

CONTRACT NAS1-20334

The following information has been determined to be exempt from disclosure and has been deleted from the contract:

- Exhibit C: The Small business and Small Disadvantaged Business Subcontracting Plan.

The deleted material is exempt from disclosure under 14 C.F.R. 1206.300 (b) (4) which covers trade secrets and commercial or financial information obtained from a person and privileged or confidential. It has been held that commercial or financial matter is "confidential" for purposes of this exemption if its disclosure would be likely to have either of the following effects: (1) impair the Government's ability to obtain necessary information in the future; or (2) cause substantial harm to the competitive position of the person from whom the information was obtained, National Parks and Conservation v. Morton, 498 F2d 765 (D.C. Cir. 1974).

Disclosure of the information in the Subcontracting Plan would discourage future submission of detailed data concerning the company's implementation of their Subcontracting Plan and impair the Government's ability to obtain necessary information in the future as well as cause substantial harm to the competitive position of the company.

AWARD/CONTRACT		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)	RATING DO-C9	PAGE OF PAGES 1 31
2. CONTRACT (Proc. Inst. Ident.) NO. NAS1-20334		3. EFFECTIVE DATE OCT 31 1994	4. REQUISITION/PURCHASE REQUEST/PROJECT NO.	
5. ISSUED BY National Aeronautics and Space Administration Langley Research Center Hampton, VA 23681-0001		6. ADMINISTERED BY (If other than Item 5) Delegation Being Made Via NASA Form 1430 Criticality Designator C		

7. NAME AND ADDRESS OF CONTRACTOR (No., street, city, county, State and ZIP Code) SRI International 333 Ravenswood Avenue Menlo Park, CA 94025		8. DELIVERY <input type="checkbox"/> FOB ORIGIN <input checked="" type="checkbox"/> OTHER (See below)
11. SHIP TO/MARK FOR CODE		9. DISCOUNT FOR PROMPT PAYMENT NONE
10. SUBMIT INVOICES (4 copies unless otherwise specified) TO THE ADDRESS SHOWN IN: Section G		

11. SHIP TO/MARK FOR CODE		FACILITY CODE	12. PAYMENT WILL BE MADE BY CODE Financial Management Division, M/S 175 NASA, Langley Research Center Hampton, VA 23681-0001
13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: <input type="checkbox"/> 10 U.S.C. 2304(c) <input type="checkbox"/> 41 U.S.C. 253(c)		14. ACCOUNTING AND APPROPRIATION DATA PR: DIC.1102; R19565; \$300,996 (Complete)	

15A. ITEM NO.	15B. SUPPLIES/SERVICES	15C. QUANTITY	15D. UNIT	15E. UNIT PRICE	15F. AMOUNT
	Formal Methods for Life-Critical Systems				
			Est. Cost	Fixed Fee	Total
			Base \$ 813,800	\$ 48,800	\$ 862,600
			Option \$ 2,034,500	\$ 122,000	\$ 2,156,500
			Total \$ 2,848,300	\$ 170,800	\$ 3,019,100

15G. TOTAL AMOUNT OF CONTRACT \$

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CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE

17. <input type="checkbox"/> CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return _____ copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)	18. <input type="checkbox"/> AWARD (Contractor is not required to sign this document.) Your offer on Solicitation Number _____ including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.
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19A. NAME AND TITLE OF SIGNER (Type or print) Barbara E. Campb Group Manager, Engineering Contracts	20A. NAME OF CONTRACTING OFFICER J. Y. TAYLOR
19B. NAME OF CONTRACTOR BY _____ (Signature of person authorized to sign)	20B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer)
19C. DATE SIGNED OCT 25 1994	20C. DATE SIGNED OCT 31 1994

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PART I - THE SCHEDULE

SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS

B.1 ESTIMATED COST AND FIXED FEE (NASA 18-52.216-74) (DEC 1991)

The estimated cost of this contract is \$813,800 exclusive of the fixed fee of \$48,800. The total estimated cost and fixed fee is \$862,600.

B.2 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 \$290,138. This allotment is for the performance of work in accordance with the limitations and completion dates as set forth in task assignments authorized by the Contracting Officer.

(b) An additional amount of \$10,858 is obligated under this contract for payment of fee.

B.3 ADMINISTRATION OF CONTRACT FUNDING (LaRC 52.232-113) (JUL 1993)

A. The Contractor agrees that all future incremental funding shall be accomplished by Administrative Change Modification and that the funding procedure shall in no way change the Contractor's notification obligations as set forth in the "Limitation of Funds" clause.

B. In addition to the requirements of the "Limitation of Funds" clause, the Contractor shall notify the Contracting Officer in writing if, at any time, the Contractor has reason to believe that the total cost to the Government for the complete performance of this contract will be greater or substantially less than the then total estimated cost of the contract. Such notification shall give a revised estimate of the total cost for the performance of this contract.

B.4 LEVEL-OF-EFFORT

A. In performing Government assigned tasks under this contract, the Contractor is obligated to provide up to 10,000 direct productive labor hours as defined in paragraph C. below.

B. Government authorized task assignments will be issued requiring a cumulative minimum of 2,000 direct productive labor hours.

C. The "direct labor hours" specified in Paragraph A above are defined as those productive hours expended by Contractor personnel in performing the engineering, technician and scientific functions required to complete the Statement of Work as defined in Section C. 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 does not 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.

D. Each task assignment shall specify a total cost and a direct labor hour limitation, neither of which shall be exceeded without the prior written consent of the Contracting Officer. Only expenditures against specific written tasks authorized by the Contracting Officer and within the man-hour and cost limitations set forth therein shall be allocable or allowable under this contract. Notwithstanding such authorizations, in no event shall the Contractor exceed the total contract cost limitation imposed by the Section I clause entitled "Limitation of Funds."

E. The fee set forth in B.1 is based upon the furnishing of the level of effort specified in paragraph A. If the Contractor has provided the hours specified in Paragraph B, but not the total level of effort specified in paragraph A. and the Government has not invoked, under the Termination clause of this contract, its rights to adjust the contract for reduced effort, the Contracting Officer may make a downward adjustment to the contract fee. The adjustment in fee will equate the percentage of fee specified in The Schedule to the percentage of direct productive labor hours expended. At the Contracting Officer's discretion, an adjustment may include consideration of efficiencies in the Contractor's performance, including productivity improvements, if any, which contributed to the lesser number of direct labor hours being provided.

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.1 STATEMENT OF WORK - FORMAL METHODS FOR LIFE-CRITICAL SYSTEMS

A. Technical Objectives

NASA Langley Research Center has been developing techniques for the design and validation of flight critical systems for over two decades. Although much progress has been made in developing methods which can accommodate physical failures, the design flaw remains a serious problem. Formal methods offer the most scientifically-defensible means of removing design flaws from the digital systems used in aerospace vehicles. The objective of this contract is to develop practical methods for the formal specification and verification of life-critical system components-both hardware and software-and to demonstrate the capabilities of the methods by application to realistic system designs. The intent of the contract is to build on recent advances in automated theorem proving, software engineering and high level CAD/design synthesis tools to extend/enhance existing design and verification environments for the life-critical system design problem. The specification and verification methods will be demonstrated on realistic or real industrial problems. This contract will be used to establish cooperative efforts between industry and the Contractor to transfer this technology to industry.

B. Research Task Areas

The Contractor shall perform specific tasks as assigned by the Contracting Officer within the scope of the typical research areas outlined in the following subsections.

1. Verification Methodology

The Contractor shall develop formal specifications of digital system designs. The formal specifications shall be written in a language based on mathematical logic. The specification language must be rigorously defined and support deductive reasoning. For many life-critical applications, it is necessary that the design/verification methodologies utilize advanced semi-automatic theorem proving techniques to virtually eliminate the possibility that there are errors in the formal proofs. The Contractor shall modify and extend a theorem prover to improve its capabilities for specific aerospace applications and to facilitate the transfer of this technology to industry. The Contractor shall develop special user interfaces as well as create novel decision procedures for specific applications. The Contractor shall support the verification environment with a reasonable bug-reporting and bug repairing capability.

2. Aircraft System Design

The Contractor shall develop and assess the effectiveness of verification methodologies suitable for digital flight control systems including flight-control, flight management, navigation, communications, and autopilot. Life-critical avionics for civil air transports must be certified by the FAA to meet verification standards defined in DO-178B. The Contractor shall develop verification approaches for integrated avionics systems and justify their compliance with applicable FAA standards.

3. System and Subsystem Verification

Digital flight-control systems are complex, integrated systems of hardware and software. In many ways, the most difficult issues of design and verification are found in the integration of components at the system level. The Contractor shall develop a verification methodology to support design and verification throughout all stages of the development from conceptual analysis and systems engineering through implementation. The Contractor's formal methods tools and techniques shall be applicable or extendable to all of the development stages. Systems-level requirements definition, abstract system specification and early life-cycle requirements analysis shall be supported by the Contractor. The Contractor's methodology shall support hierarchical design and verification of the system with traceability from the system level to the implementation in hardware and software.

4. Fault-tolerance Theory and Real-Time Theory

The NASA Program has been centered around the design and verification of fault-tolerant computer architectures. The Contractor shall apply formal methods to specified fault-tolerant real-time systems and subsystems. The Contractor shall also verify real-time safety properties of safety critical systems.

SECTION D - PACKAGING AND MARKINGD.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.

SECTION E - INSPECTION AND ACCEPTANCE

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 as specified in task assignments.

SECTION F - DELIVERIES OR PERFORMANCEF.1 PERIOD OF PERFORMANCE - TASK ASSIGNMENTS (LARC 52.212-112)
(JUL 1989)

A. The period for issuance of task assignments is 60 months from the effective date of this contract.

B. Any task assignments issued prior to the expiration of the period for issuance of task assignments shall be completed, subject to the limitations specified in B.4; provided that the Contractor will not be required to perform any work beyond 12 months after the period for issuing task assignments.

F.2 PLACE(S) OF PERFORMANCE (LARC 52.212-98) (OCT 1992)

The place(s) of performance shall be:

The Contractor's facility located in Menlo Park, California.

SECTION G - CONTRACT ADMINISTRATION DATAG.1 DESIGNATION OF NEW TECHNOLOGY REPRESENTATIVE AND PATENT
REPRESENTATIVE (NASA 18-52.227-72) (APR 1984)

(a) For purposes of administration of the clause of this contract entitled "New Technology" or "Patent Rights - Retention by the Contractor (Short Form)", whichever is included, the following named representatives are hereby designated by the Contracting Officer to administer such clause:

<u>Title</u>	<u>Office Code</u>	<u>Address (including zip code)</u>
New Technology Representative	200	NASA, Langley Research Center Hampton, VA 23681-0001
Patent Representative	143	NASA, Langley Research Center Hampton, VA 23681-0001

(b) Reports of reportable items, and disclosure of subject inventions, interim reports, final reports, utilization reports, and other reports required by the clause, as well as any correspondence with respect to such matters, should be directed to the New Technology Representative unless transmitted in response to correspondence or request from the Patent Representative. Inquiries or requests regarding disposition of rights, election of rights, or related matters should be directed to the Patent Representative. This clause shall be included in any subcontract hereunder requiring a "New Technology" clause or "Patent Rights - Retention by the Contractor (Short Form)" clause, unless otherwise authorized or directed by the Contracting Officer. The respective responsibilities and authorities of the above-named representatives are set forth in 18-27.375-3 of the NASA FAR Supplement.

G.2 INVOICES AND PAYMENTS (LaRC 52.232-96) (OCT 1992)

A. General--Invoices shall be addressed as shown in Block 12 on page 1 of this contract and shall be identified by the contract number. Cost and fee invoices shall be submitted separately.

B. Cost--Payments of cost shall be made in monthly installments.

C. Cost invoices shall be submitted through the delegated Government Audit Agency.

D. No installment of fixed fee shall exceed the proportion of the total fixed fee determined by dividing the total number of direct labor hours (B.4, Level of Effort, paragraph A) into the number of direct labor hours expended during the period. Notwithstanding, any payments shall be subject to the withholding provisions of the clause of this contract entitled "Fixed Fee."

E. Fee invoices shall be submitted through the delegated audit agency.

G.3 TASK ASSIGNMENTS (LaRC 52.212-102) (OCT 1991)

A. The work to be performed within the areas outlined in Section C, Description/Specifications/Work Statement, will be more specifically defined and controlled by means of written task assignments, issued solely by the Contracting Officer, containing the following information:

1. Task assignment number and date
2. Description of work and/or deliverable items
3. Direct labor-hour limitation and total cost limitation

- 4. Required completion date and/or delivery schedule
- 5. Government-furnished items
- 6. Appropriate special instructions or information

B. Task assignments issued under this contract will be negotiated and managed as completion type requirements.

C. A copy of each task assignment 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 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) 864-2462.

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 NONE, 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 June 28, 1994, upon which this contract is based.

H.2 OPTION TO INCREASE THE LEVEL OF EFFORT - RESEARCH AND DEVELOPMENT (LaRC 52.217-90) (JUN 1991)

A. The Government may, by unilateral written modification(s) within 60 months after the contract effective date, increase B.4, Level of Effort, paragraph A., up to an additional 25,000 direct labor hours. The 25,000 option hours may be specified by the Government in increments determined by the Contracting Officer. However, any such increment will be at least 1,000 hours. F.1, Period of Performance, shall remain unchanged. The contract cost and fixed fee set forth in B.1 shall be increased using the following rates:

Estimated Cost:	\$	<u>81.38</u>
		(Per Hour)
Fixed Fee:	\$	<u>4.88</u>
		(Per Hour)

B. The Government shall give the Contractor a preliminary written notice of its intent to increase the level of effort at least 30 days before the effective date of the modification. The preliminary notice does not commit the Government to an increase in the level of effort.

H.3 ADVANCE APPROVAL FOR RELEASE OF TECHNICAL INFORMATION (LaRC 52.227-92) (OCT 1993)

The Contractor shall not release technical information based on or containing data first produced in the performance of this contract and describing the work performed under this contract unless prior written approval is given by NASA. The Contractor shall submit technical information regarding the contract effort, such as journal articles, meeting papers, and technical documents, to the Contracting Officer Technical Representative (COTR) for review and concurrence with subsequent approval by the cognizant NASA Headquarters Program Office prior to establishing claim to copyright, publication, presentation, or release to others. The Contractor may proceed upon receipt of written concurrence by the COTR as though approval also had been received from the cognizant NASA Headquarters Program Office, unless directed otherwise in the COTR concurrence letter.

H.4 MANAGEMENT AND PROTECTION OF DATA

During the performance of this contract, the Contractor may have access to proprietary data, including trade secrets and commercial or financial data of other companies, and to Government information which is sensitive. The Contractor agrees to protect such data from unauthorized release or disclosure and agrees to use or disclose such data only to the extent necessary to perform the work required under the contract with emphasis on restricting the data to employees having a bonafide need to know. In addition, the Government has the right to perform periodic inspections of the Contractor's work site, technical capabilities and operations for the purpose of ensuring continued efficacy and efficiency of safeguards against threats and hazards to data security, integrity, and confidentiality.

PART II - CONTRACT CLAUSES

SECTION I - CONTRACT CLAUSES

I.1 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

<u>CLAUSE NUMBER</u>	<u>TITLE AND DATE</u>
52.202-1	Definitions (SEP 1991)
52.203-1	Officials Not to Benefit (APR 1984)
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 (JUL 1985)
52.203-7	Anti-Kickback Procedures (OCT 1988)
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity (SEP 1990)
52.209-6	Protecting the Government's Interest when Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment (NOV 1992)
52.210-5	New Material (APR 1984)
52.212-8	Defense Priority and Allocation Requirements (SEP 1990)
52.212-13	Stop-Work Order (AUG 1989) Alternate I (APR 1984)
52.215-1	Examination of Records by Comptroller General (FEB 1993)
52.215-2	Audit - Negotiation (FEB 1993)--Alternate II (FEB 1993)
52.215-22	Price Reduction for Defective Cost or Pricing Data (JAN 1991)
52.215-24	Subcontractor Cost or Pricing Data (DEC 1991)
52.215-26	Integrity of Unit Prices (APR 1991)
52.215-27	Termination of Defined Benefit Pension Plans (SEP 1989)
52.215-31	Waiver of Facilities Capital Cost of Money (SEP 1987)
52.215-33	Order of Precedence (JAN 1986)
52.215-39	Reversion or Adjustment of Plans for Postretirement Benefits Other Than Pensions (JUL 1991)
52.216-8	Fixed Fee (APR 1984)
52.219-8	Utilization of Small Business Concerns and Small Disadvantaged Business Concerns (FEB 1990)
52.219-9	Small Business and Small Disadvantaged Business Subcontracting Plan (JAN 1991)
52.219-13	Utilization of Women-Owned Small Businesses (AUG 1986)
52.219-16	Liquidated Damages - Small Business Subcontracting Plan (AUG 1989)
52.220-3	Utilization of Labor Surplus Area Concerns (APR 1984)
52.220-4	Labor Surplus Area Subcontracting Program (APR 1984)
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 (MAR 1986)
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 Veterans of the Vietnam Era (JAN 1988)

52.223-2 Clean Air and Water (APR 1984)

52.223-6 Drug-Free Workplace (JUL 1990)

52.225-11 Restrictions on Certain Foreign Purchases (MAY 1992)

52.227-1 Authorization and Consent (APR 1984) Alternate I (APR 1984)

52.227-2 Notice and Assistance Regarding Patent and Copyright Infringement (APR 1984)

52.227-11 Patent Rights - Retention by the Contractor (Short Form) (JUN 1989)--as modified by NASA FAR Supplement 18-52.227-11

52.227-14 Rights in Data - General (JUN 1987) -- as modified by NASA FAR Supplement 18-52.227-14

52.227-16 Additional Data Requirements (JUN 1987)

52.228-7 Insurance - Liability to Third Persons (APR 1984)

52.230-2 Cost Accounting Standards (AUG 1992)

52.230-3 Disclosure and Consistency of Cost Accounting Practices (AUG 1992)

52.230-5 Administration of Cost Accounting Standards (AUG 1992)

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 (MAR 1994) Alternate I (DEC 1991)

52.233-3 Protest After Award (AUG 1989) Alternate I (JUN 1985)

52.242-1 Notice of Intent to Disallow Costs (APR 1984)

52.242-2 Production Progress Reports (APR 1991)

52.243-2 Changes - Cost-Reimbursement (AUG 1987) Alternate V (APR 1984)

52.244-2 Subcontracts (Cost-Reimbursement and Letter Contracts) (JUL 1985) Alternate I (APR 1985)

52.244-5 Competition in Subcontracting (APR 1984)

52.245-1 Property Records (APR 1984)

52.245-5 Government Property (Cost--Reimbursement, Time-and-Material, or Labor-Hour Contracts) (JAN 1986) Alternate I (JUL 1985)

52.246-9 Inspection of Research and Development (Short Form) (APR 1984)

52.246-23 Limitation of Liability (APR 1984)

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)

NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER

TITLE AND DATE

18-52.204-70 Report on NASA Subcontracts (NOV 1992)

18-52.208-81 Restrictions on Printing and Duplicating (AUG 1993)
 18-52.212-70 Notice of Delay (DEC 1988)
 18-52.216-75 Payment of Fixed Fee (DEC 1988)
 18-52.219-74 Use of Rural Area Small Businesses (SEP 1990)
 18-52.219-75 Small Business and Small Disadvantaged Business
 Subcontracting Reporting (SEP 1992)
 18-52.219-76 NASA Small Disadvantaged Business Goal (JUL 1991)
 18-52.227-70 New Technology (APR 1988)
 18-52.235-70 Center for AeroSpace Information (NOV 1992)
 18-52.245-70 Acquisition of Centrally Reportable Equipment (MAR 1989)

I.2 .CLAUSES IN FULL TEXT

The clauses listed below follow in full text:

52.252-2 Clauses Incorporated by Reference (JUN 1988)
 52.203-9 Requirement for Certificate of Procurement Integrity -
 Modification (NOV 1990)
 52.216-7 Allowable Cost and Payment (JUL 1991)
 52.222-2 Payment for Overtime Premiums (JUL 1990)
 52.232-25 Prompt Payment (MAR 1994)
 52.242-13 Bankruptcy (APR 1991)
 18-52.204-76 Security Requirements for Unclassified Automated Information
 Resources (SEP 1993)
 18-52.223-70 Safety and Health (SEP 1993)
 18-52.245-73 Financial Reporting of Government-Owned/Contractor-Held
 Property (JUL 1994)

I.3 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.4 REQUIREMENT FOR CERTIFICATE OF PROCUREMENT INTEGRITY--MODIFICATION (FAR 52.203-9) (NOV 1990)

- (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:

CERTIFICATE OF PROCUREMENT INTEGRITY--MODIFICATION (NOV 1990)

(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 Integrity--Modification (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)

(d) 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.

(e) 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 ALLOWABLE COST AND PAYMENT (FAR 52.216-7) (JUL 1991)

(a) Invoicing. The Government shall make payments to the Contractor when requested as work progresses, but (except for small business concerns) not more often than once every 2 weeks, in amounts determined to be allowable by the Contracting Officer in accordance with Subpart 31.2 of the Federal Acquisition Regulation (FAR) in effect on the date of this contract and the terms of this contract. The Contractor may submit to an authorized representative of the Contracting Officer, in such form and reasonable detail as the representative may require, an invoice or voucher supported by a statement of the claimed allowable cost for performing this contract.

(b) Reimbursing costs. (1) For the purpose of reimbursing allowable costs (except as provided in subparagraph (2) below, with respect to pension, deferred profit sharing, and employee stock ownership plan contributions), the term "costs" includes only -

(i) Those recorded costs that, at the time of the request for reimbursement, the Contractor has paid by cash, check, or other form of actual payment for items or services purchased directly for the contract;

(ii) When the Contractor is not delinquent in paying costs of contract performance in the ordinary course of business, costs incurred, but not necessarily paid, for -

(A) Materials issued from the Contractor's inventory and placed in the production process for use on the contract;

(B) Direct labor;

(C) Direct travel;

(D) Other direct in-house costs; and

(E) Properly allocable and allowable indirect costs, as shown in the records maintained by the Contractor for purposes of obtaining reimbursement under Government contracts; and

(iii) The amount of progress payments that have been paid to the Contractor's subcontractors under similar cost standards.

(2) Contractor contributions to any pension or other postretirement benefit, profit-sharing, or employee stock ownership plan funds that are paid quarterly or more often may be included in indirect costs for payment purposes; provided, that the Contractor pays the contribution to the fund within 30 days after the close of the period covered. Payments made 30 days or more after the close of a period shall not be included until the Contractor actually makes the payment. Accrued costs for such contributions that are paid less often than quarterly shall be excluded from indirect costs for payment purposes until the Contractor actually makes the payment.

(3) Notwithstanding the audit and adjustment of invoices or vouchers under paragraph (g) below, allowable indirect costs under this contract shall be

obtained by applying indirect cost rates established in accordance with paragraph (d) below.

(4) Any statements in specifications or other documents incorporated in this contract by reference designating performance of services or furnishing of materials at the Contractor's expense or at no cost to the Government shall be disregarded for purposes of cost-reimbursement under this clause.

(c) Small business concerns. A small business concern may be paid more often than every 2 weeks and may invoice and be paid for recorded costs for items or services purchased directly for the contract, even though the concern has not yet paid for those items or services.

(d) Final indirect cost rates. (1) Final annual indirect cost rates and the appropriate bases shall be established in accordance with Subpart 42.7 of the Federal Acquisition Regulation (FAR) in effect for the period covered by the indirect cost rate proposal.

(2) The Contractor shall, within 90 days after the expiration of each of its fiscal years, or by a later date approved by the Contracting Officer, submit to the cognizant Contracting Officer responsible for negotiating its final indirect cost rates and, if required by agency procedures, to the cognizant audit activity proposed final indirect cost rates for that period and supporting cost data specifying the contract and/or subcontract to which the rates apply. The proposed rates shall be based on the Contractor's actual cost experience for that period. The appropriate Government representative and Contractor shall establish the final indirect cost rates as promptly as practical after receipt of the Contractor's proposal.

(3) The Contractor and the appropriate Government representative shall execute a written understanding setting forth the final indirect cost rates. The understanding shall specify (i) the agreed-upon final annual indirect cost rates, (ii) the bases to which the rates apply, (iii) the periods for which the rates apply, (iv) any specific indirect cost items treated as direct costs in the settlement, and (v) the affected contract and/or subcontract, identifying any with advance agreements or special terms and the applicable rates. The understanding shall not change any monetary ceiling, contract obligation, or specific cost allowance or disallowance provided for in this contract. The understanding is incorporated into this contract upon execution.

(4) Failure by the parties to agree on a final annual indirect cost rate shall be a dispute within the meaning of the Disputes clause.

(e) Billing rates. Until final annual indirect cost rates are established for any period, the Government shall reimburse the Contractor at billing rates established by the Contracting Officer or by an authorized representative (the cognizant auditor), subject to adjustment when the final rates are established. These billing rates -

(1) Shall be the anticipated final rates; and

(2) May be prospectively or retroactively revised by mutual agreement, at either party's request, to prevent substantial overpayment or underpayment.

(f) Quick-closeout procedures. When the Contractor and Contracting Officer agree, the quick-closeout procedures of Subpart 42.7 of the FAR may be used.

(g) Audit. At any time or times before final payment, the Contracting Officer may have the Contractor's invoices or vouchers and statements of cost audited. Any payment may be (1) reduced by amounts found by the Contracting Officer not to constitute allowable costs or (2) adjusted for prior overpayments or underpayments.

(h) Final payment. (1) The Contractor shall submit a completion invoice or voucher, designated as such, promptly upon completion of the work, but no later

than one year (or longer, as the Contracting Officer may approve in writing) from the completion date. Upon approval of that invoice or voucher, and upon the Contractor's compliance with all terms of this contract, the Government shall promptly pay any balance of allowable costs and that part of the fee (if any) not previously paid.

(2) The Contractor shall pay to the Government any refunds, rebates, credits, or other amounts (including interest, if any) accruing to or received by the Contractor or any assignee under this contract, to the extent that those amounts are properly allocable to costs for which the Contractor has been reimbursed by the Government. Reasonable expenses incurred by the Contractor for securing refunds, rebates, credits, or other amounts shall be allowable costs if approved by the Contracting Officer. Before final payment under this contract, the Contractor and each assignee whose assignment is in effect at the time of final payment shall execute and deliver -

(i) An assignment to the Government, in form and substance satisfactory to the Contracting Officer, of refunds, rebates, credits, or other amounts (including interest, if any) properly allocable to costs for which the Contractor has been reimbursed by the Government under this contract; and

(ii) A release discharging the Government, its officers, agents, and employees from all liabilities, obligations, and claims arising out of or under this contract, except -

(A) Specified claims stated in exact amounts, or in estimated amounts when the exact amounts are not known;

(B) Claims (including reasonable incidental expenses) based upon liabilities of the Contractor to third parties arising out of the performance of this contract; provided, that the claims are not known to the Contractor on the date of the execution of the release, and that the Contractor gives notice of the claims in writing to the Contracting Officer within 6 years following the release date or notice of final payment date, whichever is earlier; and

(C) Claims for reimbursement of costs, including reasonable incidental expenses, incurred by the Contractor under the patent clauses of this contract, excluding, however, any expenses arising from the Contractor's indemnification of the Government against patent liability.

I.6 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.7 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.

(i) 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.8 BANKRUPTCY (FAR 52.242-13) (APR 1991)

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail, 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.9 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 the following 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.

I.10 SAFETY AND HEALTH (NASA 18-52.223-70) (SEP 1993)

(a) The Contractor shall take all reasonable safety and health measures in performing under this contract. The Contractor shall comply with all Federal, State, and local laws applicable to safety and health in effect on the date of this contract and with the safety and health standards, specifications, reporting requirements, and provisions set forth in the contract Schedule.

(b) The Contractor shall take or cause to be taken such other safety and health measures the Contracting Officer may reasonably direct. To the extent that the Contractor may be entitled to an equitable adjustment for those measures under the terms and conditions of this contract, the equitable adjustment shall be determined pursuant to the procedures of the changes clause of this contract; provided, that no adjustment shall be made under this safety and health clause for any change for which an equitable adjustment is expressly provided under any other provision of the contract.

(c) The Contractor shall immediately notify and promptly report to the Contracting Officer or a designee any accident, incident, or exposure resulting in fatality, lost-time occupational injury, occupational disease, contamination of property beyond any stated acceptable limits set forth in the Contract Schedule, or property loss of \$25,000 or more arising out of work performed under this contract. The Contractor is not required to include in any report an expression of opinion as to the fault or negligence of any employee. Service contractors (excluding construction contracts) shall provide quarterly reports specifying lost-time frequency rate, number of lost-time injuries, exposure, and accident/incident dollar losses as specified in the Contract Schedule. The Contractor shall investigate all work-related incidents or accidents to the extent necessary to determine their causes and furnish the Contracting Officer a report, in such form as the Contracting Officer may require, of the investigative findings and proposed or completed corrective actions.

(d) (1) The Contracting Officer may notify the Contractor in writing of any noncompliance with this clause and specify corrective actions to be taken. The Contractor shall promptly take and report any necessary corrective action.

(2) If the Contractor fails or refuses to institute prompt corrective action in accordance with subparagraph (1) above, the Contracting Officer may invoke the stop-work order clause in this contract or any other remedy available to the Government in the event of such failure or refusal.

(e) The Contractor (or subcontractor or supplier) shall insert the substance of this clause, including this paragraph (e) and any applicable Schedule provisions, with appropriate changes of designations of the parties, in subcontracts of every tier that (1) amount to \$1,000,000 or more (unless the Contracting Officer makes a written determination that this is not required), (2) require construction, repair, or alteration in excess of \$25,000, or (3) regardless of dollar amount, involve the use of hazardous materials or operations.

(f) Authorized Government representatives of the Contracting Officer shall have access to and the right to examine the sites or areas where work under this contract is being performed in order to determine the adequacy of the Contractor's safety and health measures under this clause.

(g) As a part of the Contractor's safety plan (and health plan, when applicable) and to the extent required by the Schedule, the Contractor shall furnish a list of all hazardous operations to be performed, including operations indicated in paragraphs (a) and (b) above, and a list of other major or key operations required or planned in the performance of the contract, even though not deemed hazardous by the Contractor. NASA and the Contractor shall jointly decide which operations are to be considered hazardous, with NASA as the final authority. Before hazardous operations commence, the Contractor shall submit for NASA concurrence either or both of the following as required by the Contract Schedule or by the Contracting Officer:

- (1) Written hazardous operating procedures for all hazardous operations.
- (2) A certification program for personnel involved in hazardous operations.

I.11 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 Contract Documentation Requirements, 4 pages
- Exhibit B Procedures for the Preparation and Approval of Contractor
 Reports for Langley Research Center, Form PROC./P-72,
 May 1992, 4 pages
- Exhibit C Subcontracting Plan, January 3, 1994, 7 pages

EXHIBIT A - CONTRACT DOCUMENTATION REQUIREMENTS

I. DOCUMENTATION PREPARATION/SUBMISSION INSTRUCTIONS

A. Quarterly Progress Report--The Contractor shall submit separate quarterly reports of all work accomplished during each three-month period of contract performance. In addition to factual data, these reports shall include a separate analysis section which interprets the results obtained, recommends further action, and relates occurrences to the ultimate objectives of the contract work. Sufficient diagrams, sketches, curves, photographs, and drawings shall be included to convey the intended meaning.

The quarterly progress report shall be submitted within 10 days after the end of each calendar monthly report period. A quarterly report shall not be required for the period in which the final report is due. This submittal shall be subject to the provisions of the Section I clause entitled "Production Progress Reports."

B. Monthly Financial Management Report

1. The Contractor shall submit a monthly financial management report as provided by the Section I clause entitled "NASA Financial Management Reporting." This report shall be submitted utilizing NASA Form 533M, Monthly Contractor Financial Management Report, in accordance with submission instructions contained on the reverse side of the form. (Columns 8a and 8b, 533M, shall contain estimates for the following two successive months for the reporting a. and c. of paragraph 2. below.)

2. For this task assignment contract a 533M shall be provided for the reporting levels identified below:

a. Each Authorized Task

b. All Unassigned Effort (Total level of effort hours set forth in B.4, minus sum of all authorized task hours.)

c. Contract Total (Includes the sum of Items a. and b.) Column 9b shall reflect total hours of 10,000 and estimated cost of \$813,800 plus fixed fee of \$48,800.)

3. In addition, cost detail associated with the following elements shall be included in each of the above, if applicable.

- a. Direct Productive Labor Hours
- b. Other Direct Labor Hours
- c. Direct Productive Labor Dollars
- d. Other Direct Labor Dollars
- e. Overhead
- f. G&A
- g. Subcontract
- h. Travel
- i. ODC

- j. Total Estimated Cost
- k. Fee
- l. Total Estimated Cost and Fee

C. Subcontracting Reports--The Contractor shall submit Standard Form 294, Subcontracting Report for Individual Contracts, Standard Form 295, Summary Subcontractor Report, and NASA Form 667, Report on NASA Subcontracts, in accordance with the instructions on the reverse of the form. In addition to other instructions on the reverse of the SF 294, the Contractor is required to report awards to Women-Owned (W-O) business, Historically Black Colleges and Universities (HBCUs) and other Minority Educational Institutions (MEIs). This information shall be detailed in Block 18 as follows:

Subcontract awards to small W-O businesses this reporting period: \$

Subcontract awards to HBCUs and/or MEIs this reporting period: \$

The total subcontract dollars to W-O businesses, HBCUs, and MEIs shall be included in Blocks 15A and 16.

In addition to the instructions on the reverse of the SF 295, the Contractor is required to comply with Clause 18-52.219-75, Small and Small Disadvantaged Subcontracting Reporting.

Pursuant to the contract clause entitled "Small Business and Small Disadvantaged Subcontracting Plan" (FAR 52.219-9 and 19.704(a)(5)), you are required to submit a letter progress report on a monthly basis. The "Monthly Progress Report for Socioeconomic Goals" shall be limited to the monthly data only (excluding cumulative data from beginning of Subcontract Plan) as required for Lines 15A, 15B, 15C, and 16 of the Standard Form 294. Letter progress reports may be signed by the Contract Administrator or equivalent organizational level, and each report is due by the 10th calendar day of the month following the close of the reporting period.

D. Report of Government-Owned/Contractor Held Property (NASA Form 1018)-- The Contractor shall submit the NASA Form 1018 no later than October 31 of each year in accordance with the Section I clause entitled "Financial Reporting of Government-Owned/Contractor-Held Property."

E. Final Reports--Each task assignment may require the Contractor to submit a final report, either formal or informal, which documents and summarizes the results. When a formal final Contractor report is required, it shall be submitted in accordance with the instructions contained in Exhibit B, Procedures for the Preparation and Approval of Contractor Reports for Langley Research Center, Form PROC./P-72. The specified number of approval copies shall be submitted within the time specified in the task assignments.

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: Allison Ballew, Mail Stop 126
 Contract NAS1-20334
 Hampton, VA 23681-0001

B. The following letter codes designate the recipients of reports and other documentation which are required to be delivered to Langley Research Center by the Contractor:

A--Contract Administrator, Mail Stop 126

B--Contracting Officer Technical Representative, Mail Stop 130

C--New Technology Representative, Mail Stop 200

D--Patent Counsel, Mail Stop 212

E--Cost Accounting, Mail Stop 135 (via Mail Stop 175)

F--Property Administrator

G--According to Instructions on Form

C. The following are the distribution requirements for reports and other documentation required to be delivered f.o.b. destination. The numeral following the letter code specifies the number of copies to be provided:

<u>DOCUMENT</u>	<u>LETTER CODE AND DISTRIBUTION</u>
Monthly/Quarterly Progress Report	A-1, B-2, C-1
Financial Management Report	A-1, B-2, E-2
New Technology or Patent Rights Report	A-1, B-2, C-1, D-1
Analysis of Government-Owned/Contractor-Held Property (NASA Form 1018)	F-4
Federal Contractor Veterans Employment Report	G-1
Subcontracting Report for Individual Contracts (Standard Form 294)	A-1
Summary Subcontractor Report (Standard Form 295)	A-1, G-1
Monthly Progress Report for Socioeconomic Goals	A-1
Informal Final Report	A-5

Final Report (Approval Copies)

A-5

Final Report (Approved)

As specified by
the Contracting
Officer

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.

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 consecutive 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 list 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 25² 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 1a and 1b 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.

¹See 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 x 9 1/8 inches. Page image including page number will not exceed 7 1/8 x 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 x 9 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 x 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 1/2 x 30 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 x 30 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 DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

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.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE May 1991	3. REPORT TYPE AND DATES COVERED Contractor Report	
4. TITLE AND SUBTITLE Science Needs for Real-Time Adaptable Data Products From the Earth Observing System			5. FUNDING NUMBERS C NAS1-18676	
6. AUTHOR(S) Paul D. Try, Paul F. Twitchell, and Christopher R. Redder				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Science and Technology Corporation 101 Research Drive Hampton, VA 23666-1340			8. PERFORMING ORGANIZATION REPORT NUMBER STC-42518	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) National Aeronautics and Space Administration Langley Research Center Hampton, VA 23665-5225			10. SPONSORING/MONITORING AGENCY REPORT NUMBER NASA CR-0000	
11. SUPPLEMENTARY NOTES Langley Technical Monitor: David E. Bowker Final Report				
12a. DISTRIBUTION/AVAILABILITY STATEMENT Unclassified Unlimited Subject Category 43			12b. DISTRIBUTION CODE <i>(If contract specifies restricted distribution, state restriction instead of Unclassified-Unlimited.)</i>	
13. ABSTRACT (Maximum 200 words) 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 processing is concluded to be a critical need for EOS. <i>(Provide an unclassified abstract not to exceed 200 words)</i>				
14. SUBJECT TERMS Real-time data needs; Onboard data processing; Real-time processing for EOS; EOS communication needs			15. NUMBER OF PAGES 76	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT	

EXHIBIT C
SUBCONTRACTING PLAN

MEMORANDUM OF AGREEMENT REGARDING
MASTER SUBCONTRACTING PLAN

SRI INTERNATIONAL
333 Ravenswood Avenue
Menlo Park, CA 94025

Period of Agreement: January 1, 1994 to December 31, 1994

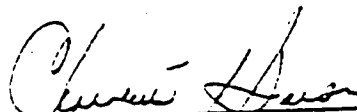
Authorized Official:


Jonivjay Gakson
Vice President Finance

Date:

1-3-94

Government Approval:


Administrative Contracting Officer
Team 38

Date:

12/21/93

This Master Subcontracting Plan has been prepared to comply with the requirements of the "Small Business and Small Disadvantaged Business Subcontracting Plan (Negotiated)," and shall apply to all contracts which contain the clauses at FAR 52.219-9 and DFAR 19.704

The program will be administered by Ms. Dorothy Snowden, Administrator of the Socioeconomic Programs, whose duties require the review and approval of each individual subcontracting plan and the maintenance of records consisting of:

1. Source lists of small business concerns and small business concerns owned and controlled by socially and economically disadvantaged individuals.
2. Records of efforts to identify and award orders to such vendors.
3. Records of and data reflecting progress toward percentage goals for the utilization as subcontractors of such vendors. These goals will be established annually as a percentage of total purchase order dollars to be awarded by SRI in support of its entire operation. Data will be captured within the purchasing subsystem of the MIS and retrieved for reporting purposes.
4. Reports provided will contain dollars awarded, orders awarded, and vendors utilized, in terms of total subcontracting and separately for those to small business concerns and small business concerns owned and controlled by socially and economically disadvantaged individuals, women owned business, business in a labor surplus area, historically Black Colleges and Universities (HBCU), and Minority Institutions (MIs).

Assurances

1. Corporate Commitment - To assure that small business and small disadvantaged business concerns have an equitable opportunity to compete for subcontracts, SRI management
 - (a) Issues and promulgates company policies and procedures which implement the requirements of OFPP Policy Letter 30-2 (effective 6/1/80) and Supplement to OFPP Policy Letter 30-2 (effective 6/30/81).
 - (b) Periodically reviews progress made against the goals established by the plan.
 - (c) Trains and motivates personnel to insure their complete support of the plan.
 - (d) Provides technical and management assistance to small business and small disadvantaged business concerns to assure complete understanding of requirements.
 - (e) Provides clear-cut and realistic technical specifications and delivery schedules to encourage maximum participation.
 - (f) Gives consideration to products of all available small business and small disadvantaged business concerns during the make/buy process.

- (g) Discusses subcontracting opportunities with representatives of small business and small disadvantaged business concerns, women owned business, business in a labor surplus area, historically Black Colleges and Universities (HBCU), and Minority Institutions (MIs) that are referred by the cognizant small business utilization specialist, or who make independent inquiry of SRI.
2. Subcontract Flowdown - SRI will include the clause entitled "Utilization of Small Business and Small Disadvantaged Business Concerns" in all subcontracts which offer further subcontracting opportunities and will require all subcontractors (except small business concerns) who receive subcontracts in excess of \$500,000 to adopt a plan in consonance with the clause entitled "Small Business and Small Disadvantaged Business Subcontract Plan (Negotiated)." SRI will ensure that subcontractors with plans submit Standard Forms 294 and 295.
 3. Cooperation - SRI shall submit periodic reports and cooperate in any studies or surveys as may be required by a federal agency or the Small Business Administration in order to determine the extent of compliance by SRI with this subcontracting program.
 4. Technical Assistance - SRI shall provide assistance services to potential small disadvantaged business concerns owned and controlled by socially and economically disadvantaged individuals, historically black colleges and universities, and minority institutions described in subsection (a3) of DFAR 219.704. Such assistance shall include information about SRI's Small Business programs, advice about procurement procedures, instruction in preparation of proposals and other such assistance considered appropriate. SRI shall provide expanded assistance to small disadvantaged business which are under contract especially in technical areas. For example, such contractors will be encouraged to participate in technical meetings, reviews and testing during the development acceptance phases of the contract. When a small disadvantaged business encounters technical difficulties in the performance of their contract, SRI will offer technical assistance in the form of training to help overcome their delay.

Methods Used in Developing Goals

Once the Principal Investigator/Project Leader has identified the principal product and service areas to be subcontracted, Socioeconomic Programs Office, Material Services' Buyers and Contract Services' Subcontract Administrator use the following source lists to identify small business and small disadvantaged business concerns qualified to provide such products and/or services:

1. East Bay MUD Minority & Women Business Enterprises Directory
2. Procurement Automated Source System (PASS)
3. Lockheed Missiles & Space Company, Inc. Small Disadvantaged Business Directory
4. DCASMA-SF Small Business/Small Disadvantaged Business Listing
5. SRI International Small and Minority Vendor Listing (updated as new vendors are utilized)
6. Toy Us National Minority Business Listing
7. Small Business Administration 8A Listing
8. Lawrence Berkeley Labs Small Disadvantaged Business Directory
9. Bay Area Purchasing Council
10. National Minority Purchasing Council

The proposed goals are based on response to solicitations issued as a result of searching the above sources and incorporated results of further searching prior to and after contract award.

Indirect Costs

In establishing subcontracting goals, SRI does not normally include indirect or overhead costs in the proposed subcontracting planned goals.

Records

The following records will be maintained to demonstrate the adoption of procedures to comply with the requirements and goals set forth in the plan:

1. Institute-wide Records

- (a) Small business and small disadvantaged business source lists, guides and other data identifying small business and small disadvantaged business vendors.
- (b) Organizations contacted for small business and small disadvantaged business sources.
- (c) Records to support other outreach efforts:
 - Contacts with minority and small business trade associations.
 - Attendance at small and minority business procurement conferences and trade fairs.
- (d) Records to support internal activities to guide and encourage buyers:
 - Workshops, seminars, training programs, etc.
 - Monitoring activities to evaluate compliance.
- (e) In addition to the above, SRI will maintain records of and data reflecting progress toward goals for the utilization of small business and small disadvantaged business vendors, as a percentage of total purchase order dollars awarded by SRI in support of its entire operation. Data will be retained within SRI's MIS and retrieved for reporting purposes. Reports provided will contain dollars awarded, orders awarded, and vendors utilized, in terms of total subcontracting and separately for small business concerns owned and controlled by socially and economically disadvantaged individuals, women-owned businesses, business in a Labor Surplus area, Historically Black Colleges and Universities, and Minority Institution.

2. On a Contract-by-Contract Basis

- (a) Records on all subcontract solicitations over \$100,000, indicating on each solicitation (i) whether small business was solicited, and if not, why not (ii) whether small disadvantaged business was solicited, and if not, why not and (iii) reasons for the failure of solicited small business or small disadvantaged business concerns to receive the subcontract award.
- (b) Records to support award data submitted to the government to include name and address of subcontractor.