

AWARD/CONTRACT	1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)	RATING DO-C9	PAGE OF PAGES 1 42
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2. CONTRACT (Proc. Inst. Ident.) NO. NNA06AA01C	3. EFFECTIVE DATE February 8, 2006	4. REQUISITION/PURCHASE REQUEST/PROJECT NO. 420014598
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5. ISSUED BY NASA Ames Research Center Acquisition Division, M/S 241-1 Moffett Field, CA 94035-1000	CODE JAI: 241-1	6. ADMINISTERED BY (If other than Item 6)
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7. NAME AND ADDRESS OF CONTRACTOR (No. street, county, state and ZIP Code) Consolidated Safety Services, Inc. 10301 Democracy Lane, Suite 300 Fairfax, VA 22030-2545	8. DELIVERY <input type="checkbox"/> FOB ORIGIN <input checked="" type="checkbox"/> OTHER (See below)
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9. DISCOUNT FOR PROMPT PAYMENT NET - 30 Days	10. SUBMIT INVOICES (4 copies unless otherwise specified) TO THE ADDRESS SHOWN IN: 12
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11. SHIP TO/MARK FOR See Section F	CODE QE: 218-1	12. PAYMENT WILL BE MADE BY NASA Ames Research Center Accounting Operations Branch, M/S 203-18 Moffett Field, CA 94035-1000 650/604-5315
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13. AUTHORITY FOR USING OTHER 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 4200145698 \$50,000 PPC: GF
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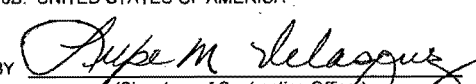
15A. ITEM NO.	15B. SUPPLIES/SERVICES	15C. QUANTITY	15D. UNIT	15E. UNIT PRICE	15F. AMOUNT
01-03	Services for Occupational Safety, Industrial Hygiene, and Medical Support. See Section B for Item Descriptions (Basic Services including Phase-In and Additional Requirements)				

Type of Contract: Cost-Plus-Award Fee	15G. TOTAL AMOUNT OF \$12,975,799 EST
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16. TABLE OF CONTENTS				
(✓) SEC.	DESCRIPTION	PAGE(S)	(✓) SEC. DESCRIPTION PAGE(S)	
PART I - THE SCHEDULE		PART II - CONTRACT CLAUSES		
A	SOLICITATION/CONTRACT FORM		L CONTRACT CLAUSES	
B	SUPPLIES OR SERVICES AND PR		M DOCUMENTS, EXHIBITS AND OTHER ATTACH.	
C	DESCRIPTION/SPECS./WORK ST		N ATTACHMENTS	
D	PACKAGING AND MARKING		PART IV - REPRESENTATIONS AND INSTRUCTIONS	
E	INSPECTION AND ACCEPTANCE		K	REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS
F	DELIVERIES OR PERFORMANCE		L	INSTRS., CONDS., AND NOTICES TO OFFERORS
G	CONTRACT ADMINISTRATION DATA		M	EVALUATION FACTORS FOR AWARD
H	SPECIAL CONTRACT REQUIREMENTS			

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 checked="" type="checkbox"/> AWARD (Contractor is not required to sign this document.) Your offer on Solicitation Number NNA04055727R , 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)	20A. NAME OF CONTRACTING OFFICER Lupe M. Velasquez Contracting Officer
19B. NAME OF CONTRACTOR	20B. UNITED STATES OF AMERICA
19C. DATE SIGNED	20C. DATE SIGNED 2/8/06
(Signature of person authorized to sign)	BY  (Signature of Contracting Officer)

AWARD/CONTRACT		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)	RATING DO-C9	PAGE OF PAGES 1 42
2. CONTRACT (Proc. Inst. Ident.) NO. NNA06AA01C		3. EFFECTIVE DATE See Block 20C	4. REQUISITION/PURCHASE REQUEST/PROJECT NO.	
5. ISSUED BY NASA Ames Research Center Acquisition Division, M/S 241-1 Moffett Field, CA 94035-1000	CODE JAI:241-1	6. ADMINISTERED BY (if other than item 6)		CODE

7. NAME AND ADDRESS OF CONTRACTOR (No. street, county, state and ZIP Code) Consolidated Safety Services, Inc. 10301 Democracy Lane, Suite 300 Fairfax, Virginia 22030-2545		8. DELIVERY <input type="checkbox"/> FOB ORIGIN <input checked="" type="checkbox"/> OTHER (See below)
		9. DISCOUNT FOR PROMPT PAYMENT N/A
		10. SUBMIT INVOICES (4 copies unless otherwise specified) TO THE ADDRESS SHOWN IN: ITEM See Paragraph G.2

11. SHIP TO/MARK FOR NASA Ames Research Center Shipping and Receiving, Mail Stop 255-3 Moffett Field, CA 94035-1000	CODE JFS:255-3	FACILITY CODE	12. PAYMENT WILL BE MADE BY NASA Ames Research Center Accounting Operations Branch, Mail Stop 203-18 Moffett Field, CA 94035-1000	CODE CFS:203-18
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13. AUTHORITY FOR USING OTHER 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
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15A. ITEM NO.	15B. SUPPLIES/SERVICES	15C. QUANTITY	15D. UNIT	15E. UNIT PRICE	15F. AMOUNT
01	Occupational Safety, Industrial Hygiene and Medical Services; Phase In	1	LOT	See Sec. B	
02	Occupational Safety, Industrial Hygiene and Medical Services, Base Period	1	LOT	See Sec. B	
See Section B for details, including options.					

COST PLUS AWARD FEE (CPAF)	15G. TOTAL AMOUNT OF CONTRACT	33,701,250
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16. TABLE OF CONTENTS			
(✓) SEC.	DESCRIPTION	PAGE(S)	(✓) SEC. DESCRIPTION PAGE(S)
PART I - THE SCHEDULE		PART II - CONTRACT CLAUSES	
X A	SOLICITATION/CONTRACT FORM	SEE FOLLOWING PAGE	TRACT CLAUSES 2
X B	SUPPLIES OR SERVICES AND PRICE		ST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH.
X C	DESCRIPTION/SPECS./WORK STATEMENT		X J LIST OF ATTACHMENTS
X D	PACKAGING AND MARKING		PART IV REPRESENTATIONS AND INSTRUCTIONS
X E	INSPECTION AND ACCEPTANCE		K REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS
X F	DELIVERIES OR PERFORMANCE		L INSTRS. CONDS. AND NOTICES TO OFFERORS
X G	CONTRACT ADMINISTRATION DATA		M EVALUATION FACTORS FOR AWARD
X H	SPECIAL CONTRACT REQUIREMENTS		

CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE

17. <input checked="" type="checkbox"/> CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return one (1) 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 NNA04055727R , 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) MARY V. NA VICE PRESIDENT	20A. NAME OF CONTRACTING OFFICER
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19B. NAME OF CONTRACTOR <i>(Signature)</i>	19C. DATE SIGNED 10/17/05	20B. UNITED STATES OF AMERICA BY <i>(Signature)</i>	20C. DATE SIGNED
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ITEM 15B. SUPPLIES/SERVICES (CONTINUED)

Section K, Representations, Certifications, and Other Statements submitted in response to NNA04055727R is hereby incorporated by reference.

Consolidated Safety Services, Inc. Section B, schedule of items and proposed prices, dated October 17, 2005 is hereby incorporated into and made a part of this contract.

Consolidated Safety Services, Inc. Final Proposal Revision extension dated October 18, 2005 is hereby incorporated by reference.

B.4 CONTRACT FUNDING (NFS 1852.232-81)(JUN 1990) is completed as follows:

(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 \$50,000.00. This allotment is for Occupational Safety, Industrial Hygiene, and Medical Services, Line Item 01 and covers the following estimated period of performance: February 8, 2006 through February 24, 2006.

(b) An additional amount of \$00.00 is obligated under this contract for payment of fee.

(c) For summary purposes, total amount obligated is:

	FROM	BY	TO
Estimated Cost	\$ 00.00	\$50,000.00	\$50,000.00
Award Fee	\$ 00.00	\$ 00.00	\$ 00.00
Total CPAF	\$ 00.00	\$50,000.00	\$50,000.00

TABLE OF CONTENTS

PART I - THE SCHEDULE

SECTION B - SUPPLIES OR SERVICES AND PRICE/COSTS B-1

- B.1 SUPPLIES/SERVICES TO BE PROVIDED (ARC 52.211-94) (FEB 1997) B-1
- B.2 ESTIMATED COST AND AWARD FEE (NFS 18-52.216-85) (SEP 1993) B-3
- B.3 CONTRACT VALUE SUMMARY TABLE B-4
- B.4 CONTRACT FUNDING (NFS 18-52.232-81) (JUN 1990) B-4

SECTION C - DESCRIPTION/SPECIFICATION/WORK STATEMENT C-1

SECTION D - PACKAGING AND MARKING D-1

- D.1 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998) D-1
- D.2 PACKAGING AND MARKING (ARC 52.211-95) (ALTERNATE I) (FEB 1997) D-1

SECTION E - INSPECTION AND ACCEPTANCE E-1

- E.1 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998) E-1

SECTION F - DELIVERIES OR PERFORMANCE F-1

- F.1 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998) F-1
- F.2 PERIOD OF PERFORMANCE (ARC 52.211-100) (JUL 1997) F-1
- F.3 PLACE OF PERFORMANCE (ARC 52.237-90) (FEB 1997) F-2
- F.4 DELIVERY OF REPORTS (ARC 52.211-92) (FEB 1997) F-2
- F.5 REPORTS OF WORK (ARC 52.227-95) (SEP 1998) F-5

SECTION G - CONTRACT ADMINISTRATION DATA G-1

- G.1 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998) G-1
- G.2 AWARD FEE FOR SERVICE CONTRACTS (NFS 1852.216-76) (JUN 2000) G-1
- G.3 SUBMISSION OF VOUCHERS FOR PAYMENT (NASA 1852.216-87) (MAR 1998) (MODIFIED ARC/FEB 1998) G-2
- G.4 TECHNICAL DIRECTION (NFS 1852.242-70) (SEP 1993) G-5
- G.5 INSTALLATION-ACCOUNTABLE GOVERNMENT PROPERTY (NFS 1852.245-71) (NOV 2004) (ALTERNATE I) (NOV 2004) G-6
- G.6 LIST OF INSTALLATION-ACCOUNTABLE PROPERTY AND SERVICES (NFS 1852.245-77) (JUL 1997) G-7
- G.7 DESIGNATION OF NEW TECHNOLOGY REPRESENTATIVE AND PATENT REPRESENTATIVE (NFS) 1852.227-72 (JULY 1997) G-8

SECTION H - SPECIAL CONTRACT REQUIREMENTS H-1

- H.1 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998)..... H-1
- H.2 SECURITY REGISTRATION AND IDENTIFICATION BADGES—ON-SITE CONTRACTORS, EXCLUDING CONSTRUCTION (ARC 52.204-91) (FEB 1997) ... H-1
- H.3 RESTRICTIONS ON PRINTING AND DUPLICATING (NASA 1852.208-81) (NOV 2004) H-2
- H.4 EMERGENCY PREPAREDNESS AND RESPONSE (ARC 52.233-90 SEP 2004) ... H-3
- H.5 DISASTER ASSISTANCE AND RESCUE TEAM (DART) PARTICIPATION (ARC 52.223-91) (APR 2004)..... H-3
- H.6 MANAGEMENT AND PROTECTION OF DATA (ARC 52.227-93) (JUL 1988)..... H-4
- H.7 HANDLING OF DATA (ARC 52.227-96) (JUN 1989)..... H-5
- H.8 SEVERANCE PAY (ARC 52.231-90) (MAY 1993)..... H-6
- H.9 KEY PERSONNEL AND FACILITIES (NASA 1852.235-71) (MAR 1989) H-6
- H.10 CONTRACTOR MONTHLY ACCIDENT REPORTING..... H-6
- H.11 SUBCONTRACTING, DATA NOT FIRST PRODUCED UNDER THE CONTRACT AND REPRESENTATION OF LIMITED RIGHTS DATA AND RESTRICTED RIGHTS SOFTWARE (ARC 52.227-97) (OCT 2004)..... H-7
- H.12 INFORMATION INCIDENTAL TO CONTRACT ADMINISTRATION (ARC 52.227-98) (OCT 2004)..... H-7

PART II - CONTRACT CLAUSES

SECTION I - CONTRACT CLAUSES I-1

- I.1 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998)..... I-1
- I.2 OMBUDSMAN (NFS 1852.215-84) (OCT 2003)..... I-4

PART III – LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

SECTION J – LIST OF ATTACHMENTS J-1

- J.1 LIST OF DOCUMENTS, EXHIBITS, AND ATTACHMENTS (ARC 52.211-90) (JAN 1998)..... J-1

SECTION B - SUPPLIES OR SERVICES AND PRICE/COSTS**PART I - THE SCHEDULE****B.1 SUPPLIES/SERVICES TO BE PROVIDED (ARC 52.211-94) (FEB 1997)**

(a) The Contractor shall provide all resources (except as may be expressly stated in this contract as furnished by the Government) necessary to furnish the items below in accordance with the Statement of Requirements (SOR) in Section C.

<u>Item No.</u>	<u>Description</u>	<u>Qty/Unit</u>	<u>Est Cost</u>	<u>Fee</u>	<u>Total Cost & Fee</u>
<u>PHASE-IN PERIOD</u>					
01	Phase-In for the period set forth in Paragraph F.2(a).	1 LOT	\$ 101,729	\$ 0	\$101,729
<u>BASE PERIOD</u>					
02	Occupational Safety, Industrial Hygiene and Medical Services as described in the Statement of Requirements (SOR), for the period set forth in Section F, paragraph F.2(b).	1 LOT	\$10,393,735	\$ 831,499	\$11,225,234
03	Additional Requirements for Occupational Safety, Industrial Hygiene and Medical Services in accordance with Section 5 of the SOR. Services will be issued under separate tasks.	1 LOT	\$ 1,526,700	\$ 122,136	\$ 1,648,836

(b) Pursuant to Section I, FAR 52-217-9, "Option to Extend the Term of the Contract", the Contractor shall provide all resources (except as may be expressly stated in this contract as furnished by the Government) necessary to furnish the items below in accordance with the Statement of Requirements (SOR) in Section J.

OPTION PERIOD ONE

<u>Item No.</u>	<u>Description</u>	<u>Qty/Unit</u>	<u>Est Cost</u>	<u>Fee</u>	<u>Total Cost & Fee</u>
04	Occupational Safety, Industrial Hygiene and Medical Services as described in the Statement of Requirements (SOR), for the period set forth in Section F, paragraph F.2(c).	1 LOT	\$ 5,419,604	\$ 433,569	\$ 5,853,173
05	Additional Requirements for Occupational Safety, Industrial Hygiene and Medical Services in accordance with Section 5 of the SOR. Services will be issued under separate tasks.	1 LOT	\$ 866,880	\$ 69,350	\$ 936,230

OPTION PERIOD TWO

06	Occupational Safety, Industrial Hygiene and Medical Services as described in the Statement of Requirements (SOR), for the period set forth in Section F, paragraph F.2(d).	1 LOT	\$ 5,524,068	\$ 441,926	\$ 5,965,994
07	Additional Requirements for Occupational Safety, Industrial Hygiene and Medical Services in accordance with Section 5 of the SOR. Services will be issued under separate tasks.	1 LOT	\$ 867,280	\$ 69,382	\$ 936,662

OPTION PERIOD THREE:

The estimated cost of this contract is \$6,512,400. The maximum available award fee, excluding base fee, if any, is \$520,992. The base fee is \$ 0. Total estimated cost base fee, and maximum award fee are \$7,033,392.

*To be completed at contract award

(End of Clause)

B.3 CONTRACT VALUE SUMMARY TABLE*

	Base Period	Option 1	Option 2	Option 3	Total
Phase In	\$101,729				\$101,729
Estimated Cost	\$11,920,435	\$6,286,484	\$6,391,348	\$6,512,400	\$31,110,667
Unearned Award Fee	\$953,635	\$502,919	\$511,308	\$520,992	\$2,488,854
Earned Award Fee	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Total CPAF	\$12,975,799	\$6,789,403	\$6,902,656	\$7,033,392	\$33,701,250

*To be completed at contract award

B.4 CONTRACT FUNDING (NFS 18-52.232-81) (JUN 1990)*

- 1) For purposes of payment of cost, exclusive of fee, in accordance with the Limitation of Funds clause, the total amount allotted by the Government to this contract is \$____. This allotment is for ____ and covers the following estimated period of performance: _____
- 2) An additional amount of \$____ is obligated under this contract for payment of fee.

*To be completed at contract award

(End of Clause)

[END OF SECTION]

OPTION PERIOD THREE

<u>Item No.</u>	<u>Description</u>	<u>Qty/Unit</u>	<u>Est Cost</u>	<u>Fee</u>	<u>Total Cost & Fee</u>
08	Occupational Safety, Industrial Hygiene and Medical Services as described in the Statement of Requirements (SOR), for the period set forth in Section F, paragraph F.2(e).	1 LOT	\$ 5,644,880	\$ 451,590	\$ 6,096,470
09	Additional Requirements for Occupational Safety, Industrial Hygiene and Medical Services in accordance with Section 5 of the SOR. Services will be issued under separate tasks	1 LOT	\$ 867,520	\$ 69,402	\$ 936,922

(End of Clause)

B.2 ESTIMATED COST AND AWARD FEE (NFS 1852.216-85) (SEP 1993)*PHASE-IN AND BASE PERIOD:

The estimated cost of this contract is \$12,022,164. The maximum available award fee, excluding base fee, if any, is \$ 953,635. The base fee is \$ 0. Total estimated cost, base fee, and maximum award fee are \$12,975,799.

OPTION PERIOD ONE:

The estimated cost of this contract is \$6,286,484. The maximum available award fee, excluding base fee, if any, is \$502,919. The base fee is \$ 0. Total estimated cost, base fee, and maximum award fee are \$6,789,403.

OPTION PERIOD TWO:

The estimated cost of this contract is \$6,391,348. The maximum available award fee, excluding base fee, if any, is \$ 511,308. The base fee is \$ 0. Total estimated cost, base fee, and maximum award fee are \$6,902,656.

SECTION C - DESCRIPTION/SPECIFICATION/WORK STATEMENT

C.1 DESCRIPTION/SPECIFICATION/WORK STATEMENT

(a) In accordance with the contract terms and conditions, the Contractor shall furnish all personnel, services, equipment and materials, unless otherwise specified in the Statement of Requirements and Clauses G.5 and G.6 of this document. Additionally, the Contractor shall do all other things necessary for, or incidental to performance of the requirements set forth herein.

(b) Work shall be accomplished in accordance with the Statement of Requirements, dated August 2005, incorporated in Section J.

(End of Clause)

[END OF SECTION]

SECTION D - PACKAGING AND MARKING**D.1 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998)**

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. Also, the full text of a clause may be accessed electronically at these addresses:

<http://www.arnet.gov/far/>

<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
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None included by reference.

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
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None included by reference.

(End of Clause)

D.2 PACKAGING AND MARKING (ARC 52.211-95) (ALTERNATE I) (FEB 1997)

(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 or as required by applicable regulations. 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.

(End of Clause)

[END OF SECTION]

SECTION E - INSPECTION AND ACCEPTANCE**E.1 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998)**

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. Also, the full text of a clause may be accessed electronically at these addresses:

<http://www.arnet.gov/far/>

<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.246-5	APR 1984	INSPECTION OF SERVICES-- COST- REIMBURSEMENT
52.246-3	MAY 2001	INSPECTION OF SUPPLIES--COST- REIMBURSEMENT

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
------------------	------	-------

None included by reference.

(End of Clause)

[END OF SECTION]

SECTION F - DELIVERIES OR PERFORMANCE

F.1 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998)

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. Also, the full text of a clause may be accessed electronically at these addresses:

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NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.242-15	AUG 1989	STOP-WORK ORDER (ALTERNATE I) (APR 1984)
52.247-34	NOV 1991	F.O.B. DESTINATION

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER DATE TITLE

None included by reference

(End of Clause)

F.2 PERIOD OF PERFORMANCE (ARC 52.211-100) (JUL 1997)

(a) PHASE-IN PERIOD

The Phase-In period of this contract shall begin on date of award and continue for thirty (30) days.

(b) BASE PERIOD

The period of performance of this contract shall be for twenty three (23) months following the Phase In period.

(c) OPTION PERIOD ONE

If exercised, the period of performance of option period one shall be for twelve (12) months.

(d) OPTION PERIOD TWO

If exercised, the period of performance of option period two shall be for twelve (12) months.

(e) OPTION PERIOD THREE

If exercised, the period of performance of option period three shall be for twelve (12) months.

(End of Clause)

F.3 PLACE OF PERFORMANCE (ARC 52.237-90) (FEB 1997)

The Contractor shall perform the work under this contract at locations specified in the Statement of Requirements, and at such other locations as may be approved in writing by the Contracting Officer.

(End of Clause)

F.4 DELIVERY OF REPORTS (ARC 52.211-92)(FEB 1997)

Unless otherwise specified, all reports shall be addressed to NASA-Ames Research Center, Moffett Field, CA 94035-1000, marked with the contract number, to the attention of the listed recipients, and in accordance with the following delivery schedule. A copy of the transmittal letter for each report shall be forwarded to the Contracting Officer.

Item	Report	Delivery Date	Qty	Recipient
(a)	Standard Operating Procedures (SOPs)	Not later than (NLT)180 days after contract effective date.	One (1) copy	Contracting Officer (CO), M/S 241-1
			One (1) copy	Contracting Officer's Technical Representative (COTR), M/S 218-1
(b)	Technical Progress Graphs and Charts	NLT seven (7) working days following end of the month	One (1) copy	CO, M/S 241-1
			Two (2) copies	COTR, M/S 218-1
(c)	Contract Task Order (CTO) Plans	As required by individual CTOs.	One (1) copy	CO, M/S 241-1

Item	Report	Delivery Date	Qty	Recipient
			One (1) copy	COTR, M/S 218-1
(d)	Contractor Monthly Accident Report (Form ARC 15)	NLT five (5) working days following the month being reported	One (1) original	http://cmar/arc/nasa.gov
(e)	Phase-Out Plan	120 days prior to contract completion	One (1) copy	CO, M/S 241-1
			One (1) copies	COTR, M/S 218-1
(f)	Initial Financial Management Report (NASA Form 533Q)	NLT thirty (30) days after contract effective date	One (1) original (electronic)	CO, M/S 241-1
			One (1) copies (electronic)	COTR, M/S 218-1
			One (1) copy	Financial Management Division, M/S 203-17
			One (1) copy	Resource Management Office (RMO), M/S 201-2
(g)	Monthly Financial Management Report (NASA Form 533M)	NLT 10 working days following close of Contractor's monthly accounting period	One (1) original (electronic)	CO, M/S 241-1
			One (1) copy (electronic)	COTR, M/S 218-1
			One (1) copy	Financial Management Division, M/S 203-17
			One (1) copy	RMO, M/S 201-2

Item	Report	Delivery Date	Qty	Recipient
(h)	Quarterly Financial Management Report (NASA Form 533Q)	NLT15 th day of the month preceding the reporting period	One (1) (electronic)	CO, M/S 241-1
			One(1) (electronic)	COTR, M/S 218-1
			One (1)	Financial Management Division, M/S 203-17
			One (1) copy	RMO, M/S 201-2
(i)	Monthly Service System Report	Within five (5) working days following reporting month	One (1) copy	CO, M/S 241-1
			One (1) copy	COTR, M/S 218-1
(j)	Cost to Complete Report	Within five (5) working days after the April 533M and July 533M of each year	Two (2) copies	COTR, M/S 218-1
(k)	NASA Mishap Report (NASA Form 1627)	Within one (1) working day of mishap occurrence	One (1) original	Occupational Safety, Health and Medical Services Office, M/S 218-1
			One (1) copy	CO, M/S 241-1
			One (1) copy	COTR, M/S 218-1
(l)	Quarterly Report of Purchases	15 calendar days after the end of each quarter.	One (1) copy	CO, M/S 241-1
			One (1) copy	Supply and Equipment Management Officer (SEMO), M/S 255-2
(m)	Subcontract Consent Package	Minimum ten (10) days prior to subcontract award.	One (1) copy	CO, M/S 241-1
(n)	"DOD Industrial Plant Equipment Requisition" (DD Form 1419)	Within thirty (30) working days prior to acquisition or fabrication of equipment.	One (1) copy	CO, M/S 241-1

Item	Report	Delivery Date	Qty	Recipient
(o)	Safety and Health Plan (Final)	Within 30 calendar days following Government comments on draft plan	One (1) copy	CO, M/S 241-1
			One (1) copy	COTR, M/S 218-1
(p)	Technical Reports	To be submitted IAW CTO	One (1) copy	COTR, M/S 218-1
(q)	IT Security Plan	NLT 30 calendar days after contract award	One (1) copy	COTR, Code QE, M/S 218-1
			One (1) copy	CO, Code JAI, M/S 241-1
(r)	IT Security Training Report	NLT 5 working days after the end of the month	One (1)	CO, Code JAI, M/S 241-1
(s)	NASA Property in the Custody of Contractors (NF 1018)	IAW NFS 1852.245-73.	Orig	Deputy CFO/Finance, Code CF, M/S 203-10 Industrial Property
			One (1) copy	Officer, Code JFS, M/S 255-2
			One (1) copy	CO, Code JAI, M/S 241-1

(End of Clause)

F.5 REPORTS OF WORK (ARC 52.227-95) (SEP 1998)

(a) Standard Operating Procedures (SOPs). The Contractor shall submit and update these procedures in accordance with (IAW) Statement of Requirements (SOR).

(b) Technical Progress Reports. The Contractor shall submit separate monthly progress reports of all work accomplished during each reporting period throughout contract performance, IAW SOR. Reports shall be in narrative form, and brief and informal in content. Reports shall include--

- (1) A quantitative description of overall progress.
- (2) An indication of any current problems which may impede performance and proposed corrective action.
- (3) Tracking of progress compared to regulatory submittal date
- (4) A discussion of the work to be performed during the next monthly reporting period.

(c) Contract Task Order (CTO) Plans. The Contractor shall submit the CTO Plans IAW NFS 1852.216-80, Task Ordering Procedures and the SOR.

(d) Contractor Monthly Accident Report (Form ARC 15). The Contractor shall submit these reports IAW NFS 1852.223-70, "Safety and Health", and H.11 *Contractor Monthly Accident Reporting*.

(e) Phase-Out Plan. The Contractor shall submit this plan 120 days prior to contract completion. This plan should be prepared in accordance with FAR 52.237-3, "Continuity of Services" and shall include transmission of SOPs to incoming Contractor. It will also include the transmission of all electronic files, and any accompanying documentation to the incoming Contractor.

(f), (g), (h) Initial, Monthly, and Quarterly Financial Management Reports (NASA Forms 533Q and 533M). The Contractor shall prepare these reports in accordance with NFS 1852.242-73 and NASA Procedural Requirement (NPR) 9501.2, both entitled "NASA Contractor Financial Management Reporting." The electronic versions shall be compatible with NASA's Integrated Financial Management Program (IFMP), or such other electronic accounting system that NASA may implement.

Reporting categories shall be elements of cost including:

- direct labor hours (Prime Contractor regular, overtime, and uncompensated overtime; subcontract hours)
- total direct labor hours
- direct labor dollars (prime Contractor productive and overtime)
- overhead
- Other Direct Costs (ODCs) by category
- total ODCs
- General and Administrative (G&A) base
- G&A expense
- total prime Contractor costs
- costs for each subcontractor (labor dollars, ODCs, and estimate of unbilled costs)
- total subcontract costs
- total costs (prime and subcontractor(s))
- fee and
- total value

The Contractor shall prepare separate reports for each CTO, and also include a summary report of all CTOs. All blocks on the form shall be completed as appropriate.

(i) Monthly Service System Report. The Contractor shall provide a summary report describing labor hours and costs (including material accruals) by task.

(j) Cost to Complete Report. The Contractor shall submit these reports within five (5) working days after the April 533M and July 533M of each year. These reports shall include the labor hours and cost (including material accruals) accrued to date for each task plus the cost expected to accrue for each task by September 30th of the reporting year.

(k) NASA Mishap Report (NASA Form 1627). The Contractor shall submit these reports IAW APR 1700.1, Ames Health and Safety Manual.

(l) Quarterly Report of Purchases. The Contractor shall prepare this report IAW NFS 1852.245-71, "Installation-Accountable Government Property," Alternate I.

(m) Subcontract Consent Package. The Contractor shall prepare these packages IAW FAR 52.244-2, Subcontracts."

(n) "DOD Industrial Plant Equipment Requisition" (DD 1419). The Contractor shall prepare these reports IAW NFS 1852.245-70, "Contractor Requests for Government-Owned Equipment".

(o) Safety and Health Plan. The Contractor shall prepare this plan IAW NFS 1852.223-73, "Safety and Health".

(p) Technical Reports. The Contractor shall provide these reports IAW SOR or CTO, as applicable.

(q) IT Security Plan. The Contractor shall submit an IT Security Plan that meets the requirement set forth in NFS 1852.204-76, "Security Requirement for Unclassified Information Technology Resources."

(r) IT Security Training Report. The Contractor shall submit an updated listing of all Contractor personnel receiving IT security training pursuant to NFS 1852.204-76.

(s) NASA Property in the Custody of Contractors. The Contractor shall submit annually a NASA Form (NF) 1018, "NASA Property in the Custody of Contractors," pursuant to the requirement of NFS 1852.245-73, "Financial Reporting of NASA Property in the Custody of Contractors."

Submission. ARC clause 52.211-92, "Delivery of Reports," contains the delivery and distribution requirements for the reports described herein.

(End of Clause)

[END OF SECTION]

SECTION G - CONTRACT ADMINISTRATION DATA**G.1 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998)**

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. Also, the full text of a clause may be accessed electronically at these addresses:

<http://www.arnet.gov/far/>

<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
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None included by reference.

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
1852.242-73	NOV 2004	NASA CONTRACTOR FINANCIAL MANAGEMENT REPORTING
1852.245-70	JUL 1997	CONTRACTOR REQUESTS FOR GOVERNMENT-OWNED EQUIPMENT

G.2 AWARD FEE FOR SERVICE CONTRACTS (NFS 1852.216-76) (JUN 2000)

(a) The Contractor can earn award fee from a minimum of zero dollars to the maximum stated in NASA FAR Supplement clause 1852.216-85, "Estimated Cost and Award Fee" in this contract.

(b) Beginning 6 months after the effective date of this contract, the Government shall evaluate the Contractor's performance every 6 months to determine the amount of award fee earned by the Contractor during the period. The Contractor may submit a self-evaluation of performance for each evaluation period under consideration. These self-evaluations will be considered by the Government in its evaluation. The Government's Fee Determination Official (FDO) will determine the award fee amounts based on the Contractor's performance in accordance with the performance evaluation plan. The plan may be revised unilaterally by the Government prior to the beginning of any rating period to redirect emphasis.

- (c) The Government will advise the Contractor in writing of the evaluation results. The NASA Ames Research Financial Management Division will make payment based on the issuance of a unilateral modification by contracting officer.
- (d) After 85 percent of the potential award fee has been paid, the Contracting Officer may direct the withholding of further payment of award fee until a reserve is set aside in an amount that the Contracting Officer considers necessary to protect the Government's interest. This reserve shall not exceed 15 percent of the total potential award fee.
- (e) The amount of award fee which can be awarded in each evaluation period is limited to the amounts set forth by the total CTOs during a given period. Award fee which is not earned in an evaluation period cannot be reallocated to future evaluation periods.
- (f) (1) Provisional award fee payments will be made under this contract pending the determination of the amount of fee earned for an evaluation period. If applicable, provisional award fee payments will be made to the Contractor on a monthly basis. The total amount of award fee available in an evaluation period that will be provisionally paid is the lesser of 80 percent or the prior period's evaluation score.
- (2) Provisional award fee payments will be superseded by the final award fee evaluation for that period. If provisional payments exceed the final evaluation score, the Contractor will either credit the next payment voucher for the amount of such overpayment or refund the difference to the Government, as directed by the Contracting Officer.
- (3) If the Contracting Officer determines that the Contractor will not achieve a level of performance commensurate with the provisional rate, payment of provisional award fee will be discontinued or reduced in such amounts as the Contracting Officer deems appropriate. The Contracting Officer will notify the Contractor in writing if it is determined that such discontinuance or reduction is appropriate.
- (4) Provisional award fee payments will be made prior to the first award fee determination by the Government.
- (g) Award fee determinations are unilateral decisions made solely at the discretion of the Government.

(End of Clause)

G.3 SUBMISSION OF VOUCHERS FOR PAYMENT (NASA 1852.216-87) (MAR 1998)
(MODIFIED ARC/FEB 1998)

- (a) Public vouchers for payment of costs shall include a reference to the contract number and the Contractor's Taxpayer Identification Number (TIN#). Forward vouchers in accordance with the instructions in paragraph (d) below. Except as noted in paragraph (c) below, the address in (d)(3) is the designated billing office for cost vouchers for purposes of the Prompt Payment clause of this contract.
- (b) Reporting Requirements Under Taxpayer Relief Act of 1997

(1) The Taxpayer Relief Act of 1997, enacted August 5, 1997, requires Federal executive agencies to file information returns (i.e., Form 1099-MISC) for payment of \$600 or more to corporations for services. Payments for services under certain confidential or classified contracts that meet the requirements of Internal Revenue Code Section 6050M(e) are excluded from the reporting requirements. This change became effective as of January 1, 1997.

(2) In order to comply with the Act, the Contractor shall separately subtotal taxable services and nontaxable materials and supplies on each voucher. If subtotals are not specified on the vouchers, the Government will presume that the entire voucher amount is reportable and will be shown on the Form 1099-MISC generated by NASA and provided to the Contractor and the Internal Revenue Service.

(c) DCAA Program for Contractor Direct Submission of Interim Vouchers to NASA Paying Offices

(1) When authorized by the Defense Contract Audit Agency (DCAA), the Contractor may submit interim vouchers directly to NASA paying offices. Such authorization does not extend to the first and final vouchers. The Contractor will continue to submit first vouchers to the DCAA office identified below. Final vouchers will be submitted to the designated contracting officer with a copy to DCAA.

(2) Upon written notification to the Contractor, DCAA may rescind the direct submission authority. Upon receipt of the written notice to rescind the direct submission authority, the Contractor will immediately begin to submit public vouchers for the affected contracts to DCAA.

(3) Interim vouchers submitted under this program are considered to be provisionally approved for payment subject to final audit. In such cases, Copy 2, identified in paragraph (c)(3)(iii) below, need not be submitted.

(d) The Contractor shall prepare and distribute cost vouchers as follows:

(1) One original Standard Form (SF) 1034, SF 1035, or equivalent Contractor's attachment.

(2) Copies of SF 1034A, SF 1035A, or equivalent Contractor's attachment as required below.

(3) The Contractor shall mark SF 1034A copies 1, 2, 3, 4, and such other copies as may be directed by the Contracting Officer by insertion in the memorandum block the names and addresses as follows and distribute to the respective addressees:

(i) Original and three (3) copies:

Accounting Operations Branch
NASA Ames Research Center
MS 203-18
Moffett Field, CA 94035-1000

Cost vouchers shall be submitted via the cognizant Government audit agency identified in paragraph (iii) below.

- (ii) Copy 1 -- NASA Contracting Officer, STAMPED "INFO COPY"

NASA Ames Research Center
Attn: Contract Administrator, M/S 241-1
Moffett Field, CA 94035-1000

- (iii) Copy 2 -- Auditor
TBD

- (iv) Copy 3 -- Contractor

- (v) Copy 4 -- Contract Administration Office (if applicable), STAMPED "INFO COPY"

- (vi) Copy 5 -- Project Management Office, STAMPED "INFO COPY"

- (vii) Copy 6 -- NASA Equipment Management Branch, M/S 255-2, STAMPED "INFO COPY"

(For Contractor-Acquired Property and/or Centrally Reportable Equipment, if applicable -- see paragraph (4) below)

(4) As authorized by FAR 52.216-7(a), the Contractor shall also include the following in its vouchers submitted for payment of costs incurred for any Contractor-Acquired Property or Centrally Reportable Equipment that has an acquisition cost exceeding \$1,000.00;

- (i) Date of Purchase
(ii) Purchase Order Number
(iii) Item Description
(iv) Quantity
(v) Purchase Price

"Centrally Reportable Equipment" is defined at NFS clause 1852.245-70.

- (e) Public vouchers for payment of fee shall be prepared similarly and be forwarded to:

Accounting Operations Branch
NASA Ames Research Center
M/S 203-18
Moffett Field, CA 94035-1000

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

- (f) In the event that amounts are withheld from payment in accordance with provisions of this contract, a separate voucher for the amount will be required before payment for that amount may be made.

(End of Clause)

G.4 TECHNICAL DIRECTION (NFS 1852.242-70) (SEP 1993)

(a) Performance of the work under this contract is subject to the written technical direction of the Contracting Officer's Technical Representative (COTR), who shall be specifically appointed by the Contracting Officer in writing in accordance with NASA FAR Supplement 1842.270. "Technical direction" means a directive to the Contractor that approves approaches, solutions, designs, or refinements; fills in details or otherwise completes the general description of work or documentation items; shifts emphasis among work areas or tasks; or furnishes similar instruction to the Contractor. Technical direction includes requiring studies and pursuit of certain lines of inquiry regarding matters within the general tasks and requirements in Section C of this contract.

(b) The COTR does not have the authority to, and shall not, issue any instruction purporting to be technical direction that—

- (1) Constitutes an assignment of additional work outside the statement of work;
- (2) Constitutes a change as defined in the changes clause;
- (3) Constitutes a basis for any increase or decrease in the total estimated contract cost, the fixed fee (if any), or the time required for contract performance;
- (4) Changes any of the expressed terms, conditions, or specifications of the contract; or
- (5) Interferes with the Contractor's rights to perform the terms and conditions of the contract.

(c) All technical direction shall be issued in writing by the COTR.

(d) The Contractor shall proceed promptly with the performance of technical direction duly issued by the COTR in the manner prescribed by this clause and within the COTR's authority. If, in the Contractor's opinion, any instruction or direction by the COTR falls within any of the categories defined in paragraph (b) above, the Contractor shall not proceed but shall notify the Contracting Officer in writing within 5 working days after receiving it and shall request the Contracting Officer to take action as described in this clause. Upon receiving this notification, the Contracting Officer shall either issue an appropriate contract modification within a reasonable time or advise the Contractor in writing within 30 days that the instruction or direction is—

- (1) Rescinded in its entirety; or
- (2) Within the requirements of the contract and does not constitute a change under the changes clause of the contract, and that the Contractor should proceed promptly with its performance.

(e) A failure of the Contractor and Contracting Officer to agree that the instruction or direction is both within the requirements of the contract and does not constitute a change under the changes clause, or a failure to agree upon the contract action to be taken with respect to the instruction or direction, shall be subject to the Disputes clause of this contract.

(f) Any action(s) taken by the Contractor in response to any direction given by any person other than the Contracting Officer or the COTR shall be at the Contractor's risk.

(End of Clause)

G.5 INSTALLATION-ACCOUNTABLE GOVERNMENT PROPERTY (NFS 1852.245-71)
(NOV 2004) (ALTERNATE I) (NOV 2004)

(a) The Government property described in the clause at 1852.245-77, "List of Installation-Accountable Property and Services," shall be made available to the Contractor on a no-charge basis for use in performance of this contract. This property shall be utilized only within the physical confines of the NASA installation that provided the property. Under this clause, the Government retains accountability for, and title to, the property, and the Contractor assumes the following user responsibilities:

The Contractor shall establish and adhere to a system of written procedures for compliance with these user responsibilities. Such procedures must include holding employees liable, when appropriate, for loss, damage, or destruction of Government property.

(b) (1) The official accountable record keeping, physical inventory, financial control, and reporting of the property subject to this clause shall be retained by the Government and accomplished by the installation Supply and Equipment Management Officer (SEMO) and Financial Management Officer. If this contract provides for the Contractor to acquire property, title to which will vest in the Government, the following additional procedures apply:

(i) The Contractor's purchase order shall require the vendor to deliver the property to the installation central receiving area;

(ii) The Contractor shall furnish a copy of each purchase order, prior to delivery by the vendor, to the installation central receiving area:

(iii) The Contractor shall establish a record of the property as required by FAR 45.5 and 1845.5 and furnish to the Industrial Property Officer a DD Form 1149 Requisition and Invoice/Shipping Document (or installation equivalent) to transfer accountability to the Government within 5 working days after receipt of the property by the Contractor. The Contractor is accountable for all Contractor-acquired property until the property is transferred to the Government's accountability.

(iv) Contractor use of Government property at an off-site location and off-site subcontractor(s) use require advance approval of the contracting officer and notification of the SEMO. The Contractor shall assume accountability and financial reporting responsibility for such property. The Contractor shall establish records and property control procedures and maintain the property in accordance with the requirements of FAR Part 45.5 until its return to the installation.

(2) After transfer of accountability to the Government, the Contractor shall continue to maintain such internal records as are necessary to execute the user responsibilities identified in paragraph (a) and document the acquisition, billing, and disposition of the property. These records and supporting documentation shall be made available, upon request, to the SEMO and any other authorized representatives of the contracting officer.

(3) The Contractor shall not utilize the installation's central receiving facility for receipt of Contractor-acquired property. However, the Contractor shall provide listings suitable for establishing accountable records of all such property received, on a quarterly basis, to the Contracting Officer and the Supply and Equipment Management Officer.

(End of Clause)

G.6 LIST OF INSTALLATION-ACCOUNTABLE PROPERTY AND SERVICES (NFS
1852.245-77) (JUL 1997)

In accordance with the clause at 1852.245-71, Installation- Accountable Government Property, the Contractor is authorized use of the types of property and services listed below, to the extent they are available, in the performance of this contract within the physical borders of the installation which may include buildings and space owned or directly leased by NASA in close proximity to the installation, if so designated by the Contracting Officer.

(a) Office space, work area space, and utilities. Government telephones are available for official purposes only; pay telephones are available for Contractor employees for unofficial calls.

(b) General and special-purpose equipment, including office furniture.

(1) Equipment to be made available is listed in Appendix 7.3 to SOR. The Government retains accountability for this property under the clause at 1852.245-71, Installation- Accountable Government Property, regardless of its authorized location.

(2) If the Contractor acquires property, title to which vests in the Government pursuant to other provisions of this contract, this property also shall become accountable to the Government upon its entry into Government records as required by the clause at 1852.245-71, Installation-Accountable Government Property.

(3) The Contractor shall not bring to the installation for use under this contract any property owned or leased by the Contractor, or other property that the Contractor is accountable for under any other Government contract, without the Contracting Officer's prior written approval.

(c) Supplies from stores stock.

(d) Publications and blank forms stocked by the installation.

(e) Safety and fire protection for Contractor personnel and facilities.

(f) Installation service facilities:

1) Motor Pool

2) Fitness Center facilities under the following conditions:

(i) Applications shall be submitted to, and shall be processed by the Fitness Center.

(ii) The procedure for receiving and processing applications, obtaining a medical authorization from a licensed physician, and selection of applicants for participation will be similar to the procedure for Government employees.

- (iii) All individuals applying for participation shall sign a statement waiving the Government from any liability for personal injury during participation in Fitness Center activities.
- (g) Medical treatment of a first-aid nature for Contractor personnel injuries or illness sustained during on-site duty.
- (h) Cafeteria privileges for Contractor employees during normal operating hours.
- (i) Building maintenance for facilities occupied by Contractor personnel.
- (j) Moving and hauling for office moves, movement of large equipment, and delivery of supplies. Moving services shall be provided on-site, as approved by the Contracting Officer.
- (k) The user responsibilities of the Contractor are defined in paragraph (a) of the clause at 1852.245-71, Installation-Accountable Government Property.

(End of Clause)

G.7 DESIGNATION OF NEW TECHNOLOGY REPRESENTATIVE AND PATENT REPRESENTATIVE (NFS) 1852.227-72 (JULY 1997)

(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:

Title	Office Code	Address (including zip code)
New Technology Representative	EP	Dr. Danielle Goldwater NASA Ames Research Center M/S 202A-3 Moffett Field, CA 94035-1000
Patent Representative	DL	Mr. Robert Padilla NASA Ames Research Center M/S 202A-4 Moffett Field, CA 94035-1000

(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. Inquires 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 1827.305-370 of the NASA FAR Supplement.

(End of Clause)

[END OF SECTION]

SECTION H - SPECIAL CONTRACT REQUIREMENTS**H.1 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998)**

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. Also, the full text of a clause may be accessed electronically at these addresses:

<http://www.arnet.gov/far/>

<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
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None included by reference

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
1852.216-80	OCT 1996	TASK ORDERING PROCEDURE; Insert <u>5</u> in paragraph (c); Insert <u>2</u> in paragraph (e).
1852.223-70	APR 2002	SAFETY AND HEALTH
1852.223-75	FEB 2002	MAJOR BREACH OF SAFETY OR SECURITY
1852.225-70	FEB 2000	EXPORT LICENSES
1852.237-73	JUN 2005	RELEASE OF SENSITIVE INFORMATION
1852.242-72	AUG 1992	OBSERVANCE OF LEGAL HOLIDAYS (ALTERNATE I) (SEP 1989) (ALTERNATE II) (OCT 2000)

(End of Clause)

H.2 SECURITY REGISTRATION AND IDENTIFICATION BADGES--ON-SITE CONTRACTORS, EXCLUDING CONSTRUCTION (ARC 52.204-91) (FEB 1997)

(a) All persons engaged in work at Ames Research Center are required to be registered and badged by Protective Services, and to follow all security regulations and requirements.

(b) The Contractor is responsible for assuring that each employee or company representative wears his/her issued identification badge at all times while they are within the boundaries of Moffett Field. Badges shall be worn above the waist in such a manner as to be clearly visible.

- (c) (1) The Contractor shall ensure that all employees who are terminated or who are no longer connected with the work being performed under this contract are processed out through Protective Services. Badges, keys, and other Government property must be accounted for and returned. If a computer account has been established, the account must be deactivated.
- (2) The Government shall notify the Contractor if any terminated employee has not been processed out through Protective Services. The Contractor then has 30 days in which to process the terminated employee without penalty. After 30 days, a Bill of Collection will be issued by the Government in the amount of \$500 for each terminated employee that has not been properly processed out.
- (d) U.S. Citizens and (should Permanent Resident Aliens be part of (e)??). On the first day of work, the employee will check in at the NASA Visitor Badging Office, Building 26. A temporary badge will be issued and the employee will be directed to the work site. As soon as practical, the employee must bring the completed "Non-Government Employee Security Badging Packet," NASA Form 531 and AOM Form 500, to the Employee Badging Office, Building 15. Employees will need to submit a completed packet for each badge issued, including renewals. Fingerprints will be taken if necessary and a permanent badge will be issued. All terminating employees must check out through the Employee Badging Office.
- (e) Foreign Nationals (Passports, Visas, Non-Immigrant Aliens). A National Agency Check (NAC) is a prerequisite for a foreign national, making it necessary that all paperwork be submitted to JP:15-1:4-4651/Foreign National Processing at least 60 days in advance of the anticipated entry date (NAC processing can take as long as 180 days to process). JP/Foreign National Processing will provide guidance as to what paperwork and type of visa are required.
- (f) Reserve Gate Procedure. In the event of a labor dispute the Government may restrict entrance and exit of the Contractor's employees and the Contractor's suppliers to a specified gate at Ames Research Center, pursuant to Chapter 4 of NASA Handbook 5200.1A, "Industrial Labor Relations Manual." The Contractor agrees to have all employees re-badged and to direct them and their suppliers to utilize only the designated gate.

(End of Clause)

H.3 RESTRICTIONS ON PRINTING AND DUPLICATING (NFS 1852.208-81) (NOV 2004)

- (a) The Contractor may duplicate or copy any documentation required by this contract in accordance with the provisions of the Government Printing and Binding Regulations, No. 26, S. Pub 101-9, U.S. Government Printing Office, Washington, DC, 20402, published by the Joint Committee on Printing, U.S. Congress.
- (b) The Contractor shall not perform, or procure from any commercial source, any printing in connection with the performance of work under this contract. The term "printing" includes the processes of composition, plate making, presswork, duplicating, silkscreen processes, binding, microform, and the end items of such processes and equipment.
- (c) The Contractor is authorized to duplicate or copy production units provided the requirement does not exceed 5,000 production units of any one page or 25,000 units in the

aggregate of multiple pages. Such pages may not exceed a maximum image size of 10-3/4 by 14-1/4 inches. A "production unit" is one sheet, size 8-1/2 x 11 inches (215 x 280 mm), one side only, and one color ink.

(d) This clause does not preclude writing, editing, preparation of manuscript copy, or preparation of related illustrative material as a part of this contract, or administrative duplicating/copying (for example, necessary forms and instructional materials used by the Contractor to respond to the terms of the contract).

(e) Costs associated with printing, duplicating, or copying in excess of the limits in paragraph (c) of this clause are unallowable without prior written approval of the Contracting Officer. If the Contractor has reason to believe that any activity required in fulfillment of the contract will necessitate any printing or substantial duplicating or copying, it immediately shall provide written notice to the Contracting Officer and request approval prior to proceeding with the activity. Requests will be processed by the Contracting Officer in accordance with the provisions of the Government Printing and Binding Regulations, NFS 1808.802, and NPG 1490.5A, NASA Procedural Requirements for Printing, Duplicating, and Copying Management.

(f) The Contractor shall include in each subcontract which may involve a requirement for any printing, duplicating, and copying in excess of the limits specified in paragraph (c) of this clause, a provision substantially the same as this clause, including this paragraph (f).

(End of Clause)

H.4 EMERGENCY PREPAREDNESS AND RESPONSE (ARC 52.233-90) (SEP 2004)

In the event of an emergency as defined in the Ames Emergency Preparedness Procedures and Guidelines (APG 1601.4), the Contractor shall follow the emergency procedures (e.g., shut down equipment, conduct damage assessments, etc.) shown for Contractor Responsibilities in the Guideline. Responsibilities are also assigned on an organizational basis; therefore, Contractors must refer to the section(s) of the Handbook that correlate with their respective COTR organization(s).

(End of Clause)

H.5 DISASTER ASSISTANCE AND RESCUE TEAM (DART) PARTICIPATION (ARC 52.223-91) (APR 2004)

a.) Contractor employees are eligible to participate in the Disaster Assistance and Rescue Team (DART) if approved in writing by the Contractor and appointed by the Government. If a Contractor approves of an employee's participation, the Contractor agrees to modify the employee's position description to include participation in DART, and to provide additional indemnification (e.g., worker's compensation insurance, general liability, etc.) as may be necessary to protect its employee and/or the Government while the employee is participating in the program.

b.) DART Definition: This team is comprised of civil service, Contractor, Ames Associate resident agent, and military personnel that work at Ames Research Center, the NASA Research

Park, and Moffett Federal Airfield. The team composition includes, but is not limited to, scientists, engineers, wind tunnel mechanics, aircraft mechanics, facility maintenance personnel, computer specialists, industrial hygienists, safety professionals, heavy equipment operators, administrative personnel, managers, procurement officials, and data specialists. DART is an umbrella organization that has ten functional groups. The groups are Search, Rescue, Hazardous Materials Response, Damage and Utility Control, Structural Assessment, Emergency Communications, Medical, Logistics, Technical Support, and Emergency Operations Center as well as the Emergency Communications Facility. Typically, participation will involve approximately 5% of the employee's (full) time, except for initial training/orientation, which will involve approximately 10% of the employee's (full) time. The executive management at Ames Research Center strongly encourages Contractor participation on DART, which needs all of our support, as it has proven to be a valuable element of the Center's Emergency Service Program.

(End of Clause)

H.6 MANAGEMENT AND PROTECTION OF DATA (ARC 52.227-93) (JUL 1988)

(a) In the performance of this contract it is anticipated that the Contractor may have access to, be furnished, use, or generate the following types of data (recorded information):

- (1) Data submitted to the Government with limited rights or restricted rights notices;
- (2) Data of third parties which the Government has agreed to handle under protective arrangements; and
- (3) Data generated by or on behalf of the Government which the Government intends to control the use and dissemination thereof.

(b) In order to provide management appropriate for protecting the interests of the Government and other owners of such data, the Contractor agrees with respect to data in category (a)(1) above, and with respect to any data in categories (a)(2) and (a)(3) when so identified by the Contracting Officer, to:

- (1) Use and disclose such data only to the extent necessary to perform the work required under this contract, with particular emphasis on restricting disclosure of the data to those persons who have a definite need for the data in order to perform under this contract;
- (2) Not reproduce the data unless reproduction of the data is specifically permitted elsewhere in the contract or by the Contracting Officer;
- (3) Refrain from disclosing the data to third parties without the written consent of the Contracting Officer; and
- (4) Return or deliver the data including all copies thereof to the Contracting Officer or his designated recipient when requested by the Contracting Officer.

(End of Clause)

H.7 HANDLING OF DATA (ARC 52.227-96) (JUN 1989)

(a) Paragraph (d)(1) of the "Rights in Data--General" clause of this contract permits the Government to restrict the Contractor's right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of the contract provided such restriction is expressly set forth in the contract. Pursuant to this authority, the following restrictions shall apply to such data and shall be included, in substance, in all subcontracts:

(b) Data specifically used.

(1) In the performance of this contract, it is anticipated the Contractor may have access, or be furnished, data (including financial, administrative, cost or pricing, or management information as well as technical data or computer software) of third parties which the Government has agreed to handle under protective arrangements, as well as such Government data for which the Government intends to control the use and dissemination.

(2) In order to protect the interests of the Government and the owners of such data, the Contractor agrees, with respect to such third party or Government data that is either marked with a restrictive legend or specifically identified in this contract or in writing by the Contracting Officer as being subject to this clause, to use and disclose such data only to the extent necessary to perform the work required under this contract, preclude disclosure of such data outside the Contractor's organization, and return or dispose of such data as directed by the Contracting Officer when the data is no longer needed for contract performance.

(3) Notwithstanding (2) above, the Contractor shall not be restricted in the use and disclosure of any data that becomes generally available without breach of this clause by this Contractor, is known to or is developed by the Contractor independently of any disclosure of proprietary, restricted, or confidential data hereunder, or is rightfully received by the Contractor from a third party without restriction.

(c) Data first produced.

Data first produced by the Contractor under this contract may include data for which the Government wants to control the use and dissemination. The Contracting Officer may require, or this contract may presently specify, that the Contractor apply restrictive legends to such identified data prior to delivery to the Government, or to third parties at the Government's direction, that restrict the use and disclosure of the data by any third party recipient. However, such restrictive legends shall in no way affect the Contractor's or the Government's rights to such data as provided in the "Rights in Data--General" clause of this contract.

(End of Clause)

H.8 SEVERANCE PAY (ARC 52.231-90) (MAY 1993)

In conjunction with FAR 31.205-6(g), the severance pay cost shall not exceed 40 hours pay for each year of employment per employee up to a maximum of 80 hours per eligible employee. Severance cost eligibility computation for reimbursement shall also be limited to only the period of employment on the service contract at Ames Research Center. In no event shall the Government reimburse the Contractor for severance cost for employees who voluntarily accept employment in place with the succeeding Contractor within ninety (90) days after completion of the current contract.

(End of Clause)

H.9 KEY PERSONNEL AND FACILITIES (NASA 1852.235-71) (MAR 1989)

(a) The personnel and/or facilities listed below (or specified in the contract Schedule) are considered essential to the work being performed under this contract. Before removing, replacing, or diverting any of the listed or specified personnel or facilities, the Contractor shall (1) notify the Contracting Officer reasonably in advance and (2) submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on this contract.

(b) The Contractor shall make no diversion without the Contracting Officer's written consent; provided, that the Contracting Officer may ratify in writing the proposed change, and that ratification shall constitute the Contracting Officer's consent required by this clause.

(c) The list of personnel and/or facilities (shown below or as specified in the contract Schedule) may, with the consent of the contracting parties, be amended from time to time during the course of the contract to add or delete personnel and/or facilities.

Program Manager (PM): Scott Robbins, CIH, CSP

Asst. PM/Occ. Safety Tech. Leader: Brian Roethlisberger, CIH, CSP

Industrial Hygiene Technical Leader: Jeffrey Dalhoff, CIH

Medical Director: Mark Janczewski, MD, MPH

(End of Clause)

H.10 CONTRACTOR MONTHLY ACCIDENT REPORTING (ARC 52.223-92) (MAR 2001)

In accordance with the Safety and Health Clause - NFS 18.52.223-70, and the Ames Health and Safety Manual - APR 1700.1, the Contractor shall report accident and lost time injuries. Ames Research Center (ARC) collects this data in the Contractor Monthly Accident Reporting (CMAR) web-based system, through the submission of a monthly ARC 15 CMAR form, which is located at <http://cmar.arc.nasa.gov/>. The CMAR system will assist the user via built in hyperlinks, to log into the system, complete the ARC 15 Form and other administrative activities.

The Contractor shall ensure that accurate and complete data entry of the ARC 15 information is input monthly to the CMAR web-based system for its firm as well as all applicable subcontractor(s) no later than the fifth (5th) working day of the subsequent month. The Contractor shall be responsible for input into the CMAR system of all changes (additions and/or deletions) for its applicable subcontractor(s).

(End of Clause)

H.11 SUBCONTRACTING, DATA NOT FIRST PRODUCED UNDER THE CONTRACT AND REPRESENTATION OF LIMITED RIGHTS DATA AND RESTRICTED RIGHTS SOFTWARE (ARC 52.227-97) (OCT 2004)

It is strongly recommended that the Contractor flow down the data rights provisions of this contract to lower tier subcontractors to ensure that it can fulfill its data rights obligations to the Government. See Clause FAR 52.227-14(h), *Rights in Data—General*. The Contractor shall be held responsible to obtain rights for the Government where it fails to fulfill such obligations.

Offerors are reminded that as required by Clause FAR 52.227-14(c)(2), the Contractor must obtain Contracting Officer approval before incorporating any data not first produced under the Contract into data delivered under the contract. Before delivering such data, the Contractor must identify it and grant the Government, or acquire on its behalf, the broad licenses required by subparagraph (c) of the *Rights in Data—General* clause.

The Contractor shall make the representation required by FAR 52.227-15 for each contract task order. On a case-by-case basis, the Government will insert the purposes, rights or limitations under which the Government can use Limited Rights Data and Restricted Rights Software into the alternate clauses II and III of FAR 52.227-14.

(End of Clause)

**H.12 INFORMATION INCIDENTAL TO CONTRACT ADMINISTRATION (ARC 52.227-98)
(OCT 2004)**

NASA shall have unlimited rights in information incidental to contract administration including administrative and management information created by the Contractor and specified for delivery to NASA in performance of the contract, expressly excluding financial information. Specifically, NASA shall have the right to release such administrative and management information to any third party to satisfy NASA's requirements.

(End of Clause)

(End of Section)

SECTION I - CONTRACT CLAUSES**PART II - CONTRACT CLAUSES****I.1 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998)**

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. Also, the full text of a clause may be accessed electronically at these addresses:

<http://www.arnet.gov/far/>

<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.202-1	JUL 2004	DEFINITIONS
52.203-3	APR 1984	GRATUITIES
52.203-5	APR 1984	COVENANT AGAINST CONTINGENT FEES
52.203-6	JUL 1995	RESTRICTIONS ON SUBCONTRACTOR(S) SALES TO THE GOVERNMENT
52.203-7	JUL 1995	ANTI-KICKBACK PROCEDURES
52.203-8	JAN 1997	CANCELLATION, RESCISSION AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY
52.203-10	JAN 1997	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY
52.203-12	JUN 2003	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS
52.204-4	AUG 2000	PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER
52.209-6	JUL 1995	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT
52.211-15	SEP 1990	DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS
52.215-2	JUN 1999	AUDIT AND RECORDS--NEGOTIATION
52.215-8	OCT 1997	ORDER OF PRECEDENCE - UNIFORM CONTRACT FORMAT
52.215-11	OCT 1997	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA--MODIFICATIONS
51.215-12	OCT 1997	SUBCONTRACTOR COST OR PRICING DATA
52.215-13	OCT 1997	SUBCONTRACTOR(S) COST OR PRICING DATA - MODIFICATIONS
52.215-14	OCT 1997	INTEGRITY OF UNIT PRICES
52.215-15	JAN 2004	PENSION ADJUSTMENTS AND ASSET REVERSIONS
52.215-17	OCT 1997	WAIVER OF FACILITIES CAPITAL COST OF MONEY

52.215-18	OCT 1997	REVERSION OR ADJUSTMENT OF PLANS FOR POST-RETIREMENT BENEFITS (PRB) OTHER THAN PENSIONS
52.215-19	OCT 1997	NOTIFICATION OF OWNERSHIP CHANGES
52.215-21	OCT 1997	REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA -- MODIFICATIONS
52.216-7	DEC 2002	ALLOWABLE COST AND PAYMENT Insert "30 days" in Paragraph (a)(3)
52.217-9	MAR 2000	OPTION TO EXTEND THE TERM OF THE CONTRACT Insert "30 days" and "60 days," respectively, in paragraph (a). Insert "5 years" in paragraph (c).
52.219-6	JUN 2003	NOTICE TO TOTAL SMALL BUSINESS SET-ASIDE
52.219-8	MAY 2004	UTILIZATION OF SMALL BUSINESS CONCERNS
52.219-14	DEC 1996	LIMITATIONS ON SUBCONTRACTING
52.222-1	FEB 1997	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES
52.222-2	JUL 1990	PAYMENT FOR OVERTIME PREMIUMS Insert "\$0" in paragraph (a).
52.222-3	JUN 2003	CONVICT LABOR
52.222-21	FEB 1999	PROHIBITION OF SEGREGATED FACILITIES
52.222-26	APR 2002	EQUAL OPPORTUNITY
52.222-35	DEC 2001	EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS
52.222-36	JUN 1998	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES
52.222-37	DEC 2001	EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS
52.223-3	JAN 1997	HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (ALTERNATE I) (JUL 1995) Insert None" in paragraph (b).
52.223-5	AUG 2003	POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION
52.223-6	MAY 2001	DRUG-FREE WORKPLACE
52.223-9	AUG 2000	ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL CONTENT FOR EPA-DESIGNATED PRODUCTS (Insert in paragraph (b)(2) <u>NASA/ARC, Environmental Services, Code QE, M/S 218-1</u>)
52.223-10	AUG 2000	WASTE REDUCTION PROGRAM
52.223-12	MAY 1995	REFRIGERATION EQUIPMENT AND AIR CONDITIONERS
52.223-14	AUG 2003	TOXIC CHEMICAL RELEASE REPORTING
52.224-1	APR 1984	PRIVACY ACT NOTIFICATION
52.224-2	APR 1984	PRIVACY ACT
52.225-13	DEC 2003	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES
52.227-1	JUL 1995	AUTHORIZATION AND CONSENT
52.227-2	AUG 1996	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT
52.227-3	APR 1984	PATENT INDEMNITY
52.227-11	JUN 1997	PATENT RIGHTS-RETENTION BY THE CONTRACTOR -(Short

Form) As Modified by NFS 1852.227-11

52.227-14 JUN 1987 RIGHTS IN DATA – GENERAL, ALT II (JUN 1987), ALT III (JUN 1987), as Modified by NFS 1852.227-14 (OCT 1995)

52.227-16 JUN 1987 ADDITIONAL DATA REQUIREMENTS

52.227-17 JUN 1987 RIGHTS IN DATA – SPECIAL WORKS, As Modified by NFS 1852.227-17 (OCT 1995)

52.227-19 JUN 1987 COMMERCIAL COMPUTER SOFTWARE – RESTRICTED RIGHTS

52.227-23 JUN 1987 RIGHTS TO PROPOSAL DATA (TECHNICAL)
Insert "...on pages _____, ... proposal dated _____ upon which ..."

52.228-7 MAR 1996 INSURANCE-LIABILITY TO THIRD PERSONS

52.232-17 JUN 1996 INTEREST

52.232-18 APR 1984 AVAILABILITY OF FUNDS

52.232-20 APR 1984 LIMITATION OF COST

52.232-22 APR 1984 LIMITATION OF FUNDS

52.232-23 JAN 1986 ASSIGNMENT OF CLAIMS

52.232-25 OCT 2003 PROMPT PAYMENT (ALTERNATE I) (FEB 2002)

52.232-34 MAY 1999 PAYMENT BY ELECTRONIC FUNDS TRANSFER--OTHER THAN CENTRAL CONTRACTOR REGISTRATION (Insert in paragraph (b)(1)".... NLT 15 days prior to submission of first request for payment...."

52.233-1 JUL 2002 DISPUTES (ALTERNATE I) (DEC 1991)

52.233-3 AUG 1996 PROTEST AFTER AWARD (ALTERNATE I) (JUN 1985)

52.237-2 APR 1984 PROTECTION OF GOVERNMENT BUILDINGS, EQUIPMENT, AND VEGETATION

52.237-3 JAN 1991 CONTINUITY OF SERVICES

52.237-7 JAN 1997 INDEMNIFICATION AND MEDICAL LIABILITY INSURANCE

52.242-1 APR 1984 NOTICE OF INTENT TO DISALLOW COSTS

52.242-3 MAY 2001 PENALTIES FOR UNALLOWABLE COSTS

52.242-4 JAN 1997 CERTIFICATION OF FINAL INDIRECT COSTS

52.242-13 JUL 1995 BANKRUPTCY

52.243-2 AUG 1987 CHANGES--COST-REIMBURSEMENT (ALTERNATE II) (APR 1984)

52.244-2 AUG 1998 SUBCONTRACTS (ALTERNATE I) (AUG 1998) Insert in paragraph "... (e) _____" and insert in paragraph "... (k) _____" (To be completed at time of contract award.)

52.244-5 MAY 2004 COMPETITION IN SUBCONTRACTING

52.244-6 JUL 2004 SUBCONTRACTS FOR COMMERCIAL ITEMS

52.245-1 APR 1984 PROPERTY RECORDS

52.245-5 MAY 2004 GOVERNMENT PROPERTY (COST- REIMBURSEMENT, TIME- AND- MATERIAL, OR LABOR-HOUR CONTRACTS)

52.245-19 APR 1984 GOVERNMENT FURNISHED PROPERTY – AS IS

52.246-25 FEB 1997 LIMITATION OF LIABILITY– SERVICES

52.248-1 FEB 2000 VALUE ENGINEERING

52.249-6 MAY 2004 TERMINATION (COST-REIMBURSEMENT)

52.249-14 APR 1984 EXCUSABLE DELAYS

52.251-1 APR 1984 GOVERNMENT SUPPLY SOURCES

52.253-1 JAN 1991 COMPUTER GENERATED FORMS

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
1852.204-76	NOV 2004	SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES <i>Insert "within 30 days" in paragraph (c)</i>
1852.216-89	JUL 1997	ASSIGNMENT AND RELEASE FORMS
1852.219-74	SEP 1990	USE OF RURAL AREA SMALL BUSINESSES
1852.219-76	JUL 1997	NASA 8 PERCENT GOAL
1852.227-84	DEC 1989	PATENT RIGHTS CLAUSES
1852.227-86	DEC 1987	COMMERCIAL COMPUTER SOFTWARE—LICENSING
1852.228-75	OCT 1988	MINIMUM INSURANCE COVERAGE
1852.237-70	DEC 1988	EMERGENCY EVACUATION PROCEDURES
1852.243-71	MAR 1997	SHARED SAVINGS

(End of Clause)

I.2 OMBUDSMAN (NFS 1852.215-84) (OCT 2003)

(a) An ombudsman has been appointed to hear and facilitate the resolution of concerns from offerors, potential offerors, and Contractors during the preaward and post-award phases of this acquisition. When requested, the ombudsman will maintain strict confidentiality as to the source of the concern. The existence of the ombudsman is not to diminish the authority of the contracting officer, the Source Evaluation Board, or the selection official. Further, the ombudsman does not participate in the evaluation of proposals, the source selection process, or the adjudication of formal contract disputes. Therefore, before consulting with an ombudsman, interested parties must first address their concerns, issues, disagreements, and/or recommendations to the contracting officer for resolution.

(b) If resolution cannot be made by the contracting officer, interested parties may contact the installation ombudsman:

NASA Ames Research Center
 Lewis Braxton III
 Director of Center Operations; M/S 200-8
 Moffett Field, CA 94035-1000
 Telephone: (650) 604-5068
 FAX: (650) 604-1668
 Email: Lewis.S.Braxton@nasa.gov

Concerns, issues, disagreements, and recommendations which cannot be resolved at the installation may be referred to the NASA ombudsman, the Director of the Contract Management

Division, at 202-358-0445, facsimile 202-358-3083, e-mail James.A.Balinskas@nasa.gov. Please do not contact the ombudsman to request copies of the solicitation, verify offer due date, or clarify technical requirements. Such inquiries shall be directed to the contracting officer or as specified elsewhere in this document.

(End of Clause)

[END OF SECTION]

SECTION J – LIST OF ATTACHMENTS

PART III – LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

J.1 LIST OF DOCUMENTS, EXHIBITS, AND ATTACHMENTS (ARC 52.211-90) (JAN 1998)

(a) The following documents, exhibits, and attachments are included in the solicitation and resulting contract. Representations and certifications completed by the Contractor in responses to this solicitation are incorporated by reference in the resulting contract at time of award.

<u>Attachment No./Title</u>	<u>Date</u>	<u>Pages</u>
1 Statement of Requirements	August 2005	62
2. Safety & Health Plan*		TBD
3. IT Security Plan*		TBD

* To be completed at time of award or by subsequent contract modification

(End of Clause)

[END OF SECTION]



Statement of Requirements

August 2005

Occupational Safety, Industrial Hygiene, & Medical Services



Statement of Requirements

Occupational Safety, Industrial Hygiene, & Medical Services

1	INTRODUCTION	4
1.1	PURPOSE	4
1.1.1	OCCUPATIONAL SAFETY, INDUSTRIAL HYGIENE AND MEDICAL SERVICES	4
1.1.2	COLLABORATIVE ELEMENTS	4
1.2	AMES MISSION & ACTIVITIES	4
1.3	PERSONNEL & FACILITIES	5
1.4	NASA AMES RESEARCH CENTER DESCRIPTION	5
1.5	SCOPE OF REQUIREMENTS	6
1.5.1	STATEMENT OF REQUIREMENTS	6
1.5.2	TECHNICAL DIRECTION	6
1.5.3	REQUIRED KNOWLEDGE	6
1.5.4	WORK AUTHORIZATION	6
2	OCCUPATIONAL SAFETY , INDUSTRIAL HYGIENE, AND MEDICAL FUNCTIONS TO BE PERFORMED	7
2.1	GENERAL OCCUPATIONAL SAFETY, INDUSTRIAL HYGIENE, HEALTH PHYSICS AND MEDICAL FUNCTIONS TO BE PERFORMED BY THE CONTRACTOR	7
2.2	SPECIFIC FUNCTIONS TO BE PERFORMED	8
2.2.1	INDUSTRIAL HYGIENE	8
2.2.2	HEALTH PHYSICS	11
2.2.3	OCCUPATIONAL SAFETY	14
2.2.4	CONSTRUCTION SAFETY ENGINEERING	16
2.2.5	FIRE PROTECTION ENGINEERING	18
2.2.6	INJURY/ILLNESS DATA ANALYSIS	19
2.2.7	MEDICAL SERVICES	19
3	FUNCTIONS TO BE PERFORMED: COLLABORATIVE ELEMENTS	36
3.1	EMERGENCY RESPONSE	36
3.1.1	CONTRACTOR RESPONSIBILITIES	36
3.1.2	DOCUMENTATION REQUIREMENTS	37
3.1.3	SUPPLEMENTAL INFORMATION	37
3.2	SAFETY, HEALTH AND ENVIRONMENTAL TRAINING	39
3.2.1	CONTRACTOR RESPONSIBILITIES	39
3.2.2	DOCUMENTATION REQUIREMENTS	40
3.3	COMPUTER SERVICES SUPPORT	41

4 GENERAL REQUIREMENTS	42
4.1 TECHNICAL PRESENTATIONS	42
4.2 REPORTS & DOCUMENTATION	42
4.2.1 TECHNICAL REPORTS	42
4.3 OFF-SITE ACTIVITIES	42
5 ADDITIONAL REQUIREMENTS	43
5.1 TECHNICAL STUDIES	43
5.2 ENGINEERING COST ESTIMATES	43
5.3 OFF-SITE ACTIVITIES	43
5.4 ASBESTOS AND LEAD ABATEMENT	43
6 PERSONNEL QUALIFICATIONS	43
6.1 PROGRAM MANAGER	44
6.2 ADMINISTRATIVE MANAGER	44
6.3 COMPUTER SYSTEMS SUPPORT	44
6.4 TECHNICAL LEADERS	44
6.4.1 INDUSTRIAL HYGIENE	45
6.4.2 FIRE PROTECTION ENGINEER	45
6.4.3 HEALTH PHYSICS	45
6.4.4 OCCUPATIONAL SAFETY	46
6.5 MEDICAL SERVICES	46
6.5.1 PHYSICIAN	46
6.5.2 REGISTERED NURSES	46
6.5.3 FITNESS CENTER MANAGER	46
6.5.4 AUDIOMETRIC TESTING	46
6.5.5 SUBSTITUTES	47
6.6 COLLABORATIVE ELEMENTS	47
6.6.1 TRAINING SPECIALIST	47
6.6.2 EMERGENCY RESPONSE MANAGER	47
7 OTHER KEY INFORMATION	47
7.1 MAPS OF AMES RESEARCH CENTER AND ENTIRE FEDERAL FACILITY	48
7.2 MAP OF ENTIRE FEDERAL FACILITY INCLUDING RESIDENT AGENCIES AREA TO THE EAST OF AMES RESEARCH CENTER	49
7.3 LIST OF GOVERNMENT-FURNISHED EQUIPMENT	50

1 Introduction

1.1 Purpose

The purpose of this requirement is to provide for Occupational Safety, Industrial Hygiene, and Medical Services for NASA Ames Research Center.

1.1.1 Occupational Safety, Industrial Hygiene and Medical Services

Services for the Occupational Safety, Industrial Hygiene and Medical Services Office is required in the following areas:

- INDUSTRIAL HYGIENE
- HEALTH PHYSICS
- OCCUPATIONAL SAFETY
- CONSTRUCTION SAFETY ENGINEERING
- FIRE PROTECTION ENGINEERING
- VOLUNTARY PROTECTION PROGRAM
- INJURY/ILLNESS DATA ANALYSIS
- MEDICAL
 - Health Unit Operations
 - Fitness Center Operations
 - Employee Assistance Program (EAP)

1.1.2 Collaborative Elements

The following elements require collaboration between the Occupational Safety, Industrial Hygiene, and Medical program and the Environmental Services program:

- Emergency Response (hazardous material releases)
- Training Services
- Computer Support Services

1.2 Ames Mission & Activities

Ames specializes in scientific research, exploration, and applications aimed toward creating technology for the nation. The Center's major program responsibilities are concentrated in:

- Astrobiology and nanotechnology
- Computer science and application
- Computational and experimental aerodynamics
- Flight simulation and research
- Aeronautical and space human factors
- Life sciences
- Space sciences; and
- Airborne science and applications

Ames also supports military programs, the Space Shuttle, and various aviation projects. Equipment used in this research includes aircraft and spacecraft, wind tunnels, flight simulators, and entry heating simulators. Principal operations include:

- Aerospace/aeronautics projects development, design, construction, operations, and maintenance
- Life science experiments
- Space science experiments, and
- Airborne science platform aircraft missions

1.3 Personnel & Facilities

There are approximately 1,500 civil servants and 2,000 contractors working on-site. These personnel operate in Government facilities that include:

- Offices
- Airport/hangars
- Research laboratories
- Aerospace/aeronautics facilities (e.g., Wind tunnels, arc jets, simulators)
- Computer laboratories
- Ballistic ranges
- General testing facilities
- Machine shops
- Metal shops
- Model shops
- Motor pools
- Test chambers
- Storage facilities

1.4 NASA Ames Research Center Description

Ames Research Center, encompassing approximately 2,000 acres, is located in the heart of "Silicon Valley" California, near the southern end of San Francisco Bay. The Center consists of two distinct areas: the original NASA Ames Research Center and the former Naval Air Station, Moffett Field, which has been combined, except for the military housing (see map in Section 7.2). Previously, the US Navy operated Naval Air Station, Moffett Field. In July 1994, NASA assumed control of the facility and now hosts numerous "Resident Partners." These partners are Governmental, academic, and commercial entities.

Ames Research Center operates within a very aggressive regulatory framework. The Contractor shall be sensitive to the uniqueness of this setting and the multiple jurisdictions at work within a given functional area (for example, redundancy and inconsistency in requirements present in Federal, State and County regulations).

1.5 Scope Of Requirements

1.5.1 Statement Of Requirements

This Statement of Requirements (SOR) describes the functions to be performed by the Contractor in support of the Center's Occupational Safety, Industrial Hygiene, and Medical Services Programs. The Contractor shall be responsible for all functions described in this SOR. The Government shall provide facilities except as otherwise noted in the SOR. Contractor staff shall reside on-site in facilities provided by NASA, except as specifically authorized by NASA. The overwhelming majority of the work shall be performed on-site at Ames Research Center, Moffett Field, California. However, this SOR covers a broad place of performance, including all NASA facilities and other locations as specified by the Government. For example, Ames' Crows Landing Flight Facility, located in Stanislaus County, California, is a common work site as well as other NASA centers and NASA Headquarters.

1.5.2 Technical Direction

The overall technical direction of the Occupational Safety, Industrial Hygiene, and Medical Services contract is the responsibility of the Ames Safety, Environmental and Mission Assurance Directorate (SEMA includes the Safety, Health and Medical Services Division). The Contracting Officer (CO) will appoint a Contracting Officer's Technical Representative (COTR) to assist in administering this contract. The COTR's authority is limited in scope to activities specifically identified in his/her appointment letter (NASA Form 1634).

1.5.3 Required Knowledge

The Contractor shall have and maintain current working knowledge of all relevant and applicable occupational safety, industrial hygiene, and medical regulations. The Contractor shall develop and implement a program to ensure timely and accurate dissemination of this information to the user community at NASA facilities (e.g., updates of manuals, web pages, briefings, and technical bulletins).

1.5.4 Work Authorization

All work shall be authorized using Contract Task Orders (CTOs). The CTOs will describe the basic terms of the work to be performed and the required completion date. CTOs will be issued to the Contractor using the following methods as appropriate.

1.5.4.1 Method 1: Basic Services

At the start of the contract and as required thereafter, the Government will provide incremental funding for services.

1.5.4.2 Method 2: Additional Requirements

Services requiring additional resources will be processed through issuance of a separate CTO on an as-needed basis. This will occur when additional services and/or resources are needed above the baseline services. These services have included, for example, technical studies, legionella investigations and specialized medical resources/equipment or research.

2 Occupational Safety, Industrial Hygiene, and Medical Functions to Be Performed

There are several major functions to be performed by the Contractor. Occupational safety, industrial hygiene, and medical services include programs that are intended to develop and implement policies and procedures to minimize the risk of harm to personnel. These programs shall be performed primarily at NASA Ames. Contractors providing the subject services are expected to work in concert with both civil service and other Ames contract professionals. Effective communication and civil service/contractor teaming (inter- and intra-disciplinary) are required to ensure efficient operation of programs.

Ames Research Center objectives for this effort are to implement programs designed to assure:

- the safety and health of all employees
- that all Ames operations are carried out in compliance with applicable Federal, State, and local regulations and NASA policies
- Ames Research Center maintains and retains OSHA Voluntary Protection Program certification and Joint Commission for the Accreditation of Health Care Organizations certification.

2.1 General Occupational Safety, Industrial Hygiene, Health Physics and Medical Functions to be performed by the Contractor:

- Serve as a technical expert on Occupational Safety, Industrial Hygiene, Health Physics and Medical issues, act as a Center focal point for coordination of regulatory compliance (in conjunction with Civil Servants), and notify the Center of new and proposed regulations that may impact ARC operations.
- Provide technical consultation services including review of projects, documents, plans, policies, procedures, guidelines, handbooks.
- Develop and implement various policies, plans, procedures, and guidelines. This includes the Ames Health and Safety Manual.
- Meet as often as necessary with NASA and/or Contractor employees and provide consultation on all types of Health, Safety and Medical issues. Prepare documentation such as briefing materials, meeting summaries, emails, and memos, as requested.
- Maintain Government records including physical maintenance of health and safety records and compliance documentation. Records shall be maintained in an organized, accessible manner, in accordance with federal, State, and local regulations and NASA policy. The Government shall be afforded access to these records at all times.
- Conduct timely and accurate annual compliance self-assessments in an approved format, using NASA-specified protocols.

- Prepare, implement, and track adherence to corrective action plans for instances of non-conformance identified in annual self-assessments, facility inspections and by other means.
- Track the status of industrial hygiene programs, inspections, studies, reports, and surveys using databases and other appropriate information technology.
- Provide full-scale analytical services, by laboratories that meet applicable federal, state, and local certification requirements.
- Interface with Federal, State, and local regulatory agencies as needed.
- Implement employee awareness programs including open houses and fairs, as well as develop and distribute fact sheets and information bulletins.
- Plan, organize and implement annual safety week events, family safety events and other safety and health events as required.

2.2 Specific Functions to be Performed

2.2.1 Industrial Hygiene

2.2.1.1 Contractor Responsibilities

The Contractor shall:

- Provide qualified personnel, including at least two (2) Certified Industrial Hygienists, certified by the American Board of Industrial Hygiene (ABIH) who will work in the Ames Industrial Hygiene(IH) Program. (For example: A CIH working in the safety program would not be counted toward this requirement.) The IH staff is responsible for recognition, evaluation, management, controls and follow-up regarding the industrial hygiene matters associated with chemical, biological, physical, and ergonomic hazards at Ames. At least two (2) persons who will work in the Ames IH Program, shall be registered in the State of California as Certified Asbestos Consultants, and at least two (2) persons shall be certified by the California Department of Health Services (DHS) to perform all categories of lead work. Personnel working within the IH group may hold multiple certifications to meet these requirements.
- Provide program development, implementation, coordination and training for programs such as exposure monitoring, hearing conservation, respiratory protection, chemical hazard communication, confined space entry, gas detection, biohazards, lead, asbestos, mold, mercury, formaldehyde, ethylene oxide, regulated carcinogens, toxic gases, indoor air quality, chemical hygiene programs, ventilation programs, sanitation inspections and other types of typical industrial hygiene programs.
- Provide professional analytical services for all types of known and unknown chemicals, metals, fibers, etc., by laboratories that are accredited by the American Industrial Hygiene Association (AIHA). Quality control programs such as the National Institute of Occupational Safety & Health (NIOSH) Proficiency Analytical Testing (PAT) program and the National Voluntary Laboratory Accrediting Program (NVLAP) must be utilized as required by NASA or

regulatory agencies. In addition, the Contractor must provide equipment and professional analytical services for sampling and monitoring of microbiological materials (e.g., bacteria, fungi, and legionella).

- Review new and existing projects and facilities for industrial hygiene concerns, recommend appropriate controls and work with NASA management, NASA employees, Resident Partner management, or other contract management and contract employees, to resolve various health issues.
- Provide review, evaluation and implementation of all chapters in the Ames Health and Safety Manual Ames Procedural Requirements (APR) 1700.1, annually or as specified by the Government.
- Perform risk assessments for chemicals including those that do not have published exposure limits, and recommend appropriate controls.
- Develop, implement and complete annual noise and chemical monitoring surveys of all Ames operations and facilities.
- Act as regulatory liaison for inspection activity.
- Attend meetings, participate in negotiations, and work to resolve union safety and health issues, concerns, grievances, and complaints associated with the Ames Federal Employees Union.
- Perform industrial hygiene monitoring as required by OSHA and NASA, and properly maintain and calibrate industrial hygiene monitoring equipment.
- Participate in or perform overall industrial hygiene program and/or facility audits and provide specific corrective action recommendations and follow-up.
- Participate in all audits and assessments including, but not limited to: VPP self-assessments, Headquarters' evaluations, and OSHA reviews.
- Develop, implement and/or maintain various integrated industrial hygiene databases for key programs (e.g., material safety data sheets, air monitoring data, hearing conservation/noise survey data, respiratory protection training, and asbestos hazard assessment data). Data shall be maintained in data systems owned by the Government. All data, database systems, and database documentation obtained or developed during this contract must be provided to the Government upon request and in the format specified by the Government.
- Use air dispersion models, acoustic models and sound IH calculations to predict exposures and hazard boundaries.
- Meet as often as necessary with NASA and/or Contractor employees and provide consultation on all types of industrial hygiene issues.
- Provide administrative assistance to support task orders, as requested by the Government.
- Provide monthly reports to NASA regarding new and/or proposed Safety & Health regulations.

- Participate on the Emergency Response (ER) team and all ER drills and exercises, as either a responder for Hazmat Levels A, B, C and D or as IH technical support. Individuals not qualified by a medical doctor under NASA criteria to use respirators, suits or other ER equipment will be required to fully participate, manage or support other ER functions (for example, logistics, training, and drills).
- Participate in emergency and non-emergency mitigation, abatement, cleanup and decontamination of hazardous materials such as lead and lead-based paint, asbestos, bloodborne pathogens, PCBs, and other hazardous materials as requested.
- Develop, provide and post industrial hygiene labels and signs.
- Implement all OSHA requirements for the notification of employees of their sampling results on time.

2.2.1.2 Documentation Requirements

The Contractor shall, at a minimum, submit technical reports in a format specified by the Government on industrial hygiene activities, including analytical results, field notes, summaries of activities, recommendations and calibration documents. The Contractor shall provide weekly and monthly activity report summarizing tasks completed, tasks in progress, and time spent on each. The Contractor shall also compile many of the industrial hygiene documents needed for compliance with Federal, State and local regulations. In addition, the Contractor shall prepare correspondence for Ames to be submitted to various regulatory agencies and/or to internal Ames organizations or resident partners. The Contractor shall also prepare reports and plans required by regulations for Ames.

These reports include, at a minimum, hearing conservation information, data from all forms of industrial hygiene monitoring, asbestos data tracking, employee notification data, laboratory fume hood data, local exhaust hood data, and confined space data, etc. Industrial Hygiene documentation must be kept maintained, organized, secure, backed-up if electronic, at all times so that it can be easily located and used by the Government.

Provide at least two (2) metrics monthly for each program to graph and measure program progress and/or status.

2.2.1.3 Supplemental Information

This information is provided to further describe the operations at Ames. However, as a research and development facility, these operations change regularly. At Ames, there are approximately:

- 100 laboratory fume hoods and 94 local exhaust hoods
- 1,000 confined spaces
- 75 fixed gas detection systems
- 50 users of regulated carcinogens
- 250 respirator users

- 250 people in the Hearing Conservation Program, and approximately 30 facilities that may have potentially high noise exposure levels
- Over 8,000 different chemical materials used at various locations at the NASA facilities
- Over 300 specific tasks for basic tasks are requested by NASA of the Industrial Hygiene group annually

Most of the facilities contain asbestos containing materials (ACM) and lead-based coatings.

2.2.1.4 Workload Estimates for Industrial Hygiene

Estimates of annual workload are provided in the table below.

Item Description	Annual Approximate Number
Noise Evaluations	100 (buildings)
Noise Dosimetry	300+ (persons)
Industrial Hygiene Baseline Surveys	100
Workplace Exposure Assessments	60
Ventilation Measurements	200
Respirator Fit Tests	250
Workplace Exposure Monitoring	400
Indoor Air Quality Surveys	50
Exposure Incident Investigations	12
Informal Consultations	2,000
Confined Space Permits	300
Material Safety Data Sheets	8,000
Develop/Update Training Courses	50
Health Related Training Courses	80

2.2.2 Health Physics

2.2.2.1 Contractor Responsibilities

The Contractor shall provide a Certified Health Physicist (CHP) to serve as the Radiation Safety Officer as approved by the Nuclear Regulatory Commission (NRC) to manage the ionizing radiation safety program in accordance with Chapter 7 of APR 1700.1. The Certified Health Physicist will represent NASA in all matters related to radiation protection. Activities, at a minimum, include:

- Review of radioactive materials applications, renewals, and modifications.
- Inspections/surveys of laboratories to ensure compliance with NRC regulations.
- Management of dosimetry, bioassay, and calibration programs including film badge and dosimetry services.
- Monitoring, including surveying of field radiographies. This may include work on nights, weekends, and holidays.

- Development and implementation of training programs for ionizing and non-ionizing radiation workers.
- Maintenance, renewal and payment of the Center's radioactive materials licenses (License Cost Range: @\$10K-\$20K/year).
- Compliance with EPA and National Emission Standards for Hazardous Air Pollutants (NESHAPS) requirements with respect to use of radioactive materials.
- Managing, packaging, transporting and disposing of radioactive waste and "mixed waste streams," as required by Federal, State and Local regulations.
- Paying transportation and disposal fees for radioactive waste.
- Performing receipt, pick-up and delivery of radioactive materials from NASA stores stock.
- Participating in NRC and other outside agency correspondence, documentation requests and inspections of NASA facilities.
- Operating monitoring equipment, including but not limited to, survey meters for exposure and fixed contamination surveys, anemometers for measuring hood flows, and laboratory equipment described below. Contractor shall perform surveys and sealed source leak tests, manage radioactive waste, and calibrate survey meters. Personnel shall also be experienced in the monitoring of radioactive materials and the preparation of radioactive materials for shipment.
- Providing analytical services, as well as equipment repair and calibration. On-site laboratory analytical capabilities shall include a proportional detection system for low-level alpha and beta measurements, gamma spectrometers, and liquid scintillation counters. The Contractor shall ensure that all off-site calibration facilities utilized by the Contractor have appropriate licenses. All laboratory analyses and calibrations shall conform to appropriate American National Standards Institute or other recognized standards. All laboratories conducting analyses of whole body dosimeters shall have National Voluntary Laboratory Accreditation Program (NVLAP) accreditation.
- Supporting the non-ionizing radiation safety program to conform to APR 1700.1, Chapter 8, including functioning as Non-ionizing Radiation Safety Committee member, conducting laser/microwave/radio frequency project inspections and surveys, performing or verifying beam divergence and nominal ocular hazard distance calculations, and providing expert information and training to employees.
- Providing review, evaluation and implementation of chapters in the Health and Safety Manual APR 1700.1, annually or as specified.
- Planning, coordinating and implementing Ionizing and Non-ionizing Radiation Safety Committee activity.
- Meeting, as often as necessary, with NASA and/or Contractor employees and providing consultation on all types of health physics issues. Preparing briefing materials and meeting summaries, as requested.

- Participating on the ER team and all ER drills and exercises, as either a responder for Hazmat Levels A, B, C and D or as HP technical support. Individuals not qualified by a medical doctor under NASA criteria to use respirators, suits or other ER equipment will be required to fully participate, manage or support other ER functions for example, logistics, training, drills, etc.

2.2.2.2 Documentation Requirements

The Contractor shall provide summary reports, as required, of all health physics activities, maintain all health physics documentation required by the NRC, EPA and NASA, document all Ionizing and Non-ionizing Radiation Safety Committee activities, and prepare correspondence required by regulatory agencies or NASA. The Contractor shall compile and complete all reporting requirements for the NRC. In addition, the Contractor shall be required to prepare correspondence for submittal by Ames to the NRC, to other internal NASA organizations, and resident partners.

At a minimum, documentation will include: data from all forms of employee monitoring, wipe testing, sealed source inventories, isotope records, bioassay records, air monitoring data, etc. Health Physics documentation must be kept organized, secure, backed-up if electronic, at all times so that it can be easily located and used by the Government.

Provide at least two (2) metrics monthly for each program, to graph and measure program progress, and/or status.

2.2.2.3 Supplemental Information

This information is provided to further describe the operations at Ames. The details are subject to change as operations change regularly.

- There are approximately 140 sealed sources, more than 14 isotopes, 10-15 isotope projects using unsealed sources, more than 55 isotope users, and 30 x-ray users. These do not include human diagnostic x-rays.
- There are approximately 37 sealed sources that require quarterly alpha radiation leak tests.
- Periodically radioactive sources greater than 100-200 Curies are used for nondestructive testing by radiographers. The HP Group is required to monitor each field radiography for compliance with NASA and NRC requirements. This may include nights, weekends, and holidays.
- There are approximately 30 laser users. The laser inventory includes 150 lasers of all classes, including approximately 29 Class IIIb and 50 Class IV lasers.
- There are approximately 20 radio frequency sources; several capable of exceeding American Conference of Governmental Industrial Hygienists (ACGIH) recommended exposure limits.
- NASA periodically operates a decay-in storage facility for radioactive waste, and processes monthly shipments of radioactive waste for off-site disposal.

2.2.3 Occupational Safety

2.2.3.1 Contractor Responsibilities

The Contractor shall:

- Provide qualified personnel including at least two (2) Certified Safety Professionals who will work in the Ames Safety Program. (For example: A CSP working in the IH program would not be counted toward this requirement.)
- Provide program development, implementation, coordination and training for each program, such as electrical safety, lock-out/tag-out, heavy equipment safety, fall protection, facility safety, ergonomics, machine guarding, house keeping, office safety, explosive safety, mishap reporting, safety postings/signs, safety committee management, and other types of typical safety programs.
- Participate in all VPP self-assessment audits, Headquarters' audits/visits and OSHA audits/visits.
- Perform one (1) to four (4) safety and health surveys (inspections) per year of all NASA facilities at ARC for compliance with OSHA, National Fire Protection Association (NFPA), Life Safety Code, Uniform Building Code, National Electric Code and other applicable safety, health and fire protection standards and track findings and recommend corrective actions.
- Coordinate, schedule and provide agendas for safety committee meetings. At least one safety person will be assigned to support and participate on each Centerwide Safety/Health Committee.
- Provide review, evaluation and implementation of chapters in the Health and Safety Manual APR 1700.1, annually or as specified by the Government.
- Respond to Center requests for safety information and provide safety expertise and safety awareness programs.
- Review policies and prepare safety plans and procedures.
- Review, research, and provide interpretation of safety standards, specifications, and criteria.
- Develop, implement and manage safety awareness programs, such as safety accountability, Voluntary Protection Programs, etc.
- Provide safety and health coordination, support and expertise for NASA and/or resident partner sponsored events, such as for NASA open house (220,000 visitors), air shows, community events, educational events with children, etc.
- Respond to reports of unsafe and unhealthy conditions and maintain records of corrective actions.
- Develop, implement and/or maintain various integrated safety databases for key programs (e.g., ASAP building inspection data, injury/illness data). Data shall be maintained in data systems owned by the Government. All data, database systems, and database documentation obtained or developed during this

contract shall be provided to the Government upon request and in the format specified by the Government.

- Assure Ames Research Center maintains and retains OSHA VPP certification.
- Assure the Ames Safety Accountability Program operates and is maintained as specified by the Government.
- Participate in accident investigations or mishap boards.
- Participate on the ER team and all ER drills and exercises, as either a responder for Hazmat Levels A, B, C and D or as Safety technical support. Individuals not qualified by a medical doctor under NASA criteria to use respirators, suits or other ER equipment will be required to fully participate, manage or support other ER functions for example, logistics, training, drills, etc.
- Represent Safety, Health and Medical Services Division on the center with various Center safety committees and other advisory committees.
- Develop graphics, provide and post safety labels and signs:
 - Maintain all safety and health notices and postings on Center bulletin boards on a monthly basis.
 - Ensure hazard-warning notices are posted on every floor of every building and checked monthly to ensure they are posted.
- Conduct and complete the annual 29 CFR1960 review and implement corrections as needed.
- Complete the OSHA process safety management report quarterly and implement corrections as needed.
- Meet as often as necessary with NASA and/or Contractor employees and provide consultation on all types of occupational safety issues. Prepare briefing materials, take meeting minutes and prepare meeting summaries as requested.
- Maintain the Safety Hotline, including response and follow-up to Hotline calls.
- Maintain and operate the Close Call/Hazard Reporting System, including response and follow-up to all Close-call and Hazard Reports.
- Participate on the Safety Suggestion Committee to assist the review and evaluation of all suggestions.
- Develop charter documents each safety and industrial hygiene program or provide written reports for program and transfer when staffing changes are made of responsible lead persons.
- Provide staff with electrical safety expertise with professional certification or license and manage a program to help prevent injury from electricity among civil servants, research contractors, support contractors and construction contractors.

2.2.3.2 Work Load Estimates for Occupational Safety

Estimates of annual workload are provided in the table below:

Description	Annual Approx. Number
Building Safety Inspections (OSHA)	400
Construction Site Inspections	1,000
Construction Work Permits	200
Prepare and submit Injury/Illness data base data to HQ (loss time injury data)	12
Investigate and document all Close Calls and Recordable Lost Time injuries	200
Respond to Employee Complaints (Respond within 8 hrs of request)	300
Coordinate safety for all ARC Major Events (100 to 200,000 persons)	18
Provide all OSHA required Training Courses (approximately 30)	160
Fire Protection System Test on all new systems	50
Fire Protection System Maintenance Tests	20
Develop lessons learned for all significant close calls	50

2.2.3.3 Documentation Requirements

The Contractor shall submit technical reports on all safety activities (i.e., accident investigations) and shall prepare organizational Safety Plans as requested by the Government.

Documentation must include, at a minimum, crane and forklift data, lost time and accident data, safety inspections data, and construction safety inspections data.

In addition, the Contractor shall prepare correspondence for submittal by NASA to OSHA, to internal NASA organizations and resident partners.

Develop lessons learned documentation for all significant close calls, disseminate information and maintain associated data library.

Document annual self-assessment reports for each occupational safety programs.

Provide at least two (2) metrics annually for each program, to graph or measure progress or status.

2.2.3.4 Supplemental Information

This information is provided to further describe the operations at Ames. The details are subject to change. The total area of indoor space at Ames Research Center is approximately 2.5 million square feet.

2.2.4 Construction Safety

2.2.4.1 Contractor Responsibility

The Contractor shall:

- Provide competent staff with inspector certification required by OSHA in 29 CFR 1926 and maintain certification during the term of contract.

- Review job specifications and drawing notes during the design phase. Keep records of review comments. Assure that each construction project has a designated site safety officer, a site-specific safety plan and where applicable, specialized work procedures. In addition, assure that there is oversight by a competent person for fall protection, material lifting, asbestos control and lockout/tagout.
- Coordinate with the Facilities Engineering organization and the Plant Engineering organization to ensure that construction hazards are identified and abated in a timely manner.
- Review and evaluate construction permits and Contractor safety plans prior to the start of each construction project.
- Inspect all construction sites at least daily (may include holidays, weekends, and/or evenings) for compliance with appropriate safety and health standards and specify appropriate corrective action as necessary to the construction project managers. Provide construction safety reports as requested by the Government.
- Meet as often as necessary with NASA and/or Contractor employees and provide consultation on all types of Construction Safety Engineering issues. Prepare briefing materials; take meeting minutes and meeting summaries as requested.
- The Contractor shall provide qualified safety and industrial hygiene professionals as members of the Facility Construction Permit Review Board. This board reviews all construction plans on the Center to ensure compliance with applicable codes, standards, regulations, and policies. Prior to construction, the Board issues construction permits. Number of permits has averaged approximately three to ten per week.

2.2.4.2 Documentation Requirements

The Contractor shall provide a comprehensive monthly summary report of construction safety activities. The content of the report will, as a minimum, contain:

- A list of the construction sites inspected, with the number of hours spent at each site.
- A list of the safety hazards and/or violations, sorted and summarized and graphed by type, persons notified, and corrective actions taken, with times and dates.
- A summary of other activities, such as training, design reviews, and consultations. The Contractor shall also provide a mishap report of each construction-related mishap.
- Graphical presentation of the construction activity data will be provided.
- A minimum of two (2) metrics monthly for each program, to graph and measure program progress and/or status.

2.2.4.3 Supplemental Information

This information is provided to further describe the operations at Ames. The details are subject to frequent change.

- Numerous and multiple types of construction activities are ongoing at all times.
- The types of construction activities include new construction of facilities, rehabilitation and modification of existing facilities, repair, renovation, demolition, excavation, etc.
- Approximately 4,000 construction inspections are performed annually.

2.2.5 Fire Protection Engineering

2.2.5.1 Contractor Responsibilities

The Contractor shall:

- Provide qualified personnel as experts for all fire-related safety issues at NASA facilities, who are knowledgeable of the regulations contained in the Uniform Building Code, Uniform Fire Code, OSHA standards, and National Fire Protection Association (NFPA) standards. The fire protection engineer shall be a professional engineer (PE) registered in the State of California, with fire protection experience. A PE in fire protection aspects is also acceptable.
- Review and provide recommendations on specifications and drawings for new construction and modifications for fire safety adequacy, including egress, alarm systems, fire suppression systems, and hazards associated with occupant use. Keep accurate, accessible records of projects and review recommendations.
- Monitor fire protection water supply and fire system maintenance programs and provide inspection and consultation upon request (primarily for special projects/facilities).
- Provide general fire prevention education and act as a fire department liaison. (An on-site fire department exists under separate contract to respond to emergency situations and conduct annual building fire inspections.)
- Perform final facility inspection after construction completion and witness systems acceptance testing for all new fire alarm and automatic suppression installations. Document each acceptable test with memo to the Safety Division. Follow up on deficiencies noted for subsequent correction.
- Perform fire safety audits as requested by the Government. The Contractor shall occasionally work with the on-site Fire Department to address and consult on special fire issues.
- Support the system safety organization on analyses of hazardous operations.
- Provide fire extinguisher equipment selection, installation, maintenance, and annual servicing for the Center.
- Provide fire protection equipment (fire suppression systems and alarms) and training by a fire protection engineer for emergency response personnel.

- Meet as often as necessary with NASA and/or Contractor employees and provide consultation on all types of Fire Protection Engineering issues. Prepare briefing materials and meeting summaries as requested.
- Closely monitor and support applicable activities of the Ames Permit Review Board, the Construction of Facilities (C of F) program and other facilities work that impacts fire protection. Keep full and accurate records of recommendations.
- Investigate and report on major or significant fires.
- Disseminate and publicize fire protection information and educational material annually to Ames personnel to capitalize on Fire Prevention Week promotions of the NFPA.
- Organize implementation of recommendations in the Ames Fire Protection Engineering Survey Report.
- Provide fire protection oversight consultation on the findings and recommendations in the Ames hazard correction database (4D) to assure accurate statements of deficient fire safety conditions and cost-effective recommendations for resolution.

2.2.5.2 Documentation Requirements

The Contractor shall submit technical reports on all fire protection and safety activities, accident investigations, etc., and shall prepare fire safety analyses. These will include but not be limited to: facility inspections and audits, design reviews, code reviews, and recommendations. In addition, the Contractor shall prepare correspondence to internal NASA organizations, resident partners on the Center, and outside agencies. The contractor shall provide a minimum of two (2) metrics monthly for each program, to graph and measure program progress and/or status.

2.2.5.3 Supplemental Information

There are approximately 100, 150-pound halon fire-extinguishers for aircraft use and approximately 1800, 5- to 20-pound dry powder chemical extinguishers for a variety of uses.

2.2.6 Injury/Illness Data Analysis

2.2.6.1 Documentation Requirements

The primary documentation required pertains to reporting monthly, quarterly, and annually on NASA mishaps (injuries, illness, and property damage). Additionally, the Contractor shall prepare and post the annual OSHA 300 Log and Summary of Occupational Injuries and Illnesses and post it annually in all NASA occupied buildings by January 15th of each year.

2.2.7 Medical Services

The purpose of this effort is to provide emergency and other professional medical services for NASA employees, contractors, and visitors. In addition, on-site physical fitness programs, employee assistance services, supplies and equipment to maintain and improve the health of the Center's employees shall be provided. The emphasis will



be on the prevention, diagnosis, treatment, and care of illness and injuries caused or aggravated by the work environment.

This portion of the SOR describes the functions to be performed by the Contractor in order to maintain and operate the Ames' Health Unit and Fitness Center, and consult in matters of occupational health and safety. The primary function of the Ames' Health Unit is to provide initial emergency medical treatment for Civil Service personnel, NASA contractor personnel, or visitors who become ill or who are injured on ARC property. The secondary function of the Ames' Health Unit is to provide required occupational and job-related examinations and general health maintenance medical evaluations for Civil Service employees. Occupational and job-related examinations may be performed for Ames Research Center resident and support contractors at the Government's discretion.

Additional services will include providing licensed, certified counseling and referral services for the Employee Assistance Program, and staffing and operation of the Ames Fitness Center.

2.2.7.1 Contractor Responsibilities

The Contractor shall advise the Government of desired development or changes of any policy or programs for the Health Unit operations. The tasks to be performed by the Contractor shall include, but not be limited to, the following items:

2.2.7.1.1 Initial On-Site Medical Treatment, Occupational Injury

The Contractor shall provide initial on-site medical treatment within the capabilities of the Ames' Health Unit for Civil Service, contractor employees, visitors, and students incurring an occupational injury or illness during normal working hours. This also includes any injury or illness sustained while participating in a physical fitness activity on-site. When the patient requires treatment beyond the scope of the Ames' Health Unit's capabilities and functions, the patient shall be referred to an appropriate facility, or to a physician, with advice that the patient may be liable for costs for such treatment. The Contractor shall have established procedures to allow for the immediate treatment of all occupational injuries at the work site, unless initial treatment at the Ames' Health Unit is more appropriate. The Contractor shall inform employees reporting to the Ames' Health Unit with an occupational injury or illness of their rights to claim possible treatment and compensation by the Government for their injuries, pursuant to the Federal Employees' Compensation Act. The Contractor shall provide such employees with information regarding the established procedures for reporting the circumstances of on-the-job illness or injury. The Contractor Responsible Physician shall interface with the employee's private physician as necessary, including assistance with any forms required by the Office of Worker's Compensation Program (OWCP).

2.2.7.1.2 Initial On-Site Medical Treatment, Non-Occupational Injury

The Contractor shall provide initial on-site treatment for Civil Service personnel having non-occupational illnesses when this is within the capabilities of the Ames' Health Unit, and when these services do not interfere with the treatment of occupational-related illnesses or other primary functions. The Contractor physician will refer employees to physicians in the private medical community for further treatment when necessary.



2.2.7.1.3 Ambulance Services

The Contractor will be required to provide emergency and non-emergency transportation operations on-site and may be required to transport patients off-site by special request from the Government or during emergencies. This will require operation of a Government owned ambulance by personnel certified to drive and respond to emergency medical calls.

2.2.7.1.4 Emergency Medical and Hazardous Materials Response and Training

The contractor (Physicians, Nurses and Medical Assistants) shall participate in Emergency Medical and Hazardous Materials responses, drills and training courses to maintain proficiency in emergency response events.

2.2.7.1.5 Administration of Prescribed Medication

The Contractor physician or appropriate medical staff shall administer medications:

- Furnished by the employee and prescribed in writing by his/her personal physician as reasonably necessary to maintain the employee at work; or
- Prescribed by a physician providing medical care in treatment of duty injury or illness cases under the Federal Employees' Compensation Act; or
- Any medication associated with, or in conjunction with an Employee Assistance Program (EAP) approved rehabilitation program.

In cases such as the above, the Ames' Health Unit shall obtain a signed release of liability from the requesting patient. The release shall specify the type of medication, purpose, amount, frequency, length of administration, and name of private physician prescribing medication.

2.2.7.1.6 Travel Immunizations

The Contractor shall provide to Civil Service personnel immunizations required by local, state, federal and international laws or regulations. Other immunizations compatible with good public health and preventive medicine will be administered by the Health Unit to Civil Service personnel and resident or support contractor personnel. The Contractor shall also provide immunizations, when required, for official overseas travel for both Civil Servants and contractors. If vaccines cannot be kept in stock, employees will be referred to local clinics.

2.2.7.1.7 Types of Typical Employee Physical Exams, Exam Content and Exam Frequency

The following medical surveillance requirements in addition to OSHA requirements apply:

Federal Employees Health Program (FEHP) Exam Contents

Exam Frequency: Comprehensive examination is offered every three years with a limited exam in the interim years.

Exam Specifications:

Comprehensive exam includes:

1. Evaluation of medical, occupational and exposure history.
2. Vital signs including height, weight, blood pressure, pulse rate and rhythm.
3. Laboratory testing for complete blood count, fasting blood chemistry profile including glucose and complete lipid profile (total cholesterol, HDL, LDL, triglycerides and total cholesterol / HDL ratio), urinalysis, thyroid profile including TSH (with T3 and T4 if TSH abnormal or clinically indicated), PSA test for males 50 years and older.
4. Tuberculosis screening
5. Hemocult screening
6. Visual Acuity and ocular tonometry
7. 12-lead electrocardiogram
8. Baseline examinations with follow-up exams as clinically indicated for audiogram, chest x-ray, and spirometry including FVC, FEV1, and FEF 25-75.
9. Examination by, or under the auspices of a physician including an offer of a total body skin examination, and prostate and testicular or breast and pelvic examination.
10. Mammograms are offered according to the following guidelines:

<u>Age</u>	<u>Frequency</u>
35-40	Baseline
40-49	Biennial
>50	Annual
11. Baseline cardiac stress test is offered, with follow up as clinically indicated.
12. Sigmoidoscopy or colonoscopy recommendation with referral to Primary Care Provider are indicated for employees who are 50 years and older, or who have increased risk for colon cancer with follow up as clinically indicated.
13. Optional tests offered if clinically indicated may include skin fold or Body Mass Index (BMI) evaluation.

Limited exam includes:

1. Evaluation of medical, occupational and exposure history
2. Vital signs including height, weight, blood pressure, pulse rate and rhythm
3. Laboratory testing for complete blood count, fasting blood chemistry profile including glucose and complete lipid profile (total cholesterol, HDL, LDL, triglycerides and total cholesterol / HDL ratio), urinalysis, thyroid profile including TSH (with T3 and T4 if TSH abnormal or clinically indicated), PSA test for males 50 years and older
4. Tuberculosis screening
5. Hemocult screening

Examination by, or under the auspices of a physician including an offer of a total body skin examination, and prostate and testicular or breast and pelvic examination, with mammography according to guidelines indicated above.

Examples of physical examinations performed based on NASA guidelines:

1. Evaluation and / or surveillance for exposure to identified hazardous substances and toxic chemicals
2. Chemical Laboratory Workers
3. Hazardous Waste Operations
4. Hearing Conservation
5. Insect and Pest Control Workers
6. Spray Painting
7. Water and Sewage Workers
8. Air Traffic Control
9. Confined Space / Tank Entry
10. Lift Operators
11. Divers
12. Down Range / Shipboard Workers
13. Remote Assignments
14. FAA exams
15. Fire Fighter
16. Cafeteria Workers
17. DART
18. HAZMAT / ERT
19. Heavy Ordnance / Explosives Handlers
20. Heavy Equipment Operators
21. Multiple Passenger Vehicle Operators
22. DMV / Commercial Drivers
23. Non-Crew Flying
24. SCAPE Suit Certification
25. Security Personnel
26. Disability Retirement
27. Fitness for Duty: Civil Servant
28. Fitness for Duty: Contractor
29. Return to Work
30. Console Color Spectrum
31. Dye Penetrant
32. Microscopic Color Spectrum
33. Solderers and Welders
34. Bloodborne Pathogens
35. Laser Workers
36. Animal Handlers
37. Radiation Workers

38. Respirator (Non-SCAPE)
39. Tuberculosis Control
40. Federal Employee Health Program
41. KC 135 Aircraft
42. Childcare Workers
43. Fitness Center Releases

2.2.7.1.8 Health Programs

The Contractor shall support a diverse spectrum of health programs, for example: hearing conservation, respiratory protection, safety and computer glasses, ergonomics, annual blood pressure clinic, annual flu clinic, EAP, and stress reduction. Counseling of employees and supervisors on the medical aspects/problems of alcoholism and drug abuse by qualified members of the Ames' Health Unit shall be provided in participation and cooperation with EAP as described below.

Additional specific health programs may be implemented as deemed necessary by the Government and approved by the Contracting Officer.

2.2.7.1.9 Health Maintenance & Job Fitness Evaluations

The Contractor shall perform health maintenance and job fitness evaluations for all Civil Service personnel according to the specified exam frequency. (see Paragraph 2.2.7.1.7)

The Contractor shall provide the following additional Health Services:

Results of the medical evaluation to the employee's personal physician upon the written request of the employee.

Additional tests or examinations at more frequent intervals, if required, by medical findings, hazards in the work environment, or return to duty evaluations requested by Human Resources Division or employee supervisor.

Medical clearance evaluations for Civil Service employees prior to using the Fitness Center.

At the discretion of the Human Resources Division, complete evaluations on newly appointed NASA employees, or employees transferring from other agencies or NASA installations at the time of their entrance for duty.

For supervisor-referred employees, return to work interviews and/or medical evaluations by the Health Unit physician.

Qualified Ames' Health Unit staff members who will provide guidance, assistance and limited counseling to employees and managers in conjunction with the EAP.

Preparation of the medical sections of accident, insurance, and health reports as required by Occupational Safety and Health Administration, Office of Workers' Compensation Program, and/or the State of California.

Maintenance of usage, disposal, and order records for medical supplies and medicines.

The Contractor physicians shall perform special evaluations when:

Medical findings indicate a need for further extensive evaluations,

Duties are located in hazardous areas, in which hazardous or toxic materials are handled

Employee's duties include participation in a Hazardous Materials Response team

Necessitated by job assignment and related regulations.

The Contractor shall provide follow-up monitoring of abnormal findings detected as a result of NASA health maintenance examinations within the scope and schedule as follows:

Employees Diagnosed With Hypertension: Offer weekly blood pressure evaluation and referral, as well as consultation with their private physician until adequate therapeutic control has been established.

Employees Diagnosed With Hyperlipidemia: Offer quarterly review with referral to and consultation with their private physician until adequate therapeutic control has been established.

Employees With Substance Abuse Problems: Provide counseling and/or referral to EAP for employees where possible substance abuse is suspected through medical observation, interview or supervisor recommendation.

Employees With Other Conditions: Conduct follow-up and supplemental medical histories of employees having conditions requiring treatment by the private medical community.

Medical Evaluations For Extended Absenteeism: The Contractor physician shall conduct interviews and/or perform return-to-work medical evaluations for Civil Service employees whose absences are in excess of five working days, or at the request of Human Resources Division or employee's supervisor.

2.2.7.1.10 Clinical Laboratory Support

The Contractor shall provide clinical laboratory support as required for implementation of the health maintenance evaluation program and the injury and illness treatment program. Tests shall include but not necessarily be limited to:

LABORATORY TESTING

COMPLETE BLOOD COUNT (CBC)

1. White Cell Count with Differential
2. Red Cell Count
3. Hemoglobin
4. Hematocrit
5. MCV
6. MCH
7. MCHC
8. Platelets

URINALYSIS – complete w/microscopic

CHEMISTRY PROFILE

1. Glucose
2. Blood Urea Nitrogen (BUN)
3. Creatinine
4. Calcium
5. Sodium
6. Potassium
7. CO₂
8. Chloride
9. Total Protein
10. Albumin
11. Globulin
12. A/G Ratio
13. Bilirubin – Total, Direct, and Indirect
14. Alkaline Phosphatase
15. AST (SGOT)
16. ALT (SGPT)
17. Iron
18. Phosphorus
19. Uric Acid
20. LDH
21. GGT
22. Cholesterol – Total, Triglycerides, VLDL, LDL, HDL, Cholesterol / HDL Ratio, LDL/HDL Ratio
23. Thyroid Stimulating Hormone (TSH)
24. T3 Uptake (T3RU)
25. Prostate Specific Antigen (PSA) – males 50 yrs. and older
26. PAP smear
27. Lead level / Zinc Protoporphyrin (ZPP) as indicated

2.2.7.1.11 Medical Advice & Assistance to Committees, Programs, Activities & Center Management

The Contractor physicians and qualified staff shall provide medical advice and assistance to committees, programs, activities and Center management. The Contractor shall implement health requirements and maintain standards (inspections, monitoring, abatements, training, etc.) as specified in:

- Executive Order 12196, "Occupational Safety and Health Programs for Federal Employees"
- 29 CFR 1960, "Basic Program Elements for Federal Employee Occupational Safety and Health Programs"
- APR 1700.1, Ames Safety & Health Manual
- 29 CFR 1910/1926, OSHA Safety and Health Standards.
- Joint Commission (JCAHO) Requirements.

2.2.7.1.12 Audiometric Analysis

The Contractor physician, in adherence to the Ames Hearing Conservation Program set forth in APR 1700.1, shall be responsible for conducting audiometric analysis on Civil Service personnel who are exposed to high noise levels. Audiometric analysis is not normally available to contract personnel who are similarly exposed. The Contractor physician shall confer with private physicians, as required, regarding exposed personnel, participate in training sessions, confer with and advise the Safety, Health and Medical Services Division in coordination with the above. Audiometric testing is performed annually on employees working in areas exposed to high noise levels, and retesting is done after 30 days when a threshold change is noted.

2.2.7.1.13 Administrative Functions, Meetings, Travel, & Training

Appropriate staff shall attend meetings, seminars, and other administrative functions. Contractor employees shall clearly identify themselves as contractor employees when attending such events.

Approval for proposed travel must be obtained via the Contract Task Order.

All requests for training (including attendance at meetings and seminars) away from the facility shall be addressed in the Contract Task Order.

2.2.7.1.14 Health Hazards

The Contractor physicians and nurses, in coordination with the Safety, Health and Medical Services Division, shall respond to medical inquiries and complaints relative to health hazards.

2.2.7.1.15 Personal Protective Equipment

Respirators

The Contractor physicians shall medically review personnel prior to measuring and fitting of respiratory protective gear in order to meet the requirements of APR 1700.1, Chapter 28 and OSHA Standard 1910.134.

Safety and Computer Glasses

As required, the Contractor shall provide to federal employees American National Standards Institute (ANSI)-compliant safety glasses and computer glasses, including a basic eye exam and vision test, fitting, and adjustment by a qualified optometrist or ophthalmologist. In addition, the contractor shall provide a selection of at least 40 different styles of glasses in plastic and at least 40 different styles of glasses in metal. At least 25 different styles of computer glasses shall be provided to protect employees from potential vision related ergonomic hazards.

2.2.7.1.16 Medical Surveillance of Exposed Personnel

In the absence of OSHA health standards, the Contractor physician shall utilize NIOSH criteria documents as guides for medical surveillance of exposed personnel. Medical testing to evaluate Biological Exposure Indices published by ACGIH may be required to evaluate specific exposures.

The Contractor shall coordinate with safety professionals and industrial hygienists to take appropriate corrective action following the receipt of alerts relative to newly recognized health hazards, carcinogens, mutagens, etc.

2.2.7.1.17 Drug Enforcement Administration (DEA) Registration

Contractor physicians shall be required to maintain a current Drug Enforcement Administration (DEA) registration to order, prescribe and administer controlled substances under the Center auspices. Controlled substances will be handled in accordance with applicable regulations.

2.2.7.1.18 Supplies & Equipment

Level of Supplies & Materials

Contractor shall maintain supplies and materials sufficient to ensure performance of the contract. The Contractor shall purchase equipment, such as replacement or new medical and exercise equipment, and instruments necessary for the proper operation of the Ames' Health Unit and Fitness Center and emergency response apparel/clothing for the Center's hazmat team members. All equipment purchases must be approved by the Contracting Officer after receiving concurrence from the COTR.

Analysis of Specific Medical Equipment

The Contractor shall provide on written request of the Government a comparative analysis of specific medical equipment or devices being considered for purchase. Furthermore, the Contractor shall inform the Government of any equipment deterioration and the resulting need for replacement or repair. The Contractor shall provide the Government with repair or supply sources and arrange for any necessary repairs to equipment after obtaining approval.

2.2.7.1.19 Contract Task Order

The Contractor shall request purchase authority for any order of materials, supplies, and pharmaceuticals, unavailable through Stores Stock, which exceed \$500. These requests shall be approved by the Government, prior to purchase.

For any piece of equipment whose unit price exceeds \$1,000, the Contractor shall obtain the Contracting Officer's written approval, via the COTR and Ames Industrial Property Officer, prior to making the purchase. A DD Form 1419 will be submitted for each piece of equipment, and a DD Form 1149 when property is received. The Contractor shall maintain a record of all purchases. This record shall include: quotes obtained or source justification, receipts, and description of materials and equipment purchased, PO number, and date of purchase.

2.2.7.1.20 Employee Assistance Program

NASA's Employee Assistance Program is a comprehensive educational and diagnostic system that establishes and provides appropriate assessment and referral services for an organization, its civil servant employees and dependents, primarily in the areas of:

- Substance abuse
- Psychological difficulties
- Personal relationship problems
- Work-related problems
- Legal or financial difficulties
- Stress-related illnesses

EAP Goals and Objectives

The goals of the Center's Employee Assistance Program are to restore employee job performance to acceptable standards through therapeutic services, and to ensure that civil servants and their dependents receive the same consideration and offer of assistance that is extended to employees having other health problems or illnesses. In order to achieve these program goals:

- Employees will be familiarized through training sessions with the concepts, functions and accessibility of NASA's EAP.
- Supervisors and managers will have training every three years to inform them of their responsibilities to their employees and emphasize their roles with respect to substandard job performance and the use of the EAP as a management tool.

Statement of Functions and Requirements

The Contractor shall: (a) meet the applicable requirements of NPR 3792.1A Plan for a Drug-Free Workplace; (b) have accumulated an overall EAP experience of at least 1,000 cases; and (c) be affiliated with a chemical dependency unit on a consultant basis.

The Contractor shall provide the following:

- An off-site location for employee consultations with minimum daily working hours of 8:00 a.m. to 5:00 p.m., Monday through Friday, and emergency counseling available 24-hours/day, 7-days per week with access to a psychiatrist. These services shall be available to the employee through self-referral, supervisor referral, Ames' Health Unit referral or EAP Officer referral.
- Association with and access to a hospital, detoxification/care unit and access to such units in various cost categories in order to place an employee consistent with health insurance and financial status.
- Up to five visits per problem per employee for short-term counseling. The number of visits will be determined on a case by case basis. In unusual circumstances, substance abuse cases, or formal supervisor referrals, the number of visits are not limited to five (5) and will be determined by the counselor.
- Assistance in an on-site program of limited counseling and advice in the resolution of individual employee problems when requested by the employee, supervisor or civil service EAP Officer.
- Assurance that employee record confidentiality shall be maintained at the on-site and off-site locations as in the Privacy Act of 1974, NASA Privacy Act System of Records (NASA 10HIMS), and NP 1830.1A NASA Employee Assistance Program and their subsequent replacements.
- Access to a wide range of professional services in the community for referral of employees.
- Counselors currently licensed by the State of California.

In coordination with and approval of the EAP Officer, the Contractor shall:

- Conduct a comprehensive program and a monthly report for management initiated assessments, employee and family referrals for problems including, but not limited to, emotional, personal relationship, work, financial, stress or conflict, and chemical dependency issues.
- Provide information/training sessions for employees on the nature and scope of the Employee Assistance Program.
- Accompany EAP Officer to meet with the Center Deputy Director quarterly to apprise him of any pertinent issues occurring at the Center.
- Provide quarterly 1-2-hour supervisor training sessions for management personnel addressing subjects such as, but not limited to, identifying poor work

performance, confronting a troubled employee, accessing the EAP and using the employee assistance program as a management tool.

- Provide a monthly 1-hour EAP training for all employees on current EAP topics. Topic list is to be reviewed and approved by EAP Officer at the start of each calendar year.
- Provide one EAP table/display in the Ames cafeteria once per month during lunch (11:30am to 1:00pm) to distribute educational materials and interact with employees to both advertise the employee assistance program and to explain how to utilize the EAP services.
- Provide verbal and written communication with the EAP Officer to aid in the exchange of information on program status and visibility.
- Provide documentation of management referred cases indicating completion or non-completion of prescribed treatment.

2.2.7.1.21 Fitness Center

The manager/supervisor of the Fitness Center shall:

- Oversee and supervise the Fitness Center staff and operations, under the general supervision of a physician.
- Coordinate exercise programs, group exercise classes, and provide exercise prescriptions for individuals or groups.
- Maintain up-to-date knowledge in the areas of exercise equipment and exercise physiology by attending recognized informational/training conferences, seminars, and continuing education, and communicating with outside sources.
- Maintain equipment and area to provide a safe, clean, exercise facility. This includes monitoring the fitness facilities and the Par Course and reporting and coordinating needed equipment maintenance and repairs.
- Publicize exercise programs, group exercise classes, fitness programs, and running events that are available to employees. All material to be printed must be approved by the Government prior to submission of originals for copying and distribution.
- Assure that all Contractor Fitness Center employees maintain current certification in CPR/AED and First Aid.
- Assure that the Fitness Center staff is familiar with the College of Sports Medicine requirements.
- Ensure each client who participates at the Fitness Center maintains an updated Medical Clearance form on file with the Fitness Center. This form must be updated every year. Clients are required to attend a 15-minute introductory session before using the Fitness Center. The introduction is used to inform clients about the classes, programs, and weight room etiquette. If the clients are interested in a personal fitness evaluation or exercise routine, appointments are made at that time.

Fitness programs shall include, but not be limited to:

- Individual tests available for fitness evaluations shown in table below.

Weight	Resting Heart Rate
Resting Blood Pressure	Body Measurements
Fat Percentage	Cardiovascular Measurements (Step Test or Rockport Walking Test)
Grip Strength	Upper Body Endurance (Bench Press)
Abdominal Endurance (Curl Ups)	Flexibility (Sit and Reach)

- Routine Classes: An average of 40 classes/week are held at the Fitness Center throughout the year. The classes below are usually offered biweekly or weekly basis throughout the year and changed on a quarterly basis.

- Step-Kick-Boxing
- Cardio Step
- Aerobics
- Back Ball
- Circuit Training
- Muscle Toning
- Step and Muscle Toning
- Ski Conditioning
- Martial Arts
- Tai Chi
- Yoga

In addition, chair exercise classes (Sittercise™) are held once per quarter.

- Fat Loss Program (12-weeks):
Up to 40 individuals per session are accepted into this program. This 12-week program expects the client to: weigh in weekly; attend monthly lectures given by a registered nutritionist; modify and monitor their eating habits to a low fat; lower calorie diet and exercise a minimum of 3 times/week. The introductory session (where clients are measured, goals are determined, and nutritional materials are distributed) takes ~60 minutes/client. Follow up sessions take ~20 minutes/client.
- Individual Exercise Programs:
Qualified personnel prepare a written program based on the client's needs, limitations and goals. Most clients require ~60 minutes to teach the proper exercising techniques required for the routine. The written program takes ~15 minutes of the staff time to complete prior to the teaching session. Approximately 3-5 clients receive new programs each week.

- 5K Run/2-mile Walk-Run:
The third Tuesday of each month a 5K run/2 mile walk-run is held. Approximately 75 runners and walkers participate per event.
- Fall and Spring Fun Runs:
These 2-mile and 10K runs, usually held in May and October, draw approximately 400 participants from the Center. This event requires solicitation and coordination of approximately 25 volunteers.
- Rock Climbing Training Wall Instruction:

Each client desiring to use the Training Wall for rock climbing is required to complete introductory training. Typically this is offered the first Tuesday of each month. After completing this training, the client receives a Training Wall card that must be displayed prior to climbing on the wall.

2.2.7.1.22 Interface with Public Health Agencies

The Contractor shall support the Government in the interface with Public Health Agencies on specific problems that may arise.

2.2.7.1.23 Information & Reference Sources

The Contractor shall fund the necessary subscriptions and literature searches to provide the staff with up-to-date information and reference sources.

2.2.7.1.24 Additional Services

Consultants

Based on the physician's recommendation, the contractor will obtain services of consultant physicians or other medical specialists. For example, consultants may include: Occupational Health Specialists in Toxicology, Cardiologists, Radiologists, Ophthalmologists, Psychiatrists, Pathologists, Dentists, Otolaryngologists, Internists, Audiologists, Dietitians, Laboratory Technicians, Optometrists, Dermatologists, primary care physicians, ER physicians and other Health Care Specialists.

Medical Services for Human Research Program

Provide medical evaluations for human subjects participating in human research experiments, as needed. The extent of the medical evaluation is determined by the Medical Services Officer and may include some, or all of the following:

Complete Medical History

Complete Physical Examination

Resting Electrocardiogram and/or Stress Electrocardiogram

Pulmonary Function

Laboratory tests including: CBC, complete chemistry panel, blood coagulation studies, and specialty laboratory tests, as required

Review research protocol for each project

Certify that subject is able to participate in the study

2.2.7.2 Documentation Requirements

2.2.7.2.1 Medical Records

The Contractor shall be responsible for the maintenance of accurate and complete medical records. These records will be considered confidential information and shall be safeguarded in accordance with the provisions of the Privacy Act of 1974 as well as the Health Insurance Portability and Accountability Act of 1996. The information contained in these records shall be sufficient to provide data for use in job placement; establish health maintenance, treatment and rehabilitation; to use in epidemiological studies; and help management with program evaluation and improvement. Medical records shall be disposed of in accordance with the NASA Record Disposal Schedule, Privacy Act of 1974, Systems of Records, and NASA 10 Health Information Management System (HIMS). Records considered to be Employee Assistance Program (EAP) related (whether the employee is referred or not) must be filed separately and kept in a secure, locked file, and are not to be combined with other medical records.

2.2.7.2.2 EAP Report

The Contractor shall provide a report on a monthly basis that reflects statistical and patient tracking data on EAP participants in at least the following areas:

Opening Statistics	New Cases by Organization Code
Total Open Cases	Client Status
Total Closed Cases	Referral Source
Problem Area	Type of Referral
Referred Out	Employee Demography
Age	Counseling Outcome

This report must be prepared in accordance with laws, policies and regulations concerning patient confidentiality.

In addition, the contractor shall prepare an annual report at the end of each Fiscal Year (beginning of October through end of September).

2.2.7.3 Schedule of Operation

Operating Hours

The Contractor shall operate the Health Unit from 7:30 a.m. to 4:30 p.m. Monday through Friday (excluding Government holidays). Physician shall cover either 7:30 a.m. to 4:00 p.m. or 8:00 a.m. to 4:30 p.m. with the remaining half-hour covered by the Nurse Practitioner.

The Contractor shall operate the Fitness Center from Monday through Friday (excluding Government holidays) according to the following schedule:

The Contractor shall operate the Fitness Center from Monday through Friday (excluding Government holidays) according to the following schedule:		
Session Start	Session End	Average Monthly Attendance
6:00 AM	9:00 AM	1,000
11:00 AM	2:30 PM	2,000
4:00 PM	7:00 PM	1,200

2.2.7.4 Standards of Performance

The Contractor shall be responsible for providing and maintaining standards of performance (professional, ethical, and technical) in accordance with the standards of the local medical community for the conduct of the Occupational Health Program, and shall assign and use only those personnel whose performance conforms to such standards.

2.2.7.5 Supplemental Information

Based on recent data, the following ranges of services have been typically experienced annually:

Occupational Health Program	Average
Health Screening Exams	2,000
Job-Related Exams	2,000
Immunizations	1,900
Occupational Injury/Illness	450
Consultations	3,000
911 Response	48
Safety Glasses/Vision	150
Non-Occupational Treatment	2,000
Fitness Center Visits	43,000
EAP Cases	150

3 Functions to be Performed: Collaborative Elements

The following elements are to be performed in coordination with the Environmental Services Division.

3.1 Emergency Response

3.1.1 Contractor Responsibilities

The Contractor shall, in coordination with the Safety, Health and Medical Services Division and the Environmental Services Division:

(Note: The plant engineering team will provide response to and cleanup of routine hazardous materials releases. Contractors from the Environmental Division, combined with contractors from the Safety, Health and Medical Services Division will provide a pool of personnel for 24 hour compliance and resource assistance/support to the plant engineering contractor, as described in detail below.)

- Provide 24-hour emergency response (compliance and technical resource) coverage, 365 days a year.
- From 8:00 a.m. to 4:30 p.m., Monday through Friday, except Government holidays, the contractor shall return all phone or pager calls within 5 minutes to the NASA dispatch personnel and Code Q on-call civil servant, and respond physically to the ER site and the incident commander (typically the Ames Fire Chief) within 15 minutes of the first call from the NASA dispatch or the Code Q on-call civil servant.

All other days and times, except from 8:00 a.m. to 4:30 p.m., Monday through Friday:

- The Contractor shall return all phone or pager calls within 10 minutes to the Code Q on-call civil servant and NASA dispatch.
- Respond physically to the ER site and the incident commander (typically the Ames Fire Chief) within 60 minutes of the first call from the Code Q on-call civil servant or NASA dispatch which ever was first.
- The contractor shall evaluate the hazardous materials release scene, notify the Government of regulatory reporting requirements, and make all required notifications in the absence of the Government.
- The contractor shall determine if additional safety, health and/or environmental human resources are required, and if so, provide (within 90 minutes) safety, industrial hygiene, health physicist, and/or environmental professionals to the scene, as appropriate.
- Act as the on-site safety officer providing safety and health information, compliance assistance, PPE recommendations, and general safety.
- In the case of an unusually large or complex release, the contractor's trained personnel shall participate in the response and clean-up.

- Notify the Environmental Division that an environmental specialist is required to assist with reporting and/or response. (Typical emergency responses are chemical, biological, and/or radiological in nature. For example, these responses are related to gas odors, spills, safety and health issues, tank alarms, and toxic gas alarms.)
- Assist the Ames Fire Department and Plant Engineering in performing confined space rescue ER incidents, by providing typical safety and health duties that would support such an entry. (For example: the on-scene industrial hygienist might assist in using a portable gas detector and evaluating toxic gas concerns.)
- Participate in emergency preparedness planning activities, training, and practice drills, as requested by the Government.
- The contractor shall ensure that at least 12 on-site personnel (at least 2 IHs, 2 Safety, 2 HP and 6 Environmental) are trained to wear respirators and trained to the First Responder Operations level and the Hazardous Materials Industrial Technician level.
- Develop safety plans for hazardous material incident response and/or participate as emergency response team members for Hazmat Levels A, B, C and D.
- Purchase and maintain emergency response equipment as needed.

3.1.2 Documentation Requirements

The Contractor shall furnish a written report upon completion of each emergency response. The report shall include survey findings, analytical data, and recommendations to avoid a similar incident. Reports required by regulations shall be provided in the format and within the time frame specified by the applicable law. The Contractor shall prepare an annual summary of hazardous materials spills, and other ad hoc reports as requested.

Provide at least two (2) metrics monthly for each program, to graph and measure program progress and/or status.

3.1.3 Supplemental Information

Significant interfacing, cooperation, training, planning and management, with other emergency response teams (e.g., Fire Department, Disaster Assistance and Response Team, Moffett Security Police, Moffett Dispatch) will be required.



Emergency Response History

Year	Fluid from a vehicle or stationary engine/tank	Jet Fuel	Gas Leak or Gas/Smoke Odor including Fire	PCB oil, Capacitor, or Light Ballast	Mercury	Water including Grey/waste water	BBP, Body Fluid, PIM	Tank Alarm	Inadvertent fire suppression system discharge	Other Hazardous Material	Other Non-Hazardous		Total Responses for Year
	VS	JP	Odor	PCB	Hg	H ₂ O	BBP	TA	FS	OHM	NHM		
1995	6	2	4	0	0	1	0	0	1	0	1	1995	15
1996	16	5	2	9	3	1	0	0	1	4	1	1996	42
1997	14	7	4	1	5	2	5	1	1	3	1	1997	44
1998	10	6	2	0	0	1	1	4	0	2	3	1998	29
1999	10	5	2	1	0	1	0	0	0	1	0	1999	20
2000	5	3	0	2	0	2	3	0	0	3	0	2000	18
2001	7	2	2	2	2	0	0	0	0	3	0	2001	18
2002	10	3	0	2	2	3	0	1	1	7	1	2002	30
2003	11	6	1	0	0	1	3	0	1	2	0	2003	25
	Veh	JP	Odor	PCB	Hg	H ₂ O	BBP	Tank	FS	OHM	NHM		
Totals by Type	89	39	17	17	12	12	12	6	5	25	7		

Legend	
Veh	Vehicle Spill/Release
JP	Jet Fuel
Odor	Odor of Gas, Smoke
PCB	PCB oil or light ballast
Hg	Mercury
H ₂ O	Water, grey water, waste water
BBP	Blood-borne Pathogens
TA	Tank Alarm
FS	Inadvertent Fire Suppression Discharge
OHM	Other Hazardous Material
NHM	Other - non-hazardous

3.2 Training (Safety, Health and Environmental)

3.2.1 Contractor Responsibilities

The Contractor shall:

- Develop, implement and maintain the occupational safety, health and environmental training programs, which provide instruction for personnel in relevant policies, procedures, guidelines, and regulations. The safety and health contractor will manage all aspects of safety and health training. The environmental training classes will be developed and presented by the environmental contractor. However, the Safety and Health contractor will include environmental classes in the Training Catalog scheduling and database. The environmental contract will have their own trainers, but the majority of the training development and management will reside with the safety and health contractor including catalogs, database management, scheduling, tracking, computer base training management, training reports, etc.

Courses offered under the training program shall include, but not limited to:

CPR INTRO.	4 HR
AED INTRO.	0.5 HR
FIRST AID	3.5 HR
CPR REFRESHER	2 HR
AED REFRESHER	0.5 HR
ASBESTOS AWARENESS	2 HR
BACK INJURY PREVENTION	2 HR
BLOODBORNE PATHOGENS	2 HR
BLOODBORNE PATHOGENS REFRESHER	1 HR
CHEMICAL HYGIENE FOR LABORATORY WORKERS	3 HR
COMPRESSED GAS	.5 HR
COMPRESSED GAS REFRESHER	.5 HR
CRYOGENIC	.5 HR
CRYOGENIC REFRESHER	.5 HR
CONFINED SPACE ENTRY INTRO.	12 HR
CONFINED SPACE ENTRY REFRESHER	4 HR
DECONTAMINATION PROCEDURES	1 HR
ERGONOMICS FOR INDUSTRIAL WORKERS	2 HR
ERGONOMICS FOR OFFICE WORKERS	2 HR
ERGONOMICS FOR LABORATORY WORKERS	2 HR
EXPLOSIVE SAFETY MANAGEMENT AND ENGINEERING	8 HR
FALL PROTECTION INTRO.	8 HR
FALL PROTECTION REFRESHER new	4 HR
FIRE EXTINGUISHER SAFETY	2 HR
FORKLIFT SAFETY	16 HR
FORMALDEHYDE OPERATIONS	1 HR
HAZARD COMMUNICATION FOR CHEMICAL WORKERS	3 HR
HAZARD COMMUNICATION FOR OFFICE WORKERS REFRESHER	3 HR
HEARING CONSERVATION	1 HR
HEARING CONSERVATION REFRESHER	.5 HR

LABORATORY BOOTCAMP FOR STUDENTS	4 HR
LEAD AWARENESS	2 HR
LOCKOUT/TAGOUT	4 HR
MANLIFT (AERIAL LIFT)	8 HR
METHYLENE CHLORIDE	1 HR
OVERHEAD CRANE non-critical lifts	8 HR
OVERHEAD CRANE critical lifts	16 HR
OVERHEAD CRANE REFRESHER	4 HR
PERSONAL PROTECTION INTRO.	2.5 HR
PERSONAL PROTECTION REFRESHER	1 HR
RESPIRATORY PROTECTION INTRO.	4 HR
RESPIRATORY PROTECTION REFRESHER	1 HR
RADIATION SAFETY, ANCILLARY	CBT
RADIATION SAFETY, EXCEPTED PACKAGE SHIPPING	CBT
RADIATION SAFETY, INDUSTRIAL RADIOGRAPHY	CBT
RADIATION SAFETY, INTRO.	CBT
RADIATION SAFETY, LASERS	CBT
RADIATION SAFETY, MEDICAL PERSONNEL	CBT
RADIATION SAFETY, MICROWAVE AND RF	CBT
RADIATION SAFETY, RADIOACTIVE WASTE HANDLERS	CBT
RADIATION SAFETY, REFRESHER	CBT
RADIATION SAFETY, X-RAY	CBT
SMOKE HOOD	4 HR

- Audit training activities, develop and present various training courses, and prepare training plans and reports as requested. Prepare annual training plan, including environmental courses, to be updated quarterly.
- Develop, update, and standardize course curricula annually.
- Acquire additional expertise, courses, and/or materials for training as needs are identified by NASA.
- Maintain records of all training activities and a database of trained and certified personnel, including environmental courses. Database to include fields selected by NASA.
- Provide certified trainers as required (e.g., CPR/AED, crane training)
- Maintain training rooms in a clean and organized manner.

3.2.2 Documentation Requirements

The Contractor shall prepare monthly status reports including current certification status for equipment operators, status of refresher training requirements, names and job descriptions of each person who attended the training, identifying the training courses that were completed, attendance reports, etc. to supervisors as requested.

3.3 Computer Services Support

The Contractor shall provide general support in the areas discussed below for the Safety, Health and Medical Services Division and the Environmental Services Division:

- Computer systems operations support to include, at a minimum, performing periodic system and user backups, archiving and restoring files as needed, performing file directory cleanups, maintaining orderly operational areas, monitoring printers, maintaining an adequate supply of consumable items, etc.
- System Administration of computing resources to include, at a minimum, organizing file structures, including data and database administration, maintaining system and user accounts, managing disk storage, coordinating with support organizations for system preventive maintenance and repairs, trouble-shooting system problems, preparing system status reports on performance and utilization, maintaining system configuration records, assisting with hardware and software installations, etc. The administrator is to make use of internal support organizations to the maximum extent possible so that administration costs are minimized.
- System management of the computing environment to include, at a minimum, monitoring and tuning performance of systems, managing system resource allocations, trouble-shooting system problems, developing command procedures and tools as required, planning/monitoring/performing installation of hardware and software upgrades/products, preparing system management reports, establishing and implementing system security procedures as required, anticipating growth needs and assisting in plans to meet those needs, etc. The manager is to make use of internal support organizations to the maximum extent possible so that management costs are minimized.
- User support and assistance for approximately 60 users, including the Safety, Health and Medical Services Division and the Environmental Division, through consultation, training in the use of automated resources, trouble-shooting user problems, and responding to user queries.
- Network operations support to include, at a minimum, monitoring communications equipment, coordinating with support organizations for network equipment maintenance and repairs, maintaining communications configuration records, trouble-shooting network problems, maintain security in accordance with NASA policy.
- Development and web-implementation of 4D™ database for the training, and other safety and industrial hygiene and environmental programs.
- Maintenance of the Health Unit's medical records database using Occupational Health Manager™ software.
- Maintenance, upgrades, daily changes, and updating of the Occupational Safety, Health, & Medical Services Division's home page.
- Written documentation for all databases, including file structures, code, data dictionaries, user manuals, etc.

4 General Requirements

4.1 Technical Presentations

The Contractor shall provide oral or written technical presentations, as requested by NASA, concerning any safety, health or medical topic.

4.2 Reports & Documentation

The Contractor shall submit periodic, demand and event-driven technical, administrative, contract management, and financial management reports, by functional area, to provide a current and accurate picture of workload and project status during specified reporting periods varying from daily to annually, depending on the task. The Contractor may be required to change, modify, delete, or add report requirements as requested for NASA purposes. The Contractor shall submit information in electronic and/or hard copy formats as requested by NASA.

The Contractor shall either utilize NASA furnished databases or other NASA-authorized software, or provide software if requested by NASA. The Contractor shall also input data, maintain data, generate reports, train NASA employees on its use and furnish the software and its contents to the NASA. The software and its data contents are considered NASA property. At the conclusion of the contract, all software and data contents, including supporting documentation, shall be turned over to NASA.

4.2.1 Technical Reports

The Contractor shall provide, at a minimum, the technical reports as described in this Statement of Requirements and as requested by the Government.

4.2.1.1 Standard Operating Procedures (SOPs)

In order to ensure that routine tasks are performed consistently and that comprehensive evaluations are conducted, the Contractor shall generate and maintain Standard Operating Procedures. The SOPs shall describe the methods to be used, data to be collected, standardized formats to be used for presentation of data and results, etc. SOPs shall be submitted to NASA for review and approval. SOPs shall be reviewed and updated as appropriate, at least annually. Where existing SOPs have been developed, NASA will make them available during phase-in.

4.2.1.2 Technical Progress Report

The Contractor shall prepare a technical progress report for all ongoing work and any work completed within the report period, progress for the report period, any problems encountered or foreseen, and schedule summary.

4.3 Off-Site Activities

The Contractor shall provide occupational safety, industrial hygiene, and medical services off-site as required by NASA CTOs. In addition, Contractor personnel shall travel to other locations as necessary in support of individual CTOs. All travel shall be authorized in advance by the Government.

5 Additional Requirements

The Government may issue separate ask orders for the requirements described in this section. The Contractor shall provide the support necessary to fulfill these requirements.

5.1 Technical Studies

The Contractor shall conduct specified studies and/or analyses in the areas of occupational safety, industrial hygiene, fire protection, and occupational medicine. Studies shall include compliance reviews, site investigations, audits and inspections, and other topics as requested. All technical studies shall be described and controlled by CTOs.

5.2 Engineering Cost Estimates

Prepare engineering cost estimates for various safety and health issues as requested.

5.3 Off-Site Activities

The Contractor shall provide occupational safety, industrial hygiene, and medical services off-site as required by NASA. In addition, Contractor personnel shall travel to other locations as necessary in support of individual CTOs. All travel shall be authorized in advance by the Government.

5.4 Asbestos and Lead Abatement

The Contractor shall provide professional asbestos and lead abatement and consultation services, as requested by the Government. The Contractor is to use only individuals and/or companies that are appropriately trained, licensed, certified, etc. as required by applicable regulations and NASA policy.

5.5 Additional Information

Refer to the slides from the pre-solicitation conference for some historical data.

6 Personnel Qualifications

Certain positions and levels of experience within the occupational safety, industrial hygiene, and medical, disciplines are considered most important to the successful performance of this contract. Assignments may be given in terms of general objectives and are frequently characterized by problems that are clearly defined. The Contractor shall analyze the problem, formulate an approach for solution, and conduct follow-up investigations. Contractor personnel must have proven ability to plan work in detail, be innovative, be responsive, estimate costs, develop and follow project schedules, track performance, update plans as required, and coordinate their activities within the structure of a larger project team minimum qualifications of the staff to accomplish this work are defined below.

The Contractor shall provide personnel for each of the following functions.

6.1 Program Manager

The Program Manager (PM) will provide overall technical leadership for the Contractor's staff. The PM acts as a focal point interfacing with Government representatives. The PM shall establish procedures for accomplishing all aspects of the various work functions of the Statement of Requirements. The PM shall organize, direct, monitor, and motivate the Contractor staff in their execution of the work functions; and establish procedures to review the technical adequacy and accuracy of analysis and reports prepared by the staff. The PM shall have Bachelor's degree in an appropriate discipline, and a minimum of seven (7) years experience in managing a health & safety effort involving several of the work functions described in the Statement of Requirements.

6.2 Administrative Manager

The Administrative Manager (AM) is generally responsible for personnel, industrial relations, travel, finance, procurement, data processing, subcontracting, etc. The AM directs the reporting of all contract costs, such as Contractor staff work hours, material procurement, and subcontracting, to appropriate cost accounts required by NASA. The AM is responsible for the operation and maintenance of a cost accounting and financial reporting system adequate to identify and discriminate among costs for various work functions, a timely manner. The AM shall have a Bachelor's degree in Business Administrative or Accounting or equivalent, and a minimum of five (5) years experience in some combination of the skill areas described above.

6.3 Computer Systems Support

The Computer Systems Support (CSS) is generally responsible for hardware and software specification and installation, for software configuration for safety, industrial hygiene compliance programs, for assuring adequate information documentation and retrieval, for hardware/software problem solving, and for training NASA personnel and Contractors in computer usage. At least five (5) years of current appropriate experience is required.

6.4 Technical Leaders

Technical Leaders (TLs) shall perform fieldwork as well as provide coordination for the Contractor's personnel assigned to on or more functional areas. The TLs shall be responsible for technical matters relating to their functional areas, coordinate work with other work functions of the contract, coordinate with other contract personnel, and attend meetings as requested for the work function supported. TLs shall interface regularly with the respective NASA professionals to assess, coordinate, and adjust the effort of ongoing Service Requests and Task Orders, and provide informal assessment of individual CTO performance, status, and schedule. TLs shall have a minimum of a bachelor's degree and 10 years of experience in the discipline of their functional areas of responsibility and a minimum of five (5) years experience in a safety & health technical leadership capacity.

6.4.1 Industrial Hygiene

Industrial hygiene personnel shall have at least 16 semester units or equivalent quarter units in chemistry, and shall function under the on-site direction of an American Board of Industrial Hygiene Certified Industrial Hygienist with at least two years of college chemistry. The experience level of the industrial hygiene group must be appropriate for managing key NASA facilities programs such as:

- Hearing conservation
- Respiratory protection
- Confined space entry
- Chemical hazard communication
- Gas detection
- Biohazards
- Lead
- Legionella
- Asbestos
- Mercury
- Regulated carcinogens
- Indoor air quality
- Chemical hygiene programs
- Ventilation

The IH group must be capable of responding to requests covering all types of industrial hygiene concerns and capable of providing training in IH-related areas.

6.4.2 Fire Protection Engineer

The Fire Protection Engineer shall be a California registered professional engineer, with a minimum of five (5) years experience in diversified fire protection engineering practice. This individual must have an understanding of the technical fire life safety requirements for all types of building construction, industrial operations and for the installation of scientific and computer equipment. Position requires knowledge in fire suppression systems, alarm systems, smoke control, compartmentalization, water systems, electronics, electricity, mechanics, heating, lighting, ventilation, architecture, flammability of various chemical substances and materials, construction methods, building codes, inspection, performance testing, and fire safety codes. Must be knowledgeable in NFPA, UBC, FM and UL standards and criteria.

6.4.3 Health Physics

The health physics team shall function under the direction of a Radiation Safety Officer (RSO) approved by the Nuclear Regulatory Commission. The experience level of the health physics team must be appropriate for providing oversight of research use of radioisotopes, X-ray generating equipment, lasers (class II, III, and IV), and microwave transmitters. Qualifications of health physics program members are expected to range from the technical level to the RSO. The RSO must have a bachelor's degree and a minimum of 10 years of health physics experience and be a Certified Health Physicist.

6.4.4 Occupational Safety

The lead for occupational safety is required to have a minimum of a bachelor's degree in engineering, safety engineering, or equivalent; maintain Certified Safety Professional status; and have a minimum of 10 years experience in the development and implementation of safety polices and programs. Additional experience is required in project management and written communication skills. Qualifications of safety program personnel are expected to range from those of the lead safety engineer to the technical level.

6.5 Medical Services

One physician must be the Medical Director and be fully responsible for the Ames Health Unit operations including fitness operations, EAP and medical emergency response. The Medical Director must be fully capable of both typical physician and senior management responsibilities.

At least one physician shall be a fully qualified flight surgeon (Senior Aviation Medical Examiner). If more than one physician is on staff then only one physician needs to be fully qualified flight surgeon and the physician with the flight surgeon qualifications only needs to work the minimum hours needed to complete NASA required FAA exams.

6.5.1 Physician

All physicians shall be licensed to practice medicine in the State of California and shall have a background in either general practice or internal medicine. All physicians working in the Ames Health Unit shall be certified by either the American Heart Association or the American Red Cross status in "Advanced Cardiac Life Support" (ACLS) and maintain current certification.

6.5.2 Registered Nurses

Registered Nurses and Nurse Practitioners shall be licensed in the State of California. At least two nurses shall be certified by either the American Heart Association or the American Red Cross in Advanced Cardiac Life Support (ACLS) and maintain current certification.

At a minimum the technical staff shall include one Full Time Equivalent (FTE) Medical Director (Medical Doctor or Doctor Osteopathy), one FTE Registered Nurses, and one FTE Nurse Practitioner. The Government prefers that at least one person on staff have current paramedic status.

6.5.3 Fitness Center Manager

The Contractor shall provide one FTE professional with a bachelor's degree in exercise physiology or related field to supervise the operations of the Fitness Center.

6.5.4 Audiometric Testing

The Contractor shall provide to the Ames Health Unit at least one staff member who is a Certified Occupational Hearing Conservationist by Counsel For The Accreditation in Occupational Hearing Conservation to perform audiometric testing.

6.5.5 Substitutes

Requirements are waived for medical professionals substituting in the following Key Personnel positions on a short-term basis only.

The requirement for a Flight Surgeon or FAA Class I Examiner accreditation can be waived by the Government for a period of up to two (2) weeks, per request, for vacations, training or other absences from the Center.

The requirement for a Registered Nurse can be waived by the Government for a period of up to two (2) weeks, per request, for vacations, training or other absences from the Center for less than two (2) weeks.

6.6 Collaborative Elements

6.6.1 Training Specialist

The Training Specialist (TS) shall conduct training courses in one or more facets of hazardous materials management, industrial hygiene compliance, or occupational safety. The TS shall have a Bachelor's degree in an appropriate technical discipline and experience in identifying, planning, and coordinating the above mentioned training activities and in designing, developing, conducting, and evaluating training courses using a variety of training techniques and methods. The TS must have excellent communication skills. Any regulatory requirements for qualifications of trainers must be met.

6.6.2 Emergency Response Manager

At least one person must be identified by the contractor as the Emergency Response Manager. The Emergency Response Manager can either be an individual dedicated full-time to ER or a collateral duty of a safety, health, medical. The ER manager must have a bachelor's degree in safety, industrial hygiene, medical or environmental and have at least 16 semester units or equivalent quarter units of chemistry, as well as at least two years ER/HazMat experience and current First Responder Operations and Industrial Technician certifications.

7 Other Key Information