300	. 06
1158117	DISK DRIVE UNIT	SEAGATE	ST42400N	1300	. 06
G074400	DISPLAY UNIT	SONY CORP	GDM 1950	1300	. 06
1158929	DISPLAY UNIT	SUN MICROSYSTEMS INC	GDM1962B	1300	. 06
0847346	DISPLAY UNIT	SUN MICROSYSTEMS INC	M	1300	. 06
G076198	DISPLAY UNIT	SUN MICROSYSTEMS INC	M19P114PHILIPS	1300	. 06
1091637	DISK DRIVE UNIT	SUN MICROSYSTEMS INC	411	1300	. 08
1262987	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	433L	1300	. 104
1262986	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	433L	1300	. 104
0802895	DISK DRIVE UNIT	ANDATACO	X200P31A3255X	1300	. 104
1262988	DISPLAY UNIT	DELL COMPUTER CORP F-PC'S LTD	VC8BN	1300	. 104
1263418	DISPLAY UNIT	DELL COMPUTER CORP F-PC'S LTD	VC8BN	1300	. 104
0846781	DISPLAY UNIT	SONY CORP	GDM1950	1300	. 104
1262623	PRINTER, ADP	HEWLETT-PACKARD CO	C2001A	1300	. 104
0848665	SCANNER, COMPUTER	APPLE COMPUTER INC	A9M0337	1300	. 104
G075972	TRANSPORT, MAGNETIC TAPE	PRIME COMPUTER INC	TLA10363-001	1300	. 104
0057996	DISPLAY UNIT	RADIUS INC	2PAGE DISPLAY	1300	. 110E
0282414	COMPUTER, MICRO	APPLE COMPUTER INC	MACINTOSH512K MOOO1	1300	. 1144
1087886	COMPUTER, MICRO	APPLE COMPUTER INC	M5525	1300	. 114A
0398537	DISK DRIVE UNIT	APPLE COMPUTER INC	X0135	1300	. 114A
1087889	DISK DRIVE UNIT	DYNAFILE	DF2	1300	. 114A
0062486	DISK DRIVE UNIT	JASMINE TECHNOLOGIES INC	90MB	1300	. 114A
1087198	DISK DRIVE UNIT	MASS MICROSYSTEMS INC	DATAPAKII	1300	. 114A

LARC EMS REPORT IPGPLIST EQUIPMENT ASSIGNED TO SPECIFIC ON SITE CONTRACTORS

PROCESS DATE 12/04/95 PAGE NUMBER

MANUFACTURER MODEL NO DESCRIPTION BLDG ROOM | 1089386 DISPLAY UNIT | SONY CORP | APPLE COMPUTER INC | M5000 | 1300 | 114A | 108787 | PRINTER, ADP | APPLE COMPUTER INC | M5000 | 1300 | 114B | 13073723 | CALCULATOR, ELECTRONIC | HEMLETT-PACKARD CO | HP41CV | 1300 | 216 | 13073723 | CALCULATOR, ELECTRONIC | HEMLETT-PACKARD CO | HP41CV | 1300 | 216 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760 | 13760

LARC EMS REPORT IPGPLIST EQUIPMENT ASSIGNED TO SPECIFIC ON SITE CONTRACTORS

PROCESS DATE 12/04/95

E C N DESCRIPTION MANUFACTURER MODEL NO BLDG ROOM

NUMBER OF ITEMS 918 TOTAL VALUE 4220106.67

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EXHIBIT B - CONTRACT DOCUMENTATION REQUIREMENTS

I. DOCUMENTATION PREPARATION/SUBMISSION INSTRUCTIONS

- A. Financial Management Reports--The Contractor shall comply with the Section I clause of this contract entitled "NASA Contractor Financial Management Reporting" by monthly submission of NASA Form 533M. The form shall be prepared and submitted in accordance with the instructions set forth on the reverse side of the form and NASA Handbook "Procedures for Contractor Reporting of Correlated Cost and Performance Data" (NHB 9501.2) as further definitized below.
- 1. A 533M report shall be completed for each task order along with a summary report which includes a summation of the task orders.
- 2. Due not later than the 10th operating day following the close of the Contractor's accounting period being reported.
- 3. Columns 8.a. and b. shall be completed using estimates (forecasts) for the succeeding two months.
 - 4. Minimum reporting categories:

Costs

```
Labor:
  Direct Labor
  Overtime
  Subtotal Direct Labor
  Management and Administration
Total Labor Costs
Overhead(s)
ODCs:
  Material and Supplies
  Travel
  Training
  Subcontracts
  Other.
Total ODCs
Subtotal
G&A
Total Cost
Award Fee
Cost-Plus-Award-Fee (CPAF)
```

- 5. Each 533M shall include a narrative explanation for variances exceeding 10 percent between planned hours/dollars and actual hours and dollars for each reporting category.
- B. Quarterly Financial Management Report--The Contractor shall submit a quarterly financial report detailed by categories specified in I.A.4 above on NASA Form 533Q at times and in accordance with the instructions contained on the

reverse side of the form. The initial 533Q shall be submitted within 10 operating days after award of the contract.

- C. Safety and Health Plan--Within 30 days after contract award, the Contractor shall submit a detailed safety and health plan showing how the Contractor intends to protect the life, health, and well being of NASA and Contractor employees as well as property and equipment. This plan, as approved by the Contracting Officer, should contain, as a minimum the following:
- 1. Points of Contact and Responsibility--Organizational flow chart and description of responsibilities of each employee in your organization for safety.
- 2. Employee Safety Training, Certification and Programs--Detailed information on type of training required, parties responsible for certification, and outline of applicable regulations. Detail company programs which emphasize personal safety and motivate employees to be safety conscious.
- 3. LaRC Safety Policies/Procedures--Recognition of applicable LaRC safety policies and procedures such as Langley Handbook 1710.10, LaRC Red Tag System.
- 4. Accident Investigation and Reporting--Procedures for investigating and reporting accidents/incidents including immediate notification to the NASA LaRC Safety Manager of all injuries and damage to equipment or facilities.
 - 5. Hazardous Operations--
- (a) Description of hazardous operations involved in contract performance.
- (b) Plans for apprising emp-loyees of all hazards to which they may be exposed.
- (c) Proper conditions and precautions for safe use and exposure to hazardous operations. Include recognition of LHB 1710.12, Potentially Hazardous Materials.
- 6. People with Disabilities--In accordance with the Americans with Disabilities Act, the plans should specify that prior to assigning a person with disabilities to this contract, the Contractor shall contact the Disability Program Manager at (804) 864-7718.
- 7. Other Safety Considerations--Any other safety considerations unique to your operation.
- D. Monthly Technical Progress Report--The Contractor shall submit a monthly progress report summarizing technical progress for each task order. This report shall include an analysis of the actual work performed versus the planned effort. This report shall be submitted within 10 operating days following the end of the reporting period.

- E. Electronic Task Order Status Data Base--The Contractor shall provide a data base containing monthly submissions of the reports listed in Paragraphs I.A and I.D of Exhibit B. The software used shall be compatible with Macintosh and/or DOS.
- F. Quarterly Accident/Injury Report--The Contractor shall submit a Quarterly Accident/Injury Report within 10 operating days after the end of each quarter.
- G. Conformable Wage Rate Agreement--Within 15 operating days after the effective date of the contract, the Contractor shall submit a report confirming conformable wage rate agreement as this subject is addressed in the Section I clause entitled "Service Contract Act of 1965," for those individuals employed by the Contractor who are covered by the Service Contract Act, but are not listed in Exhibit C.
- H. Collective Bargaining Agreements--The Contractor shall provide the Contracting Officer with copies of any collective bargaining agreements, and amendments thereto, which arise during the course of the contract and which apply to Contractor employees assigned to the contract.
- I. Federal Contractor Veterans Employment Report--In compliance with Clause 52.222-37, Employment Reports on Special Disabled Veterans and Veterans of the Vietnam Era, the Contractor shall submit the Federal Contractor Veterans Employment Reports (VETS-100) as required by this clause.
- J. Evidence of Insurance--The Contractor shall submit evidence of the insurance coverage, required by the NASA Clause 18-52.228-75 in Section I entitled "Minimum Insurance Coverage" (i.e., a Certificate of Insurance or other confirmation), to the Contracting Officer prior to performing under this contract. In the event the Government exercises its-options to extend the term of the contract, the Contractor shall also present such evidence to the Contracting Officer prior to commencement of performance under the extension.
- K. Virginia and Local Sales Taxes--In accordance with Section H.10, you are required to submit a copy of the letter sent to the Virginia Tax Commission and a copy of the subsequent response.
- L. Semiannual Progress Report for Small Disadvantaged Business (SDB) Goals--The Contractor shall submit a semiannual report on SDB goals as contained in Exhibit F.
- M. Conflict of Interest Plan--Within 15 operating days after the effective date of contract, the Contractor shall submit a Conflict of Interest Plan in accordance with the guidelines contained in Section H.2, Limitation of Future Contracting (NASA 18-52.209-71).
- N. Security Plan for Unclassified Federal Computer Systems--The Contractor shall submit the Security Plan for Unclassified Federal Computer Systems in accordance with NASA FAR Supplement Clause 18-52.204-77 30 days after contract award.

II. DOCUMENT DISTRIBUTION REQUIREMENTS

A. Unless otherwise specified elsewhere in this contract, reports and other documentation shall be submitted F.O.B. destination as specified below, addressed as follows:

National Aeronautics and Space Administration Langley Research Center
Attn: ______, Mail Stop _____
Contract NAS1Hampton, VA 23681-0001

- B. The following letter codes designate the recipients of reports and other documentation which are required to be delivered prepaid to Langley Research Center by the Contractor:
 - A--Contract Specialist, Mail Stop 126
 - B--Contracting Officer Technical Representative, Mail Stop
 - C--Cost Accounting, Mail Stop 135
 - D--Safety Manager, Mail Stop 429
 - E--Industry Relations Office, Mail Stop 144
 - F--Programs and Resources Division, Mail Stop 104
 - G--Industrial Property Office, Mail Stop 377
 - H--Small Business Specialist, Mail Stop 144
- C. The following are the distribution requirements for reports and other documentation required with the numeral following the letter code specifying the number of copies to be provided:

DOCUMENT	LETTER CODE AND DISTRIBUTION
Financial Management Report (NASA Forms 533M and 533Q)	A-1, B-2, C-2, F-1
Safety and Health Plan	A-1, B-1, D-1
Monthly Technical Progress Report	A-1, B-2
Electronic Task Order Status Data Base	A-1, B-1
Quarterly Accident/Injury Report	A-1, B-1, D-1
Conformable Wage Rate Agreement	A-1, B-1, E-1

Collective Bargaining Agreement	A-1, B-1, E-1
Requisition and Invoice/Shipping Document (DD Form 1149)	G-1
Federal Contractor Veterans Employment Report (VETS-100)	E-1
Semi-Annual Progress Report for Small Disadvantaged Business Goals	A-1, H-1
Conflict of Interest Plan	A-1
Virginia and Local Sales Tax Correspondence	A-1
Security Plan for Unclassified Federal Computer Systems	A-2

D. When the Contract Administrator (A) is not designated above to receive a copy of a report or document, the Contractor shall furnish a copy of the report/document transmittal letter to the Contract Administrator. The Contractor shall also furnish a copy of the transmittal letter and a copy of each Financial Management Report to the delegated Administrative Contracting Officer of the cognizant DoD (or other agency) contract administrative services component.

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REGISTER OF WAGE DETERMINATIONS UNDER THE SERVICE CONTRACT ACT.

By direction of the Secretary of Labor

Alan L. Moss Director

Wage Determinations

U.S. DEPARTMENT OF LABOR EMPLOYMENT STANDARDS ADMINISTRATIC WAGE AND HOUR DIVISION WASHINGTON, D.C. 20210

Wage Determination No.: 94-2544

Revision No.: 6

Date of Last Revision: 06/20/1995

State(s): North Carolina, Virginia

Area: NORTH CAROLINA COUNTIES OF CAMDEN, CHOWAN, CURRITUCK, GATES,

PASQUOTANK, PERQUIMANS.

VIRGINIA COUNTIES OF CHESAPEAKE, GLOUCESTER, HAMPTON, ISLE OF WIGHT, JAMES CITY, MATHEWS, NEWPORT NEWS, NORFOLK, POQUOSON, PORTSMOUTH, SOUTHAMPTON, SUFFOLK, SURRY, VIRGINIA BEACH, WILLIAMSBURG, YORK.

** Fringe Benefits Required For All Occupations Included In This Wage Determination Follow The Occupational Listing **

OCCUPATION CODE AND TITLE

MINIMUM HOURLY WAGE

ADMINISTRATIVE SUPPORT AND CLERICAL:

0101 0101 0103 0105 0106 0109 0111 01112 01113 0113 0113 0119 01192	Accounting Clerk I Accounting Clerk II Accounting Clerk III Accounting Clerk IV Court Reporter Dispatcher, Motor Vehicle Document Preparation Clerk Duplicating Machine Operator Film/Tape Librarian General Clerk II General Clerk II General Clerk IV Housing Referral Assistant Key Entry Operator I Corder Clerk I Corder Clerk II Corder Clerk II Corder Filler Personnel Assistant (Employment) I		\$ 6.75 8.95 9.75 9.08 10.83 8.08 8.08 8.46 7.42 8.54 9.42 8.54 9.42 8.54 9.42 8.54 9.42 8.54 9.42 8.54 9.42 8.65 8.65
01262	Personnel Assistant		
	(Employment) II		\$ 10.03
01263	Personnel Assistant	·	\$ 10.75
01264	(Employment) III Personnel Assistant		
	(Employment) IV	•	\$ 12.06
01270	Production Control Clark		\$ 10.42
01290	Rental Clerk		S 8 46
01300	Scheduler, Maintenance Secretary I		\$ 8.46
01312	Secretary II		\$ 8.46
01313	Secretary III		\$ 9.81
01314	Secretary IV		\$ 10.42
01315	Secretary V		\$ 11.41
01320	Service Order Dispatcher		\$ 11.96
01341	Stenographer I		\$ 10.42 \$ 8.46 \$ 8.46 \$ 9.81 \$ 10.42 \$ 11.41 \$ 11.96 \$ 8.46 \$ 8.78

01342 Stenographer II 01400 Supply Technician		\$ 9.86 \$ 10.00 \$ 9.81 \$ 8.08
01420 Survey Worker(Interviewer) 01460 Switchboard Operator- Receptionist		\$ 9.81 \$ 8.08
01531 Travel Clerk I 01532 Travel Clerk II		\$ 6.31 \$ 6.69
01533 Travel Clerk III 01551 Typist I		\$ 7.06 \$ 7.42
01552 Typist II 01611 Word Processor I	•	\$ 8.92 \$ 8.73
01612 Word Processor II 01613 Word Processor III		\$ 6.31 \$ 6.69 \$ 7.06 \$ 7.42 \$ 8.92 \$ 8.73 \$ 9.80 \$ 10.97
AUTOMATIC DATA PROCESSING:		
03010 Computer Data Librarian 03041 Computer Operator I		\$ 8.26 \$ 9.58 \$ 11.83 \$ 13.70 \$ 14.56 \$ 11.02 \$ 13.62 \$ 16.20 \$ 19.39 \$ 17.62 \$ 20.28 \$ 23.23 \$ 8.26
03042 Computer Operator II		\$ 9.58
03043 Computer Operator III 03044 Computer Operator IV	•	\$ 11.83
03045 Computer Operator V		\$ 13.70 \$ 14.56
03071 Computer Programmer I 1/		\$ 11.02
03072 Computer Programmer II 1/ 03073 Computer Programmer III 1/		\$ 13.62
03074 Computer Programmer IV 1/		\$ 19.39
03101 Computer Systems Analyst I 1/ 03102 Computer Systems Analyst II 1/	•	\$ 17.62
03103 Computer Systems Analyst III 1/		\$ 20.28 \$ 23.23
03160 Peripheral Equipment Operator		\$ 8.26
AUTOMOTIVE SERVICE:		
05005 Automobile Body Repairer, Fiberglass	.•	\$ 14.05
05010 Automotive Glass Installer 05040 Automotive Worker		\$ 12.82
05070 Electrician, Automotive		\$ 12.82 \$ 13.42
05100 Mobile Equipment Servicer		\$ 13.42 \$ 11.59
05130 Motor Equipment Metal Mechanic 05160 Motor Equipment Metal Worker		\$ 14.05
05190 Motor Vehicle Mechanic		\$ 12.82 \$ 14.05
05220 Motor Vehicle Mechanic Helper 05250 Motor Vehicle Upholstery		\$ 10.95
Worker		\$ 12.82
05280 Motor Vehicle Wrecker		\$ 12.82 \$ 13.42
05310 Painter, Automotive 05340 Radiator Repair Specialist		\$ 13.42
05370 Tire Repairer		\$ 12.82 \$ 11.59
05400 Transmission Repair Specialist		\$ 14.05
OOD PREPARATION AND SERVICE:		
07010 Baker · 07041 Cook I		\$ 8.68
07042 Cook II		\$ 7.85 \$ 8.68
07070 Dishwasher 07100 Food Service Worker		\$ 6.05
07130 Meat Cutter		\$ 8.68 \$ 7.85 \$ 8.68 \$ 6.05 \$ 6.05 \$ 8.68 \$ 6.58
07250 Waiter/Waitress		\$ 6.58

WAGE DETERMINATION NO.:9. 2544 (Rev. 6) ISSUE DATE:06/20/1995 Page 3 of 3

FURNITURE MAINTENANCE AND REPAIR:	••	
09010 Electrostatic Spray Painter 09040 Furniture Handler 09070 Furniture Refinisher 09100 Furniture Refinisher Helper 09110 Furniture Repairer, Minor 09130 Upholsterer		\$ 13.42 \$ 10.95 \$ 13.42 \$ 10.95 \$ 12.19 \$ 13.42
GENERAL SERVICES AND SUPPORT:		
11030 Cleaner, Vehicles 11060 Elevator Operator 11090 Gardener 11121 Housekeeping Aide I 11122 Housekeeping Aide II 11150 Janitor 11180 Laborer 11210 Laborer, Grounds Maintenance 11240 Maid or Houseman 11270 Pest Controller 11300 Refuse Collector 11360 Window Cleaner		\$ 6.05 \$ 6.05 \$ 7.75 \$ 5.93 \$ 6.49 \$ 6.05 \$ 9.68 \$ 5.52 \$ 8.25 \$ 6.05 \$ 6.58
HEALTH:		
12010 Ambulance Driver 12040 Emergency Medical Technician 12070 Licensed Practical Nurse 12100 Medical Assistant 12130 Medical Laboratory Technician 12160 Medical Record Clerk 12190 Medical Record Technician 12220 Nursing Assistant 12250 Pharmacy Technician 12280 Phlebotomist 12311 Registered Nurse I 12312 Registered Nurse II 12313 Registered Nurse III 12313 Registered Nurse III 12314 Registered Nurse III 12315 Registered Nurse III 12316 Registered Nurse IV INFORMATION AND ARTS:		\$ 8.75 \$ 9.13 \$ 8.82 \$ 7.88 \$ 7.88 \$ 7.88 \$ 10.92 \$ 7.02 \$ 9.83 \$ 7.88 \$ 10.92 \$ 13.36 \$ 13.36 \$ 16.16 \$ 16.16 \$ 19.37
13002 Audiovisual Librarian 13011 Exhibits Specialist I 13012 Exhibits Specialist II 13013 Exhibits Specialist III 13041 Illustrator I 13042 Illustrator II 13050 Library Technician 13071 Photographer I 13072 Photographer II 13073 Photographer III 13074 Photographer IV 13075 Photographer V		\$ 14.56 \$ 13.06 \$ 15.87 \$ 17.63 \$ 13.06 \$ 15.87 \$ 17.63 \$ 11.02 \$ 10.40 \$ 13.06 \$ 15.87 \$ 17.63 \$ 21.32

\$ 14.05

LAUNDRY, DRY CLEANING, PRESSING: 15010 Assembler 5.18 15030 Counter Attendant \$\$\$\$ 5.18 15040 Dry Cleaner 6.30 15070 Finisher, Flatwork, Machine 5.18 15090 Presser, Hand 15100 Presser, Machine, Dry Cleaning 15130 Presser, Machine, Shirts 15160 Presser, Machine, Wearing Apparel, Laundry 5.18 5.18 5.18 5.18 15190 Sewing Machine Operator \$ 6.71 15220 Tailor 7.11 15250 Washer, Machine 5.57 MACHINE TOOL OPERATION AND REPAIR: 19010 Machine-tool Operator \$ 14.05 (Toolroom) 19040 Tool and Die Maker \$ 15.57 MATERIALS HANDLING AND PACKING: 21010 Fuel Distribution System \$ 12.82 Operator 21020 Material Coordinator \$ 12.19 21030 Material Expediter \$ 12.19 21040 Material Handling Laborer 7.44 21071 Forklift Operator 9.05 21100 Shipping/Receiving Clerk 8.85 21130 Shipping Packer 8.85 21150 Stock Clerk 8.85 21210 Tools and Parts Attendant \$ 10.95 21400 Warehouse Specialist \$ 10.54 MECHANICS AND MAINTENANCE AND REPAIR: 23010 Aircraft Mechanic \$ 14.05 23040 Aircraft Mechanic Helper \$ 10.95 \$ 12.19 \$ 12.82 \$ 13.42 \$ 11.59 \$ 14.05 23060 Aircraft Servicer 23070 Aircraft Worker 23100 Appliance Mechanic 23120 Bicycle Repairer 23125 Cable Splicer 23130 Carpenter, Maintenance \$ 13.42 23140 Carpet Layer 13.42 23160 Electrician, Maintenance \$ 15.57 23181 Electronics Technician, \$ 13.99 Maintenance I 23182 Electronics Technician, \$ 14.31 Maintenance II 23183 Electronics Technician, \$ 15.33 Maintenance III 23260 Fabric Worker \$ 12.19 23290 Fire Alarm System Mechanic \$ 14.05 23310 Fire Extinguisher Repairer \$ 11.59 23340 Fuel Distribution System \$ 14.05 Mechanic 23370 General Maintenance Worker \$ 8.75 23400 Heating, Refrigeration and Air

Conditioning Mechanic

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***		/3
WAGE DETERMINATION NO.:94 2544 (Rev.	6) ISSUE	DATE: 06/20/1995 Pa
23430 Heavy Equipment Mechanic 23460 Instrument Mechanic 23500 Locksmith 23530 Machinery Maintenance Mechanic 23550 Machinist, Maintenance 23580 Maintenance Trades Helper 23640 Millwright 23700 Office Appliance Repairer 23740 Painter, Aircraft 23760 Painter, Maintenance 23790 Pipefitter, Maintenance 23800 Plumber, Maintenance 23800 Plumber, Maintenance 23820 Pneudraulic Systems Mechanic 23850 Rigger 23870 Scale Mechanic 23890 Sheet-metal Worker, Maintenance		\$ 14.05 \$ 14.05 \$ 13.42 \$ 14.05 \$ 10.95 \$ 14.05 \$ 13.42 \$ 13.42 \$ 13.42 \$ 14.05 \$ 14.05 \$ 14.05 \$ 14.05 \$ 14.05
23910 Small Engine Mechanic 23930 Telecommunications Mechanic I 23940 Telecomunications Mechanic II 23950 Telephone Lineman 23960 Welder, Combination, Maintenance 23965 Well Driller		\$ 12.82 \$ 14.05 \$ 15.22 \$ 14.05 \$ 14.05
23970 Woodcraft Worker 23980 Woodworker		\$ 14.05 \$ 14.05 \$ 12.22
PERSONAL NEEDS:		
24570 Child Care Attendant 24600 Chore Aide 24630 Homemaker		\$ 6.01 \$ 4.91 \$ 8.33
PLANT AND SYSTEM OPERATION:		
25010 Boiler Tender 25040 Sewage Plant Operator 25070 Stationary Engineer 25190 Ventilation Equipment Tender 25210 Water Treatment Plant Operator		\$ 14.05 \$ 13.42 \$ 14.05 \$ 10.95 \$ 13.42
PROTECTIVE SERVICE:		
27004 Alarm Monitor 27010 Court Security Officer 27040 Detention Officer 27070 Firefighter 27101 Guard I 27102 Guard II 27130 Police Officer		\$ 7.21 \$ 9.68 \$ 9.68 \$ 10.50 \$ 6.03 \$ 7.21 \$ 12.28
TECHNICAL:		
29010 Air Traffic Control 2/ Specialist, Center 29011 Air Traffic Control 2/ Specialist, Station 29012 Air Traffic Control 2/ Specialist, Terminal 29020 Archeological Technician 29030 Cartographic Technician		\$ 21.67 \$ 14.94 \$ 16.46 \$ 15.87
29040 Civil Engineering Technician		\$ 15.87 \$ 15.87

WAGE DETERMINATION NC .94-2544 (Rev. 6) ISSUE _ fE:06/20/1995 Page 6 of 9

29061 Drafter II 29062 Drafter III 29063 Drafter III 29064 Drafter IV 29070 Embalmer 29081 Engineering Technician II 29082 Engineering Technician III 29083 Engineering Technician IV 29084 Engineering Technician IV 29085 Engineering Technician V 29086 Engineering Technician VI 29090 Environmental Technician 29210 Laboratory Technician 29210 Laboratory Technician 29330 Mortician 29330 Mortician 29390 Photooptics Technician 29480 Technical Writer 29620 Weather Observer, Senior 3/ 29621 Weather Observer, Combined 3/ Upper Air and Surface Programs 29622 Weather Observer, Upper Air 3/ TRANSPORTATION/MOBILE EQUIPMENT OPERATION:		\$ 9.24 \$ 10.40 \$ 13.06 \$ 15.87 \$ 17.63 \$ 10.36 \$ 11.63 \$ 13.02 \$ 16.12 \$ 19.72 \$ 23.86 \$ 15.87 \$ 17.63 \$ 15.87 \$ 17.63 \$ 15.87 \$ 17.63 \$ 11.83 \$ 11.83 \$ 11.83
31030 Bus Driver 31100 Driver Messenger 31200 Heavy Equipment Operator 31290 Shuttle Bus Driver 31300 Taxi Driver 31361 Truckdriver, Light Truck 31362 Truckdriver, Medium Truck 31363 Truckdriver, Heavy Truck 36364 Truckdriver, Tractor-Trailer MISCELLANEOUS:	. •	\$ 9.15 \$ 8.70 \$ 14.05 \$ 8.75 \$ 7.29 \$ 8.75 \$ 9.15 \$ 9.65 \$ 10.15
99005 Aircraft Quality Control Inspector 99020 Animal Caretaker 99030 Cashier 99040 Child Care Center Clerk 99050 Desk Clerk 99260 Instructor 99300 Lifeguard 99350 Park Attendant (Aide) 99400 Photofinishing Worker 99500 Recreation Specialist 99510 Recycling Worker 99610 Sales Clerk 99630 Sports Official 99658 Survey Party Chief 99659 Surveying Technician 99660 Surveying Aide 99690 Swimming Pool Operator 99720 Vending Machine Attendant 99730 Vending Machine Repairer 99740 Vending Machine Repairer		\$ 15.22 \$ 7.00 \$ 5.93 \$ 7.50 \$ 17.63 \$ 5.36 \$ 6.01 \$ 13.04 \$ 5.36 \$ 7.41 \$ 5.36 \$ 7.41 \$ 8.68 \$ 7.41 \$ 8.68 \$ 7.41

WAGE DETERMINATION NO.:94-2544 (Rev. 6) ISSUE DATE:06/20/1995 Page 7 of 9

** Fringe Benefits Required For All Occupations Included In
This Wage Determination **

HEALTH & WELFARE: Life, accident, and health insurance plans, sick leave, pension plans, civic and personal leave, and savings and thrift plans. Minimum employer contributions costing an average of \$2.56 per hour computed on the basis of all hours worked by service employees employed on the contract. May include such benefits as severance pay.

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 10 years; 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 4.173)

HOLIDAYS: Minimum of ten paid holidays per year: New Year's Day, Martin Luther King Jr.'s Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

Does not apply to employees employed in a bona fide executive, administrative, or professional capacity as defined and delineated in 29 CFR 541. (See 29 CFR 4.156)

3/

- NIGHT DIFFERENTIAL: An employee is entitled to pay for all work performed between the hours of 6:00 P.M. and 6:00 A.M. at the rate of basic pay plus a night pay differential amounting to 10 percent of the rate of basic pay.
 - APPLICABLE TO WEATHER OBSERVERS ONLY NIGHT PAY & SUNDAY PAY: If you work at night as a part of a regular tour of duty, you will earn a NIGHT DIFFERENTIAL and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employee (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

** UNIFORM ALLOWANCE **

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all

employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$4.25 per week (or \$.85 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

** NOTES APPLYING TO THIS WAGE DETERMINATION **

Source of Occupational Titles and Descriptions:

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations," Fourth Edition, January 1993, as amended by First Supplement December 1993, unless otherwise indicated. This publication may be obtained from the Superintendent of Documents, at 202-783-3238, or by writing to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Copies of specific job descriptions may also be obtained from the appropriate contracting officer.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE (Standard Form 1444 (SF 1444))

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be retroactive to the commencement date of the contract. (See Section 4.6 (C)(vi)) When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

1) When preparing the bid, the contractor identifies the need for a conformed occupation(s) and computes a proposed rate(s).

- 2) After contract award, the contractor prepares a written report listing in order proposed classification title(s), a Federal grade equivalency (FGE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.
- 3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).
- 4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.
- 5) The contracting officer transmits the Wage and Hour decision to the contractor.
- 6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

EXHIBIT D

DEPARTMENT OF DEFENSE 1. CLEARANCE AND SAFEGUARDING 6. FACILITY CLEARANCE REQUIRED											
	CONTRACT SECURITY CLASSIFICATION SPECIFICATION TOP SECRET										
(The requirements of the DoD Industrial Security Manual apply											
	to all security aspects of this effort.)										
2. THI	THIS SPECIFICATION IS FOR: (X and complete as applicable) 3. THIS SPECIFICATION IS: (X and complete as applicable)										
	PRIME CONTRACT NUMBER					e. ORIGINAL (Complete date in all cases)			95-10-02		
	B. SUBCONTRACT NUMBER						1SED (Supersedes revious specs)	Revision No.	Date (YYMMOO)		
Х	RFP-1-132.D.1166	95-1		3		c. FIN.	AL (Complete item 5 in a	of cases)	Date (YYMME	0)	
4. IS	THIS A FOLLOW-ON CONTRACT?	YES	Y.		s, complet	le the f	ollowing:		<u> </u>		
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5. IS 1	THIS A FINAL DO FORM 2547	YES	X	NO IFY	es, comple	to the	ollowing:				
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DD Form 254, DEC 90

EXHIBIT D

12. PUBLIC RELEASE. Any information (cleanafied or uncleanafied) p. Security Manual or unless it has been approved for public release by approp				
Orect X Through (Specify):				
NASA Langley Research Center	·			
to the Directorate for Freedom of Information and Security Review, Office of "In the case of non-000 User Agencies, requests for disclosure shall be sub-	mitted by that agency			
13. SECURITY GUIDANCE. The security classification guidance ne- contributing factor indicates a need for changes in this guidance, the contri- assigned to any information or material furnished or generated under this decision, the information involved shall be handled and protected at the hig forward under separate correspondence, any documenta/guides/extracts in	actor is authorized and encouraged to procentract; and to submit any questions for gheat level of classification assigned or r	rovide recommended changes; i interpretation of this guidance t acommended. (Fill in as approp	o the official identified below, Pending final printe for the classified effort. Attach or	
THE CONTRACTOR WILL BE INVOLVED PROGRAMS THAT WILL REQUIRE INDISECRET SECURITY CLEARANCE.				P
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14. ADDITIONAL SECURITY REQUIREMENTS. Requirem pertinent contractual clauses in the contract document itself, or provide an	nents, in addition to ISM requirements, as appropriate statement which identifies a			140
a copy of the requirements to the cognizant security office. Use item 13 if i	additional space is needed.)			
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 INSPECTIONS. Elements of this contract are outside the inspections, transport of the activity responsible for inspections. 			dentity specific YES A	J 100
			and the standard	
16. CERTIFICATION AND SIGNATURE. Security require information to be released or generated under this classifier.	ments stated herein are complet d effort. All questions shall be r			
TYPED NAME OF CERTIFYING OFFICIAL	b. TITLE	Foom Loades	c. TELEPHONE (Include Area Cade) 804-864-6507	
Sam A. Harvey	Program Security	eam Leader	804-864-6507	
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DD Form 254 Reverse, DEC 9

EXHIBIT D

PROCEDURES FOR THE PREPARATION AND APPROVAL OF CONTRACTOR REPORTS FOR LANGLEY RESEARCH CENTER

GUIDELINES. - The following documents or subsequent editions in effect on date of contract shall serve as the basis for preparation of Contractor Reports:

NASA SP-7047 NASA Publications Guide DoD 5220.22-M Industrial Security Manual for Safeguarding Classified Information, January 1991

NOTE: Copies of NASA SP-7047 will be furnished by the Contracting Officer upon request.

FORMAT AND ORGANIZATION. - The format and organization of a Contractor Report should be consistent and follow the practices recommended in the NASA Publications Guide (NASA SP-7047). For questions concerning format, contact Langley Technical Editing Branch at (804) 864-2518. An original Report Documentation Page (Standard Form 298) shall be included as the last page in the report. (The instructions on the back of the form shall not appear in the printed report.) A reproducible copy of this form will be furnished to you with your copy of the executed contract.

TRADEMARKS. - U.S. Government policy prohibits endorsing or criticizing commercial products in its publications. Use of trademarks is discouraged. If a trademark must be used, its owner must be credited and the trademark must be used as an adjective modifying the generic name.

REFERENCES. - Material that is not obtainable or available must not be listed in the references. Documents of NASA contracts published as in-house documents must be referenced as NASA CR's, not as NASA Contract Numbers.

SECURITY. - Security markings, when necessary, shall be consistent with DD Form 254, the directive issued by the Security Classification Officer, and shall conform to requirements established in the DoD Industrial Security Manual. For questions concerning security classification, contact LaRC Security Classification Officer at (804) 864-3415.

APPROVAL COPIES.

- 1. Upon completion of a report, the Contractor shall submit five (5) approval copies to the Contracting Officer for review and approval by NASA. These copies may be reproduced and assembled by an economical means by the Contractor.
- 2. The Contractor will be notified of acceptance of the approval copy of the report by the Contracting Officer within sixty (60) days. Approval will be contingent upon changes required by NASA. An original master copy in agreement with the approval copy shall be prepared and submitted by the Contractor.

ORIGINAL MANUSCRIPT. - The original manuscript of a Contractor Report shall consist of a one-sided master copy of the text, cleanly typed on opaque white paper, from which negatives and printing plates can be made, unscreened glossy prints of photographs, and original artwork of a quality suitable for reproduction

by offset printing. Suggestions for preparing acceptable copy are given in NASA SP-7047. The original manuscript should not be bound and should have consecut page numbers added in proper sequence. Odd numbered pages are numbered at the bottom of the page on the right; even, on the left. To avoid damage in handling and shipping, the original manuscript should be carefully packaged.

DISTRIBUTION AND DUPLICATION. - From the review made at the Langley Research Center, the Contracting Officer will make a determination concerning publication and distribution, which the Contractor shall complete within thirty (30) days after receipt of approval copies.

- 1. If NASA Langley Research Center considers that the report should be distributed only in limited quantities, the Contractor shall be requested to prepare duplicates of the original manuscript and distribute the original manuscript and copies (not to exceed 100¹) in accordance with a distribution limit supplied by the Contracting Officer. In this case, the report will be assigned a number in the NASA CR high-numbered series (CR number above 50,000) by the Contracting Officer. When necessary, the Contractor will be provided with any notices to be added to the cover concerning distribution limitations.
- 2. If the NASA Langley Research Center considers the report of such quality or interest that it warrants wide distribution, it will be recommended to NASA Headquarters for publication in the NASA CR low-numbered series, and the Contractor will be requested to forward the original manuscript, together with up to 25¹ duplicate copies to Langley Research Center addresses furnished by the Contracting Officer. At the direction of the Contracting Officer, advance distribution by the Center may be made to those having a need to know. Printing from the original manuscript for final distribution will be provided by NASA. NASA will include the CR number on the cover and provide the author(s) with 10 copies each of the final printed report. (Author(s) will not receive 10 copies each of restricted distribution reports.)

PRINTING STANDARDS. - To comply with NASA printing requirements and cost considerations, reports submitted should conform to the following standards. Any questions regarding implementation of these standards should be directed to the Langley Printing Management Officer (LPMO) at (804) 864-3284.

- 1. Multiple-copy production shall be by the offset duplicating method, except as described in subparagraphs la and lb below.
- a. Production may be on office copying machines or on diazo equipment when the number of copies is so small that such production is more economical than offset duplicating. However, the images will be clearly legible and permanent.

See Clause 18-52.208-81, Printing and Duplicating, for more detailed guidance.

- b. Any image that cannot be accommodated by a foldout (as described in paragraph 2 herein) will be produced by the diazo or electrostatic method in a size dictated by legibility requirements.
- 2. The page image size of cover and text pages including headings will not exceed 7 $1/8 \times 9 1/8$ inches. Page image including page number will not exceed 7 $1/8 \times 10$ inches. Diagrams, charts, drawings, etc., shall be reduced and, if necessary, run broadside to eliminate oversized pages. If such reduction is too great for legibility, the subject will be split and run on two facing pages or run as a foldout with an image not larger than $14 \times 9 \cdot 1/2$ inches.
 - 3. Text and foldout pages will be on either of two paper stocks:
- a. Offset book paper, white, substance 50 lbs. (basis 25 x 38/1000 sheets, Joint Committee on Printing (JCP) A60).
- b. Chemical wood writing paper, white or colored, substance 20 lbs. (basis $17 \times 22/1000$ sheets, JCP G30).
 - 4. Covers, if necessary, will be on either of two paper stocks:
- a. Vellum finish (or antique finish) cover paper, white or colored, substance 50 lbs. (basis 20 x 26/1000 sheets, JCP L20).
- b. Chemical wood index paper, white or colored, substance 110 lbs. (basis $25 \frac{1}{2} \times 30 \frac{1}{2} / 1000$ sheets, JCP K20).
- 5. Use of tabs is expensive and rarely necessary. First consideration should be given to the use of a contents page. Second choice should be bleed- edge index markers. If tabs must be used, they will be duplicated on one side only, on chemical wood index paper, white or colored, substance 110 lbs. (basis 25 $1/2 \times 30 \times 1/2/1000$ sheets); they will be angle cut and not die cut.
- 6. All duplicating will be in black ink. If other or additional color is required for a functional purpose, approval in writing must be obtained from the Langley Printing Management Officer (LPMO) through the Contracting Officer before preparation of final reproduction copy.
- 7. Text pages of all documents produced will be reproduced on both sides of sheet where feasible.
- 8. Binding will be by fastening with wire staples or stitches, either one in a corner or two in the binding margin. Documents too thick to staple or stitch will be produced in two or more volumes. Prong fasteners, binding screws, plastic combs, and spiral and similar wire fasteners add to production time and costs, and generally their use should be avoided.
 - 9. Plastic protective sheets will not be used.
- 10. When hard-cover protection of a document is needed, the document will be drilled with three round 1/4 inch or 3/8 inch holes, 4 1/4 inches center-to-center, for insertion into standard 3-ring binders. Special stamped, printed or silk-screened binders shall not be used. A single corner staple or stitch or a band will be used to hold the document together until it is put into a binder.

REPORT DOC .MENTATION PAGE

Form Approved
OMB No. 070+-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503

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11. SUPPLEMENTARY NOTES						
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Langley Technical Monitor: David E. Bow	ker					
Final Report						
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Advancing the understanding of the limit		www.lwlma.of.th	e timescariant governing			
Advancing the understanding of the Earth system requires improved knowledge of the time-variant governing processes, and the knowledge of these processes often comes only from real-time observations of the changing						
variables as seen from space. The unpredictability of what is to be measured and at what rate requires flexibility						
in the observational capability. The Earth Observing System (EOS) will be a major source of observational data						
during the next 10- to 25-year timeframe. Consequently, to ensure the needed advances in the understanding						
of the Earth system, real-time onboard pr	occssing is concluded to be a	critical need	for EOS.			
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EXHIBIT F

TO:

NASA Langley Research Center 126/Contract Specialist Hampton, VA 23681-0001

FROM:

(Insert Company Name)

SUBJECT: Semiannual Progress Report for Small Disadvantaged Business Goals - NAS1- for the Period Ending

		This Repor	ting Period	<u>Cumulative</u>		
		<u>Dollars</u>	<u>Percent</u>	Dollars	Percent	
1.	Small Disadv. Bus. Concerns:	\$	%	\$	%	
2.	Woman-Owned Small Bus: (include as part of 1 above)	\$	%	\$	%	
3.	Historical Black Colleges/University and/or Minority Institutions (include as part of 1 above)	\$	%	\$	%	

cc:

NASA, Langley Research Center M/S 144, Head AOB Hampton, VA 23681-0001

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PART IV - REPRESENTATIONS AND INSTRUCTIONS

SECTION K - REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS

K.1 CONTINGENT FEE REPRESENTATION AND AGREEMENT (FAR 52.203-4) (APR 1984)

or the Federal Acquisition Regulation.)

(a) Representation. The offeror represents that, except for full-time bona fide employees working solely for the offeror, the offeror (NOTE: The offeror must check the appropriate boxes. For interpretation of the representation, including the term "bona fide employee", see Subpart 3.4

(1) () has, () has not, employed or retained any person or company to solicit or obtain this contract; and

- (2) () has, () has not, paid or agreed to pay to any person or company employed or retained to solicit or obtain this contract any commission, percentage, brokerage, or other fee contingent upon or resulting from the award of this contract.
- (b) Agreement. The offeror agrees to provide information relating to the above Representation as requested by the Contracting Officer and, when subparagraph (a)(1) or (a)(2) is answered affirmatively, to promptly submit to the Contracting Officer -
- (1) A completed Standard Form 119, Statement of Contingent or Other Fees, (SF 119); or
- (2) A signed statement indicating that the SF 119 was previously submitted to the same contracting office, including the date and applicable solicitation or contract number, and representing that the prior SF 119 applies to this offer or quotation.
- K.2 CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (FAR 52.203-11) (APR 1991)
- (a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this certification.
- (b) The offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief, that on or after December 23, 1989, -
- (1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of

any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer; and

- (3) He or she will include the language of this certification in all subcontracts at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.
- (c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision or who fails to file or amend the disclosure form to be filed or amended by this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.
- K.3 TAXPAYER IDENTIFICATION (FAR 52.204-3) (MAR 1994)
- (a) Definitions.
- "Common parent," as used in this solicitation provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.
- "Corporate status," as used in this solicitation provision, means a designation as to whether the offeror is a corporate entity, an unincorporated entity (e.g., sole proprietorship or partnership), or a corporation providing medical and health care services.
- "Taxpayer Identification Number (TIN)," as used in this solicitation provision, means the number required by the IRS to be used by the offeror in reporting income tax and other returns.
- (b) All offerors are required to submit the information required in paragraphs (c) through (e) of this solicitation provision in order to comply with reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M and implementing regulations issued by the Internal Revenue Service (IRS). If the resulting contract is subject to the reporting requirements described in 4.903, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

partnership that does not have income effectively connected with the conduct of a trade or business in the U.S. and does not have an office or place of business or a fiscal paying agent in the U.S.;

() Offeror is an agency or instrumentality of a foreign government:

() Offeror is an agency or instrumentality of a foreign government;
 () Offeror is an agency or instrumentality of a Federal, state, or local government;

() Corporation providing medical and health care services, or engaged in the billing and collecting of payments of such services;

 () Other corporate entity; () Not a corporate entity: () Sole proprietorship () Partnership () Hospital or extended care facility described in 26 CFR 501(c)(3) that is exempt from taxation under 26 CFR 501(a). (e) Common Parent. (j) Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this clause. (j) Name and TIN of common parent:
Name
TIN
K.4 WOMEN-OWNED BUSINESS (FAR 52.204-5) (OCT 1995)
(a) Representation. The offeror represents that it [] is, []is not a womenowned business concern.
(b) Definition. "Women-owned business concern," as used in this provision, means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and whose management and daily business operations are controlled by one or more women.
K.5 JEWEL BEARINGS AND RELATED ITEMS CERTIFICATION (FAR 52.208-2) (APR 1984)
 (a) This is to certify that - (1) Jewel bearings and/or related items, as defined in the Required Sources for Jewel Bearings and Related Items clause, will be incorporated into one or more items/will not be incorporated into any item (delete one) covered by this offer. (2) Any jewel bearings required (or an equal quantity of the same type, size, and tolerances) will be ordered from the William Langer Plant, Rolla, North Dakota 58367, as provided in the Required Sources for Jewel Bearings and Related Items clause; and (3) Any related items required (or an equal quantity of the same type, size,
and tolerances) will be acquired from domestic manufacturers, including the Plant, if the items can be obtained from those sources. (b) Attached to this certificate are estimates of the quantity, type, and size (including tolerances) of the jewel bearings and related items required, and identification of the components, subassemblies, or parts that require jewel bearings or related items.
Date of Execution

- K.6 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS (FAR 52.209-5) (MAY 1989)
- (a) (1) The Offeror certifies, to the best of its knowledge and belief, that -(i) The Offeror and/or any of its Principals -
- (A) Are () are not () presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;
- (B) Have () have not (), within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property; and

(C) Are () are not () presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in subdivision (a)(1)(i)(B) of this provision.

(ii) The Offeror has () has not (), within a three-year period preceding this offer, had one or more contracts terminated for default by any

Federal agency.

(2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER SECTION 1001, TITLE 18, UNITED STATES CODE.

- (b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- (c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.
- (d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- (e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

TYPE OF BUSINESS ORGANIZATION (FAR 52.215-6) (JUL 1987)

The offeror or quoter, by checking the applicable box, represents that -(a) It operates as () a corporation incorporated under the laws of the State of partnership, () a nonprofit organization, or () a joint venture; or (b) If the offeror or quoter is a foreign entity, it operates as () an individual () and indi individual, () a partnership, () a nonprofit organization, () a joint venture, or () a corporation, registered for business in _____

K.8 AUTHORIZED NEGOTIATORS (FAR 52.215-11) (APR 1984)

The offeror or quoter represents that the following persons are authorized to negotiate on its behalf with the Government in connection with this request for proposals or quotations: (list names, titles, and telephone numbers of the authorized negotiators).

SMALL BUSINESS PROGRAM REPRESENTATIONS (FAR 52.219-1) (OCT 1995) K.9

- (a)(1) The standard industrial classification (SIC) code for this acquisition is _
- (2) The small business size standard is _____ (insert SIC Code).

 (2) Insert size standard is _____ (insert size standard). (insert size standard).
- The small business size standard for a concern which submits an offer in (3) its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b) Representations. (1) The offeror represents and certifies as part of its offer that it [] is, [] is not a small business concern.

(Complete only if offeror represented itself as a small business concern in Block (b)(1) of this section.) The offer represents as part of its offer that it [] is, [] is not a small disadvantaged business concern.

(3) (Complete only if offeror represented itself as a small business concern in Block (b)(1) of this section.) The offeror represents as part of its offer that it $[\]$ is, $[\]$ is not a women-owned small business concern.

(c) Definitions. "Small business concern," as used in this provision, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts and qualified as a small business under the criteria in 13 CFR Part 121 and the size standard in Paragraph (a) of this provision.

"Small disadvantaged business concern," as used in this provision, means a small business concern that (1) is at least 51 percent unconditionally owned by one or more individuals who are both socially and economically disadvantaged, or publicly owned business having at least 51 percent of its stock unconditionally owned by one or more socially and economically disadvantaged individuals and has its management and daily business controlled by one or more such individuals. This term also means a small business concern that is at least 51 percent unconditionally owned by an economically disadvantaged Indian tribe or Native Hawaiian Organization, or a publicly owned business having at least

51 percent of its stock unconditionally owned by one or more of this entities, which has its management and daily business controlled by members os an economically disadvantaged Indian tribe or Native Hawaiian Organization and which meets the requirements of 13 CFR Part 124.

"Woman-owned small business concern," as used in this provision, means a small business concern--

- (1) Which is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and
- (2) Whose management and daily business operations are controlled by one or more women.
- (d) Notice. (1) If this solicitation if for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-=aside contains restrictions on the source of the end items to be furnished.
- (2) Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small or small disadvantaged business concern in order to obtain a contract to be awarded under the preference programs established pursuant to Sections 8(a), 8(d), 9 or 15 of the Small Business Act or any other provision of Federal law that specifically references Section 8(d) for a definition of program eligibility, shall--
 - (i) Be punished by imposition of fine, imprisonment, or both;
- (ii) Be subject to administrative remedies, including suspension and debarment; and
- (iii) Be ineligible for participation in programs conducted under the authority of the Act.
- K.10 SMALL BUSINESS CONCERN REPRESENTATION FOR THE SMALL BUSINESS COMPETITIVENESS DEMONSTRATION PROGRAM (FAR 52.219-19) (JUL 1991)
- (a) Definition.
 "Emerging small business" as used in this solicitation, means a small business concern whose size is no greater than 50 percent of the numerical size standard applicable to the standard industrial classification code assigned to a contracting opportunity.
- (b) (Complete only if the Offeror has certified itself under the provision at 52.219-1 as a small business concern under the size standards of this solicitation.)
- The Offeror represents and certifies as a part of its offer that it _____ is, ____ is not an emerging small business.
- (c) (Complete only if the Offeror is a small business or an emerging small business, indicating its size range.)
 Offeror's number of employees for the past 12 months (check this column if size standard stated in solicitation is expressed in terms of number of employees) or Offeror's average annual gross revenue for the last 3 fiscal years (check this column if size standard stated in solicitation is expressed in terms of annual receipts). (Check one of the following.)

No. of Employees	Avg. Annual Gross Revenues
50 or fewer 51 - 100 101 - 250 251 - 500 501 - 750 751 - 1,000 0ver 1,000	\$1 million or less\$1,000,001 - \$2 million\$2,000,001 - \$3.5 million\$3,500,001 - \$5 million\$5,000,001 - \$10 million\$10,000,001 - \$17 million0ver \$17 million

K.11 SMALL BUSINESS SIZE REPRESENTATION FOR TARGETED INDUSTRY CATEGORIES UNDER THE SMALL BUSINESS COMPETITIVENESS DEMONSTRATION PROGRAM (FAR 52.219-21) (JUL 1991)

(Complete only if the Offeror has certified itself under the provision at 52.219-1 as a small business concern under the size standards of this solicitation.)

Offeror represents and certifies as follows:

Offeror's number of employees for the past 12 months (check this column if size standard stated in solicitation is expressed in terms of number of employees) or Offeror's average annual gross revenue for the last 3 fiscal years (check this column if size standard stated in solicitation is expressed in terms of annual receipts). (Check one of the following.)

No. of Employees	Avg. Annual Gross Revenues
50 or fewer	\$1 million or less
51 - 100	\$1,000,001 - \$2 million
101 - 250	\$2,000,001 - \$3.5 million
251 - 500	\$3,500,001 - \$5 million
501 - 750	\$5,000,001 - \$10 million
751 - 1,000	\$10,000,001 - \$17 million
0ver 1,000	0ver \$17 million

K.12 WALSH-HEALY PUBLIC CONTRACTS ACT REPRESENTATION (FAR 52.222-19) (APR 1984)

The offeror represents as a part of this offer that the offeror () is, or () is not, a regular dealer in, or () is, or () is not, a manufacturer of the supplies offered.

- K.13 CERTIFICATION OF NONSEGREGATED FACILITIES (FAR 52.222-21) (APR 1984)
- (a) "Segregated facilities", as used in this provision, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin because of habit, local custom, or otherwise.

(b) By the submission of this offer, the offeror certifies that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The offeror agrees that a breach of this certification is a violation of the Equal Opportunity clause in the contract.

(c) The offeror further agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will -

(1) Obtain identical certifications from proposed subcontractors before the award of subcontracts under which the subcontractor will be subject to the Equal Opportunity clause;

(2) Retain the certifications in the files; and

(3) Forward the following notice to the proposed subcontractors (except if the proposed subcontractors have submitted identical certifications for specific time periods):

NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT FOR CERTIFICATIONS OF NONSEGREGATED FACILITIES

A Certification of Nonsegregated Facilities must be submitted before the award of a subcontract under which the subcontractor will be subject to the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semiannually, or annually.

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

K.14 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FAR 52.222-22) (APR 1984)

The offeror represents that
(a) It () has, () has not, participated in a previous contract or subcontract subject either to the Equal Opportunity clause of this solicitation, the clause originally contained in Section 310 of Executive Order No. 10925, or the clause contained in Section 201 of Executive Order No. 11114;

(b) It () has, () has not, filed all required compliance reports; and
 (c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

K.15 AFFIRMATIVE ACTION COMPLIANCE (FAR 52.222-25) (APR 1984)

The offeror represents that (a) it () has developed and has on file, () has not developed and does not have on file, at each establishment, affirmative action programs required by the rules and regulations of the Secretary of Labor (41 CFR 60-1 and 60-2), or (b) it () has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

K.16 CLEAN AIR AND WATER CERTIFICATION (FAR 52.223-1) (APR 1984)

The offeror certifies that -

- (a) Any facility to be used in the performance of this proposed contract () is,() is not, listed on the Environmental Protection Agency List of Violating Facilities:
- (b) The offeror will immediately notify the Contracting Officer, before award, of the receipt of any communication from the Administrator, or a designee, of the Environmental Protection Agency, indicating that any facility that the offeror proposes to use for the performance of the contract is under consideration to be listed on the EPA List of Violating Facilities; and
- (c) The offeror will include a certification substantially the same as this certification, including this paragraph (c), in every nonexempt subcontract.

K.17 CERTIFICATION REGARDING A DRUG-FREE WORKPLACE (FAR 52.223-5) (JUL 1995)

(a) Definitions. As used in this provision,

"Controlled substance" means a controlled substance in Schedules I through V of Section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 - 1308.15.

"Conviction" means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession or use of any controlled substance.

"Drug-free workplace" means the site(s) for the performance of work done by the Contractor in connection with a specific contract at which employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

"Employee" means an employee of a Contractor directly engaged in the performance of work under a Government contract. "Directly engaged" is defined to include all direct cost employees and any other Contractor employee who has other than minimal impact or involvement in contract performance.

"Individual" means an offeror/Contractor that has no more than one employee including the offeror/Contractor.

(b) By submission of its offer, the offeror (other than an individual) responding to a solicitation that is expected to exceed the simplified acquisition threshold, certifies and agrees, that with respect to all employees of the offeror to be employed under a contract resulting from this solicitation, it will—no later than 30 calendar days after contract award (unless a longer period is agreed to in writing), for contracts of 30 calendar days or more performance duration; or as soon as possible for contracts of less than 30 calendar days performance duration, but in any case, by a date prior to when performance is expected to be completed—

(1) Publish a statement notifying such employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition:

(2) Establish an ongoing drug-free awareness program to inform such employees about -

- (i) The dangers of drug abuse in the workplace;
- (ii) The Contractor's policy of maintaining a drug-free workplace;
- (iii) Any available drug counseling, rehabilitation, and employee assistance programs; and
- (iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (3) Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph (b)(1) of this provision;
- (4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this provision that, as a condition of continued employment on the contract resulting from this solicitation, the employee will -
 - (i) Abide by the terms of the statement; and
- (ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 calendar days after such conviction:
- (5) Notify the Contracting Officer in writing within 10 calendar days after receiving notice under subdivision (b)(4)(ii) of this provision, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee; and
- (6) Within 30 calendar days after receiving notice under subdivision (b)(4)(ii) of this provision of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:
- (i) Take appropriate personnel action against such employee, up to and including termination; or
- (ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.
- (7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) through (b)(6) of this provision.
- (c) By submission of its offer, the offeror, if an individual who is making an offer of any dollar value, certifies and agrees that the offeror will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in the performance of the contract resulting from this solicitation.
- (d) Failure of the offeror to provide the certification required by paragraphs (b) or (c) of this provision, renders the offeror unqualified and ineligible for award. (See FAR 9.104-1(g) and 19.602-1(a)(2)(i).)
- (e) In addition to other remedies available to the Government, the certification in paragraphs (b) or (c) of this provision concerns a matter within the jurisdiction of an agency of the United States and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.
- K.18 CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (FAR 52.223-13) (OCT 1995)
- (a) The offeror, by signing this offer, certifies that--(NOTE: The offeror must check the appropriate box(es).)
- (1) To the best of its knowledge and belief, it is not subject to the filing and reporting requirements described in Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) Sections 313(a) and (g) and Pollution Prevention

Act of 1990 (PPA) Section 6607 because none of its owned or operated facilities to be used in the performance of this contract currently--

(i) Manufacture, process or otherwise use any toxic chemicals listed under Section 313(c) of EPCRA, 42 U.S.C. 11023(c).

(ii) Have 10 or more full-time employees as specified in

Section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A).

(iii) Meet the reporting thresholds of toxic chemicals established under Section 313(f) of EPCRA, 42 U.S.C. 11023(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA).

(iv) Fall within Standard Industrial Classification Code (SIC)

designations 20 through 39 as set forth in FAR Section 19.102.

- (2) If awarded a contract resulting from this solicitation, its owned or operated facilities to be used in the performance of this contract, unless otherwise exempt, will file and continue to file for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in EPCRA Sections 313(a) and (g) and PPA Section 6607 (42 U.S.C. 13106)
- (b) Submission of this certification is a prerequisite for making or entering into this contract Imposed by Executive Order 12969, August 8, 1995 (60 FR 40989-40992).
- K.19 REPRESENTATION OF LIMITED RIGHTS DATA AND RESTRICTED COMPUTER SOFTWARE (FAR 52.227-15) (JUN 1987)
- (a) This solicitation sets forth the work to be performed if a contract award results, and the Government's known delivery requirements for data (as defined in FAR 27.401). Any resulting contract may also provide the Government the option to order additional data under the Additional Data Requirements clause at 52.227-16 of the FAR, if included in the contract. Any data delivered under the resulting contract will be subject to the Rights in Data General clause at 52.227-14 that is to be included in this contract. Under the latter clause, a Contractor may withhold from delivery data that qualify as limited rights data or restricted computer software, and deliver form, fit, and function data in lieu thereof. The latter clause also may be used with its Alternates II and/or III to obtain delivery of limited rights data or restricted computer software, marked with limited rights or restricted rights notices, as appropriate. In addition, use of Alternate V with this latter clause provides the Government the right to inspect such data at the Contractor's facility.
- (b) As an aid in determining the Government's need to include any of the aforementioned Alternates in the clause at 52.227-14, Rights in Data General, the offeror's response to this solicitation shall, to the extent feasible, complete the representation in paragraph (b) of this provision to either state that none of the data qualify as limited rights data or restricted computer software, or identify which of the data qualifies as limited rights data or restricted computer software. Any identification of limited rights data or restricted computer software in the offeror's response is not determinative of the

status of such data should a contract be awarded to the offeror.

REPRESENTATION CONCERNING DATA RIGHTS

Offeror has reviewed the requirements for the delivery of data or software and states (offeror check appropriate block) -

	()	None of the data proposed for fulfilling such requirements qualifies as limited rights data or restricted computer software.
	()	Data proposed for fulfilling such requirements qualify as limited rights data or restricted computer software and are identified as follows:
		_	
		-	
NOTE:	" t	Lir he	mited rights data" and "Restricted computer software" are defined in contract clause entitled "Rights in Data - General."
K.20	CO (N	NTI AS	RACTS BETWEEN NASA AND FORMER NASA EMPLOYEES A 18-52.203-70) (DEC 1988) (NASA/FAR SUPPLEMENT)
was er	mpl idu	oy al	r represents that he or she () is, or () is not, an individual who ed by NASA during the past two (2) years, or a firm in which such an is a partner, principal officer, or majority shareholder or that is controlled or predominantly staffed by such individuals.
K.21	PA	ΥM	ENT INFORMATION (LARC 52.232-98) (JUN 1988)
made	Th by	e ch	following is the address to which payment must be sent, if payment is eck.
	_		
		-,	
SECTI	ON	L	- INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS

U.1 ORGANIZATIONAL CONFLICTS OF INTEREST CERTIFICATE--MARKETING CONSULTANTS (FAR 52.209-7) (OCT 1995)

(a) Definitions.

(1) "Marketing consultant" means any independent contractor who furnishes advice, information, direction, or assistance to an offeror or any other contractor in support of the preparation or submission of an offer for a Government contract by that offeror. An independent contractor is not a marketing consultant when rendering --

- (i) Services excluded in Subpart 37.2;
- (ii) Routine engineering and technical services (such as installation, operation, or maintenance of systems, equipment, software, components, or facilities);
 - (iii) Routine legal, actuarial, auditing, and accounting services; or (iv) Training services.
- (2) Organizational conflict of interest means that because of other activities or relationships with other persons, a person is unable or potentially unable to render impartial assistance or advice to the Government, or the person's objectivity in performing the contract work is or might be otherwise impaired, or a person has an unfair competitive advantage.
- (b) An individual or firm that employs, retains, or engages contractually one or more marketing consultants in connection with a contract, shall submit to the contracting officer, with respect to each marketing consultant, the certificates described below, if the individual or firm is notified that it is the apparent successful offeror.
- (c) The certificate must contain the following:
 - (1) The name of the agency and the number of the solicitation in question.
- (2) The name, address, telephone number, and federal taxpayer identification number of the marketing consultant.
- (3) The name, address, and telephone number of a responsible officer or employee of the marketing consultant who has personal knowledge of the marketing consultants involvement in the contract.
- (4) A description of the nature of the services rendered by or to be rendered by the marketing consultant.
- (5) The name, address, and telephone number of the client or clients, and the name of a responsible officer or employee of the marketing consultant who is knowledgeable about the services provided to such client(s), and a description of the nature of the services rendered to such client(s), if, based on information provided to the Contractor by the marketing consultant, any marketing consultant is rendering or, in the 12 months preceding the date of the certificate, has rendered services respecting the same subject matter of the instant solicitation, or directly relating to such subject matter, to the Government or any other client (including any foreign Government or person).
- (6) A statement that the person who signs the certificate for the prime Contractor has informed the marketing consultant of the existence of Subpart 9.5 and Office of Federal Procurement Policy Letter 89-1.
- (7) The signature, name, title, employer's name, address, and telephone number of the persons who signed the certificates for both the apparent successful offeror and the marketing consultant.
- (d) In addition, the apparent successful offeror shall forward to the Contracting Officer a certificate signed by the marketing consultant that the marketing consultant has been told of the existence of Subpart 9.5 and Office of Federal Procurement Policy Letter 89-1, and the marketing consultant has made inquiry, and to the best of the consultant's knowledge and belief, the consultant has provided no unfair competitive advantage to the prime Contractor with respect to the services rendered or to be rendered in connection with the solicitation, or that any unfair competitive advantage that, to the best of the consultant's knowledge and belief, does or may exist, has been disclosed to the offeror.
- (e) Failure of the offeror to provide the certifications may result in the offeror being determined ineligible for award. Misrepresentation of any fact may

result in the assessment of penalties associated with false certifications or such other provisions provided for by law or regulation.

L.2 NOTICE OF PRIORITY RATING FOR NATIONAL DEFENSE USE (FAR 52.212-7) (SEP 1990)

Any contract awarded as a result of this solicitation will be a () DX rated order; (X) DO rated order certified for national defense use under the Defense Priorities and Allocations System (DPAS) (15 CFR 700), and the Contractor will be required to follow all of the requirements of this regulation.

L.3 SOLICITATION DEFINITIONS (FAR 52.215-5) (JUL 1987)

"Offer" means "proposal" in negotiation.
"Solicitation" means a request for proposals (RFP) or a request for quotations (RFQ) in negotiation.
"Government" means United States Government.

L.4 UNNECESSARILY ELABORATE PROPOSALS OR QUOTATIONS (FAR 52.215-7) (APR 1984)

Unnecessarily elaborate brochures or other presentations beyond those sufficient to present a complete and effective response to this solicitation are not desired and may be construed as an indication of the offeror's or quoter's lack of cost consciousness. Elaborate art work, expensive paper and bindings, and expensive visual and other presentation aids are neither necessary nor wanted.

- L.5 AMENDMENTS TO SOLICITATIONS (FAR 52.215-8) (DEC 1989)
- (a) If this solicitation is amended, then all terms and conditions which are not modified remain unchanged.
- (b) Offerors shall acknowledge receipt of any amendment to this solicitation (1) by signing and returning the amendment; (2) by identifying the amendment number and date in the space provided for this purpose on the form for submitting an offer; (3) by letter or telegram or (4) facsimile, if facsimile offers are authorized in the solicitation. The Government must receive the acknowledgment by the time specified for receipt of offers.
- L.6 SUBMISSION OF OFFERS (FAR 52.215-9) (JUL 1995)
- (a) Offers and modifications thereof shall be submitted in sealed envelopes or packages (1) addressed to the office specified in the solicitation, and (2) showing the time specified for receipt, the solicitation number, and the name and address of the offeror.
- (b) Telegraphic offers will not be considered unless authorized by the solicitation; however, offers may be modified by written or telegraphic notice.
- (c) Facsimile offers, modifications or withdrawals will not be considered unless authorized by the solicitation.
- (d) Offers submitted by electronic commerce shall be considered only if the electronic commerce method was specifically stipulated or permitted by the solicitation.

- (e) Item samples, if required, must be submitted within the time specified for receipt of offers. Unless otherwise specified in the solicitation, these samples shall be (1) submitted at no expense to the Government and (2) returned at the sender's request and expense, unless they are destroyed during preaward testing.
- L.7 LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWALS OF PROPOSALS (FAR 52.215-10) (JUL 1995)
- (a) Any proposal received at the office designated in the solicitation after the exact time specified for receipt will not be considered unless it is received before award is made and it -
- (1) Was sent by registered or certified mail not later than the fifth calendar day before the date specified for receipt of offers (e.g., an offer submitted in response to a solicitation requiring receipt of offers by the 20th of the month must have been postmarked by the 15th);

(2) Was sent by mail or, if authorized by the solicitation, was sent by telegram or via facsimile and it is determined by the Government that the late receipt was due solely to mishandling by the Government after receipt at the

Government installation;

(3) Was sent by U.S. Postal Service Express Mail Next Day Service-Post Office to Addressee, not later than 5:00 p.m. at the place of mailing two working days prior to the date specified for receipt of proposals. The term "working days" excludes weekends and U.S. Federal holidays;

(4) Was transmitted through an electronic commerce method authorized by the solicitation and was received by the Government not later than 5:00 p.m. one

working day prior to the date specified for receipt of proposals; or

(5) Is the only proposal received.

(b) Any modification of a proposal or quotation, except a modification resulting from the Contracting Officer's request for "best and final" offer, is subject to the same conditions as in subparagraphs (a)(1), (2), and (3) of this provision.

(c) A modification resulting from the Contracting Officer's request for "best and final" offer received after the time and date specified in the request will not be considered unless received before award and the late receipt is due solely to mishandling by the Government after receipt at the Government installation.

- (d) The only acceptable evidence to establish the date of mailing of a late proposal or modification sent either by registered or certified mail is the U.S. or Canadian Postal Service postmark on the envelope or wrapper and on the original receipt from the U.S. or Canadian Postal Service. Both postmarks must show a legible date or the proposal, quotation, or modification shall be processed as if mailed late. "Postmark" means a printed, stamped, or otherwise placed impression (exclusive of a postage meter machine impression) that is readily identifiable without further action as having been supplied and affixed by employees of the U.S. or Canadian Postal Service on the date of mailing. Therefore, offerors or quoters should request the postal clerks to place a legible hand cancellation bull's-eye postmark on both the receipt and the envelope or wrapper.
- (e) The only acceptable evidence to establish the time of receipt at the Government installation is the time/date stamp of that installation on the proposal wrapper or other documentary evidence of receipt maintained by the installation.
- (f) The only acceptable evidence to establish the date of mailing of a late offer, modification, or withdrawal sent by Express Mail Next Day Service-Post Office to Addressee is the date entered by the post office receiving clerk on the

"Express Mail Next Day Service-Post Office to Addressee" label and the postmark on both the envelope or wrapper and on the original receipt from the U.S. Postal "Postmark" has the same meaning as defined in paragraph (d) of this provision, excluding postmarks of the Canadian Postal Service. Therefore, offerors or quoters should request the postal clerk to place a legible hand cancellation bull's-eye postmark on both the receipt and the envelope or wrapper. Notwithstanding paragraph (a) of this provision, a late modification of an otherwise successful proposal that makes its terms more favorable to the Government will be considered at any time it is received and may be accepted. (h) Proposals may be withdrawn by written notice or telegram (including mailgram) received at any time before award. If the solicitation authorizes facsimile proposals, proposals may be withdrawn via facsimile received at any time before award, subject to the conditions specified in the provision entitled "Facsimile Proposals." Proposals may be withdrawn in person by an offeror or an authorized representative, if the representative's identity is made known and the representative signs a receipt for the proposal before award.

L.8 PREPARATION OF OFFERS (FAR 52.215-13) (APR 1984)

(a) Offerors are expected to examine the drawings, specifications, Schedule, and

all instructions. Failure to do so will be at the offeror's risk.

(b) Each offeror shall furnish the information required by the solicitation. The offeror shall sign the offer and print or type its name on the Schedule and each continuation sheet on which it makes an entry. Erasures or other changes must be initialed by the person signing the offer. Offers signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office.

(c) For each item offered, offerors shall (1) show the unit price/cost, including, unless otherwise specified, packaging, packing, and preservation and (2) enter the extended price/cost for the quantity of each item offered in the "Amount" column of the Schedule. In case of discrepancy between a unit price/cost and an extended price/cost, the unit price/cost will be presumed to be correct, subject, however, to correction to the same extent and in the same manner

as any other mistake.

(d) Offers for supplies or services other than those specified will not be

considered unless authorized by the solicitation.

(e) Offerors must state a definite time for delivery of supplies or for performance of services, unless otherwise specified in the solicitation.

(f) Time, if stated as a number of days, will include Saturdays, Sundays, and holidays.

L.9 EXPLANATION TO PROSPECTIVE OFFERORS (FAR 52.215-14) (APR 1984)

Any prospective offeror desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must request it in writing soon enough to allow a reply to reach all prospective offerors before the submission of their offers. Oral explanations or instructions given before the award of the contract will not be binding. Any information given to a prospective offeror concerning a solicitation will be furnished promptly to all other prospective offerors as an amendment of the solicitation, if that information is necessary in submitting offers or if the lack of it would be prejudicial to any other prospective offerors.

L.10 FAILURE TO SUBMIT OFFER (FAR 52.215-15) (JUL 1995)

Recipients of this solicitation not responding with an offer should not return this solicitation, unless it specifies otherwise. Instead, they should advise the issuing office by letter, postcard, or established electronic commerce methods, whether they want to receive future solicitations for similar requirements. If a recipient does not submit an offer and does not notify the issuing office that future solicitations are desired, the recipient's name may be removed from the applicable mailing list.

L.11 CONTRACT AWARD (FAR 52.215-16) (OCT 1995) -- ALTERNATE II (OCT 1995)

- (a) The Government will award a contract resulting from this solicitation to the responsible offeror whose offer conforming to the solicitation will be most advantageous to the Government, cost or price and other factors, specified elsewhere in this solicitation, considered.
- (b) The Government may (1) reject any or all offers if such action is in the public interest, (2) accept other than the lowest offer, and (3) waive informalities and minor irregularities in offers received.
- (c) The Government intends to evaluate proposals and award a contract without discussions with offerors (except communications conducted for the purpose of minor clarification). Therefore, each initial offer should contain the offeror's best terms from a cost or price and technical standpoint. However, the Government reserves the right to conduct discussions if later determined by the Contracting Officer to be necessary.
- (d) The Government may accept any item or group of items of an offer, unless the offeror qualifies the offer by specific limitations. Unless otherwise provided in the Schedule, offers may be submitted for quantities less than those specified. The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit cost or prices offered, unless the offeror specifies otherwise in the offer.
- (e) A written award or acceptance of offer mailed or otherwise furnished to the successful offeror within the time for acceptance specified in the offer shall result in a binding contract without further action by either party. Before the offer's specified expiration time, the Government may accept an offer (or part of an offer, as provided in paragraph (d) above), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award. Negotiations conducted after receipt of an offer do not constitute a rejection or counteroffer by the Government.
- (f) Neither financial data submitted with an offer, nor representations concerning facilities or financing, will form a part of the resulting contract. However, if the resulting contract contains a clause providing for price reduction for defective cost or pricing data, the contract price will be subject to reduction if cost or pricing data furnished is incomplete, inaccurate, or not current.
- (g) The Government may determine that an offer is unacceptable if the prices proposed are materially unbalanced between line items or subline items. An offer is materially unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated in relation to cost for other work, and if there is a reasonable doubt that the offer will result in

the lowest overall cost to the Government, even though it may be the low evaluated offer, or it is so unbalanced as to be tantamount to allowing an advance payment.

- L.12 FACILITIES CAPITAL COST OF MONEY (FAR 52.215-30) (SEP 1987)
- (a) Facilities capital cost of money will be an allowable cost under the contemplated contract, if the criteria for allowability in subparagraph 31.205-10 (a)(2) of the Federal Acquisition Regulation are met. One of the allowability criteria requires the prospective Contractor to propose facilities capital cost of money in its offer.
- (b) If the prospective Contractor does not propose this cost, the resulting contract will include the clause Waiver of Facilities Capital Cost of Money.
- L.13 TYPE OF CONTRACT (FAR 52.216-1) (APR 1984)

The Government contemplates award of a cost-plus-award-fee contract resulting from this solicitation.

- L.14 SIC CODE AND SMALL BUSINESS SIZE STANDARD (FAR 52.219-22) (JAN 1991)
- (a) The standard industrial classification (SIC) code for this acquisition is 8731.
- (b)(1) The small business size standard is 1,500 employees.
- (2) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.
- L.15 PREAWARD ON-SITE EQUAL OPPORTUNITY COMPLIANCE REVIEW (FAR 52.222-24) (APR 1984)

An award in the amount of \$1 million or more will not be made under this solicitation unless the offeror and each of its known first-tier subcontractors (to whom it intends to award a subcontract of \$1 million or more) are found, on the basis of a compliance review, to be able to comply with the provisions of the Equal Opportunity clause of this solicitation.

L.16 DETERMINATION OF RESPONSIBILITY

Prior to contract award the selected offeror, and as appropriate, subcontractors and/or teaming partners must be determined by the Contracting Officer to be responsible. If responsibility cannot be determined from the relevant experience and past performance information received, or from other sources available to the Government, additional information will be required to adequately demonstrate responsibility. Failure to demonstrate responsibility (FAR 9.104-1) may result in the Government selecting the second best-value proposal.

- L.17 SERVICE OF PROTEST (FAR 52.233-2) (OCT 1995)
- (a) Protests, as defined in Section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed

with the General Accounting Office (GAO) or the General Services Administration Board of Contract Appeals (GSBCA), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from Head, Grants and Services Contracts Branch.

- (b) The copy of any protest shall be received in the office designated above on the same day a protest is filed with the GSBCA or within one day of filing a protest with the GAO.
- (c) In this procurement, you may not protest to the GSBCA because of the nature of the supplies or services being procured.

L.18 RESTRICTION ON USE AND DISCLOSURE OF PROPOSAL/QUOTATION INFORMATION (DATA) (NASA 18-52.215-72) (DEC 1984)

It is NASA policy to use information contained in proposals and quotations for evaluation purposes only. While this policy does not require that the proposal or quotation bear a restrictive notice, offerors and quoter should, in order to maximize protection of trade secrets or other information that is commercial or financial and confidential or privileged, place the following notice on the title page of the proposal or quotation and specify the information subject to the notice by inserting appropriate identification, such as page numbers, in the notice. In any event, information (data) contained in proposals and quotations will be protected to the extent permitted by law, but NASA assumes no liability for use and disclosure of information not made subject to the notice.

RESTRICTION ON USE AND DISCLOSURE OF PROPOSAL AND QUOTATION INFORMATION (DATA)

The information (data) contained in (<u>insert page numbers or other identification</u>) of this proposal or quotation constitutes a trade secret and/or information that is commercial or financial and confidential or privileged. It is furnished to the Government in confidence with the understanding that it will not, without permission of the offeror, be used or disclosed for other than evaluation purposes; provided, however, that in the event a contract is awarded on this proposal or quotation the Government shall have the right to use and disclose this information (data) to the extent provided in the contract. This restriction does not limit the Government's right to use or disclose this information (data) if obtained from another source without restriction.

L.19 EXPENSES RELATED TO OFFEROR SUBMISSIONS (NASA 18-52.215-75) (DEC 1988)

This solicitation neither commits the Government to pay any cost incurred in the submission of the offer or in making necessary studies or designs for preparing the offer, nor to contract for services or supplies. Any costs incurred in anticipation of a contract shall be at the offeror's own risk.

L.20 FALSE STATEMENTS (NASA 18-52.215-76) (DEC 1988)

PROPOSALS MUST SET FORTH FULL, ACCURATE, AND COMPLETE INFORMATION AS REQUIRED BY THE SOLICITATION (INCLUDING ATTACHMENTS). THE PENALTY FOR MAKING FALSE STATEMENTS IN PROPOSALS IS PRESCRIBED IN 18 U.S.C. 1001.

L.21 DISPOSAL OF UNSUCCESSFUL PROPOSALS (NASA 18-52.215-80) (DEC 1988)

After contract award, one or more copies of each unsuccessful proposal will be retained in the Government's official contract file, and all other copies will be destroyed.

L.22 TEST OF SOURCE SELECTION PROCEDURES

The Government intends to award the contract resulting from this solicitation without discussions (See Section L clause entitled "Contract Award," FAR 52.215-16 (OCT 1995)--Alternate II (OCT 1995). In the event that the Government later determines that discussions are necessary, a test of source selection procedures will be used. A deviation has been granted by the NASA Associate Administrator for Procurement which applies to this solicitation. The limited discussion procedures set forth in NASA Federal Acquisition Supplement (NFS) 18-15.613(b)(5) will not be utilized for this acquisition. Instead, the provisions of FAR 15.610(c)(2) shall apply. In accordance with FAR 15.610(c)(2), offerors within the competitive range will be advised of deficiencies and uncertainties identified in their proposals and allowed a reasonable opportunity to satisfy the solicitation requirements. As stipulated in FAR 15.611, at the conclusion of discussions, a Best and Final Offer (BAFO) will be requested from all offerors still within the competitive range. This BAFO shall be submitted in the form of a contractual document which has been executed by an individual with the authority to contractually bind the offeror. Selection will be made in accordance with the evaluation criteria set forth in Section M of this solicitation. Contract award will be made WITHOUT SUBSEQUENT DISCUSSIONS OR NEGOTIATIONS and will be evidenced by the Contracting Officer's signature on the BAFO submitted by the successful A deviation has also been granted to NFS 18-15.1003-4(c)(1); debriefing of unsuccessful offerors will occur after contract award.

L.23 EVALUATION OF COMPENSATION FOR PROFESSIONAL EMPLOYEES (FAR 52.222-46) (FEB 1993)

Recompetition of service contracts may in some cases result in lowering the compensation (salaries and fringe benefits) paid or furnished professional employees. This lowering can be detrimental in obtaining the quality of professional services needed for adequate contract performance. It is therefore in the Government's best interest that professional employees, as defined in 29 CFR 541, be properly and fairly compensated. As a part of their proposals, offerors will submit a total compensation plan setting forth salaries and fringe benefits proposed for the professional employees who will work under the contract. The Government will evaluate the plan to assure that it reflects a sound management approach and understanding of the contract requirements. evaluation will include an assessment of the offeror's ability to provide uninterrupted high-quality work. The professional compensation proposed will be considered in terms of its impact upon recruiting and retention, its realism, and its consistency with a total plan for compensation. Supporting information will include data, such as recognized national and regional compensation surveys and studies of professional, public and private organizations, used in establishing the total compensation structure.

- (b) The compensation levels proposed should reflect a clear understanding of work to be performed and should indicate the capability of the proposed compensation structure to obtain and keep suitably qualified personnel to meet mission objectives. The salary rates or ranges must take into account differences in skills, the complexity of various disciplines, and professional job difficulty. Additionally, proposals envisioning compensation levels lower than those of predecessor Contractors for the same work will be evaluated on the basis of maintaining program continuity, uninterrupted high-quality work, and availability of required competent professional service employees. Offerors are cautioned that lowered compensation for essentially the same professional work may indicate lack of sound management judgment and lack of understanding of the requirement. (c) The Government is concerned with the quality and stability of the work force to be employed on this contract. Professional compensation that is unrealistically low or not in reasonable relationship to the various job
- categories, since it may impair the Contractor's ability to attract and retain competent professional service employees, may be viewed as evidence of failure to comprehend the complexity of the contract requirements.
- (d) Failure to comply with these provisions may constitute sufficient cause to justify rejection of a proposal.

L.24 DETERMINATION OF COMPENSATION REASONABLENESS (NASA 18-52.231-71) (MAR 1994)

- (a) The proposal shall include a total compensation plan. This plan shall address all proposed labor categories, including those personnel subject to union agreements, the Service Contract Act, and those exempt from both of the above. The total compensation plan shall include the salaries/wages, fringe benefits and leave program proposed for each of these categories of labor. The plan also shall include a discussion of the consistency of the plan among the categories of the labor being proposed. Differences between benefits offered professional and nonprofessional employees shall be highlighted. The requirements of this plan may be combined with that required by the clause at (FAR) 48 CFR 52.222-46, "Evaluation of Compensation for Professional Employees."
- The offeror shall provide written support to demonstrate that its proposed compensation is reasonable.
- (c) The offeror shall include the rationale for any conformance procedures used or those Service Contract Act employees proposed that do not fall within the scope of any classification listed in the applicable wage determination.
- (d) The offeror shall require all service subcontractors (1) with proposed cost reimbursement or non-competitive fixed-price type subcontracts having a total potential value in excess of \$500,000 and (2) the cumulative value of all their service subcontracts under the proposed prime contract in excess of 10 percent of the prime contract's total potential value, provide as part of their proposals the information identified in (a) through (c) of this provision.

L.25 IDENTIFICATION OF UNCOMPENSATED OVERTIME (NASA 18-52.237-72) (APR 1995)

The use of uncompensated overtime is neither encouraged or discouraged. When the proposed uncompensated overtime is consistent with an offeror's written policies and practices, NASA will consider it in proposal evaluation, including the

evaluation of cost and of professional compensation (see 48 CFR (FAR) subpart 22.11).

(a) Definitions. As used in this provision:

"Uncompensated overtime" means the hours worked in excess of an average of 40 hours per week, by direct charge employees who are exempt from the Fair Labor Standards Act (FLSA) without additional compensation. Compensated personal absences, such as holidays, vacations, and sick leave shall be included in the normal work week for purposes of computing uncompensated overtime hours.

"Effective hourly rate" is the rate that results from multiplying the hourly rate for a 40-hour work week by 40, and then dividing by the proposed hours per week. For example, 45 hours proposed on a 40-hour work week basis at \$20.00 per hour would be converted to an effective hourly rate of \$17.78 per hour [(\$20.00 X

40) divided by 45 = \$17.78.

- (b) For any hours proposed against which an effective hourly rate is applied, the Offeror shall identify in its proposal the hours in excess of an average of 40 hours per week, at the same level of detail as compensated hours, and the effective hourly rate, whether at the prime or subcontract level. This includes uncompensated overtime hours that are in indirect cost pools for personnel whose regular hours are normally charged direct. The proposal shall include the rationale and methodology used to estimate the proposed amount of uncompensated overtime.
- (c) The Offeror's accounting practices used to estimate uncompensated overtime must be consistent with its cost accounting practices used to accumulate and report uncompensated overtime hours.

(d) Proposals that include unrealistically low labor rates, or that do not otherwise demonstrate cost realism, will be considered in a technical and cost risk assessment and evaluated for award in accordance with that assessment.

- (e) The Offeror shall include with its proposal a copy of its policy addressing uncompensated overtime, a description of the timekeeping and accounting systems used to record all hours worked by FLSA-exempt employees, and the historical basis for the uncompensated overtime hours proposed.
- L.26 PREPROPOSAL/PRE-BID CONFERENCE (NASA 18-52.215-77) (DEC 1988)
 - (a) A preproposal/pre-bid conference will be held as indicated below:

Date: January 26, 1996 Time: 9:00 a.m. - Noon

Location: Pearl Young Theater (Building 1202), NASA LaRC

For planning your itinerary, the following is a tentative agenda for the conference:

Agenda

Opening Remarks LaRC Presentations Break Virtual Facilities Tour Contractor/LaRC on the Internet Questions and Answers

Attendance will be limited to a maximum of three representatives per offeror. The briefing will be unclassified. If you desire to attend the conference, you should so indicate by written or telephone contact with the appropriate individual specified below. After the briefing, advise this Center if vou intend to submit a proposal.

In order that as many questions as possible may be answered at the NASA presentations during the briefing, written questions must be submitted to C. Tom Weih no later than January 23, 1996. A limited time may be available for answering questions submitted on the day of the conference. However, as there is no assurance that adequate time to answer such questions will remain, submission of questions prior to the conference, by the date specified above, will assure their being fully answered.

- (b) Attendance at the preproposal/pre-bid conference is recommended; however, attendance is neither required nor a prerequisite for proposal/bid submission and will not be considered in the evaluation.
- L.27 CERTIFICATE OF PROCUREMENT INTEGRITY OFFERS (LaRC 52.203-90) (OCT 1992)

The certificate required by Federal Acquisition Regulation (FAR) provision 52.203-8, Requirement for Certificate of Procurement Integrity, Alternate I, is attached to this solicitation. In accordance with FAR 3.104-9, the officer or employee responsible for your offer for this procurement shall execute this certificate and submit it with your proposal.

COMMUNICATIONS REGARDING THIS SOLICITATION (Larc 52.204-95) (OCT 1993)

Any communications in reference to this solicitation shall cite the solicitation number and be directed to the following Government representative:

Name:

C. Tom Weih

Phone:

(804) 864-3878 (COLLECT CALLS NOT ACCEPTED)

E-mail Address: c.t.weih@larc.nasa.gov

Facsimile:

804-864-7709

Address:

National Aeronautics and Space Administration

Langley Research Center

Attn: C. Tom Weih, Mail Code 126

Hampton, VA 23681-0001

Any written communications must include the mail code on the envelope or on the telex.

Please note the provision in this section covering "Facsimile Transmission." This provision specifies a different facsimile number for use in transmitting modifications or withdrawals of bids or proposals and acknowledgment of amendments to solicitations.

- L.29 FACSIMILE TRANSMISSION--BIDS OR PROPOSALS (LaRC 52.204-100) (OCT 1992)
- (a) Definition. "Facsimile transmission," as used in this solicitation, means a submittal, via electronic equipment that communicates and reproduces both printed and handwritten material, for a modification of a bid or proposal or withdrawal of a bid or proposal that is submitted to and received by the Government, or an acknowledgment of amendment(s) to the solicitation.
- (b) OFFERORS MAY NOT SUBMIT FACSIMILE BIDS OR PROPOSALS AS RESPONSES TO THIS SOLICITATION. Facsimile bids or proposals will not be considered.
- L.30 REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA (FAR 52.215-41) (OCT 1995)--ALTERNATE IV (OCT 1995)
 - (a) Submission of cost or pricing data is not required.
- (b) The Contractor shall provide cost and pricing information as prescribed in L.35, Paragraph F, Business Proposal (Volume II) Instructions.

L.31 USE OF GOVERNMENT SUPPLY SOURCES

You may assume for proposal preparation purposes that use of Government sources such as GSA Contractors will be authorized. Reference FAR Clause 52.251-1.

L.32 BIDDER'S LIBRARY

A bidder's library has been established and is located at LaRC in the Technical Library, 2 West Durand Street (Building 1194). Information regarding the contents of the library is included in Attachment 5, SAERS Bidder's Library Index. The hours of operation are from 8:00 a.m. to 4:00 p.m. Monday through Friday, excluding Government holidays. The bidder's library will be open for visitation through the proposal due date. Offerors wishing to visit the bidder's library should contact Donna Y. Jones at (804) 864-3900 to schedule an appointment. All users of the bidder's library must have a proper NASA Visitor Badge, which may be obtained from the NASA Langley Badge and Pass Office located at the Main Gate (1 Langley Boulevard), telephone (804) 864-2790. The bidder's library contains instructional and reference material that is too voluminous to include with the RFP. Offerors are encouraged to visit the library, although a visit is neither required nor a prerequisite for proposal/bid submission.

L.33 COMPETITIVE RANGE DETERMINATION

The Government intends to award the contract resulting from this solicitation without discussions (See Section L clause entitled "Contract Award," FAR 52.215-16 (OCT 1995)--Alternate II (OCT 1995). In the event that the Government later determines that discussions are necessary, a test of source selection procedures will be used in accordance with Section L.22. Those proposals which have a reasonable chance of being selected for award shall constitute the competitive range. To reduce unnecessary expense, both to offerors

and the Government, a total of three proposals shall be a working goal in establishing the competitive range.

L.34 SECURITY PLAN FOR UNCLASSIFIED FEDERAL COMPUTER SYSTEMS

Notwithstanding the requirements of NASA FAR Supplement Clause 18-52.204-77, it is <u>not</u> expected that offerors will be required to submit the security plan for selection. However, your attention is invited to Exhibit B, Paragraph N, which requires the selected offeror to submit the subject plan within 30 days after contract award.

L.35 PROPOSAL PREPARATION AND SUBMISSION--SPECIAL INSTRUCTIONS

A. Number of Proposals, Time and Place of Submission

The offeror shall submit the original and nine copies of each volume of his proposal to the address shown in Block 8 of the Standard Form (SF) 33 (face page of this solicitation), or if hand carried, to the depository listed in Block 9 of the SF 33. Offers must be received at the place indicated on or before the date and hour shown in Block 9 of the SF 33. In addition, one copy of your proposal shall be sent directly to the cognizant DCAA office with a cover letter referencing the solicitation number in Block 3 of the SF 33.

B. Proposal Clarity

Your proposal should be specific, complete, and concise. The offeror is urged to examine this solicitation in its entirety and to assure that his/her proposal contains all the necessary information, provides all required documentation and is complete in all respects since evaluation of the proposal will be based on the actual material presented and not on the basis of what is implied. You should ensure that your cost proposal is consistent with your technical proposal in all respects since the cost proposal may be used as an aid to determine the offeror's understanding of the technical requirements. Discrepancies may be viewed as a lack of understanding.

C. Proposal Format and Content

Proposals must be submitted in two (2) volumes: Volume I, Technical Proposal, and Volume II, Business Proposal. No cost information shall be presented in the Technical Proposal except the costs associated with Sample Task Orders.

D. Page Limitation

Based upon our experience with procurements of this size and complexity, the items to be addressed in your technical proposal can be covered in 50 pages, exclusive of cover page, table of contents, title pages, list of figures, and dividers. The Government, therefore, requires that offerors limit the technical proposal to a total of 50 pages. Each "page" is one side of one sheet, 8-1/2" by 11" with at least one-inch margins on all sides. Pages should be single column format with text justified left only with a ragged right edge. Foldouts count as an equivalent number of 8-1/2" by 11" pages. The metric standard format most

closely approximating the described standard 8-1/2" by 11" size may be used. Narrative text shall be 12 point type size with double-spacing between lines. Type size and spacing between lines for table of contents, list of figures, charts, graphs, figures, illustrations, diagrams, photographs, and tables may be smaller/less, but should be easily readable. The business proposal is not page limited; however, it should be limited to information pertaining to cost, relevant experience and past performance information, and any proposed exceptions or additions to the contract terms and conditions. All pages of both volumes should be numbered.

E. Technical Proposal - Volume I

FACTOR 1 - MISSION SUITABILITY

The offeror's Technical Proposal is the basis for the evaluation of the Mission Suitability Factor (Factor 1). Proposal risks associated with the cost, schedule and performance or technical aspects of the program shall be discussed. The discussion of risk should address the probability of success, the impact of failure and the alternatives available to meet the requirements. The Mission Suitability Subfactors to be considered and discussed are set forth below:

1. <u>Subfactor 1 - Understanding the Requirements and Technical Approach</u>

The offeror's understanding and approach for providing systems analysis and engineering research should be addressed through your response to each sample task order set forth in Attachment 1. For each sample task, the proposal should address the offeror's proposed skill mix by category and hours, schedule, estimated cost, material purchases and travel expenses (if appropriate). In addition, the offeror shall provide a general discussion on their understanding of and approach to performing work in the following areas: aeronautics systems analysis, project planning, and aircraft and aircraft systems maintenance and operations.

2. <u>Subfactor 2 - Total Compensation Plan</u>

The offeror should provide a total compensation plan setting forth salaries and fringe benefits proposed for the professional and nonprofessional employees who will work under the contract. [Detail and provide a copy of your policies and procedures relative to uncompensated overtime (see L.25) and the historical basis therefor for any uncompensated overtime proposed. The rationale and methodology used to estimate the uncompensated overtime (if any) for you and your subcontractors shall be addressed. The effect of the uncompensated overtime on the effective hourly rate for all Fair Labor Standards Act (FSLA)-exempt employees shall be included.] Your compensation plan shall also address the information required by FAR 52.222-46 and NFS 18-52.231-71 (reference paragraphs L.23 and L.24).

3. <u>Subfactor 3 - Management Operations</u>

For this procurement a mandatory goal of 40% has been established for SDB participation at the prime and/or subcontract level. The goal is stated

as a percentage of the total contract value, not the total planned subcontracting dollars and includes participation by small business concerns owned and controlled by women, Historically Black Colleges and Universities and other minority educational institutions.

The offeror should discuss the methods for achieving the proposed goal. If meeting the goal is proposed through subcontracting, the offeror should make an independent assessment of subcontracting opportunities and is encouraged to propose a higher goal. The offeror should discuss the types and amount of work, in terms of total dollars, that will be performed by SDBs. This discussion should include any plans for utilizing high-technology SDB firms. (High-technology, as defined in NASA FAR Supplement 1819.7202, means research and/or development efforts that are within or advance the state-of-the-art in a technology discipline and are performed primarily by professional engineers, scientists and highly skilled and trained technicians or specialists.) In addition, the plan should address the offeror's plans, if any, for establishing formal Mentor-Protege relationships as defined in NASA FAR Supplement 1819.72.

The offeror should address the plans for managing the contract while avoiding personal services as defined in FAR 37.104. Your proposal should contain a discussion on the management approach for dealing with the declining workload while maintaining continuity of uninterrupted support, in accordance with the declining level-of-effort as defined in Section L.35, Paragraph F.3(a). The offeror should provide discussion on the approach for maintaining competent staffing and appropriate skill mix for efficient contract performance in the face of shifting contract requirements within the scope of the contract. The offeror should provide discussion on the general approach to managing the total contract and the individual task orders. The offeror shall discuss the approach for handling urgent, short-turn around time, task orders that require immediate rampup of capabilities that exceed the inherent skill mix. The offeror shall discuss corporate resources to augment those available on the contract to meet special short term requirements. The offeror shall provide discussion on the approach to managing the work flow from task initiation to completion.

4. Subfactor 4 - Cost Realism

Cost realism is the degree to which all costs for both the sample tasks and total contract reflect the proposed approach to achieving the technical objectives. Paragraphs E.1 and F of Section L.35 require the offeror to submit cost proposals for each sample task order and for the overall contract, respectively. These cost proposals will be the primary source for determining realistic costs as discussed in the criteria in Section M.3, Paragraph C. A separate discussion concerning cost realism is not required.

F. Business Proposal (Volume 2) Instructions

Under requirements of the Federal Acquisition Regulation (FAR), the Contracting Officer is responsible for determining reasonableness of pricing. To assist in determining whether the prices proposed in offers under this solicitation are "fair and reasonable," offerors are required to submit cost or pricing information with your proposal. It is anticipated that downsizing of the Langley budget and workforce will continue for the duration of the contractual

period. These national external forces will result in continuing changes to the NASA and Langley aerospace research priorities resulting in contract downsizing and skill mix adjustments.

1. Standard Form (SF) 1448 Instructions

- a. In submitting the cost proposal, the offeror shall submit a fully executed SF 1448, Contract Pricing Proposal Cover Sheet, a copy of which is included as Attachment 2 of this solicitation. Each subcontract expected to exceed \$500,000 shall also be supported by fully executed SF 1448.
- b. The offeror shall fully comply with the requirements set forth in Table 15-3, Instructions for Submission of a Contract Pricing Proposal, of FAR 15.804-6(b)(2).
- c. The cost proposal as represented by the SF 1448 should be prepared in a manner consistent with your current accounting system and Cost Accounting Standards Disclosure Statement, if applicable. A complete and timely evaluation of your proposal cannot be performed without this information being submitted with your proposal.

2. Computerized Cost Proposal Input Instructions

- a. The Government intends to use an IBM-compatible personal computer with 16 MB RAM and LOTUS 1-2-3 for Windows, Release 5 software to aid in the evaluation of the cost proposal. The offerors and major subcontractors, as defined below, are requested to submit cost information on floppy diskettes, two copies, 3-1/2 inch, formatted under MS DOS. Cost information must be submitted as a Lotus 1-2-3 spreadsheet or any spreadsheet retrievable under LOTUS 1-2-3 for Windows, Release 5, in formats with the identical information that is supplied on all Contractor paper form in order to be useful in the Government's evaluation. In the event of any inconsistency between the diskettes and the paper forms, the paper forms will be considered the intended version. Any questions related to the computerized cost proposal shall be directed to Timothy P. Warner at (804) 864-2480.
- b. Each diskette should have affixed an external label indicating the name of the offeror and the RFP number. Provide with each diskette an index of file contents and applicable ranges.

ALL DISKETTE SUBMISSIONS SHALL BE TRUE SELF-CALCULATING SPREADSHEETS. Include on your diskette all rates and formulas used to derive your proposed costs. For example, your straight time hours might show a formula that, either directly or by referencing other cells, multiplies positions in a labor category times the productive man-hours in a man-year for that category and your overhead elements might show a formula that, either directly or by referencing other cells, multiplies a rate times the applicable base. Any absolute values must be explained and their values supported.

3. Other Cost and Pricing Information Required

a. Labor - You must propose the labor hours necessary to provide the services set forth in Section C, Statement of Work. Show the hours and costs by labor classification. If any of the positions are classified by your accounting system as other than direct labor, or if you propose to subcontract any of the positions, so indicate. Any composite hourly rates must be explained.

The resultant contract will not contain a specified level-of-effort; however, for the purposes of the Government's comparative cost evaluation of your proposal for this solicitation the offeror shall propose the following direct labor hours for the basic contract and the priced option periods notwithstanding L.11, Contract Award, Paragraph d.

	<u>Period</u>	Estimated Hours
Initial Contract Period First Option to Extend Second Option to Extend Third Option to Extend Fourth Option to Extend Each Option to Extend Each Option to Extend 5 - 10 (One Mo. Eac	5/01/96 - 4/30/97 5/01/97 - 4/30/98 5/01/98 - 4/30/99 5/01/99 - 4/30/00 5/01/00 - 4/30/01 h) 5/01/01 - 10/31/01	311,000 276,000 256,000 226,000 206,000 18,000

The "direct labor hours" specified above are defined as those productive hours expended by Contractor personnel in performing the engineering, technician and direct support functions (Ref. Skill Matrix, Attachment 6) required to complete the Statement of Work as defined in Section C (including subcontractors). It does not include administrative or other labor which the Contractor may charge as direct labor under its established accounting policy and procedures. The term <u>does not</u> include sick leave, vacation, holiday leave, military leave, or any type of administrative leave, but does include overtime hours and direct labor hours provided under level-of-effort subcontracts.

Skill Mix is to be proposed as directed in the "Skill Matrix" provided in Attachment 6.

A copy of the Register of Wage Determinations and Fringe Benefits issued by the Department of Labor for employees under this proposed contract is included in Exhibit C. It should be noted that the wage rates specified therein are minimum rates. It should also be noted that the wage determination may not list all labor classes to be employed under this contract. Paragraph (a) of the Section I clause entitled "Service Contract Act of 1965" states that in this event, conformable rates must be established for those service employees to be employed under the contract but not listed on the wage determination. These conformable wage rates will be the result of a three-party agreement between the employees, contractor and the Government.

If you propose to subcontract any part of the required labor, have the prospective subcontractor complete separate SF 1448, if applicable. The subcontractor shall provide the same information as the prime Contractor.

If the subcontractor refuses to release proprietary cost information to the prime contractor, the subcontractor shall submit the cost information to NASA under a separate cover.

- (b) Fringes and Payroll Taxes Provide the fringe benefits and payroll tax costs applicable to direct labor costs. Provide a breakdown of those rates and/or cost proposed.
- (c) City/County Business License Tax Propose any applicable local business license taxes. Consult the City of Hampton regarding those personnel you intend to work on-site at LaRC even if your facility will not be located in Hampton.
- (d) G&A Provide G&A costs, and identify separately the rates used to determine the costs. Provide the composition of the G&A pool costs and allocation bases upon which the rates were determined. Provide G&A rate history for the preceding three fiscal years.
- (e) Facilities Capital Cost of Money (FCCOM) Propose FCCOM if you choose to include it in your proposal (ref. FAR 52.215-30). If you do not propose FCCOM, Clause 52.215-31, Waiver of Facilities Capital Cost of Money (SEPT 1987) will be included in the contract. As required by NASA FAR Supplement 18-15.970-3, when facilities capital cost of money is included as an item of cost in the Contractor's proposal, a reduction in the profit objective shall be made in an amount equal to the amount of facilities capital cost of money allowed in accordance with FAR 31.205-10(a).
- (f) Award Fee and Fixed Fee Provide the amounts of award fee for the initial contract and first four options to extend, and the fixed fees for the six one-month options to extend. Provide your rationale for determining the proposed amounts.
- (g) Provide three year history of rates and factors proposed, including escalation.
- 4. It is NASA LaRC's policy to provide existing property (furniture and general purpose equipment) for on-site Contractor use if needed to accomplish the contract. When the property becomes obsolete and/or the physical condition prevents further usage, the Contractor will be required to replace it with company-owned property. To assist in forecasting depreciation expenses, the offeror should assume a replacement cost of \$100,000 for the basic contract and \$100,000 for each of the 1-year option periods.
- 5. For the purposes of determining the extent of installation provided property as defined in Section G.2 of this solicitation, the offeror can assume that approximately 85% of the work performed under this contract will be on-site at NASA LaRC. The remaining 15% will be performed off-site.

6. FACTOR 3 - RELEVANT EXPERIENCE AND PAST PERFORMANCE

a. Each offeror should address his/her relevant experience and past performance, and that of significant subcontractors and/or teaming partners, if

any, under existing or prior contracts for similar products or services. Relevant experience is the accomplishment of work which is comparable or related to the work or effort required by this RFP. Past performance is the quality of performance relative to the size, content and complexity of the requirements for this procurement. Past performance information will be used in making responsibility determinations and to assess the capabilities of offerors. This factor should include a discussion of overall corporate or offeror experience and past performance, but not the experience and performance of individuals who are proposed to be involved with work pursuant to this RFP. For newly-formed businesses having little or no company experience, the relevant experience and past performance of a predecessor firm, the company's principal owner(s), or corporate officer(s) should be addressed. You are cautioned that omissions or an inaccurate or inadequate response to this evaluation factor will have a negative effect on your overall evaluation.

- b. The Relevant Experience and Past Performance Form (Form REPP), included as Attachment 4 to this RFP, will be used to collect information as to the quality of past performance of the offeror and any significant subcontractor and/or teaming partner. The offeror shall select three of his/her customers, for which he/she has performed relevant work within the past three years, and forward copies of the Form REPP to those agencies and/or firms for completion and submission to the Contract Specialist for this solicitation. The forms should be returned or faxed to the Contract Specialist no later than the closing date of the solicitation. The address and fax number are listed at the bottom of the first page of the Form REPP.
- c. If a significant portion of work to be performed is proposed to be accomplished by subcontractor(s) and/or teaming partner(s), three Form REPP's shall be submitted by customers of each proposed subcontractor and/or teaming partner. The offeror shall include in his/her proposal the written consent of his/her subcontractor(s) and/or teaming partner(s) to allow the Government to discuss the subcontractors'/teaming partners' past performance evaluation with the offeror during any discussions that are held for this procurement.
- d. The offeror shall include with his/her business proposal a list of the firms that will submit evaluation forms. The offeror shall also include a list of all other contracts he/she has held and any significant subcontractors and/or teaming partners have held within the past five years for requirements similar to those being solicited in this acquisition and that are valued at over \$100,000. Other references, aside from those provided by the offeror, may be contacted and their comments considered during the source selection process. The information submitted may be verified by the Government through discussions with the references provided. While the Government may elect to consider data obtained from other sources, the burden of providing relevant references that the Government can readily contact rests with the offeror.
- e. Offerors shall prepare a short narrative explanation on each contract listed or for which a Form REPP will be received that identifies its customer and briefly describes the contract, including the objectives achieved and any cost growth or schedule delays encountered. Your summary should include the following for each related contract:

- (1) Contract Number
- (2) Contracting Agency
- (3) Points of contact in the program and contracting offices, including telephone numbers
 - (4) Contract type
 - (5) Contract beginning and end dates
- (6) Description of the contract work and explanation of its relevance to this solicitation
- (7) Description of the original cost/price and delivery terms in the contract and the cost/price and delivery actually experienced, and explain any differences.
- (8) For award fee contracts, separately state in dollars the base fee and award fee available and the award fee actually received, on a contract year basis.

SECTION M - EVALUATION FACTORS FOR AWARD

M.1 METHOD OF EVALUATION

- A. Proposals received in response to this RFP will be evaluated by a NASA Source Evaluation Board (SEB) in accordance with NASA Handbook (NHB) 5103.6B, with the exception of awarding the contract without discussions. In the event that the Government later determines that discussions are necessary, the full discussion procedures set forth in FAR 15.610(c)(2) will be utilized in accordance with Section L, L.22, Test of Source Selection Procedures. Mission Suitability will be scored. Cost and Relevant Experience and Past Performance will not be scored. The Source Selection Official, after consultation with the SEB, will select the offeror (or offerors) which he considers can perform the contract in a manner most advantageous to the Government, all factors considered.
- B. Evaluation will be on the basis of material presented and substantiated in your proposal and not on the basis of what may be implied. Vague statements will be interpreted as a lack of understanding on the part of the offeror and/or inability to demonstrate adequate qualifications. Your attention is directed to Section L, L.35, which provides important instructions concerning proposal preparation.

M.2 EVALUATION FACTORS

A. Factor 1 - Mission Suitability

The offeror's Technical Proposal is the basis for the SEB's evaluation of the Mission Suitability Factor (Factor 1). Proposal risks associated with the cost, schedule and performance or technical aspects of the program will be assessed. The evaluation of risk will consider the probability of success, the

impact of failure and the alternatives available to meet the requirements. The Mission Suitability Subfactors to be considered and scored in the evaluation of the Technical Proposals are set forth below:

1. Subfactor 1 - Understanding the Requirements and Technical Approach

The offeror's demonstrated understanding of and approach for providing systems analysis and engineering research support will be evaluated. This evaluation will be based on the offeror's response to the Sample Task Orders set forth in Attachment 1. For each sample task the offeror's proposed skill mix by category and hours, schedule, estimated cost, material purchases and travel expenses (if appropriate) will be evaluated. In addition, the offeror's understanding and approach for performing work related to aeronautic systems analysis, project planning, and aircraft and aircraft systems maintenance and operations will be evaluated.

2. <u>Subfactor 2 - Total Compensation Plan</u>

The offeror's Total Compensation Plan setting forth salaries and fringe benefits proposed for the professional and non-professional employees who will work under the contract will be evaluated. The offeror's policies and procedures relative to uncompensated overtime (L.25) and the historical basis therefor for any uncompensated overtime proposed will be evaluated. The rationale and methodology used to estimate the uncompensated overtime (if any) for you and your subcontractors will be evaluated. The effect of the uncompensated overtime on the effective hourly rate for all Fair Labor Standards Act (FSLA)-exempt employees will be evaluated. The offeror's compensation plan, to the extent that it complies with FAR 52.222-46 and NFS 18-52.231-71, will be evaluated.

3. <u>Subfactor 3 - Management Operations</u>

Offers will be evaluated on the proposed SDB participation goal in comparison to the 40% goal specified in the solicitation and on the offeror's proposed method of achieving the goal. The offeror will also be evaluated on the types and amount of work proposed to be performed by SDBs, with emphasis on the utilization of high-technology SDBs. Any plans for establishing Mentor-Protege relationships as defined in NASA FAR Supplement 1819.72 will also be evaluated. An initial proposal will not be rejected as unacceptable solely as a result of an offeror proposing a goal that is less than the mandatory goal. The offeror's approach for managing the contract while avoiding personal services as defined in FAR 37.104 will be evaluated. In addition, the offeror's management approach for dealing with the declining workload while maintaining continuity of uninterrupted support, in accordance with the declining level-of-effort defined in Section L.35, Paragraph F.3(a), will be evaluated. The offeror's approach for maintaining competent staffing and appropriate skill mix for efficient contract performance in the face of shifting contract requirements within the scope of this contract will be evaluated. The offeror's general approach to managing the total contract and the individual task orders will be evaluated. The offeror's approach for handling urgent, short-turn around time, task orders that require immediate ramp-up of capabilities that exceed the inherent skill mix will be evaluated. The offeror's corporate resources to augment those available on the contract to meet special

short term requirements will be evaluated. The Contractor's approach to managing work flow from task initiation to completion will be evaluated.

4. Subfactor 4 - Cost Realism

Cost realism is the degree to which all costs for both the sample tasks and total contract reflect the proposed approach to achieving the technical objectives. The offeror's cost proposal and the proposed cost of each sample task order will be evaluated for cost realism in accordance with the guidelines contained in M.3, Paragraph C.

B. Factor 2 - Cost

An analysis of the proposed cost and fee for the basic contract and each priced option period will be conducted to determine their validity and the extent to which they reflect performance addressed in the technical proposal. Proposal risk will be considered in the cost factor evaluation. An assessment will be made of the offeror's capability to accomplish the contract objectives within the estimated cost proposed. A probable cost will be developed in accordance with NHB 5102.6 for each proposal in the competitive range. The reasonableness of the proposed award fee will also be determined in accordance with the guidelines set forth in NASA FAR Supplement 18-15.902.

C. Factor 3 - Relevant Experience and Past Performance

Each offeror will be evaluated on his/her relevant experience and past performance and that of significant subcontractors and/or teaming partners, if any, under existing or prior contracts for similar products or services. Relevant experience is the accomplishment of work which is comparable or related to the work or effort required by this RFP. Past performance is the quality of performance relative to the size, content and complexity of the requirements for this procurement. Past performance information will be used in making responsibility determinations and to assess the capabilities of offerors. This factor includes the evaluation of overall corporate or offeror experience and past performance, but not the experience and performance of individuals who are proposed to be involved with work pursuant to this RFP. For newly-formed businesses having little or no company experience, the relevant experience and past performance of a predecessor firm, the company's principal owner(s), or corporate officer(s) will be considered. You are cautioned that omissions or an inaccurate a inadequate response to this evaluation factor will have a negative effect on your overall evaluation.

M.3 RELATIVE IMPORTANCE OF EVALUATION FACTORS

- A. Overall, in the selection of an offeror for award, Mission Suitability, Cost, and Relevant Experience and Past Performance will be of essentially equal importance. Further, Mission Suitability and Relevant Experience and Past Performance when combined are significantly more important than cost.
- B. The weights to be used in the scoring of Mission Suitability Subfactors are presented below:

<u>Mission Suita</u>	ability <u>Subfactors</u>	Weight
Subfactor 1.	Understanding the Requirements and Technical Approach	500
Subfactor 2.	Total Compensation Plan	150
Subfactor 3.	Management Operations	_350
Subfactor 4.	Cost Realism	(300)

The weights assigned to the above subfactors are indicative of the relative importance of these evaluation areas. The weights are to be utilized by the Selection Official only as a guide.

C. As stated above, a pool of 300 points will be used to adjust the Mission Suitability score to account for any weaknesses associated with a lack of cost realism present in the offeror's proposal. This adjustment will be made if the proposed resources are unrealistically high or low according to the following guidelines.

The "cost realism adjustment" will be determined for the Basic contract and each of the four Options. Depending upon the severity of the adjustment, some or all of the points in the cost realism pool will be deducted from the offeror's Mission Suitability score. The 300 points are allocated against the Basic contract and Options as follows:

Basic (Contract	60	points
Option 0	#1	60	points
Option	#2		points
Option	#3	60	points
<u>Option</u>	#4	60	points
Total			points

The total amount of points to be subtracted from the Mission Suitability score will be calculated as follows:

If the percent cost realism adjustment of the cost proposal is less than 15%, no adjustment will be made to the Mission Suitability score. If the percent cost realism adjustment is greater than 55%, all 60 points will be deducted from the offeror's Mission Suitability score. Where the cost realism adjustment is between the range of 15% and 55% the amount of points to be subtracted will be allocated according to the table below:

Realism <u>Adjustment</u>	Basic Requirement	Option Periods
0-15%	O points	O points
16-35%	l pt. per % pt. over 15%	1 pt. per % pt. over 15%
36-55%	2 pts. per % pt. over 35%	2 pts. per % pt. over 35%
>55%	60 pts.	60 pts.

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ATTACHMENT 1 SAMPLE TASK ORDERS

ATTACHMENT 1

Sample Task Orders

- 3.2 Conceptual Design Study of Mach 4.0 X-Airplane
- 3.3 Space Station Functionality Impact Due to Loss of Russian Participation
- 4.1 Pre-Phase A Engineering Study of Atmospheric LIDAR Experiment in Space
- 4.4 Microphone Array Beamforming Techniques

Sample Performance Based Task Order Systems Analysis and Engineering Research Support Contract

1. Task Order Number and Title

Number: 3.2

Title: Conceptual Design Study of Mach 4.0 X-Airplane

The task order number will be assigned by the COTR. The Task Order will be issued by the Contracting Officer pursuant to the terms and conditions of the contract. Expand the boxes below using as much space as needed to provide the COTR the pertinent task requirements and supporting information:

2. Purpose and Description of the Work to be Performed:

The contractor shall provide a first-order conceptual design including cost of a Mach 4.0 airplane that will establish the boundaries of size and cost (Design, Development, Test and Engineering) for an X-airplane with the focus on the transition from a turbojet to a ramjet at Mach 2.5 to 3.0. A secondary focus shall be on demonstrating Mach 4.0 cruise with ramjet power.

3. Tasks, Deliverables, and or Products:

Initial Conditions/Guidelines/Constraints:

The Mach 5 Waverider-Derived Airplane "as-drawn" design and database presented in AIAA Paper 93-0401 shall be used as the baseline from which the conceptual X-airplane will be evolved/scaled. The existing Mach 5 design includes an over/under turbojet/ramjet engine integration in an underslung configuration. The scaling down of the existing Mach 5 design will be based on removing the four HiMATE-type, 35-inch diameter turbojets of the existing design and replacing them with four Allison turbojets having a diameter of 13 inches. The performance of these new engines is to be supplied by Allison.

The design of the X-airplane shall adhere to that of the baseline including the integral titanium fuel tanks for the hydrocarbon fuel except:

- (1) the X-airplane will have a smaller scale based on replacing the existing turbojets with the smaller Allison engines,
- (2) the X-airplane will have no pilot or cockpit (remotely piloted),
- (3) the X-airplane will have no payload other than 500 pounds of instrumentation which will be assumed to require no payload bay (volume),
- (4) the X-airplane will be dual fuel (the turbojets operate on JP-4 fuel and the ramjets operate on hydrogen fuel (need nonintegral aluminum tanks for LH₂), and
- (5) the X-airplane will employ external burning (hydrogen) during ascent at transonic speeds.

The contractor shall provide a conceptual design of a Mach 4.0 X-airplane as described above. The contractor shall deliver a 3-view drawing, a weight statement, a trajectory analysis from horizontal takeoff to Mach 4.0, the fuel load remaining at Mach 4.0, and a trajectory for returning to the homebase. If returning to the homebase is not possible, then the contractor shall determine the radius of the landing footprint from the Mach 4.0 test point. The contractor shall develop a first-order cost analysis. The DDT&E cost estimate resolution shall be approximately 20 percent, assuming the cost estimate is of the order of \$150M to \$200M.

4. Performance Evaluation Criteria:

(Express performance indicators as Outcome or Output Measures)

The contractor's performance will be tracked and evaluated based on the following items:

- On-schedule performance
- Within budget performance
- Assessment of multiple, innovative, and viable concepts
- Utilization of appropriate methods and techniques to obtain results

The final report describing the analyses defined in section 3 shall be delivered within budget and on schedule.

5. Security clearance required: Secret

6. Period of Performance	
Planned start date: May 1, 1996	Expected delivery date: May 17, 1996

Sample Performance Based Task Order Systems Analysis and Engineering Research Support Contract

1. Task Order Number and Title

Number: 3.3 Title: Space Station Functionality Impact Due to Loss of Russian Participation The task order number will be assigned by the COTR. The Task Order will be issued by the Contracting Officer pursuant to the terms and conditions of the contract. Expand the boxes below using as much space as needed to provide the COTR the pertinent task requirements and supporting information:

2. Purpose and Description of the Work to be Performed:

The purpose of this task is to assess the impact on Space Station assembly and operations of eliminating all Russian segment hardware and functionality.

A large European-designed Space Tug has been proposed to replace the previously Russian supplied functionality in the areas of propulsive attitude control, reboost, fuel storage and minimal initial capabilities (power, communications, command and data handling, thermal, and guidance, navigation, and control).

Given the specifications of the proposed European Space Tug, a stage-by-stage assessment of the assembly sequence for the new Space Tug based Space Station is required.

The assessment shall document the impacts of utilizing the tug on configuration mass properties, functionality, resource balances, operations, logistics, attitude control, microgravity environment and propellant usage.

3. Tasks, Deliverables, and or Products:

Work Plan - The contractor shall develop a plan for each element of this task that include cost and schedule milestones. Dates for the delivery of each item described below shall be provided in the first monthly report. Any algorithms or software tools developed during the assessment shall be fully documented and delivered as independent analysis modules.

<u>Databook</u> - The contractor shall produce a databook that includes:

- 1. A stage by stage assessment of resource requirements (EVA, power, thermal, fuel, etc.),
- 2. Operations analysis including robotic simulations,
- 3. Configuration drawings and mass/aerodynamic properties,
- 4. Reaction control system simulation of orientation maneuvers (selected stages),
- 5. Orbital lifetime assessments and attitude control system simulations utilizing control moment gyros.
- 6. Stage by stage microgravity analyses. This will also be required to establish changes in the environment resulting from using the tug instead of the Russian elements.

Attitude Control Simulator - The contractor shall develop and or modify an attitude control simulator to incorporate the new algorithms described above so that the flight characteristics of each stage can be fully evaluated. The effects of varying drag due to articulating solar arrays and atmospheric density fluctuations should be considered along with the effects of the Space Station orbital dynamics.

Significant changes in station mass properties will require the development and/or the implementation of new Control Moment Gyro control laws and associated momentum managers. The assessment will include recommendations for changes in Control Moment Gyro control algorithms and operational procedures that will enhance the assembly process.

The simulator shall have an easy to use interface that facilitates rapid input changes so that parametric studies can be performed. The attitude control simulator shall not include any proprietary software that would inhibit its distribution in the public domain once delivered.

<u>Video</u> - The contractor shall develop a narrated video depicting the installation of the second Space Station pressurized node. The video shall show the results of kinematic robotic simulations of the station and/or Shuttle robotic arm operations required for attaching the node to the front port of the U.S. laboratory module.

System Simulator - The contractor shall modify and or develop a system simulator to evaluate the operation and interaction of multiple subsystems as a function of time and spacecraft resources by creating a virtual Space Station environment. The systems simulator shall present the user a graphical/object oriented environment to enhance usability and integration. Each subsystem or payload model shall be defined using a functional block diagram. Each block within the diagram shall define a function or a lower hierarchical level of additional blocks. The contractor shall provide the capability to plot simulation data from any input and output at each block as a function of time so that the user can analyze subsystem interactions. The system simulator shall have three initial subsystem models. Models shall be developed for the power, communications and command, data handling based on known resource requirements and duty cycles of Space Station payloads. An orbital propagator model shall also be developed to drive the simulation.

4. Performance Evaluation Criteria:

(Express performance indicators as Outcome or Output Measures)

Contractor performance will be tracked and evaluated based on the on-time delivery of the following items:

- On time delivery of all items defined in the work plan developed for this task.
- A monthly progress report by the 15th of each month that discusses:
 - The work performed during the previous month,
 - The work planned for the next month,
 - Status charts showing the work accomplished vs. accrued cost
 - Status charts showing the work accomplished vs. the overall work schedule.
- A limited distribution final report that documents the results by February 1, 1997.

5. Security clearance required: Unclassified

6. Period of Performance	
Planned start date: May 1, 1996	Expected delivery date: February 1, 1997

Sample Performance Based Task Order Systems Analysis and Engineering Research Support Contract

1. Task Order Number and Title

Number: 4.1

Title: Pre-Phase A Engineering Study of Atmospheric LIDAR Experiment in Space

The task order number will be assigned by the COTR. The Task Order will be issued by the Contracting

Officer pursuant to the terms and conditions of the contract. Expand the boxes below using as much space as
needed to provide the COTR the pertinent task requirements and supporting information:

2. Purpose and Description of the Work to be Performed:

The contractor shall perform a Pre-Phase A Engineering Study to produce a conceptual definition and design for a free-flying spaceborne atmospheric LIDAR experiment, in accordance with the guidelines of Langley Handbook 7122.1, Systems Engineering Handbook for In-House Space Flight Projects.

The contractor shall develop a conceptual design of an instrument that can operate for 2-years in a 500-km altitude, 97.1-degree inclination orbit, with a 100-percent LIDAR system duty cycle for studying aerosols and clouds from space. The total program development is to take less than 36-months, and cost less than \$100M including instrument design and fabrication, launch services, flight operations and science data management.

3. Tasks, Deliverables, and or Products:

The contractor shall perform analyses that produce the following:

- 1. Pre-Phase A Engineering study report that shall include:
 - Executive Summary
 - Introduction
 - Mission Requirements and Programmatic Constraints
 - Mission Description
 - Concept Description
 - Risk Assessment
 - Potential Technology Developments
 - Performance Enhancement Options
 - Conclusions and Recommendations
 - Lists of Tables, Figures and Appendices
- 2. Presentation material:
 - Color snapshots of 3-D design model in electronic format for viewgraphs
- 3. Quick-look sketches (black-and-white, 2-D and 3-D)
- 4. Documentation electronic files
 - A backup electronic copy should be maintained by the contractor
- 5. CAD Mockup drawings in Pro-Engineer format
- 6. Mockup/Models

4. Performance Evaluation Criteria:

(Express performance indicators as Outcome or Output Measures)

The contractor's performance will be tracked and evaluated based on the following items:

- On-schedule performance
- Within budget performance
- Robustness of the conceptual design
- Assessment of multiple, innovative, and viable concepts
- Utilization of "cheaper, better, and faster" philosophy
- A limited distribution final report that documents the results by August 1, 1996
- Delivery of items 2, 3, 4 and 5 described in section 3 by August 1, 1996

5. Security clearance required: Unclassified

6. Period of Performance		•
Planned start date: May 1, 1996	Expected delivery date: August 1, 1996	

Sample Performance Based Task Order Systems Analysis and Engineering Research Support Contract

1. Task Order Number and Title

Number: 4.4

Title: Microphone Array Beamforming Techniques

The task order number will be assigned by the COTR. The Task Order will be issued by the Contracting Officer pursuant to the terms and conditions of the contract. Expand the boxes below using as much space as needed to provide the COTR the pertinent task requirements and supporting information:

2. Purpose and Description of the Work to be Performed:

To provide software and hardware to enable microphone array beamforming techniques to be applied in non-anechoic wind tunnel environments for the purposes of:

- (1) Identifying noise producing regions of aerospace models, and
- (2) Providing quantitative measures of farfield noise for signals below the tunnel background noise levels through use of sufficient array gain.

3. Tasks, Deliverables, and or Products:

The contractor shall develop computer codes with documentation which perform null-steer beamforming of an array of 25 microphones. The computer codes are to execute on a workstation in less than 5 minutes for a 25-microphone array.

The contractor shall provide microphones, pre-amplifiers, amplifiers, filters, and a workstation to enable validation test to be performed in a wind tunnel. All hardware shall be transportable. The system shall be operational in time to perform a demonstration experiment in the Langley 14- by 22-foot wind tunnel no later than 9 months after task start date.

The contractor shall perform a demonstration experiment in NASA Langley 14- by 22-foot wind tunnel using a government-provided 6 percent scale High Speed Research aircraft model to validate the ability of the software and the hardware developed above to accurately localize airframe noise sources and to provide estimates of farfield noise levels within ± 1.5 dB as a function of frequency from 250 to 10,00 Hertz and radiation angles from 45 degrees to 135 degrees as measured on the center line from the aircraft nose.

The contractor shall deliver the system hardware, software and complete operating instructions for both.

The contractor shall deliver a final technical report describing theory, beamforming equations, and error analysis for both tones and broadband source simulations.

4. Performance Evaluation Criteria:

(Express performance indicators as Outcome or Output Measures)

Contractor performance will be tracked and evaluated based on the on-time delivery of the following items:

A monthly progress report by the 15th of each month that discusses:

- The work performed during the previous month,
- The work planned for the next month,
- Status charts showing the work accomplished vs. accrued cost
- Status charts showing the work accomplished vs. the overall work schedule.

The deliverables shall meet or exceed established performance requirements

The final technical report shall be clear, accurate and comprehensive.

5. Security clearance required: Unclassified

6. Period of Performance	•
Planned start date: May 1, 1996	Expected delivery date: February 28, 1997

ATTACHMENT 2 CONTRACT PRICING PROPOSAL COVER SHEET

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	PROPOSAL COVER SHEET (Cost or Pricing Data Not Required)											NO.: 9000-0013 es: 09/30/98
sou oth	rces, gathering and r	naintaining the data n	eeded, and co	ompleting and rave	iwing t	he collection o	if information. Sen	d com	ment	a regardir	ng this	s, searching existing data s burden estimate or an Acquisition Policy, GSA
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ATTACHMENT 3 REQUIREMENT FOR CERTIFICATE OF PROCUREMENT INTEGRITY

REQUIREMENT FOR CERTIFICATE OF PROCUREMENT INTEGRITY (FAR 52.203-8) (SEP 1995) ALTERNATE I (SEP 1990)

- (a) Definitions. The definitions at FAR 3.104-4 are hereby incorporated in this provision.
- (b) Certifications. As required in paragraph (c) of this provision, the officer or employee responsible for this offer shall execute the following certification:

CERTIFICATE OF PROCUREMENT INTEGRITY

CERTIFICATE OF PROCUREMENT INTEGRITY
(1) I,
[Name of certifier] am the officer or employee responsible for the preparation of this offer and hereby certify that, to the best of my knowledge and belief, with the exception of any information described in this certificate, I have no information concerning a violation or possible violation of subsections 27(a), (b), (d), or (f) of the Office of Federal Procurement Policy Act, as amended* (41 U.S.C. 423), (hereinafter referred to as "the Act"), as implemented in the FAR, occurring during the conduct of this procurement [(solicitation number)]
that, to the best of my knowledge and belief, each officer, employee, agent, representative, and consultant of
[Name of offeror] who has participated personally and substantially in the preparation or submission of this offer has certified that he or she is familiar with, and will comply with, the requirements of subsection 27(a) of the Act, as implemented in the FAR, and will report immediately to me any information concerning a violation or possible violation of subsection 27(a), (b), (d), or (f) of the Act, as implemented in the FAR, pertaining to this procurement. (3) Violations or possible violations: (Continue on plain bond paper if necessary and label Certificate of Procurement Integrity (Continuation Sheet), ENTER NONE IF NONE EXIST)
•
(4) I agree that, if awarded a contract under this solicitation, the certifications required by subsection 27(e)(1)(B) of the Act shall be maintained in accordance with paragraph (f) of this provision.
[Signature of the officer or employee responsible for the offer and date]
[Typed name of the officer or employee responsible for the offer]
*Subsections 27(a), (b), and (d) are effective on December 1, 1990. Subsection 27(f) is effective on June 1, 1991.

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER TITLE 18, UNITED STATES CODE,

SECTION 1001.

(End of certification)

- (c) For procurements, including contract modifications, in excess of \$100,000 made using procedures other than sealed bidding, the signed certifications shall be submitted by the successful Offeror to the Contracting Officer within the time period specified by the Contracting Officer when requesting the certificates except as provided in subparagraphs (c)(1) through (c)(5) of this clause. In no event shall the certificate be submitted subsequent to award of a contract or execution of a contract modification:
- For letter contracts, other unpriced contracts, or unpriced contract modifications, whether or not the unpriced contract or modification contains a maximum or not to exceed price, the signed certifications shall be submitted prior to the award of the letter contract, unpriced contract, or unpriced contract modification, and prior to the definitization of the letter contract or the establishment of the price of the unpriced contract or unpriced contract modification. The second certification shall apply only to the period between award of the letter contract and execution of the document definitizing the letter contract, or award of the unpriced contract or unpriced contract modification and execution of the document establishing the definitive price of such unpriced contract or unpriced contract modification.

(2) For basic ordering agreements, prior to the execution of a priced order; prior to the execution of an unpriced order, whether or not the unpriced order contains a maximum or not to exceed price; and, prior to establishing the price of an unpriced order. The second certificate to be submitted for unpriced orders shall apply only to the period between award of the unpriced order and execution of the document establishing the definitive price for such order.

(3) A certificate is not required for indefinite delivery contracts (see Subpart 16.5) unless the total estimated value of all orders eventually to be

placed under the contract is expected to exceed \$100,000.

(4) For contracts and contract modifications which include options, a certificate is required when the aggregate value of the contract or contract modification and all options (see 3.104-4(e)) exceeds \$100,000.

- (5) For purposes of contracts entered into under section 8(a) of the SBA, the business entity with whom the SBA contracts, and not the SBA, shall be required to comply with the certification requirements of subsection 27(e). SBA shall obtain the signed certificate from the business entity and forward the certificate to the Contracting Officer prior to the award of a contract to the SBA.
- Failure of an Offeror to submit the signed certificate within the time prescribed by the Contracting Officer shall cause the offer to be rejected. (d) Pursuant to FAR 3.104-9(d), the Offeror may be requested to execute

additional certifications at the request of the Government. Failure of an Offeror to submit the additional certifications shall cause its offer to be rejected.

- (e) A certification containing a disclosure of a violation or possible violation will not necessarily result in the withholding of award under this solicitation. However, the Government, after evaluation of the disclosure, may cancel this procurement or take any other appropriate actions in the interests of the
- Government, such as disqualification of the Offeror. In making the certification in paragraph (2) of the certificate, the officer or employee of the competing contractor responsible for the offer may rely upon a onetime certification from each individual required to submit a certification to the competing Contractor, supplemented by periodic training. These certifications shall be obtained at the earliest possible date after an individual required to certify begins employment or association with the contractor. If a contractor decides to rely on a certification executed prior to suspension of Section 27 (i.e., prior to December 1, 1989), the contractor shall ensure that an individual who has so certified is notified that Section 27 is reinstated. These certifications shall be maintained by the Contractor for 6 years from the date a certifying employee's employment with the company ends or, for an agent, representative, or consultant, 6 years from the date such individual ceases to act on behalf of the Contractor.
- (g) The certifications in paragraphs (b) and (d) of this provision are a material representation of fact upon which reliance will be placed in awarding a contract.

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RELEVANT EXPERIENCE AND PAST PERFORMANCE EVALUATION INSTRUCTIONS/QUESTIONNAIRE

RELEVANT EXPERIENCE AND PAST PERFORMANCE EVALUATION INSTRUCTIONS FORM REPP

Send the completed form directly to the address listed at the bottom of page one.

Space is provided for comments (additional pages may be used if desired) and comments would be particularly appreciated concerning excellent and less than satisfactory performance. Good performance is effective performance, fully responsive to contract requirements; identified deficiencies do not have substantial effects on overall performance.

FORM REPP -- RELEVANT EXPERIENCE AND PAST PERFORMANCE Solicitation No. 1-132-D.1166

I.	CONTRACT INFORMATION
	A. Name of Company Being Evaluated:
	B. Address:
	C. Contract Number: D. Contract Type:
	E. Contract Value:
	F. Period of Performance: From: To:
II.	DESCRIPTION OF CONTRACT:
	During the contract performance being evaluated, this firm was the: Prime Contractor; Significant Subcontractor; Team Membe
	Other (describe)
	Does a corporate or business relationship exist between the firm be evaluated and your organization? Yes, No. If so, please describe.
III.	Does a corporate or business relationship exist between the firm be evaluated and your organization? Yes, No. If so, please describe.
III.	Does a corporate or business relationship exist between the firm be evaluated and your organization? Yes, No. If so, please describe. EVALUATOR
III.	Does a corporate or business relationship exist between the firm be evaluated and your organization? Yes, No. If so, please describe. EVALUATOR Name:
III.	Does a corporate or business relationship exist between the firm be evaluated and your organization? Yes, No. If so, please describe. EVALUATOR Name: Title:
III.	Does a corporate or business relationship exist between the firm be evaluated and your organization? Yes, No. If so, please describe. EVALUATOR Name:

SEND TO:

ATTN: 126/C. TOM WEIH NASA LANGLEY RESEARCH CENTER

9A LANGLEY BOULEVARD HAMPTON VA 23681-0001 TELEPHONE: 804-864-3878

FAX: 804-864-7709

This form contains Source Selection Information when completed. See FAR 3.104.

IV. OVERALL PERFORMANCE

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	How	would you rate the Contractor in the	followi	ing area	as (C	ircle	One)	:
	Α.	Local Management Authority	Ε	VG	G	F	Р	N/A
	В.	Contract Compliance	Ε	VG	G	F	P	N/A
	С.	Subcontract Administration	Ε .	VG	G	F	Р	N/A
	D.	Responsiveness to Technical Direction	Ε	VG	G	F	Р	N/A
_	Ε.	Responsiveness to Change Orders (N/A if not services)	Ε	VG	G	F	P	N/A
	F.	Phase-in	Ε	VG	G	F	Р	N/A
	G.	Meeting SDB Goals	Ε	VG	G	F	P	N/A
	н.	Planning, Estimating and Scheduling	E	VG	G	F	P	N/A
	I.	Work Control	Ε	VG	G	F	Р	N/A
	J.	Responsiveness to Changing Requirements	Ε	VG	G	F	Р	N/A
	Κ.	Management of Diverse Tasks	Ε	VG	G	F	Р	N/A
	L.	Early Identification of Problems and Timely Resolution	E	VG	G	F	P	N/A
	М.	Labor Relations	Ε	VG	G	F	Р	N/A
	N.	Worked Without Extensive Guidance	Ε	VG	G	F	Р	N/A
	0.	Quality Management Philosophy	Ε	VG	G	F	P	N/A
	FINA	ANCIAL MANAGEMENT PERFORMANCE						
	Α.	How would you rate the Contractor in	the fol	lowing	areas	(Ci	rcle	One):
		1. Complete and Timely Reporting	Ε	VG	G	F	Р	N/A
		2. Cost Control	Ε	VG	G	F	Р	N/A
		3. Procurement System	٤	VG	G	F	Р	N/A
		4. Property Management System	Ε	VG	G	F	Р	N/A
		5. Accounting System	Ε	VG	G	F	Р	N/A
		6. Adherence to Cost Estimates	Ε	VG	G	F	P ·	N/A
		7. Overall Financial Management	Ε	VG	G	F	Ρ	N/A

U	. Please provide the Contractor's yearly ov	erhead	and G&	A gro	wth:	
	Overhead:					
	G&A:					
С.	If ceiling rates are contained in this con ceiling rates:	tract,	please	indi	cate	current
	Overhead:					
	G&A:					
D.	Has the Contractor experienced overruns or	underr	uns?	Yes		No
	If yes, please elaborate:					
TE	CHNICAL PERFORMANCE					
Α.	How would you rate the Contractor's technicareas:	al perf	ormanc	e in t	he fo	llowing
	1. Completeness and Accuracy	Ε	VG	G	F	Р
	2. Timeliness	Ε	VG	G	F	Р
	3. Product Reviews/Product Assurance	Ε	۷G	G	F	P
	4. Documentation	Ε	VG	G	F	Р
	5. Qualifications of Technical Staff	Ε	VG	G	F	P
	6. Overall Technical Performance	Ε	VG	G	F	P
В.	How long did proposed key personnel remain	on con	tract?	·		
С.	What is the Contractor's average annual tu	rnover	rate?			
D.	Is there an award or incentive fee? If so and percentages earned for the last three	o, plea reporti	se giv ng per	e the	fee	dollars
	Review Period Fee Dollars \$ 5		<u> </u>	of P	ossit	ole <u>Fee</u> %
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CO	NCLUSIONS					
Wo	ould you recommend this Contractor for anothory comments you feel pertinent.	er cont	ract?	Why?	Pl€	ease add
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ATTACHMENT 5 SAERS BIDDERS LIBRARY INDEX

BIDDER'S LIBRARY

SYSTEMS ANALYSIS AND ENGINEERING RESEARCH SUPPORT (SAERS)

AND

AEROSPACE RESEARCH TECHNOLOGY (ART)

The purpose of the Bidder's Library is to provide offerors with specific information concerning work that is presently being performed under all the contracts that are being consolidated into this procurement. It should be noted that the task assignments listed below represent active work only.

1		LaRC Organizational Chart
2	NHB 5103.6B	Source Evaluation Handbook
3	NHB 9501.2	Procedures for Contractor Reporting of Correlated Costs and Cost Performance
4	NMI 1382.17D	Privacy ActNASA Regulations
5	NHB.2410.9A	NASA Automation Information Security Handbook
6	FY 93	LaRC's Automated Information Security (AIS) Annual Plan
7	LHB 1710.10	LaRC Red Tag System
8	LHB 1710.12	Potentially Hazardous Materials
9	LHB 1740.2	Facility Safety Requirements
10	LMI 5300.1	Systems Safety, Quality, Reliability Program
11	LHB 7910.1	Flight Research Program Management Transport Systems Research Vehicle (TSRV) Description of the Experimental Avionics Systems Integration Laboratory (EASILY)

12	LHB 7122.1	Systems Engineering Handbook For In-House Space Flight Projects
13	LHB 7320.1	Engineering Drawing System
14	LHB 5300.1	Program Assurance Manual
15	AIAA 93-0401	Design of a Hypersonic Waverider- Derived Airplane
NAS1-18935 Statement of Work	AMA, Inc.	Analytical Support for NASA Space Missions and Payload Requirements
NAS1-18935 Task No. 8	AMA, Inc.	Guidance, Navigation, and Control Research
NAS1-18935 Task No. 11	AMA, Inc.	Structural Dynaqmics Experiments Analysis
NAS1-18935 Task No. 17	AMA, Inc.	Spacecraft Configuration and Mission Design and Analysis
NAS1-18936 Statement of Work	СТА	Analytical Support for NASA Space and Missions and Payload Requirements
NAS1-18936 Task No. 15	СТА	Modeling and Performance Evaluation of COSMOS Features
NAS1-18936 Task No. 26	СТА	Microgravity Systems Engineering
NAS1-18936 Task No. 27	СТА	Microgravity Program History
NAS1-18936 Task No. 28	СТА	Development of Data Compression Software for Remote Sensing Application
NAS1-18936 Task No. 29	CTA	Fast Steering Mirror Control Study
NAS1-18936 Task No. 30	CTA	Aerospace Modeling Tools Development

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NASI-18980 Statement of Work	SpaceTec Ventures, Inc.	Studies and Analyses of Scientific Instruments and Payloads
NAS1-18980 Task No. 2	SpaceTec Ventures, Inc.	Payload Planning, Development and Operation Support for MAPS Experiment
NASI-18980 Task No. 11	SpaceTec Ventures, Inc.	Post-Flight Data Processing System for Flight of MAPS Instrument
NAS1-18980 Task No. 14	SpaceTec Ventures, Inc.	Photogrammetric Appendage Structural Dynamics Experiment (PASDE)
NAS1-18980 Task No. 15	SpaceTec Ventures, Inc.	Lite Mission Operations Report
NASI-19000 Statement of Work	Lockheed	Technical Support Services for Aerospace Research & Technology
NAS1-19000 Work Orders	Lockheed	Technical Support Services for Aerospace Research & Technology
NAS1-19341 Statement of Work	Vigyan, Inc.	Physical R&D in Flight Control, Detection, Guidance, and Navigation
NAS1-19341 Task No. 1	Vigyan, Inc.	Verification of Life-Critical Computer System Designs
NAS1-19341 Task No. 3	Vigyan, Inc.	Development of New and Innovative Navigation, Guidance, and Control Laws, Implement Techniques and Cockpit Aids
NAS1-19341 Task No. 5	Vigyan, Inc.	Controller Synthesis and Integrated Design for Flexible Space Structures
NAS1-19341 Task No. 6	Vigyan, Inc.	Development of Advanced Electro-Optical Sensory Systems
NAS1-19341 Task No. 9	Vigyan, Inc.	Control System Software Development

NAS1-19341 Task No. 11	Vigyan, Inc.	Perform Analysis and Design Studies for a Laser Atmospheric Wind Sounder (LAWS) CSI Focus Mission
NAS1-19341 Task No. 12	Vigyan, Inc.	Electromagnetic Radiation and Scattering Analysis and Computer Code Development
NAS1-19341 Task No. 13	Vigyan, Inc.	Wake Vortex Field Data Analysis and Interpretation
NAS1-19341 Task No. 14	Vigyan, Inc.	Perform Analyses on Flight Data from PASDE Flight Experiment on STS-74
NASI-19505 Statement of Work	Vigyan, Inc.	Fundamental Research and Practical Development of Aerodynamic Measurement Technology
NAS1-19505 Task No. 9	Vigyan, Inc.	Fiber Optic Lever Probes for High Temperature Instrumentation
NAS1-19505 Task No. 10	Vigyan, Inc.	Measurement Technology
NAS1-19505 Task No. 11	Vigyan, Inc.	Development of Pressure Sensitive Paint S <u>o</u> ftware Package
NAS1-19603 Statement of Work	STC	R&D in Atmospheric Science and Remote Sensor Research
NAS1-19603 Task No. 1	STC	Designing, Development, and Testing of Various Diode Pumped Solid-State Laser Systems
NAS1-19603 Task No. 2	STC	Advanced Visual and Spectral Information Processing
NASI-19603 Task No. 6	STC	Data Analysis and Instrument Development for the DACOM Instrument
NASI-19603 Task No. 11	STC	Spacecraft Accommodation of Earth Probe Sensors

NAS1-19603 Task No. 13	STC	Laser System Optical Design Support
NAS1-19603 Task No. 20	STC	High Energy Optics Damage Analysis and Tests
NAS1-19603 Task No. 23	STC	SEDS-1 End Mass Payload Flight Data Analysis
NAS1-19603 Task No. 24	STC	System Definition Studies for Wake-Vortex Lidar Systems
NAS1-19672 Statement of Work	Vigyan, Inc.	Applied Aeronautics Research and Development
NAS1-19672 Task No. 2	Vigyan, Inc.	Low-Speed Flight Dynamics
NAS1-19672 Task No. 9	Vigyan, Inc.	Propulsion/Airframe Integration of Advanced Aircraft
NAS1-19672 Task No. 12	Vigyan, Inc.	Vehicle Integration Studies
NAS1-19672 Task No. 13	Vigyan, Inc.	-Numerical Experimentation in Subsonic Aerodynamics
NAS1-19672 Task No. 14	Vigyan, Inc.	Numerical Experiments in Rotorcraft Configuration Aerodynamics
NAS1-19672 Task No. 17	Vigyan, Inc.	Experimental Research in Fundamental Fluid Dynamics
NAS1-19672 Task No. 18	Vigyan, Inc.	Free-Flight Rotorcraft Research Program
NAS1-19672 Task No. 20	Vigyan, Inc.	High-Performance Military Aircraft Research
NASI-19672 Task No. 22	Vigyan, Inc.	High-Reynolds Number Aerodynamics

NAS1-19672 Task No. 23	Vigyan, Inc.	Application of Advanced Computationa. Theoretical Methods in Transonic Aerodynamics
NAS1-19672 Task No. 24	Vigyan, Inc.	Improvement Study of 16-Foot And Unitary Tunnels
NAS1-19672 Task No. 27	Vigyan, Inc.	Research to Advance Design of Future Aircraft and Transporation Vehicle Concepts-Aerodynamic Preliminary Analyisi System (APAS)
NAS1-19700 Statement of Work	AS&M, Inc.	Basic & Applied Research in Structural Mechanics
NAS1-19700 Task No. 1	AS&M, Inc.	Applied Research in Aircraft Structural Mechanics
NAS1-19700 Task No. 5	AS&M, Inc.	Flow-Structure Acoustic Interaction
NAS1-19700 Task No. 7	AS&M, Inc.	ACT Program Research
NAS1-19700 Task No. 8	AS&M, Inc.	-Support and Development of the Computational Mechanics Testbed
NAS1-19700 Task No. 9	AS&M, Inc.	Composite Structural Analysis
NAS1-19700 Task No. 10	AS&M, Inc.	Modeling Analysis and Test of Structures and Thermal Protection Systems (TPS) for High-Speed Vehicles
NASI-19708 Statement of Work	AS&M, Inc.	Basic & Applied Research in Advanced Material Technology
NASI-19708 Task No. 1	AS&M, Inc.	Metals Processing
NASI-19708 Task No. 2	AS&M, Inc.	Metals Synthesis

NAS1-19708 Task No. 3	AS&M, Inc.	Fatigue and Fracture of Metals
NASI-19708 Task No. 4	AS&M, Inc.	Materials Characterization
NAS1-19708 Task No. 5	AS&M, Inc.	Mechanics of Composite Materials
NAS1-19708 Task No. 6	AS&M, Inc.	Coatings for Ceramic Fiber Insulation
NAS1-19831 Statement of Work	AS&M, Inc.	Basic Research in Aeronautics
NAS1-19831 Task No. 8	AS&M, Inc.	Distributed & Parallel Computing
NAS1-19831 Task No. 12	AS&M, Inc.	Rotorcraft Aerodynamic Research
NAS1-19831 Task No. 15	AS&M, Inc.	Network-Based Computing Environments for Fluid Mechanics Research
NAS1-19831 Task No. 19	AS&M, Inc.	-Experimental and Theoretical Studies Research of Fluid Mechanics and Acoustics of Current and Future Subsonic and Supersonic Aircraft
NAS1-19831 Task No. 20	AS&M, Inc.	Analytical Numerical Assessment of Scramjet Performance
NAS1-19864 Statement of Work	AS&M, Inc.	Applied Research in Support of National Aerospace Plane (NASP) and other Hypersonic Vechicles
NAS1-19864 Task No. 1	AS&M, Inc.	Numerical Techniques Analysis of Aerodynamic and Propulsion Performance of Hypersonic Vehicles
NAS1-19864 Task No. 2	AS&M, Inc.	Numerical Methods Analysis of Aerodynamic Performance of Hypersonic Vehicles

NAS1-19864 Task No. 4	AS&M, Inc.	Boundary Layer Transition Characterizaton and Mode Separation for Hypersonic Flows
NASI-19864 Task No. 5	AS&M, Inc.	Design & Develop a Pressure-Box Test Fixture to Test Composite Panels at Cryogenic and Elevated Temprature Conditions
NAS1-19864 Task No. 6	AS&M, Inc.	NASP/HySTP Aerodynamics Technology
NAS1-20043 Statement of Work	AS&M, Inc.	Basic & Applied Research in Measurement Science Technology
NAS1-20043 Task No. 1	AS&M, Inc.	Non-Destructive Evaluation (NDE) Research
NAS1-20043 Task No. 4	AS&M, Inc.	Non-Destructive Evaluation (NDE) Technology for Aging Aircraft
NAS1-20043 Task No. 5	AS&M, Inc.	Operation and Maintenance of Acoustic Microscopy Laboratory
NAS1-20043 Task No. 6	AS&M, Inc.	.Non-Destructive Evaluation (NDE) Technology for Aging Aircraft
NAS1-20043 Task No. 7	AS&M, Inc.	Development of Cryogenic Pressure Sensor Technology
NAS1-20043 Task No. 8	AS&M, Inc.	Non-Destruction Evaluation Technology
NAS1-20059 Statement of Work	High Technology Corporation	Basic Research in Transition and Turbulent Flow Physics
NAS1-20059 Task No. 7	High Technology Corporation Corporation	Theoretical, Computational and Experimental Research on the Mechanism of Transition to Turbulence and Subsonic and Super-sonic Laminar Flow Control
NASI-20255 Statement of Work	AS&M, Inc.	Research in Aerothermodynamics and Advanced Space Transportation Vehicles

Design

NAS1-20255 Task No. 1	AS&M, Inc.	Aerothemodynamics
NAS1-20255 Task No. 2	AS&M, Inc.	Advanced Space Transporation Vehicle Design

SKILL MATRIX

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Attachment 6

Skill Matrix

The following charts are to assist in proposing cost data. The first chart reflects the percentage of the Level-of-Effort (LOE) which each labor classification is expected to perform on this contract (See Section L). The second chart defines the labor experience levels used in the "Experience Table". The third sets of charts demonstrates the incumbent labor experience and their average labor rate for that level of experience. (These rates are current as of September 1, 1995.) This is followed by lists of the incumbent direct labor position titles from which the experience tables were composed. The data was supplied by the incumbent contractors, and is to be used in your proposal.

In your proposal, explain how your skill mix's experience differs from "Experience Categories" provided herein and how those changes occur over time, if applicable.

SKILL MIX (to be used in cost proposal and Cost Forms):

Labor Classification	% of LOE Hours
Engineer	61%
Support Personnel	14%
Technician	25%

LABOR EXPERIENCE LEVELS:

Category I - Senior Professional (Ph.D. and ≥3 years related experience, or Masters degree and >6 years experience, or Bachelors degree and >10 years experience)

Category II -- Journeyman Professional (Ph.D. and <3 years., or Masters degree and 3 - 6 year experience, or Bachelors degree and 5 - 10 years experience)

Category III — Junior Professional (Masters degree and <3 years experience, Bachelors degree and <5 years experience)

Category IV -- Associate (High School diploma or equivalent)

Incumbent Experience Tables

Experience Table: Engineer						
	Category					
Years of Work Experience	l l	11	111	IV	Total	
< 6 yrs experience	1.2%	5.9%	3.2%	0.0%	10.4%	
6-10 years	14.3%	17.5%	0.0%	1.0%	32.8%	
11-15 years	21.1%	. 0.0%	0.0%	1.5%	22.6%	
16-20 years	13.6%	0.0%	0.0%	1.0%	14.6%	
20-25 years	5.9%	0.0%	0.0%	0.5%	6.4%	
25 years or more	10.8%	0.0%	0.0%	2.5%	13.2%	
Total	66.9%	23.4%	3.2%	6.4%	100.0%	
Average Labor Rate:	\$26.96	\$20.08	\$16.57	\$20.56		

Experience Table: Support Personnel						
	Category					
Years of Work Experience	l	11	111	IV	Total	
< 6 yrs experience	0.0%	7.7%	3.8%	0.0%	11.5%	
6-10 years	7.7%	34.6%	3.8%	0.0%	46.2%	
11-15 years	15.4%	0.0%	0.0%	0.0%	15.4%	
16-20 years	3.8%	0.0%	0.0%	0.0%	3.8%	
20-25 years	7.7%	0.0%	0.0%	3.8%	11.5%	
25 years or more	7.7%	. 0.0%	0.0%	3.8%	11.5%	
Total	42.3%	- 42.3%	7.7%	7.7%	100.0%	
Average Labor Rate:	\$22.69	\$17.54	\$16.09	\$18.81	į	

Experience Table: Technician						
	Category					
Years of Work Experience	ı	11	111	IV	Total	
< 6 yrs experience	0.0%	0.0%	3.7%	7.4%	11.1%	
6-10 years	0.0%	0.0%	0.0%	9.3%	9.3%	
11-15 years	0.0%	0.0%	0.0%	14.8%	14.8%	
16-20 years	3.7%	0.0%	0.0%	7.4%	11.1%	
20-25 years	0.0%	0.0%	0.0%	20.4%	20.4%	
25 years or more	1.9%	0.0%	0.0%	31.5%	33.3%	
Total	5.6%	0.0%	3.7%	90.7%	100.0%	
Average Labor Rate:	\$17.63	\$0.00	\$15.87	\$17.41		

Examples of Incumbent Skill Classifications

<u>Engineer</u> Advanced Sys Eng Spec Advanced Sys Spec Sr Asst. Engineer III Computer Analyst Computer Analyst Sr Computer Operator I Computer Program Assoc Sr. Computer System Analyst Computer System Spec Data Proc Co-Ordinator II **Data Processor** Data Verification Tech Elect. Dev. Eng. III Engineer Engineer Associate, Sr **Engineer Associate** Engineer I Engineer II Engineer III Engineer IV Engineering Supervisor Engineer, Associate Engineer, Principal

Engineer, Senior Engineer, Staff Programming Asst Project Engineer Project Manager Research Engineer Research Engineer III Research Scientist Senior Engineer Senior Scientist Sr. Project Engineer Sr. Research Engineer Staff Engineer Supervising Engineer

Tech Illustrator

Support Personnel

Program Planner Program Planner Assoc Sr Program Planner, Assoc Program Planner, Sr Research Engineer Research Scientist Senior Programmer Analyst Senior Scientist Support IV Systems Analyst

Technician

Administrative Associate Aircraft Equip. Flight Specialis Aircraft Equip. Flight Spec., S Electric Sys. Dev. Technician Electric Sys. Dev. Technician Electronic Technician Research Technician Tech Support Supervisor Technician **Test Conductor** Test Operations Assistant Test Subject Coordinator

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