

SOLICITATION, OFFER AND AWARD			1. This Contract Is A Rated Order Under DPAS (15 CFR 700)	Rating DOA4	Page 1 of 42
2. Contract No.	3. Solicitation No. W56HZV-04-R-0686		4. Type of Solicitation Negotiated (RFP)	5. Date Issued 2004AUG06	6. Requisition/Purchase No. SEE SCHEDULE
7. Issued By TACOM WARREN AMSTA-AQ-ABGA WARREN, MICHIGAN 48397-5000 HTTP://CONTRACTING.TACOM.ARMY.MIL		Code W56HZV	8. Address Offer To (If Other Than Item 7)		

SOLICITATION NOTE: In sealed bid solicitations 'offer' and 'offeror' mean 'bid' and 'bidder'.

9. Sealed offers in original and 1 signed copies for furnishing the supplies or services in the Schedule will be received at the place specified in item 8, or if handcarried, in the depository located in _____ until 04:00pm (hour) local time 2004SEP07 (Date).

Caution - Late Submissions, Modifications, and Withdrawals: See Section L, Provision No. 52.214-7 or 52.215-1. All offers are subject to all terms and conditions contained in this solicitation.

10. For Information Call:	Name JEFFREY BEAN E-mail address: BEANJ@TACOM.ARMY.MIL	Telephone No. (Include Area Code) (NO Collect Calls) (586)574-7860
----------------------------------	---	--

11. Table Of Contents

(X)	Section	Description	Page(s)	(X)	Section	Description	Page(s)
Part I - The Schedule				Part II - Contract Clauses			
X	A	Solicitation/Contract Form	1	X	I	Contract Clauses	19
X	B	Supplies or Services and Prices/Costs	4	Part III - List Of Documents, Exhibits, And Other Attachments			
X	C	Description/Specs./Work Statement	6	X	J	List of Attachments	24
Part IV - Representations And Instructions							
X	D	Packaging and Marking		X	K	Representations, Certifications, and Other Statements of Offerors	25
X	E	Inspection and Acceptance	13	X	L	Instr., Conds., and Notices to Offerors	34
X	F	Deliveries or Performance	14	X	M	Evaluation Factors for Award	42
X	G	Contract Administration Data	16				
X	H	Special Contract Requirements	17				

OFFER (Must be fully completed by offeror)

NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.

12. In compliance with the above, the undersigned agrees, if this offer is accepted within _____ calendar days (60 calendar days unless a different period is inserted by the offeror) from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.

13. Discount For Prompt Payment (See Section I, Clause No. 52.232-8)

14. Acknowledgment of Amendments (The offeror acknowledges receipt of amendments to the Solicitation for offerors and related documents numbered and dated:	Amendment Number	Date	Amendment Number	Date

15A. Contractor/Offeror/Quoter	Code	Facility	16. Name and Title of Person Authorized to Sign Offer (Type or Print)
15B. Telephone Number (Include Area Code)	15C. Check if Remittance Address is Different From Blk 15A- Furnish Such Address In Offer		17. Signature
			18. Offer Date

AWARD (To be completed by Government)

19. Accepted As To Items Numbered	20. Amount	21. Accounting And Appropriation	
22. Authority For Using Other Than Full And Open Competition: <input type="checkbox"/> 10 U.S.C. 2304(c)() <input type="checkbox"/> 41 U.S.C. 253(c)()		23. Submit Invoices To Address Shown In (4 copies unless otherwise specified)	Item
24. Administered By (If other than Item 7)	Code	25. Payment Will Be Made By	Code
SCD PAS ADP PT			
26. Name of Contracting Officer (Type or Print)		27. United States Of America _____ /SIGNED/ (Signature of Contracting Officer)	28. Award Date

IMPORTANT - Award will be made on this Form, or on Standard Form 26, or by other authorized official written notice.

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-04-R-0686 MOD/AMD	Page 2 of 42
---------------------------	---	----------------------------

Name of Offeror or Contractor:

SECTION A - SUPPLEMENTAL INFORMATION

Regulatory Cite	Title	Date
A-1 52.204-4016 (TACOM)	TACOM-WARREN ELECTRONIC CONTRACTING	JUL/2003

(a) TACOM is now operating in an electronic contracting environment. All TACOM solicitations and awards are now distributed on the TACOM Warren Business Opportunities web page (<http://contracting.tacom.army.mil/opportunity.htm>) and are no longer available in hard copy. The TDPs and other documents, when available electronically, will be an attachment or linked to the solicitation package on the web. Please see submission guidelines at <http://contracting.tacom.army.mil/userguide.htm> and <http://contracting.tacom.army.mil/ebidnotice.htm> for more information. Any requirements included in the solicitation take precedence over guidance found on the TACOM contracting web page.

(b) You may need to use special software to view documents that we post on the home page. This viewing software is freeware, available for download at no cost from commercial web sites like Microsoft and Adobe. In cases where such software is required, we provide a link from our page to the commercial site where the software is available. Once you arrive at the software developer's site, follow their instructions to download the free viewer. You then can return to the TACOM home page.

(c) You are required to submit your offer, bid, or quote electronically. See the provision entitled "Electronic Offers (or 'Quotes' or 'Bids') Required in Response to This Solicitation (or 'Request for Quotations')" for more specific information.

(d) Any award issued as a result of this solicitation will be distributed electronically. Awards posted on the TACOM Warren Business Opportunities web page represent complete OFFICIAL copies of contract awards and will include the awarded unit price. This is the notice required by Executive Order 12600 (June 23, 1987) of our intention to release unit prices in response to any request under the Freedom of Information Act (FOIA), 5 USC 552. Unit price is defined as the contract price per unit or item purchased as it appears in Section B of the contract and is NOT referring to nor does it include Cost or Pricing data/information. If you object to such release, and you intend on submitting an offer, notify the PCO in writing prior to the closing date identified in this solicitation and include the rationale for your objection consistent with the provisions of FOIA. A release determination will be made based on rationale given.

(e) If you have questions or need help in using the Acquisition Center Home Page, call our Electronic Contracting Help Desk at (586) 574-7059, or send an email message to: acqcenweb@tacom.army.mil

(f) If you have questions about the content of any specific item posted on our home page, please call the buyer or point of contact listed for the item. Additional help is available to small businesses from Government-funded Electronic Commerce Regional Centers (ECRCs) to implement EDI. Information on ECRC is available at <http://www.ecrc.ctc.com>

[End of Clause]

A-2 52.204-4232 (TACOM)	PUBLIC ACTIVITY INVOLVEMENT	DEC/2002
-------------------------------	-----------------------------	----------

Subcontract opportunities under this solicitation and any resulting contracts are open to competition between Department of Defense activities and private firms. In addition, Army Industrial Facilities are available to sell manufactured articles or to perform work at such Facilities on behalf of Offerors, in certain circumstances and as permitted by law. Rock Island Arsenal, Watervliet Arsenal, Anniston Army Depot, Sierra Army Depot, and Red River Army Depot have expressed interest in securing subcontracting opportunities under this RFP. For information related to the capabilities of these facilities, and Points of Contact, see www.gsie.army.mil

[End of Notice]

A-3 52.215-4854 (TACOM)	PAPERLESS ELECTRONIC RESPONSES REQUIRED IN RESPONSE TO THIS SOLICITATION/REQUEST	JUL/2002
-------------------------------	--	----------

TACOM WILL NOT ACCEPT PAPER OFFERS IN RESPONSE TO THIS SOLICITATION/REQUEST. YOU ARE REQUIRED TO SUBMIT YOUR OFFER, BID, OR QUOTE VIA PAPERLESS ELECTRONIC MEDIA. SEE THE PROVISION ENTITLED "ELECTRONIC OFFERS (OR 'QUOTES' OR 'BIDS') REQUIRED IN RESPONSE TO THIS SOLICITATION (OR 'REQUEST FOR QUOTATIONS')" FOR MORE SPECIFIC INFORMATION.

[End of Clause]

1. PURPOSE / OVERVIEW / INSTRUCTIONS TO OFFERORS

a. The purpose of this solicitation is to obtain research and development services for the Tank-automotive Research and Development Center (TARDEC) of the US Army Research, Development, and Engineering Command (RDECOM). The contract will be awarded by the US Army Tank-

Name of Offeror or Contractor:

automotive and Armaments Command of Warren, MI. The government buyer is Mr. Jeffrey Bean, email jeffrey.r.bean@us.army.mil, (586) 574-7860.

b. The research and development services sought are in the area of creating an intelligent control framework that shall provide for adjustably autonomous robotic control of ground vehicles. The requirements are set forth in section C of this solicitation.

c. It is anticipated that this will be awarded without competition to Soar Technology of Ann Arbor, Michigan. However, other interested offerors may submit proposals (see the synopsis for this solicitation on the FedBizOpps web site: www.eps.gov).

d. This sollicitaion is for one year of effort under a basic award, with options for up to two additional years. Separate pricing is required for each year. Offerors should pay particular attention to section B, which includes a format for providing key pricing information.

e. The estimated funding available for this effort is:

base year: \$425,000

Year 2 Option: \$2,000,000

Year 3 Option: \$2,000,000

f. The contract data requirements list (CDRL, exhibit A) is available from the government buyer.

g. The government intends to award a cost plus fixed fee contract. Offerors will be required to submit cost and pricing information. The awardee will be required to have an accounting system reviewed and approved by the Defense Contracts Audit Agency.

*** END OF NARRATIVE A 001 ***

Name of Offeror or Contractor:

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001	<p>SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS</p> <p><u>SERVICES LINE ITEM</u></p> <p>SECURITY CLASS: Unclassified</p> <p>The contractor shall furnish all the supplies and services to accomplish the tasks specified in Section C "Statement of Work".</p> <p>INSTRUCTIONS TO OFFERORS: Offerors should fill in the blanks in sections B.3 through B.5. Any blank appearing as "\$x_____" requires an entry.</p> <p>Section B.3 requires you to input the estimated cost and fixed fee for performing the basic work effort, and shall be the initial contract award.</p> <p>Sections B.4 through B.5 require you to price options for up to two years of additional efforts.</p> <p>Reference section H.1 "Options For Additional Effort."</p> <p>COMPLETION DATE: See Section "F"</p> <p><u>Inspection and Acceptance</u> INSPECTION: DESTINATION ACCEPTANCE: DESTINATION</p> <p>(End of narrative B001)</p>				\$ _____

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 5 of 42

PIIN/SIIN W56HZV-04-R-0686

MOD/AMD

Name of Offeror or Contractor:B.1 ESTIMATED COST AND PAYMENT

B.1.1 The estimated cost for performance of the work under this contract is set forth in the Schedule, Section B. In consideration of performance of the work specified under section C, the Government anticipates paying the Contractor the Estimated Cost amount shown. The amount shown initially includes the basic contract effort, and will be revised by the Government as appropriate to incorporate any options exercised. The estimated cost of CLIN 0001 shall constitute the estimated cost for the purpose of the Contract Clause entitled "Limitation of Cost", but neither the Government nor the Contractor guarantee the accuracy of said estimates.

B.1.2 The Contractor will be paid the fixed fee as set forth below for the performance of work under the contract and in accordance with the terms of the Contract Clause entitled "Fixed Fee", (April 1984), FAR 52.216-8. The fixed fee together with the reimbursement of costs shall constitute full and complete consideration for the Contractor's service in connection with the work required and performed under this contract.

B.1.3 Allowable cost shall be determined, and payment thereof shall be provided, in accordance with the Contract Clause entitled "Allowable Cost and Payment."

B.2 The Contractor may submit public vouchers biweekly for payment under this contract. The fee will be payable at the time of reimbursement of cost at the same rate to such cost as the total fee of this contract bears to the total estimated cost thereof, subject to any withholding pursuant to provisions of this contract.

B.3 BASIC: Period of performance 1 - 12 months after contract award

B.3.1 At the time of initial contract award, the estimated cost and fixed fee shall be:

B.3.2 Estimated Cost: \$x_____

B.3.3 Fixed Fee: \$x_____

B.3.4 Total CPFF: \$x_____

B.4 YEAR 2 OPTION: Period of performance 13 - 24 months after contract award

B.4.1 In accordance with paragraph H.1.1, the Government shall have the option to call forth a second year of performance.

B.4.2 Estimated Cost: \$x_____

B.4.3 Fixed Fee: \$x_____

B.4.4 Total CPFF: \$x_____

B.5 YEAR 3 OPTION: Period of performance 25 - 36 months after contract award

B.5.1 In accordance with paragraph H.1.1, the Government shall have the option to call forth a third year of performance.

B.5.2 Estimated Cost: \$x_____

B.5.3 Fixed Fee: \$x_____

B.5.4 Total CPFF: \$x_____

*** END OF NARRATIVE B 001 ***

Name of Offeror or Contractor:

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.1 BACKGROUND:

C.1.1

The Army's vision of the future for armored and mechanized military structure includes the use of mixed teams of human and robotic forces on a dynamic and rapidly changing battlefield. Successful implementation of this vision will require autonomous and semi-autonomous robotic forces and a command and control infrastructure that will allow human, robotic, and mixed teams to be controlled quickly and easily. For maximum effectiveness this infrastructure should allow human commanders to control the robot teams in a manner similar to how they command human teams, that is, in the language of the military, not the language of robotic control theory. Furthermore, the human interface for robotic command and control must simplify the controller's tasks and automate processes in such a way that the cognitive workload is reduced, situational awareness is enhanced, and situational control is preserved.

C.1.2

The Intelligent Control Framework (ICF) contract is intended to conduct applied research to explore intelligent software solutions that will facilitate adjustably autonomous robotic control. The applied research requirements identified in this document were established by the Government in order to develop and validate requirements, specifications, and an architecture in time to impact the Human Robot Interaction STO (contract award planned FY05) and provide subsequent usefulness in time for FCS software builds & FCS critical design reviews (2nd Quarter FY06).

C.1.3

The primary goals are concept exploration, determining future mission needs, developing the science that will enable adjustable autonomy in intelligent user interfaces, and creating a proof-of-concept prototype component(s) within an ICF.

C.1.4

The contractor shall leverage research and critical technologies developed from other government efforts and transition these technologies into the government provided resources to explore, develop, and test technologies within the intelligent control framework (ICF). The technology for leverage shall include Mixed-Initiative Interaction Reasoner (MIIR), Goal Operators Methods (GOMS) Language Evaluation and Analysis (GLEAN) human performance model, Cooperative Interface Agent Framework (CIAF), Automated Synthesis of Plan Recognition Networks (ASPRN) Bayesian recognition system, Cooperative Interface Agents for Networked Command, Control and Communications (CIANC3), and Digital Executive Officer (DxO).

C.1.5 General:

The contractor, as an independent contractor and not as an agent of the Government, shall transition critical technological components and development of research prototype(s) into a cohesive design and development of an overall intelligent control framework to facilitate adjustable autonomy for robotic control and mission execution. The overall objective of this effort is to explore how adjustably autonomous systems would be used in a military context. The contractor shall be responsible for overall program management synchronization, which includes, as a minimum, the leveraging technologies from other efforts, coordinating issues with the government, and transitioning of products into government provided resources. The contractor shall perform research and development across 1 base year and 2 option years as described below.

C.2 BASE YEAR 1 RESEARCH TASKS AND REQUIREMENTS:

The contractor shall research, define, and develop architecture of architectures for the ICF. Research will be performed in the following critical areas; SMI/CIAF Interface and scenario investigation, Plan Recognition and Prediction research, and ICF architecture. This research will leverage concurrent work being done as part of SBIR Plus funded efforts entitled: Auto Wingman for work under the SMI/CIAF Interface and scenario task, BINAH for work under the Human and Task Modeling research task, and CIANC3 for work under the Mixed-Initiative Interaction and adjustable Autonomy Architecture task. Results and outcomes of these tasks will be integrated into the mainline research performed under this SOW. The contractor shall be responsible for the overall research tasks as stated below.

C.2.1 ICF Research:

The contractor shall research, define, and develop architecture for plan recognition and prediction, and an initial architecture of architectures for the intelligent control framework (ICF). The main goals are to determine warfighter's current situation and develop an architecture by which disparate technologies can be applied to the problem. The refinements to architecture(s) shall include re-route interfaces (links between components), add/delete/modify components (functionality), and Application Process Interface (API) Mods (Data between components).

C.2.2 ICF Requirements:

The following features and capabilities shall be incorporated into the ICF to facilitate adjustable autonomous control of robots:

C.2.2.1 SMI/CIAF Interface and scenario investigation

C.2.2.1.1 Scenario Research:

The contractor shall develop a militarily significant scenario that illustrates future unit of action techniques, tactics, and procedures to support the development, demonstration, and validation of the ICF. The contractor shall define a high level scenario that includes plan recognition and predication that includes the necessary unit organizational structures and span of control for two virtual

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 7 of 42
	PIIN/SIIN W56HZV-04-R-0686	MOD/AMD

Name of Offeror or Contractor:

unmanned robotic vehicles.

C.2.2.1.2 SMI/CIAF Interface

The contractor shall perform further development on the SMI/CIAF interface leveraged from other government efforts to define and incorporate an Application Process Interface (API) for the plan recognition system.

C.2.2.2 Plan Recognition and Prediction Intelligent Interface

C.2.2.2.1 GUI Functionality Model

The contractor shall develop and incorporate into the ICF a graphical user interface (GUI) to generate actions to create Bayesian plan recognition models.

C.2.2.2.2 ASPRN GLEAN Interface

The contractor shall integrate the ASPRN Bayesian recognition system with the GLEAN human performance architecture to perform recognition and prediction of user tasks, ensure necessary data representations and transformations, timing, and controls and to define information and control interfaces for running ASPRN using GOMS models from GLEAN.

C.2.2.2.3 Recognition Models

The contractor shall create recognition models by mixing task models, contextual information and human data. The recognition models will be integrated into the plan recognition system and the ICF.

C.2.2.2.4 Plan Recognition Engineering Prototype

The contractor shall develop an engineering prototype of the Plan Recognition system to demonstrate a task execution and plan recognition scenario as part of the ICF. The engineering prototype will be demonstrated using a simulation environment (i.e. OneSAF OTB). The plan recognition prototype shall demonstrate the ability of the software to recognize a specific task the user is working on in the context of the overall scenario.

C.2.2.3 Integrated Intelligent Control Framework

The contractor shall design and document an initial architecture of architecture design for an Intelligent Control Framework. This includes the Plan Recognition and Prediction architecture from this effort, and Mixed Initiative Interaction Reasoner, SMI/CIAF Interface, Human and Task Modeling architectures from other government efforts.

C.2.3 Year 1 Travel:

C.2.3.1

The contractor shall visit TARDEC (estimated six trips of three persons each) to 1) coordinate and analyze the research in adjustable autonomy and mixed initiative interaction, 2) review research, analysis and design products, particularly those products related to the TARDEC Vetronics Technologies, and 3) develop requirements and review research, analysis and design products.

C.2.3.2

The contractor may visit Unit of Action Maneuver Battle Lab (UAMBL) at Ft. Knox and other sites as needed (estimated three trips of three persons each) to perform requirements gathering, knowledge acquisition, usability analysis and architecture research for the intelligent control framework architecture and system.

C.2.3.3

The contractor shall travel to TARDEC to perform the demonstration as required in section C.2.5.

C.2.4 Year 1 Meetings:

C.2.4.1 Start of work meeting:

The contractor shall host a Start of Work meeting within thirty (30) days after contract award for each phase of the contract at TARDEC. At the meeting, the contractor shall present their proposed plan for accomplishing the contract requirements.

C.2.4.2 In-Process review (IPR):

The contractor shall host a semi-annual IPR to take place approximately six (6) months after contract award. The contractor shall provide a summary of the program progress and status to include: research, overall system development, technical performance, cost and schedule. The contractor shall describe those accomplishments and problems that have occurred during the first six months of the year 1 project, including the current status of unresolved problems. The contractor shall document meeting minutes and action items during meetings and reviews, and shall be provide them to the government in contractor format within five (5) business days from the date of the meeting.

C.2.4.3 Annual review meeting:

An annual review meeting of this contract shall be held at the contractor's facility no later than two (2) weeks prior to the end of the base contract year. The review shall summarize project efforts, accomplishments and results. If schedule coordination precludes the annual review meeting from happening in the timeframe specified herein, the government agrees to grant a no cost extension to the period

Name of Offeror or Contractor:

of performance of the contract of thirty (30) days after the date of the annual review meeting so that government feedback can be incorporated into the final report at the end of the base contract year.

C.2.5 Demonstration:

During the final month of the base year, the contractor shall install, compile, execute, and demonstrate the Plan Recognition and Prediction Engineering Prototype on government hardware at TARDEC.

C.2.6 Year 1 Deliverables:**C.2.6.1 Reports:****C.2.6.1.1 Monthly reports:**

The contractor shall prepare and submit monthly Contractor's Progress, Status and Management Reports starting one month after contract award, however, no report shall be due along with the Final Report or within the last month of the contract whichever occurs sooner. These reports shall indicate the progress of work, the status of the program and of the assigned tasks, man-hours and dollars expended in the period, and shall inform the customer of existing or potential problem areas together with proposals for resolution. Reference Exhibit A, CDRL, data item A001.

C.2.6.1.2 Annual report:

The contractor shall submit a draft report in contractor format to include a summary of contract activities due at the annual review meeting. The contractor shall incorporate government feedback into the final report and deliver at the end of the contract year. The final report shall include: summary of the research and development activities, conclusions drawn from their efforts, performance of the prototype(s), and state recommendations for improvements and future development. Reference Exhibit A, CDRL, data item A003.

C.2.6.1.3 Significant Activities Status:

The contractor by every other COB Friday shall email a short bullet list of bi-weekly significant items accomplished. Reference Exhibit A, CDRL, data item A002.

C.2.6.2 Software:

The contractor shall deliver to the government the Plan Recognition and Prediction Prototype specified in section C.2.2.4. The contractor shall deliver all software (including source code, executables, and libraries) for complete operation of the Plan Recognition and Prediction Engineering Prototype. The contractor shall also deliver changes made to virtual environments such as OneSAF OTB. The software shall be delivered at the annual review meeting. Reference Exhibit A, CDRL, data item A004.

C.2.6.3 ICF Documentation

Documentation will be delivered concurrently with the software at the Annual Review Meeting. The contractor shall deliver contractor developed documentation including Plan Recognition and Prediction Engineering requirements definitions, specification definitions, and preliminary ICF architecture design, Interface control documents to/from all components in the ICF architecture, model designs including agent model descriptions, simulation environment(s) modifications, task and usability analysis report, software development documentation, and technical demonstration summary, configuration, and operation documentation. Reference Exhibit A, CDRL, data item A005.

C.3 OPTION: YEAR 2 RESEARCH TASKS AND REQUIREMENTS:

If the Government exercises the option for Year 2, as provided for in section H.1, the contractor shall perform the work effort described in the following section.

This research will leverage the Plan Recognition and Prediction and the SMI/CIAF from year 1 of this effort, and Mixed Initiative Interaction Reasoner, and Human and Task Modeling architectures from Auto Wingman, BINAH, and CIANC3. Year 2 tasks will research enhancements to the architecture developed in year 1.

C.3.1 ICF Research:

The Year 2 Option period will consist of applied research in simulation, and developing an integrated engineering prototype of the ICF framework including architecture. The main goals of the research are on defining and predicting when the warfighter needs assistance. The refinements to architecture(s) shall include re-route interfaces (links between components), add/delete/modify components (functionality), and API Mods (Data between components).

C.3.2 ICF Requirements: The ICF shall incorporate the following features and capabilities:**C.3.2.1 SMI/CIAF Interface and scenario investigation**

The contractor shall expand on the year 1 scenario to increase the span of control to four units, further develop the high level scenario and develop vignettes to conduct experiments and tests to collect data for the purpose of evaluating the reduction of operator workload.

C.3.2.2 Human and Task Modeling

The contractor shall conduct usability analysis, discourse modeling, task analysis and human error tasks with the GLEAN models to facilitate the system to understand what tasks the user is attending or should be attending, and where and how the system should assist.

Name of Offeror or Contractor:

Each type of model will typically consist of a static component that represents doctrinal information, dynamic model instances that represent the current situation, and executable components that can be simulated for value judgments on future courses of action. Newly sensed information is used to update existing instances of dynamic models and create new dynamic models as necessary.

C.3.2.3 Plan Recognition and Prediction

The contractor shall further define and develop the plan recognition and prediction architecture to support multiple user tasks and models. The contractor will define and develop additional user tasks and models to increase the span of control to four units. The contractor shall modify the graphical user interface (GUI) to allow for creation of additional Bayesian plan recognition models and to collect data from user tasks.

C.3.2.4 Mixed-Initiative Interaction Reasoner

The contractor shall perform further development on the mixed interaction and intelligent reasoner system leveraged from other government efforts including the definition of additional agent interaction capabilities to perform mixed interaction reasoning including event types and event rate.

C.3.2.5 Integrated Intelligent Control Framework**C.3.2.5.1 ICF Architecture**

The contractor shall perform iterative re-design and developments on the integrated architecture for the Intelligent Control Framework to ensure a cohesive design between components. The contractor shall perform task analysis with the Intelligent Control Framework to evaluate adjustable autonomy of robot control.

C.3.2.5.2 ICF Engineering Prototype

The contractor shall develop an integrated engineering prototype of the Intelligent Control Framework system to demonstrate task execution scenarios and perform usability studies. The engineering prototype will be demonstrated using a simulation environment (i.e. OneSAF OTB) as a proof of principle at the customer's SIL laboratory.

C.3.3 Technology Transition Support

The Contractor shall provide the necessary technical support to transition contractor developed products to TARDEC identified resources and contractor(s). In the event the resources are not available, the contractor shall conduct usability analysis on the stand-alone ICF prototype. For the purpose of cost estimates, the contractor may provide 1 month of engineering support (does not require travel) and 1 week of on-site support at General Dynamics Robotic Systems based in Westminster, MD.

C.3.4 Year 2 Travel:**C.3.4.1**

The contractor may visit TARDEC (estimated six trips of three persons each) to 1) coordinate and analyze the research in adjustable autonomy and mixed initiative interaction, 2) review research, analysis and design products, particularly those products related to the TARDEC Vetronics Technologies, and 3) develop requirements and review research, analysis and design products.

C.3.4.2

The contractor may visit Unit of Action Maneuver Battle Lab (UAMBL) at Ft. Knox and other sites as needed (estimated three trips of three persons each) to perform requirements gathering, knowledge acquisition, usability analysis and architecture research for the intelligent control framework architecture and system.

C.3.4.3

The contractor shall travel to TARDEC to perform the demonstration as required in section C.3.6.

C.3.5 Year 2 Meetings:**C.3.5.1 Start of Work Meeting:**

The contractor shall host a Start of Work at TARDEC within thirty (30) days after award of the Year 2 Option. At the meeting, the contractor shall present their proposed plan for accomplishing the contract requirements.

C.3.5.2 In-Process Review (IPR):

The contractor shall host a semi-annual IPR to take place approximately six (6) months after award of the Year 2 Option. The contractor shall provide a summary of the program progress and status to include: research, overall system development, technical performance, cost and schedule. The contractor shall describe those accomplishments and problems that have occurred during the first six months of the Year 2 Option, including the current status of unresolved problems. The contractor shall document meeting minutes and action items during meetings and reviews, and shall be provide them to the government in contractor format within five (5) business days from the date of the meeting.

C.3.5.3 Annual Review Meeting:

An annual review meeting of this contract shall be held at the contractor's facility no later than two (2) weeks prior to the end of the Year 2 Option period of performance. The review shall summarize project efforts, accomplishments and results. If schedule

Name of Offeror or Contractor:

coordination precludes the annual review meeting from happening in the timeframe specified herein, the government agrees to grant a no cost extension to the period of performance of the contract of thirty (30) days after the date of the annual review meeting so that government feedback can be incorporated into the final report at the end of the Year 2 Option period of performance.

C.3.6 Demonstration:

During the final month of the Year 2 Option period, the contractor shall install, compile, execute, and demonstrate the preliminary ICF prototype on government provided hardware at the government site.

C.3.7 Year 2 Deliverables:**C.3.7.1 Reports:****C.3.7.1.1 Monthly Reports:**

The contractor shall prepare and submit monthly Contractor's Progress, Status and Management Reports starting one month after award of the Year 2 Option. However, no report shall be due along with the Final Report or within the last month of the contract period of performance. These reports shall indicate the progress of work, the status of the program and of the assigned tasks, man-hours and dollars expended in the period, and shall inform the customer of existing or potential problem areas together with proposals for resolution. Reference Exhibit A, CDRL, data item A001.

C.3.7.1.2 Annual Report:

The contractor shall submit a draft report in contractor format to include a summary of contract activities due at the Year 2 Option annual review meeting. The contractor shall incorporate government feedback into the final report and deliver at the end of the contract year. The final report shall include: summary of the research and development activities, conclusions drawn from their efforts, performance of the prototype(s), and state recommendations for improvements and future development. Reference Exhibit A, CDRL, data item A003.

C.3.7.1.3 Significant Activities Status:

The contractor by every other COB Friday shall email a short bullet list of bi-weekly significant items accomplished. Reference Exhibit A, CDRL, data item A002.

C.3.7.2 Software:

The contractor shall deliver to the government the ICF Engineering Prototype specified in section C.3.3.2. The contractor shall deliver all software (including operating system, source code, executables, and libraries) for complete operation of the preliminary ICF Engineering Prototype. The contractor shall also deliver changes made to virtual environments such as OneSAF OTB. The software shall be delivered at the Year 2 Option annual review meeting. Reference Exhibit A, CDRL, data item A004.

C.3.7.3 ICF Documentation:

Documentation will be delivered concurrently with the software at the Annual Review Meeting. The contractor shall deliver contractor developed documentation including ICF requirements definitions, specification and definitions, refined architecture(s) design, Preliminary integrated ICF Engineering Prototype include the individual component prototypes, Interface control documents to/from all components in the ICF architecture, user and task models, simulation environment(s) modifications, refined scenario(s), task and usability analysis report, software development documentation, and technical demonstration summary, configuration, and operation documentation. The contractor shall submit documents in contractor format at the Year 2 Option annual review meeting. Reference Exhibit A, CDRL, data item A005.

C.4 YEAR 3 RESEARCH TASKS AND REQUIREMENTS:

If the Government exercises the option for Year 3, as provided for in section H.1, the contractor shall perform the work effort described in the following section.

This research will leverage the Plan Recognition and Prediction, SMI/CIAF, Mixed Initiative Interaction Reasoner, and Human and Task Modeling architectures from this effort. Year 3 tasks will research enhancements to the architecture developed in the Base Year and the Year 2 Option.

C.4.1 ICF Research:

The Year 3 Option period will consist of applied research and testing in simulation, developing a finalized integrated engineering prototype of the ICF framework and a finalized integrated ICF architecture. The main goals of the research are on defining how the intelligent system should adjust the autonomy to assist the warfighter. The refinements to architecture(s) shall include re-route interfaces (links between components), add/delete/modify components (functionality), and API Mods (Data between components).

C.4.2 The contractor shall be responsible for the overall research tasks as stated below.

C.4.2.1 SMI/CIAF Interface and scenario investigation

The contractor shall modify scenarios developed in year 2 to create working scenarios that will enable intelligent agents and robotic entities to be controlled through the ICF and architecture. The contractor shall add additional capability to the SMI/CIAF interface to support agent and robotic control.

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-04-R-0686	Page 11 of 42 MOD/AMD
---------------------------	---	--

Name of Offeror or Contractor:

C.4.2.2 Human and Task Modeling

The contractor shall expand and develop additional models to address changes identified in the usability analysis. These models include, but are not limited to user models, task models, recognition models, GLEAN and GOMS models, plan recognition models and agent models.

C.4.2.3 Plan Recognition and Prediction

The contractor shall refine existing tasks, models and plan recognition and prediction architecture using results from usability analysis of the intelligent control framework.

C.4.2.4 Graphical User Interface

The contractor shall modify the graphical user interface (GUI) to allow for creation of additional Bayesian plan recognition models and to collect data from user performed tasks.

C.4.2.5 Mixed-Initiative Interaction Reasoner

The contractor shall further define architectural changes required for application of the mixed-initiative interaction reasoner to command and control of robotic vehicles and to finalize the architecture to include requirements to define how the system will help the operator, given current context and predicted need.

C.4.2.6 Integrated Intelligent Control Framework

C.4.2.6.1 ICF Architecture

The contractor shall finalize the integrated architecture design for the Intelligent Control Framework to ensure a cohesive design between components and their functionalities based on usability analysis.

C.4.2.6.2 ICF Engineering Prototype

The contractor shall refine the integrated engineering prototype (developed in the Year 2 Option) of the Intelligent Control Framework system to demonstrate adjustable autonomous robotic control. The engineering prototype will be used to collect data for usability studies and testing of various scenarios with live information needs in an instrumented simulation environment (i.e. OneSAF OTB).

C.4.3 Technology Transition Support

The Contractor shall provide the necessary technical support to transition contractor developed products to TARDEC identified resources and contractor(s). In the event the resources are not available, the contractor shall conduct usability analysis on the stand-alone ICF prototype. For the purpose of cost estimates, the contractor may provide 1 month of engineering support (does not require travel) and 1 week of on-site support at General Dynamics Robotic Systems based in Westminster, MD.

C.4.4 Year 3 Travel:

C.4.4.1

The contractor may visit TARDEC (estimated six trips of three persons each) to 1) coordinate and analyze the research in adjustable autonomy and mixed initiative interaction, 2) review research, analysis and design products, particularly those products related to the TARDEC Vetronics Technologies, and 3) develop requirements and review research, analysis and design products.

C.4.4.2

The contractor may visit Unit of Action Maneuver Battle Lab (UAMBL) at Ft. Knox and other sites as needed (estimated three trips of three persons each) to perform requirements gathering, knowledge acquisition, usability analysis and architecture research for the intelligent control framework architecture and system.

C.4.4.3

The contractor shall travel to TARDEC to perform the demonstration as required in section C.4.6.

C.4.5 Year 3 Meetings:

C.4.5.1 Start of Work Meeting:

The contractor shall host a Start of Work meeting within thirty (30) days after the exercise of the Year 3 Option, at the government facility. At the meeting, the contractor shall present their proposed plan for accomplishing the Year 3 Option requirements.

C.4.5.2 In-Process Review (IPR):

The contractor shall host a semi-annual IPR to take place approximately six (6) months after award of the Year 3 Option. The contractor shall provide a summary of the program progress and status to include: research, overall system development, technical performance, cost and schedule. The contractor shall describe those accomplishments and problems that have occurred during the first six months of the Year 3 Option, including the current status of unresolved problems. The contractor shall document meeting minutes and action items during meetings and reviews, and shall be provided to the government in contractor format within five (5) business days from the date of the meeting.

C.4.5.3 Annual Review Meeting:

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-04-R-0686	Page 12 of 42 MOD/AMD
---------------------------	---	--

Name of Offeror or Contractor:

An annual review meeting of this contract shall be held at the contractor's facility no later than two (2) weeks prior to the end of the Year 3 Option period of performance. The review shall summarize project efforts, accomplishments and results. If schedule coordination precludes the annual review meeting from happening in the timeframe specified herein, the government agrees to grant a no cost extension to the period of performance of the contract of thirty (30) days after the date of the annual review meeting so that government feedback can be incorporated into the final report at the end of each contract year.

C.4.6 **Demonstration:**

During the final month of the Year 3 Option period, the contractor shall install, compile, execute, and demonstrate the final ICF prototype on government provided hardware at the government site.

C.4.7 **Year 3 Deliverables:**

C.4.7.1 **Reports:**

C.4.7.1.1 **Monthly Reports.**

The contractor shall prepare and submit monthly Contractor's Progress, Status and Management Reports starting one month after award of the Year 3 option. However, no monthly report shall be due along with the Final Report or within the last month of the contract. These reports shall indicate the progress of work, the status of the program and of the assigned tasks, man-hours and dollars expended in the period, and shall inform the customer of existing or potential problem areas together with proposals for resolution. Reference Exhibit A, CDRL, data item A001.

C.4.7.1.2 **Annual Report:**

The contractor shall submit a draft report in contractor format to include a summary of contract activities due at the Year 3 Option annual review meeting. The contractor shall incorporate government feedback into the final report and deliver at the end of the contract year. The final report shall include a summary of contract activity. The final report shall include: summary of the research and development activities, conclusions drawn from their efforts, performance of the prototype(s), and state recommendations for improvements and future development. Reference Exhibit A, CDRL, data item A003.

C.4.7.1.3 **Significant Activities Status:**

The contractor by every other COB Friday shall email a short bullet list of bi-weekly significant items accomplished. Reference Exhibit A, CDRL, data item A002.

C.4.7.2 **Software:**

The contractor shall deliver to the government the ICF Engineering Prototype specified in section C.4.2.6.2. The contractor shall deliver all software (including operating system, source code, executables, and libraries) for complete operation of the final ICF Engineering Prototype. The contractor shall also deliver changes made to virtual environments such as OneSAF OTB. Reference Exhibit A, CDRL, data item A004. The software shall be delivered at the Year 3 Option Annual review meeting.

C.4.7.3 **ICF Documentation:**

Documentation will be delivered concurrently with the software at the Year 3 Option annual review meeting. The contractor shall deliver contractor developed documentation including ICF requirements definitions, specification and definitions, ICF architecture design, Interface control documents to/from all components in the ICF architecture, user and task models, simulation environment(s) modifications, refined scenario(s), usability and adjustable autonomous analysis report, software development documentation, and technical demonstration summary, configuration, and operation documentation. Reference Exhibit A, CDRL, data item A005.

C.5 **PERIOD OF PERFORMANCE**

The program includes a base period of 12 months after contract award, and two option periods of 12 months each (called "Year 2 option" and "Year 3 option").

C.6 **SECURITY**

This contract shall remain unclassified. No classified data to be stored or handled.

CONTINUATION SHEET**Reference No. of Document Being Continued****Page 13 of 42****PIIN/SIIN** W56HZV-04-R-0686**MOD/AMD**

Name of Offeror or Contractor:

SECTION E - INSPECTION AND ACCEPTANCE

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
E-1	52.246-9	INSPECTION OF RESEARCH AND DEVELOPMENT (SHORT FORM)	APR/1984

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 14 of 42

PIIN/SIIN W56HZV-04-R-0686

MOD/AMD

Name of Offeror or Contractor:

SECTION F - DELIVERIES OR PERFORMANCE

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
F-1	52.242-15	STOP WORK ORDER--(ALTERNATE I dated APR 1984)	AUG/1989
F-2	52.247-34	F.O.B. DESTINATION	NOV/1991

F.1. BASE YEAR

F.1.1 Period of performance:

The base year specified in section C.2 shall have a period of performance of 12 months, commencing from the date of contract award.

F.1.2 Deliverables:

F.1.2.1 The contractor shall deliver monthly Contractor Progress Status and Management Reports, as specified in section C.2.6.1.1 and Data Item A001 of Exhibit A, Contract Data Requirements List.

F.1.2.2 The contractor shall deliver biweekly Interim/Significant Activities Reports, as specified in section C.2.6.1.3 and Data Item A002 of Exhibit A, Contract Data Requirements List.

F.1.2.3 The contractor shall deliver an Annual/Final Activity Report, as specified in section C.2.6.1.2 and Data Item A003 of Exhibit A, Contract Data Requirements List.

F.1.2.4 The contractor shall deliver Intelligent Control Framework Software, as specified in section C.2.6.2 and Data Item A004 of Exhibit A, Contract Data Requirements List.

F.1.2.5 The contractor shall deliver Intelligent Control Framework Software Documentation, as specified in section C.2.6.3 and Data Item A005 of Exhibit A, Contract Data Requirements List.

F.2 YEAR 2 OPTION

F.2.1 Period of performance:

The Year 2 Option specified in section C.3 shall have a period of performance from 13 - 24 months after contract award.

F.2.2 Deliverables:

F.2.2.1 The contractor shall deliver monthly Contractor Progress Status and Management Reports, as specified in section C.3.7.1.1 and Data Item A001 of Exhibit A, Contract Data Requirements List.

F.2.2.2 The contractor shall deliver biweekly Interim/Significant Activities Reports, as specified in section C.3.7.1.3 and Data Item A002 of Exhibit A, Contract Data Requirements List.

F.2.2.3 The contractor shall deliver an Annual/Final Activity Report, as specified in section C.3.7.1.2 and Data Item A003 of Exhibit A, Contract Data Requirements List.

F.2.2.4 The contractor shall deliver Intelligent Control Framework Software, as specified in section C.3.7.2 and Data Item A004 of Exhibit A, Contract Data Requirements List.

F.2.2.5 The contractor shall deliver Intelligent Control Framework Software Documentation, as specified in section C.3.7.3 and Data Item A005 of Exhibit A, Contract Data Requirements List.

F.3 YEAR 3 OPTION

F.3.1 Period of performance:

The Year 3 Option specified in section C.4 shall have a period of performance from 25 - 36 months after contract award.

F.3.2 Deliverables:

F.3.2.1 The contractor shall deliver monthly Contractor Progress Status and Management Reports, as specified in section C.4.7.1.1 and Data Item A001 of Exhibit A, Contract Data Requirements List.

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-04-R-0686 MOD/AMD	Page 15 of 42
---------------------------	--	----------------------

Name of Offeror or Contractor:

F.3.2.2 The contractor shall deliver biweekly Interim/Significant Activities Reports, as specified in section C.4.7.1.3 and Data Item A002 of Exhibit A, Contract Data Requirements List.

F.3.2.3 The contractor shall deliver an Annual/Final Activity Report, as specified in section C.4.7.1.2 and Data Item A003 of Exhibit A, Contract Data Requirements List.

F.3.2.4 The contractor shall deliver Intelligent Control Framework Software, as specified in section C.4.7.2 and Data Item A004 of Exhibit A, Contract Data Requirements List.

F.3.2.5 The contractor shall deliver Intelligent Control Framework Software Documentation, as specified in section C.4.7.3 and Data Item A005 of Exhibit A, Contract Data Requirements List.

*** END OF NARRATIVE F 001 ***

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-04-R-0686 MOD/AMD	Page 16 of 42
---------------------------	---	----------------------

Name of Offeror or Contractor:

SECTION G - CONTRACT ADMINISTRATION DATA

Regulatory Cite	Title	Date
G-1 252.201-7000	CONTRACTING OFFICER'S REPRESENTATIVE	DEC/1991

(a) Definition. Contracting Officer's Representative means an individual designated in accordance with subsection 201.602-2 of the Defense Federal Acquisition Regulation Supplement and authorized in writing by the contracting officer to perform specific technical or administrative functions.

(b) If the Contracting Officer designates a contracting officer's representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the contracting officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

[End of Clause]

G-2 52.227-4004 (TACOM)	RELEASE OF INFORMATION	OCT/2003
---------------------------------	------------------------	----------

The contractor shall ensure that he complies with the requirements of Chapter 5, page 22, paragraph 5-48, of AR 360-1, The Army Public Affairs Program, dated 15 Oct 2000, prior to contemplated release of any procurement information. Approval of the Contracting Officer is required prior to release of any such information. AR 360-1 may be found at http://www.usapa.army.mil/pdffiles/r360_1.pdf.

[End of clause]

G-3 52.232-4005 (TACOM)	INVOICE INFORMATION REQUIREMENT	JAN/1988
---------------------------------	---------------------------------	----------

On each payment request submitted, the Contractor shall identify each affected Contract Line Item Number (CLIN), sub-CLIN, and/or work directive, together with the related dollar amounts. This requirement does not diminish or restrict any other requirement of this contract.

CONTINUATION SHEET

Reference No. of Document Being Continued

PIIN/SIIN W56HZV-04-R-0686

MOD/AMD

Name of Offeror or Contractor:

SECTION H - SPECIAL CONTRACT REQUIREMENTS

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
H-1	252.204-7000	DISCLOSURE OF INFORMATION	DEC/1991
H-2	252.204-7002	PAYMENT FOR SUBLINE ITEMS NOT SEPARATELY PRICED	DEC/1991
H-3	252.205-7000	PROVISION OF INFORMATION TO COOPERATIVE AGREEMENT HOLDERS	DEC/1991
H-4	252.225-7004	REPORTING OF CONTRACT PERFORMANCE OUTSIDE THE UNITED STATES	APR/2003
H-5	252.227-7036	DECLARATION OF TECHNICAL DATA CONFORMITY	JAN/1997
H-6	252.227-7037	VALIDATION OF RESTRICTIVE MARKINGS ON TECHNICAL DATA	SEP/1999
H-7	252.231-7000	SUPPLEMENTAL COST PRINCIPLES	DEC/1991
H-8	252.235-7011	FINAL SCIENTIFIC OR TECHNICAL REPORT	SEP/1999
H-9	252.242-7004	MATERIAL MANAGEMENT AND ACCOUNTING SYSTEM	DEC/2000
H-10	252.246-7000	MATERIAL INSPECTION AND RECEIVING REPORT	MAR/2003
H-11	252.246-7001	WARRANTY OF DATA	DEC/1991
H-12	252.225-7003	REPORT OF INTENDED PERFORMANCE OUTSIDE THE UNITED STATES	APR/2003
	(a)	The offeror shall submit a Report of Contract Performance Outside the United States, with its offer, if-	
		(1) The offer exceeds \$10 million in value; and	
		(2) The offeror is aware that the offeror or a first-tier subcontractor intends to perform any part of the contract outside the United States and Canada that-	
		(i) Exceeds \$500,000 in value; and	
		(ii) Could be performed inside the United States or Canada.	
	(b)	Information to be reported includes that for-	
		(1) Subcontracts;	
		(2) Purchases; and	
		(3) Intracompany transfers when transfers originate in a foreign location.	
	(c)	The offeror shall submit the report using-	
		(1) DD Form 2139, Report of Contract Performance Outside the United States; or	
		(2) A computer-generated report that contains all information required by DD Form 2139.	
	(d)	The offeror may obtain a copy of DD Form 2139 from the Contracting Officer.	
		(End of provision)	

H-13 252.227-7039 PATENTS -- REPORTING OF SUBJECT INVENTIONS APR/1990
 The Contractor shall furnish the Contracting Officer the following:

(a) Interim reports every twelve (12) months (or such longer period as may be specified by the Contracting Officer) from the date of the contract, listing subject inventions during that period and stating that all subject inventions have been disclosed or that there are no such inventions.

(b) A final report, within three (3) months after completion of the contracted work, listing all subject inventions or stating that there were no such inventions.

(c) Upon request, the filing date, serial number and title, a copy of the patent application and patent number, and issue data for any subject invention for which the Contractor has retained title.

(d) Upon request, the Contractor shall furnish the Government an irrevocable power to inspect and make copies of the patent application file.

(End of clause)

H-14 52.204-4005 REQUIRED USE OF ELECTRONIC CONTRACTING JUN/2004

H-15 52.216-4008 STATUS OF FUNDS ON COST REIMBURSEMENT CONTRACTS/CLINS JUN/1989
 (TACOM)

(a) The Contractor shall review the funding as it relates to work performed on the cost-reimbursement Contract Line Item Numbers (CLINs) under this contract and shall provide to the Procuring Contracting Officer (PCO) a written determination of what, if any, funds are excess to requirements (leaving a reasonable amount for final overhead rate negotiations and other reasonably predicted requirements) and are available for deobligation. This review shall be coordinated with the Administrative Contracting Officer (ACO), and the written determination shall be accomplished within 120 days of completion of performance under the CLIN. The report shall be prepared in terms of dollars available per Purchase Request Order Number (PRON), unless requested otherwise by the PCO.

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 18 of 42
	PIIN/SIIN W56HZV-04-R-0686	MOD/AMD

Name of Offeror or Contractor:

(b) This report may be requested in writing by the PCO on additional occasions during the course of performance of work on cost-reimbursable CLINs contained in this contract. On such occasions, the written report shall be provided to the PCO within 14 days of Contractor receipt of the written request.

(End of clause)

H-16 52.246-4026 LOCAL ADDRESSES FOR DD FORM 250 JAN/2002
(TACOM)

(a) The contractor must provide a copy of each Material Inspection and Receiving Report (DD 250) pertaining to this contract, to the addresses given below, using either of the following methods:

(1) Our first preference is for you to use electronic mail (e-mail), using the following e-mail address: DD250@tacom.army.mil

(2) Our second preference is for you to use data facsimile (datafax) transmission, using this fax number: (586) 574-5527 and use "DD250 mailbox" in the "to:" block of your fax cover or header sheet.

In either method, do not mix DD250s from more than one contract in a single transmission. That is, you may submit multiple DD250s in a single transmission, but they must all be against the same contract.

(b) These copies meet the requirements for the Purchasing Office copy and the Army Inventory Control Manager copy listed in tables 1 and 2 of DFARS Appendix F.

(c) The DD250 form may be found, in three different formats, on the World Wide Web at <http://web1.whs.osd.mil/icdhome/DD-0999.htm>

[End of Clause]

SPECIAL PROVISIONS

H.1 OPTION FOR ADDITIONAL YEARS OF EFFORT

H.1.1 The Government shall have the unilateral right to call forth up to two additional years of effort, as follows:

H.1.1.1 The Government may call forth the work effort described in section C.3 "Year 2 Research Tasks and Requirements" any time during the period from contract award through 30 SEP 2005. The cost and fee shall be as set forth in section B.

H.1.1.2 The Government may call forth the work effort described in section C.4 "Year 3 Research Tasks and Requirements" any time during the period from 1 OCT 2005 through 30 SEP 2006. The cost and fee shall be as set forth in section B. The Government may not exercise the option for Year 3 unless the option for Year 2 has also been exercised.

H.1.1.3 The Government may exercise the options by adding to any existing CLIN, or by establishing a new CLIN.

*** END OF NARRATIVE H 001 ***

Name of Offeror or Contractor:

SECTION I - CONTRACT CLAUSES

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 this address: <http://farsite.hill.af.mil/>

[End of Clause]

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
I-1	52.202-1	DEFINITIONS	DEC/2001
I-2	52.203-3	GRATUITIES	APR/1984
I-3	52.203-5	COVENANT AGAINST CONTINGENT FEES	APR/1984
I-4	52.203-6	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT	JUL/1995
I-5	52.203-7	ANTI-KICKBACK PROCEDURES	JUL/1995
I-6	52.203-8	CANCELLATION, RESCISSION AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY	JAN/1997
I-7	52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY	JAN/1997
I-8	52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS	JUN/2003
I-9	52.204-4	PRINTING/COPYING DOUBLE-SIDED ON RECYCLED PAPER	AUG/2000
I-10	52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT	JUL/1995
I-11	52.215-2	AUDIT AND RECORDS - NEGOTIATIONS	JUN/1999
I-12	52.215-8	ORDER OF PRECEDENCE--UNIFORM CONTRACT FORMAT	OCT/1997
I-13	52.215-10	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA	OCT/1997
I-14	52.215-12	SUBCONTRACTOR COST OR PRICING DATA	OCT/1997
I-15	52.215-14	INTEGRITY OF UNIT PRICES (ALTERNATE I, (OCT 1997))	OCT/1997
I-16	52.215-15	PENSION ADJUSTMENTS AND ASSET REVERSIONS	JAN/2004
I-17	52.215-18	REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS (PRB) OTHER THAN PENSIONS	OCT/1997
I-18	52.215-19	NOTIFICATION OF OWNERSHIP CHANGES	OCT/1997
I-19	52.216-7	ALLOWABLE COST AND PAYMENT	DEC/2002
I-20	52.216-8	FIXED FEE	MAR/1997
I-21	52.219-8	UTILIZATION OF SMALL BUSINESS CONCERNS	OCT/2000
I-22	52.222-1	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES	FEB/1997
I-23	52.222-4	CONTRACT WORK HOURS AND SAFETY STANDARDS ACT--OVERTIME COMPENSATION	SEP/2000
I-24	52.222-21	PROHIBITION OF SEGREGATED FACILITIES	FEB/1999
I-25	52.222-26	EQUAL OPPORTUNITY	APR/2002
I-26	52.222-35	AFFIRMATIVE ACTION FOR DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA	DEC/2001
I-27	52.222-36	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES	JUN/1998
I-28	52.222-37	EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS	DEC/2001
I-29	52.223-6	DRUG FREE WORKPLACE	MAY/2001
I-30	52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	JAN/2004
I-31	52.227-1	AUTHORIZATION AND CONSENT (ALTERNATE I dated April 1984)	JUL/1995
I-32	52.227-2	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT	AUG/1996
I-33	52.227-11	PATENT RIGHTS--RETENTION BY THE CONTRACTOR (SHORT FORM)	JUN/1997
I-34	52.228-7	INSURANCE--LIABILITY TO THIRD PERSONS	MAR/1996
I-35	52.229-4	FEDERAL, STATE, AND LOCAL TAXES (NONCOMPETITIVE CONTRACT)	APR/2003
I-36	52.232-9	LIMITATION ON WITHHOLDING OF PAYMENTS	APR/1984
I-37	52.232-17	INTEREST	JUN/1996
I-38	52.232-20	LIMITATION OF COST	APR/1984
I-39	52.232-22	LIMITATION OF FUNDS	APR/1984
I-40	52.232-23	ASSIGNMENT OF CLAIMS	JAN/1986
I-41	52.232-25	PROMPT PAYMENT	OCT/2003
I-42	52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFER--CENTRAL CONTRACTOR REGISTRATION	OCT/2003
I-43	52.233-1	DISPUTES	JUL/2002
I-44	52.233-3	PROTEST AFTER AWARD -- (ALTERNATE I, dated JUN 1985)	AUG/1996
I-45	52.242-1	NOTICE OF INTENT TO DISALLOW COSTS	APR/1984
I-46	52.242-3	PENALTIES FOR UNALLOWABLE COSTS	MAY/2001
I-47	52.242-4	CERTIFICATION OF INDIRECT COSTS	JAN/1997
I-48	52.242-13	BANKRUPTCY	JUL/1995
I-49	52.243-2	CHANGES--COST-REIMBURSEMENT (ALTERNATE V, dated April 1984))	AUG/1987
I-50	52.243-7	NOTIFICATION OF CHANGES	APR/1984

CONTINUATION SHEET

Reference No. of Document Being Continued

PIIN/SIIN W56HZV-04-R-0686

MOD/AMD

Name of Offeror or Contractor:

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
I-51	52.244-2	SUBCONTRACTS (ALT I--AUG 1998)	AUG/1998
I-52	52.244-5	COMPETITION IN SUBCONTRACTING	DEC/1996
I-53	52.245-5	GOVERNMENT PROPERTY (COST-REIMBURSEMENT, TIME-AND-MATERIAL, OR LABOR-HOUR CONTRACTS) (Deviation, per DAR Tracking Number 99-00008, 13 July 99)	JUN/2003
I-54	52.246-25	LIMITATION OF LIABILITY--SERVICES	FEB/1997
I-55	52.247-1	COMMERCIAL BILL OF LADING NOTATIONS the notation set forth in paragraph (a) of the clause applies in this contract. The agency name in line one of the notation shall read:US ARMY TANK-AUTOMOTIVE & ARMAMENTS COMMAND	APR/1984
I-56	52.247-67	SUBMISSION OF COMMERCIAL TRANSPORTATION BILLS TO THE GENERAL SERVICES ADMINISTRATION FOR AUDIT	JUN/1997
I-57	52.249-6	TERMINATION (COST-REIMBURSEMENT)	SEP/1996
I-58	52.249-14	EXCUSABLE DELAYS	APR/1984
I-59	52.253-1	COMPUTER GENERATED FORMS	JAN/1991
I-60	252.203-7001	PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE CONTRACT-RELATED FELONIES	MAR/1999
I-61	252.204-7003	CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT	APR/1992
I-62	252.209-7000	ACQUISITION FROM SUBCONTRACTORS SUBJECT TO ON-SITE INSPECTION UNDER THE INTERMEDIATE-RANGE NUCLEAR FORCES (INF) TREATY	NOV/1995
I-63	252.209-7004	SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A TERRORIST COUNTRY per DoD interim rule, Federal Register 27 Mar 98	MAR/1998
I-64	252.215-7000	PRICING ADJUSTMENTS	DEC/1991
I-65	252.215-7002	COST ESTIMATING SYSTEM REQUIREMENTS	OCT/1998
I-66	252.225-7012	PREFERENCE FOR CERTAIN DOMESTIC COMMODITIES	FEB/2003
I-67	252.225-7031	SECONDARY ARAB BOYCOTT OF ISRAEL	APR/2003
I-68	252.227-7013	RIGHTS IN TECHNICAL DATA --NONCOMMERCIAL ITEMS	NOV/1995
I-69	252.227-7014	RIGHTS IN NONCOMMERCIAL COMPUTER SOFTWARE AND NONCOMMERCIAL COMPUTER SOFTWARE DOCUMENTATION	JUN/1995
I-70	252.227-7016	RIGHTS IN BID OR PROPOSAL INFORMATION	JUN/1995
I-71	252.227-7017	IDENTIFICATION AND ASSERTION OF USE, RELEASE, OR DISCLOSURE RESTRICTIONS	JUN/1995
I-72	252.227-7019	VALIDATION OF ASSERTED RESTRICTIONS--COMPUTER SOFTWARE	JUN/1995
I-73	252.227-7030	TECHNICAL DATA--WITHHOLDING OF PAYMENT	MAR/2000
I-74	252.227-7034	PATENTS--SUBCONTRACTS	APR/1984
I-75	252.227-7036	DECLARATION OF TECHNICAL DATA CONFORMITY	JAN/1997
I-76	252.227-7037	VALIDATION OF RESTRICTIVE MARKINGS ON TECHNICAL DATA	SEP/1999
I-77	252.242-7000	POSTAWARD CONFERENCE	DEC/1991
I-78	252.243-7002	REQUESTS FOR EQUITABLE ADJUSTMENT	MAR/1998
I-79	252.244-7000	SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS (DoD CONTRACTS)	MAR/2000
I-80	52.215-21	REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA--MODIFICATIONS ````(ALTERNATE III (OCT 1997))	OCT/1997

(a) Exceptions from cost or pricing data.

(1) In lieu of submitting cost or pricing data for modifications under this contract, for price adjustments expected to exceed the threshold set forth at FAR 15.403-4 on the date of the agreement on price or the date of the award, whichever is later, the Contractor may submit a written request for exception by submitting the information described in the following subparagraphs. The Contracting Officer may require additional supporting information, but only to the extent necessary to determine whether an exception should be granted, and whether the price is fair and reasonable--

(i) Identification of the law or regulation establishing the price offered. If the price is controlled under law by periodic rulings, reviews, or similar actions of a governmental body, attach a copy of the controlling document, unless it was previously submitted to the contracting office.

(ii) Information on modifications of contracts of subcontracts for commercial items.

(A) If--

Name of Offeror or Contractor:

- (1) the original contract or subcontract was granted an exception from cost or pricing data requirements because the price agreed upon was based on adequate price competition, or prices set by law or regulation, or was a contract or subcontract for the acquisition of a commercial item, and
- (2) the modification (to the contract or subcontract) is not exempted based on one of these exceptions, then the Contractor may provide information to establish that the modification would not change the contract or subcontract from a contract or subcontract for the acquisition of a commercial item to a contract or subcontract for the acquisition of an item other than a commercial item.

(B) For a commercial item exception, the Contractor shall provide, at a minimum, information on prices at which the same item or similar items have previously been sold that is adequate for evaluating the reasonableness of the price of the modification. Such information may include--

- (1) For catalog items, a copy of or identification of the catalog and its date, or the appropriate pages for the offered items, or a statement that the catalog is on file in the buying office to which the proposal is being submitted. Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original equipment manufacturer, or reseller. Also explain the basis of each offered price and its relationship to the established catalog price, including how the proposed price relates to the price or recent sales in quantities similar to the proposed quantities.
- (2) For market-priced items, the source and date or period of the market quotation or other basis for market price, the base amount, and applicable discounts. In addition, describe the nature of the market.
- (3) For items included on an active Federal Supply Service Multiple Award Schedule contract, proof that an exception has been granted for the schedule item.
- (4) The Contractor grants the Contracting Officer or an authorized representative the right to examine, at any time before award, books, records, documents, or other directly pertinent records to verify any request for an exception under this clause, and the reasonableness of price. For items priced using catalog or market prices, or law or regulation, access does not extend to cost or profit information or other data relevant solely to the Contractor's determination of the prices to be offered in the catalog or marketplace.

(b) Requirements for cost or pricing data. If the Contractor is not granted an exception from the requirement to submit cost or pricing data, the following applies:

(1) The Contractor shall submit cost or pricing data and supporting attachments in accordance with Table 15-2 of FAR 15.408.

(2) As soon as practicable after agreement on price, but before contract award (except for unpriced actions), the Contractor shall submit a Certificate of Current Cost or Pricing Data, as prescribed by FAR 15.406-2.

(c) Submit the cost portion of the proposal via the following electronic media: Electronic spreadsheet files compatible with MS-DOS/Windows versions Excel 5.0 or earlier, with *.xls, *.wbl, or *.wk3 the preferred formats.

[End of Clause]

I-81

52.222-2

PAYMENT FOR OVERTIME PREMIUMS

JUL/1990

(a) The use of overtime is authorized under this contract if the overtime premium cost does not exceed amount to be negotiated or the overtime premium is paid for work--

- (1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdown of production equipment, or occasional production bottlenecks of a sporadic nature;
- (2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;
- (3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or
- (4) That will result in lower overall costs to the Government.

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

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 22 of 42

PIIN/SIIN W56HZV-04-R-0686

MOD/AMD

Name of Offeror or Contractor:

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

(2) Demonstrate the effect that denial of the request will have on the contract delivery or performance schedule;

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

(4) Provide reasons why the required work cannot be performed by using multishift operations or by employing additional personnel.

(End of clause)

I-82 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES APR/1984

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of (DEVIATION) after the date of the clause.

(b) The use in this solicitation or contract of any DoD FAR Supplement (DFARS) (48 CFR 2) clause with an authorized deviation is indicated by the addition of (DEVIATION) after the name of the regulation.

[End of Clause]

I-83 252.204-7004 ALTERNATE A NOV/2003

As prescribed in 204.1104, substitute the following paragraph (a) for paragraph (a) of the clause at FAR 52.204-7:

(a) Definitions. As used in this clause--

"Central Contractor Registration (CCR) database" means the primary Government repository for contractor information required for the conduct of business with the Government.

"Commercial and Government Entity (CAGE) code" means--

(1) A code assigned by the Defense Logistics Information Service (DLIS) to identify a commercial or Government entity; or

(2) A code assigned by a member of the North Atlantic Treaty Organization that DLIS records and maintains in the CAGE master file. This type of code is known as an "NCAGE code."

"Data Universal Numbering System (DUNS) number" means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities.

"Data Universal Numbering System +4 (DUNS+4) number" means the DUNS number assigned by D&B plus a 4-character suffix that may be assigned by a business concern. (D&B has no affiliation with this 4-character suffix.) This 4-character suffix may be assigned at the discretion of the business concern to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see Subpart 32.11 of the Federal Acquisition Regulation) for the same parent concern.

"Registered in the CCR database" means that-

(1) The Contractor has entered all mandatory information, including the DUNS number or the DUNS+4 number, into the CCR database;

(2) The Contractor's CAGE code is in the CCR database; and

(3) The Government has validated all mandatory data fields and has marked the records "Active."

[End of Clause]

I-84 52.204-4009 MANDATORY USE OF CONTRACTOR TO GOVERNMENT ELECTRONIC COMMUNICATION JUN/1999
(TACOM)

(a) All references in the contract to the submission of written documentation shall mean electronic submission. All electronic submissions shall be in the formats and media described in the "Electronic Quotations/Offers/Bids Required in Response to this Request

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-04-R-0686 MOD/AMD	Page 23 of 42
---------------------------	--	----------------------

Name of Offeror or Contractor:

for Quotations/Proposals/Bids" clause elsewhere in this document. (See Section K for commercial acquisitions, Section L for RFPs, and Section I for RFQs.)

(b) This shall include all written unclassified communications between the Government and the Contractor except contract awards and contract modifications which shall be posted on the internet. Return receipt shall be used if a commercial application is available. Classified information shall be handled in full accordance with the appropriate security requirements.

(c) In order to be contractually binding, all Government communications requiring a Contracting Officer signature must be sent from the Contracting Officer's e-mail address. The Contractor shall designate the personnel with signature authority who can contractually bind the contractor. All binding contractor communication shall be sent from this contractor e-mail address(es).

(d) Upon award, the Contractor shall provide the Contracting Officer with a list of e-mail addresses for all administrative and technical personnel assigned to this contract.

(e) Unless exempted by the Procuring Contracting Officer in writing, all unclassified written communication after contract award shall be transmitted electronically.

[End of Clause]

CONTINUATION SHEET

Reference No. of Document Being Continued

Page 24 of 42

PIIN/SIIN W56HZV-04-R-0686

MOD/AMD

Name of Offeror or Contractor:

SECTION J - LIST OF ATTACHMENTS

<u>List of</u> <u>Addenda</u>	<u>Title</u>	<u>Date</u>	<u>Number</u> <u>of Pages</u>	<u>Transmitted By</u>
Exhibit A	CDRL	10-MAR-2004	002	EMAIL

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 25 of 42

PIIN/SIIN W56HZV-04-R-0686

MOD/AMD

Name of Offeror or Contractor:

SECTION K - REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF OFFERORS

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
K-1	52.222-38	COMPLIANCE WITH VETERANS' EMPLOYMENT REPORTING REQUIREMENTS	DEC/2001
K-2	252.209-7001	DISCLOSURE OF OWNERSHIP OR CONTROL BY THE GOVERNMENT OF A TERRORIST COUNTRY per DoD interim rule, Federal Register 27 Mar 98	MAR/1998
K-3	252.227-7028	TECHNICAL DATA OR COMPUTER SOFTWARE PREVIOUSLY DELIVERED TO THE GOVERNMENT	JUN/1995
K-4 (a)	52.219-1	SMALL BUSINESS PROGRAM REPRESENTATIONS (Alternate I dated APR 2002)	APR/2002

(1) The North American Industry Classification System (NAICS) code for this acquisition is 541710.

(2) The small business size standard is 500.

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

(b) Representations.

(1) The offeror represents as part of its offer that it is, is not, a small business concern.

(2) [Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.] The offeror represents, for general statistical purposes, that it is, is not, a small disadvantaged business concern as defined in 13 CFR 124.1002.

(3) [Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.] The offeror represents as part of its offer that it is, is not, a woman-owned small business concern.

(4) [Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.] The offeror represents as part of its offer that it is, is not, a veteran-owned small business concern.

(5) [Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (b)(4) of this provision.] The offeror represents as part of its offer that it is, is not, a service-disabled veteran-owned small business concern.

(6) [Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.] The offeror represents, as part of its offer, that -

(i) It is, is not, a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material change in ownership and control, principal office, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR part 126; and

(ii) It is, is not, a joint venture that complies with the requirements of 13 CFR part 126, and the representation in paragraph (b)(6)(i) of this provision is accurate of the HUBZone small business concern or concerns that are participating in the joint venture. [The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture]: _____

Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.

(7) [Complete if offeror represented itself as disadvantaged in paragraph (b)(2) of this provision.] The offeror shall check the category in which its ownership falls:

Black American.

Hispanic American.

Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians).

Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory of the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).

Subcontinent Asian (Asian-Indian) American (persons with origins from India, Pakistan, Bangladesh,

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 27 of 42

PIIN/SIIN W56HZV-04-R-0686

MOD/AMD

Name of Offeror or Contractor:

officer or employee of an agency, a Member of Congress an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan or cooperative agreement:

(2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer: and

(3) He or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.

(c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision or who fails to file or amend the disclosure form to be filed or amended by this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

[End of Provision]

K-6

52.204-3

TAXPAYER IDENTIFICATION

OCT/1998

(a) Definitions.

(1) Common parent, as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

(2) Taxpayer Identification Number (TIN), as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

(b) All offerors must submit the information required in paragraphs (d) through (f) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the IRS. If the resulting contract is subject to the payment reporting requirements described in Federal Acquisition Regulation (FAR) 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

(c) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(d) Taxpayer Identification Number (TIN).

[] TIN: _____

[] TIN has been applied for.

[] TIN is not required because:

[] Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;

[] Offeror is an agency or instrumentality of a foreign government;

[] Offeror is an agency or instrumentality of the Federal Government.

(e) Type of organization.

[] Sole proprietorship;

[] Partnership;

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 28 of 42

PIIN/SIIN W56HZV-04-R-0686

MOD/AMD

Name of Offeror or Contractor:

- Corporate entity (not tax-exempt);
- Corporate entity (tax-exempt);
- Government entity (Federal, State, or local);
- Foreign government;
- International organization per 26 CFR 1.6049-4;
- Other:

(f) Common parent.

- Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this provision.

- Name and TIN of common parent:

Name: _____

TIN: _____

[End of Provision]

K-7 52.204-5 WOMEN-OWNED BUSINESS OTHER THAN SMALL BUSINESS MAY/1999

(a) Definition. Women-owned business concern, as used in this provision, means a concern that is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

(b) Representation. Complete only if the offeror is a women-owned business concern and has not represented itself as a small business concern in paragraph (b)(1) of FAR 52.219-1, Small Business Program Representation, of this solicitation. The offeror represents that it is a women-owned business concern.

[End of Provision]

K-8 52.204-6 DATA UNIVERSAL NUMBERING SYSTEM (DUNS) NUMBER OCT/2003

(a) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS+4" followed by the DUNS number or "DUNS+4" that identifies the offeror's name and address exactly as stated in the offer. The DUNS number is a nine-digit number assigned by Dun and Bradstreet, Inc. The DUNS+4 is the DUNS number plus a 4-character suffix that may be assigned at the discretion of the offeror to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see Subpart 32.11) for the same parent concern.

(b) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.

(1) An offeror may obtain a DUNS number--

(i) If located within the United States, by calling Dun and Bradstreet at 1-866-705-5711 or via the Internet at <http://www.dnb.com>; or

(ii) If located outside the United States, by contacting the local Dun and Bradstreet office.

(2) The offeror should be prepared to provide the following information:

- (i) Company legal business name.
- (ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.
- (iii) Company physical street address, city, state and Zip Code.
- (iv) Company mailing address, city, state and Zip Code (if separate from physical).
- (v) Company telephone number.
- (vi) Date the company was started.
- (vii) Number of employees at your location.
- (viii) Chief executive officer/key manager.
- (ix) Line of business (industry).
- (x) Company Headquarters name and address (reporting relationship within your entity).

Name of Offeror or Contractor:

[End of Provision]

K-9 52.209-5 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, DEC/2001
AND OTHER RESPONSIBILITY MATTERS

(a)

(1) The Offeror certifies, to the best of its knowledge and belief, that--

(i) The Offeror and/or any of its Principals--

(A) [] are
 [] are not

presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any
Federal agency;

(B) [] have
 [] have not

within a three-year period preceding this offer, been convicted of or had a civil judgment rendered
against them for: commission of fraud or a criminal offense in connection with obtaining, attempting
to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of
Federal or state antitrust statutes relating to the submission of offers; or commission of
embezzlement, theft, forgery, bribery, falsification or destruction of records, making false
statements, tax evasion, or receiving stolen property; and

(C) [] are
 [] are not

presently indicted for, or otherwise criminally or civilly charged by a governmental entity with,
commission of any of the offenses enumerated in paragraph (a)(1)(i)(B) of this provision.

(ii) The Offeror

[] has
[] has not

within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

(2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having
primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary,
division, or business segment, and similar positions). This Certification Concerns a Matter Within the Jurisdiction of an Agency of the
United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under
Section 1001, Title 18, United States Code.

(b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the
Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of
an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's
responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting
Officer may render the Offeror nonresponsible.

(d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in
good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required
to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when
making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies
available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

[End of Provision]

Name of Offeror or Contractor:

K-10 52.215-6 PLACE OF PERFORMANCE OCT/1997

(a) The offeror or respondent, in the performance of any contract resulting from this solicitation,

- intends
- does not intend

(Check applicable block)

to use one or more plants or facilities located at a different address from the address of the offeror or respondent as indicated in this proposal or response to request for information.

(b) If the offeror or respondent checks intends in paragraph (a) of this provision, it shall insert in following spaces the required information:

Place of Performance (Street
Address, City, County, State,
ZIP code)

Name and Address of Owner and
Operator of the Plant or Facility if
Other than Offeror or Respondent.

[End of Provision]

K-11 52.222-22 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS FEB/1999

The offeror represents that--

- (a) It has
- has not

participated in a previous contract or subcontract subject either to the EQUAL OPPORTUNITY clause of this solicitation, the clause originally contained in Section 310 of Executive Order No. 10925, or the clause contained in Section 201 of Executive Order No. 11114:

- (b) It has
- has not

filed all required compliance reports; and

(c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

[End of Provision]

K-12 52.222-25 AFFIRMATIVE ACTION COMPLIANCE APR/1984

The offeror represents that

- (a) It has developed and has on file,
- has not developed and does not have on file,

at each establishment, affirmative action programs required by the rules and regulations of the Secretary of Labor (41 CFR 60-1 and 60-2), or

- (b) It has not previously had contracts subject to the written affirmative action programs requirement of the rules and

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 31 of 42
	PIIN/SIIN W56HZV-04-R-0686	MOD/AMD

Name of Offeror or Contractor:

regulations of the Secretary of Labor.

[End of Provision]

K-13 52.227-6 ROYALTY INFORMATION APR/1984

(a) Cost or charges for royalties When the response to this solicitation contains costs or charges for royalties totaling more than \$250, the following information shall be included in the response relating to each separate item of royalty or license fee:

- (1) Name and address of licensor;
- (2) Date of license agreement;
- (3) Patent numbers, patent application serial numbers, or other basis on which the royalty is payable;
- (4) Brief description, including any part or model numbers, of each contract item or component on which the royalty is payable;
- (5) Percentage or dollar rate of royalty per unit;
- (6) Unit price of contract item;
- (7) Number of units; and
- (8) Total dollar amount of royalties.

(b) Copies of current licenses In addition, if specifically requested by the Contracting Officer before execution of the contract, the offeror shall furnish a copy of the current license agreement and an identification of applicable claims of specific patents.

[End of Provision]

K-14 252.235-7010 ACKNOWLEDGMENT OF SUPPORT AND DISCLAIMER MAY/1995

(a) The Contractor shall include an acknowledgment of the Government's support in the publication of any material based on or developed under this contract, stated in the following terms: This material is based upon work supported by the (name of contracting agency(ies)) under Contract No. (Contracting agency(ies) contract number(s)) .

(b) All material, except scientific articles or papers published in scientific journals, must, in addition to any notices or disclaimers by the Contractor, also contain the following disclaimer: Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the (name of contracting agency(ies)) .

(End of clause)

K-15 52.204-4007 OFFEROR'S DATAFAX NUMBER, E-MAIL ADDRESS, AND CAGE CODE MAR/2001
(TACOM)

(a) If you have a data fax number, please provide it below.

(b) If you have a company Internet address that we can use in the future when sending out electronic notices and possibly solicitations, please provide the complete e-mail address below.

(c) Provide your CAGE (Contractor And Government Entity) code below. If you don't have a CAGE code for your specific company name and address, enter NONE in the space below, and apply to Central Contractor Registration at the following website:
<http://www.ccr2000.com/>

[End of Provision]

K-16 52.215-4010 AUTHORIZED NEGOTIATORS JAN/1998
(TACOM)

Please identify, below, the representatives that are authorized to negotiate on your organization's behalf with the Government in connection with this request for proposals or request for information:

Name of Offeror or Contractor:

PERSONS AUTHORIZED TO NEGOTIATE

<u>NAME</u>	<u>TITLE</u>	<u>TELEPHONE NUMBER</u>
_____	_____	_____
_____	_____	_____

[End of Provision]

K-17 52.223-4002 USE OF CLASS I OZONE-DEPLETING SUBSTANCES (CIODS) DEC/1993
 (TACOM)

(a) Definitions.

(1) Class I Ozone-Depleting Substances (CIODS) refers to the class of substances identified in Section 602(a) of the Clean Air Act, (42 U.S.C. 7671a(a)), as reproduced below:

- (i) chlorofluorocarbon-11 (CFC-11)
- (ii) chlorofluorocarbon-12 (CFC-12)
- (iii) chlorofluorocarbon-13 (CFC-13)
- (iv) chlorofluorocarbon-111 (CFC-111)
- (v) chlorofluorocarbon-112 (CFC-112)
- (vi) chlorofluorocarbon-113 (CFC-113)
- (vii) chlorofluorocarbon-114 (CFC-114)
- (viii) chlorofluorocarbon-115 (CFC-115)
- (ix) chlorofluorocarbon-211 (CFC-211)
- (x) chlorofluorocarbon-212 (CFC-212)
- (xi) chlorofluorocarbon-213 (CFC-213)
- (xii) chlorofluorocarbon-214 (CFC-214)
- (xiii) chlorofluorocarbon-215 (CFC-215)
- (xiv) chlorofluorocarbon-216 (CFC-216)
- (xv) chlorofluorocarbon-217 (CFC-217)
- (xvi) halon-1211
- (xvii) halon-1301
- (xviii) halon-2402
- (xix) carbon tetrachloride
- (xx) methyl chloroform
- (xxi) Methyl bromide
- (xxii) hydrobromofluorocarbons (HBFCs)
- (xxiii) All isomers of the substances listed in this paragraph (a)(1) except for 1,1,2-trichloroethane, which is an isomer of methyl chloroform.

(2) Directly requires the use of CIODS means that the Government's specification or technical data package, at any tier, explicitly requires the use of any Class I Ozone-Depleting Substance (CIODS) in performance of the contract.

(3) Indirectly requires the use of CIODS means that the Government's specification or technical data package, while not explicitly requiring the use of any CIODS, does require a feature that you can meet or produce only by the use of CIODS.

(b) Per Section 326 of Public Law 102-484, the Department of Defense cannot award any contract that directly or indirectly requires the use of CIODS unless (i) the use of such substances is essential for contract performance, and (ii) no suitable substitute for the CIODS currently is available.

(c) Before releasing this solicitation, we conducted a best effort review of its technical requirements, standards, and specifications, to see if any contain requirements for CIODS. If we identified any such CIODS requirements, they are identified in subparagraph (d)(1) below.

(1) In addition, to help TACOM meet its obligations under Public Law 102-484, we ask you for input. If you have any special knowledge about any CIODS requirements that our specifications impose, whether directly or indirectly, or if you know about potential substitutes for any CIODS required by our specifications, we would appreciate the information.

Name of Offeror or Contractor:

(2) It should be understood that you are not obligated to give us the information requested by this provision, and that we cannot provide any separate or special payment for doing so. However, we are asking only for information based on knowledge that is readily available to you as a supplier in this industry. We do not expect you to do any review of our specifications more extensive than the one you perform in order to develop your price.

(d) Please summarize your own review of our specification/technical data package, by completing the following:

(1) During our review of the specification or technical data package in this solicitation, we--

- [] have
[] have not

found any direct requirements to use any CIODS. (If have is checked above, offerors are asked to identify, on the following lines, (i) any specifications and standards not already listed immediately below that directly require the use of CIODS; (ii) the CIODS required by the listed specifications and standards; and (iii) whether any substitutes are known to be available for the listed CIODS.)

Table with 3 columns: Spec/Standard, Required CIODS, Substitute Available? with blank rows for input.

(2) Further, in our review of the specification or technical data package in this solicitation, we--

- [] have
[] have not

found any indirect requirements to use any CIODS. (Offerors who check have above are asked to identify, on the following lines, (i) the specifications and standards for this acquisition that indirectly require the use of CIODS; (ii) the CIODS indirectly required by each listed specification and standard; and (iii) whether any substitutes are known to be available for the listed CIODS.)

Table with 3 columns: Spec/Standard, Required CIODS, Substitute Available? with blank rows for input.

(e) Offerors who check have in paragraphs (d)(1) or (2) above also are requested to say whether substitutes are known to be available for any of the CIODS. If an available substitute would perform less well than the CIODS would perform, please let us know what the technical trade-offs are to the extent that you have such information available.

(f) If you checked have in paragraphs (d)(1) or (2) above, and also indicated that substitutes for CIODS are available, we need to know whether use of the suggested substitute would have any effect on your proposed price. If your proposal price for compliance with our current specifications differs from what your price would be if the substitute for CIODS were required, we ask that you let us know what the difference would be in Section B of this solicitation, by giving us two prices or offers:

--One price/offer, labeled with CIODS, will be the offered price in the event that CIODS are used.

--The second price/offer, labeled without CIODS, will be the price offered if substitutes for CIODS are used, and will specify the substitute(s) being proposed for use.

(g) Section 326 of Public Law 102-484 reflects the national and international interest in minimizing the use of CIODS. For this reason, TACOM reserves the right to (i) determine the suitability of substitutes for CIODS when such potential substitutes are available; and (ii) change the specification in any contract awarded as a result of this solicitation, to require the use of suitable substitutes in lieu of CIODS.

[End of Provision]

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 34 of 42

PIIN/SIIN W56HZV-04-R-0686

MOD/AMD

Name of Offeror or Contractor:

SECTION L - INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS

This solicitation incorporates one or more solicitation provisions 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. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this address: <http://farsite.hill.af.mil/>

[End of Provision]

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
L-1	52.211-2	AVAILABILITY OF SPECIFICATIONS LISTED IN THE DOD INDEX OF SPECIFICATIONS AND STANDARDS (DODISS) AND DESCRIPTIONS LISTED IN THE ACQUISITION MANAGEMENT SYSTEMS AND DATA REQUIREMENTS CONTROL LIST, DOD 5010.12-L	JAN/2004
L-2	52.214-34	SUBMISSION OF OFFERS IN THE ENGLISH LANGUAGE	APR/1991
L-3	52.214-35	SUBMISSION OF OFFERS IN U.S. CURRENCY	APR/1991
L-4	52.215-1	INSTRUCTIONS TO OFFERORS--COMPETITIVE ACQUISITIONS (ALTERNATE I (OCT 1997) AND ALTERNATE II (OCT 1997))	JAN/2004
L-5	52.215-16	FACILITIES CAPITAL COST OF MONEY	OCT/1997
L-6	52.222-46	EVALUATION OF COMPENSATION FOR PROFESSIONAL EMPLOYEES	FEB/1993
L-7	252.204-7001	COMMERCIAL AND GOVERNMENT ENTITY (CAGE) CODE REPORTING	AUG/1999
L-8	252.209-7003	COMPLIANCE WITH VETERANS' EMPLOYMENT REPORTING REQUIREMENTS	MAR/1998
L-9	52.215-20	REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA (ALTERNATE III, OCT 1997)	OCT/1997

(a) Exceptions from cost or pricing data.

(1) In lieu of submitting cost or pricing data, offerors may submit a written request for exception by submitting the information described in the following subparagraphs. The Contracting Officer may require additional supporting information, but only to the extent necessary to determine whether an exception should be granted, and whether the price is fair and reasonable.

(i) Identification of the law or regulation establishing the price offered. If the price is controlled under law by periodic rulings, reviews, or similar actions of a governmental body, attach a copy of the controlling document, unless it was previously submitted to the contracting officer.

(ii) Commercial item exception. For a commercial item exception, the offeror shall submit, at a minimum, information on prices at which the same item or similar items have previously been sold in the commercial market that is adequate for evaluating the reasonableness of the price for this acquisition. Such information may include--

- (A) For catalog items, a copy of or identification of the catalog and its date, or the appropriate pages for the offered items, or a statement that the catalog is on file in the buying office to which the proposal is being submitted. Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original equipment manufacturer, or reseller. Also explain the basis of each offered price and its relationship to the established catalog price, including how the proposed price relates to the price of recent sales in quantities similar to the proposed quantities;
- (B) For market-priced items, the source and date or period of the market quotation or other basis for market price, the base amount, and applicable discounts. In addition, describe the nature of the market;
- (C) For items included on an active Federal Supply Service Multiple Award Schedule contract, proof that an exception has been granted for the schedule item.

(2) The offeror grants the Contracting Officer or an authorized representative the right to examine, at any time before award, books, records, documents, or other directly pertinent records to verify any request for an exception under this provision, and the reasonableness of price. For items priced using catalog or market prices, or law or regulation, access does not extend to cost or profit information or other data relevant solely to the offeror's determination of the prices to be offered in the catalog or marketplace.

(b) Requirements for cost or pricing data. If the offeror is not granted an exception from the requirement to submit cost or

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 35 of 42

PIIN/SIIN W56HZV-04-R-0686

MOD/AMD

Name of Offeror or Contractor:

pricing data, the following applies:

(1) The offeror shall submit cost or pricing data and supporting attachments in accordance with Table 15-2 of FAR 15.408.

(2) As soon as practicable after agreement on price, but before contract award (except for unpriced actions such as letter contracts), the offeror shall submit a Certificate of Current Cost or Pricing Data, as prescribed by FAR 15.406-2.

(c) Submit the cost portion of the proposal via the following electronic media: CD-ROM

[End of Provision]

L-10 52.216-1 TYPE OF CONTRACT APR/1984
The Government contemplates award of a cost plus fixed fee contract resulting from this solicitation.
(End of provision)

L-11 52.233-2 SERVICE OF PROTEST AUG/1996

(a) Protests, as defined in Section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgement of receipt from:

U.S. Army Tank-automotive and Armaments Command
ATTN: AMSTA-AQ, Associate Deputy for Contracting
(Protest Coordinator)
Warren, MI 48397-5000

or

HQ, Army Materiel Command
Office of Command Counsel
ATTN: AMCCC-PL
9301 Chapek Road, Rm 2-1SE3401
Ft. Blvoir, VA 22060
Facsimile number (703) 806-8866/806-8875

The AMC-Level protest procedures are found at: www.amc.army.mil/amc/command_counsel/protest/protest.html.

If Internet access is not available, contact the Contracting Officer or HQ, AMC to obtain the AMC-Level Protest Procedures.

Telegraphic transmission of protest will not be authorized, unless specifically approved by the PCO.

(b) The copy of any protest shall be received in the U.S. Army Tank-automotive and Armaments Command office designated above within one day of filing a protest with the GAO.

[End of Provision]

L-12 52.237-10 IDENTIFICATION OF UNCOMPENSATED OVERTIME OCT/1997

(a) Definitions. As used in this provision--

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

(2) Uncompensated overtime rate is the rate which results from multiplying the hourly rate for a 40 hour work week by 40, and then dividing by the proposed hours per week. For example, 45 hours proposed on a 40 hour work week basis at \$20.00 would be converted to an uncompensated overtime rate of \$17.78 per hour. ($\20×40) divided by 45 = \$17.78.

(b) For any proposed hours against which an uncompensated overtime rate is applied, the offeror shall identify in its proposal the hours in excess of an average of 40 hours per week, by labor category, at the same level of detail as compensated hours, and the uncompensated overtime rate per hour, whether at the prime or subcontract level. This includes uncompensated overtime hours that are in indirect cost pools for personnel whose regular hours are normally charged direct.

(c) The offeror's accounting practices used to estimate uncompensated overtime must be consistent with its cost accounting practices used to accumulate and report uncompensated overtime hours.

(d) Proposals that include unrealistically low labor rates, or which do not otherwise demonstrate cost realism, will be considered

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-04-R-0686	Page 36 of 42 MOD/AMD
---------------------------	---	--

Name of Offeror or Contractor:

in a risk assessment and evaluated for award in accordance with that assessment.

- (e) The offeror shall include a copy of its policy addressing uncompensated overtime with its proposal.
(End of provision)

L-13 52.252-5 AUTHORIZED DEVIATIONS IN PROVISIONS APR/1984

(a) The use in this solicitation of any Federal Acquisition Regulation (48 CFR Chapter 1) provision with an authorized deviation is indicated by the addition of (DEVIATION) after the date of the provision.

(b) The use in this solicitation of any DoD FAR Supplement (DFARS) (48 CFR Chapter 2) provision with an authorized deviation is indicated by the addition of (DEVIATION) after the name of the regulation.
(End of clause)

L-14 52.233-4001 HQ-AMC LEVEL PROTEST PROCEDURES MAY/2000
(TACOM)

(a) Policy: A protest to an AMC forum is a protest to the agency, within the meaning of FAR 33.103. The HQ, AMC-Level Protest Program is intended to encourage an interested party to seek resolution of its concerns within AMC, rather than filing a protest with the General Accounting Office (GAO), or other external forum.

(b) Agency Protest: An AMC Protest may be filed with either, but not both:

- (1) The contracting officer designated in the solicitation for resolution of protests, or,
- (2) HQ, AMC at the address designated below.

(c) Election of Forum: After an interested party protests an AMC procurement to HQ, AMC and while that protest is pending, the protestor agrees not to file a protest with the GAO, or other external forum. If the protestor has filed a protest with the GAO, or other external forum, HQ, AMC-Level protest procedures may not be used and any protest that has been filed will be dismissed.

(d) Protest Decision Authority: The AMC Command Counsel is designated as the HQ, AMC Protest Decision Authority. In the absence of the Command Counsel, the Deputy Command Counsel is designated as the HQ, AMC Protest Decision Authority.

(e) Time for Filing a Protest: HQ, AMC protest shall be filed in accordance with the timeframes set out in FAR 33.103(e). HQ, AMC Office Hours are 8:00 am--4:30 pm Eastern Time. Time for filing any document expires at 4:30 pm, Eastern Time on the last day on which such filing may be made.

(f) Form of Protest: HQ, AMC protest shall include the protestor's name, address and telephone number, including fax number; the solicitation or contract number, identity of the contracting activity and the contracting officer's name; a statement of all legal and factual grounds for protest, including copies of all relevant documents; a request for a ruling; and, a request for relief. All protests must be signed by an authorized representative of the protestor.

(g) Processing of HQ, AMC-Level Protests:

- (1) To file an AMC-level protest, send the protest to:

HQ Army Materiel Command
Office of Command Counsel
9301 Chapek Road, Rm 2-1SE3401
Ft. Belvoir, VA 22060

Fax #: (703) 806-8866 or (703) 806-8875

If you have a web browser, you can use the following HTTP to view the complete AMC-level protest procedures:
http://www.amc.army.mil/amc/command_counsel/protest/protest.html

(2) Within 10 working days after the protest is filed, the Contracting Officer, with the assistance of legal counsel, shall file with the HQ, AMC Office of Command Counsel, ATTN: AMCCC-PL, an administrative report responsive to the protest. Reports shall be sent by facsimile, over-night mail or hand-delivered, to ensure timely receipt.

(3) The HQ, AMC Protest Decision Authority will issue a written decision within 20 working days after the filing of the protest.

Name of Offeror or Contractor:

(4) The written decision will be binding on the Army Materiel Command and its contracting activities.

(5) For good cause shown, the HQ, AMC Protest Decision Authority may grant extensions of time for filing the administrative report and for the issuance of the written decision. When such an extension is granted, the protestor and all interested parties shall be notified within 1 working day of the decision to grant the extension.

(h) Effect of Protest on Award and Performance:

(1) Protests before award: When a protest is filed with HQ, AMC prior to award, a contract may not be awarded unless authorized by the Assistant Deputy Chief of Staff (ADCS) for Acquisition, Contracting and Production Management, HQ, AMC, in accordance with FAR 33.103(f).

(2) Protests after award: When a protest is filed with HQ, AMC within 10 calendar days after award, or within five calendar days of debriefing for any debriefing that when requested was required by FAR 15.806, the contracting officer shall suspend performance. The HQ, AMC ADCS for Acquisition, Contracting and Production Management may authorize contract performance, notwithstanding the protest, upon a written finding that:

-- contract performance will be in the best interests of the United States; or

-- urgent and compelling circumstances that significantly affect the interests of the United States will not permit waiting for a decision from the HQ, AMC Protest Decision Authority.

(i) Remedies: The HQ, AMC Protest Decision Authority may grant any one or combination of the following remedies:

- (1) terminate the contract;
- (2) re-compete the requirement;
- (3) issue a new solicitation;
- (4) refrain from exercising options under the contract;
- (5) award a contract consistent with statute and regulation;
- (6) pay appropriate costs as stated in FAR 33.102(b)(2); and
- (7) such other remedies as HQ, AMC Protest Decision Authority determines necessary to correct a defect.

[End of Provision]

L-15 52.215-4003 HANDCARRIED OFFERS - INCLUDING OFFERS DELIVERED BY EXPRESS SERVICES DEC/2002
(TACOM) (NON-US POSTAL SERVICE MAIL)

(a) Handcarried offers shall be addressed to:

US Army Tank-automotive and Armaments Command
Acquisition Center
Bid Lobby - Building 231, AMSTA-AQ-AMAD
East 11 Mile Road
Warren, MI. 48397-0001

(b) Offers shall not be addressed to an individual buyer. All offers must be addressed to the Bid Lobby at the above address.

(c) The external delivery envelope or wrapper must be marked with the solicitation number and the date and time of the solicitation closing. Each envelope should contain only one offer.

(d) Handcarried offers must be delivered to the TACOM Receiving Dock in Building 249. Directions to TACOM: From Van Dyke Avenue, travel westbound on 11 Mile Road; enter the first Arsenal gate immediately west of the railroad tracks on the north side of the street. Take an immediate right and follow security officer directions to the Receiving Dock in Building 249. The driver may need to obtain a visitors badge, and must be a US citizen. The Government will forward the package to the Bid Lobby address in Building 231.

(e) Offerors must ensure that the commercial carrier they use has a tracking system that can provide documentation of the date and time of delivery to the Government. For handcarried offers delivered by other than a commercial carrier, the offeror must ensure that the delivery person obtains a signature from Receiving Dock personnel on a receipt that shows the date and time of delivery to the

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 38 of 42

PIIN/SIIN W56HZV-04-R-0686

MOD/AMD

Name of Offeror or Contractor:

Government. The delivery person must provide the receipt since Receiving Dock personnel do not have them.

(f) Packages must be delivered to Building 249 between the hours of 8:00 am and 3:00 pm local time.

[End of Provision]

L-16 52.215-4004 COST OR PRICING DATA

JUN/1999

(a) Every proposal must include cost or pricing data for (i) prime contracts expected to exceed \$500,000 and (ii) each prospective noncompetitive subcontract that:

(1) Has an estimated value of \$10 million or more, or

(2) Has an estimated value of more than \$500,000 and is more than 10% of the total contract price.

(b) In order to meet this requirement, you must include a certificate of current cost or pricing data, in the format specified in 15.406-2 (see paragraph (d) below).

(c) Data shall be submitted in the format indicated in Table 15-2 of FAR 15.408.

(1) Address both (i) the basic contractual quantities identified in Section B of this solicitation, and (ii) any applicable option quantity identified in Section H of this solicitation.

(2) For required subcontractor cost or pricing data:

(i) Clearly identify the sub-contracted scope of work and its relation to the total proposal, and

(ii) Include (or forward to the Procuring Contracting Officer (PCO) when first available) complete documentation of the subcontract proposal audit, analysis, evaluation, and negotiation.

(3) Concurrently furnish the complete package of information to the cognizant Defense Contract Management Area Operation (DCMC) and Defense Contract Audit Agency (DCAA) offices. You are responsible for submitting all required subcontractor cost or pricing data to each of these three Government offices (or for ensuring that subcontractors forward their data directly).

(d) Certificate of Current Cost or Pricing Data. As soon as practicable after contract price agreement, you will furnish a Certificate of Current Cost or Pricing Data for the prime contract and each subcontract identified above.

[End of Provision]

L-17 52.215-4404 DATA AND COMMUNICATIONS SUBMITTED TO THE GOVERNMENT ELECTRONICALLY

MAY/2002

(a) The Government often employs contractors as system administrators to operate and maintain Government computer systems. These systems include local area networks, web sites, databases, other electronic records, e-mail accounts, other electronic data transfer mechanisms and computer software. The employees of these contracted system administrators sign nondisclosure agreements obligating them not to reveal information contained in files, documents, computers or systems that they administer. However, unless such information is protected in some way, contracted system administrators do have the ability to access such information.

(b) Potential contractors as well as any other parties are thus advised to take steps needed to prevent access by contracted system administrators to information submitted electronically to the Government. Absent such steps, it is assumed that contracted system administrators are permitted the capability to access the data. The access will be limited to that which is necessary for the contract system administrator to perform its duties for the Government. The access shall be subject to the condition that third party information is not to be revealed by the contracted system administrator.

[End of Provision]

L-18 52.215-4850 ELECTRONIC OFFERS REQUIRED IN RESPONSE TO THIS SOLICITATION
(TACOM)

APR/2004

(a) You must submit your offer via paperless electronic media (See Paragraph (b) below.). Unless paper copies are specifically requested elsewhere in this solicitation (in Section L), offers submitted in paper form are unacceptable. You must submit your electronic offer, and any supplemental information (such as spreadsheets, backup data, and technical information), using any of the following electronic formats:

Name of Offeror or Contractor:

(1) Files readable using these Office XP or Microsoft* 2002 Office Products (TACOM can currently read OFFICE 2002* and lower.): Word, Excel, Powerpoint, or Access. Spreadsheets must be sent in a file format that includes all formulae, macro and format information. Print image is not acceptable. Executable files are unacceptable.

(2) Files in Adobe PDF (Portable Document Format). Scanners should be set to a minimum of 200 dots per inch.

(3) Files in HTML (Hypertext Markup Language). HTML documents must not contain active links to live Internet sites or pages. All linked information must be contained within your electronic offer and be accessible offline.

(4) Other electronic formats. Before preparing your offer in any other electronic format, please e-mail the buyer identified in Block 10 of the solicitation cover sheet (Government Standard Form 33), with e-mail copy-furnished to amsta-idq@tacom.army.mil, to obtain a decision as to the format's acceptability. This e-mail must be received by the buyer not later than ten calendar days before the closing date. Failure to e-mail the buyer within this timeframe to seek an alternate format's acceptability may result in rejection of your offer. All alternate methods must be at no cost to the Government.

NOTE (Compression): The above formats may be submitted in compressed form using Winzip*. Self-extracting files are not acceptable. Check with the buyer before using any product other than Winzip for file compression.

NOTE (Hyperlinks): Documents [submitted using any of the above formats] must not contain active links (hyperlinks) to any other documents that are not contained in the proposal. This includes links to live Internet web sites or web pages. All linked information must be contained within your electronic offer and be accessible offline.

NOTE (Macros): The virus scanning software used by our email systems cannot always distinguish a macro from a virus. Therefore, sending a macro embedded in an email message or an email attachment may cause the email offer to be quarantined. In that event subparagraphs (f) and (g) apply.

(b) Acceptable media: You must submit your offer via 100 megabyte or 250 megabyte Zip*-disk, or 3 1/2 inch disk, or 650 megabyte CD ROM, E-mail, or datafax. Identify the software application, and version, that you used to create each file submitted. The word "datafax" used in this clause means "facsimilie" as defined at FAR 52.215-5.

(1) 100 OR 250 MEGABYTE ZIP*-DISK, 3 1/2 INCH DISK, OR 650 MEGABYTE CD ROM via U.S. Mail or other carrier. Offerors shall label any and all submitted disks with the solicitation number and closing date, and the offeror's name and address and contact phone number. Envelopes containing disks must be labeled per FAR 52.215-1(c), found within the provision, "Instructions to Offerors--Competitive Acquisition", listed in Section L. Your attention is also called to the entirety of that provision--all contained therein is applicable to paperless electronic offers. In the event of multiple submitted offers, place each offer/submission on its own disk(s)(one offer can comprise multiple disks). You must also submit only one offer/submission per envelope. Notwithstanding language in Block 9 of the SF 1449 cover sheet of this solicitation that may state otherwise, submit ONLY ONE (1) of each disk (no additional copies required). If you will be sending your CD or ZIP disks by any method other than US Postal Service, see the Section L provision 52.215-4003 (TACOM), entitled "Handcarried Offers," for delivery instructions.

(2) E-MAIL. If you choose to use e-mail, address your offer to offers@tacom.army.mil. DO NOT E-MAIL OFFERS TO THE BUYER. THE SUBJECT LINE OF THE E-MAIL MUST READ: "OFFER--[solicitation number], [name of Company/offeror], CLOSES [closing date]". Maximum size of each e-mail message shall be three and one-half (3.5) megabytes. Use the file compression described in the NOTE in paragraph (a) above. You may use multiple e-mail messages for each offer/submission, however, you must annotate the subject lines as described above for each message, and number them in this manner: "Message 1 of 3, 2 of 3, 3 of 3".

(3) DATAFAX. Faxed offers MUST BE SENT TO TACOM'S NETWORK FAX SERVER ON 1-586-574-5527. DO NOT FAX OFFERS TO THE BUYER. SIMILARLY, DO NOT ADDRESS THE FAX TO THE BUYER. YOU MUST ADDRESS THE FAX TO THE ATTENTION OF offers@tacom.army.mil AS THIS IS THE LOCATION WHERE YOUR FAX MUST BE RECEIVED. THE COVER PAGE OF THE FAX MUST CLEARLY INDICATE THAT THE FAX SHOULD BE SENT TO offers@tacom.army.mil.

Paper faxes are not acceptable. Transmit only one offer for each datafax transaction. Clearly identify the offer as such on your fax cover page or via your PC, include your company's name, and state the proper internal TACOM address: offers@tacom.army.mil. Offerors may send a fax using a personal computer or standalone fax machine, but it must be sent to the above number. If you use a standalone fax machine, you won't receive a confirmation of receipt. See paragraph (e) below for the minimum requirements of your offer. Maximum size of datafax offers is three and one-half megabytes (3.5MB), the same limitation as that for e-mail offers. For your datafax, use the same subject line as that for e-mails as indicated above: "OFFER--[solicitation number], [name of your Company/offeror], CLOSES [closing date]".

Unless specifically instructed otherwise in this solicitation, select only one medium by which to transmit each offer. For instance, do not submit an offer via 100 or 250 megabyte Zip*-disk AND e-mail.

(c) Lateness rules for submitted disks, e-mail, or datafax submissions are outlined in FAR 52.215-1, "Instructions to Offerors--Competitive Acquisition", listed in Section L of this solicitation. Pay particular attention to paragraph (c)(3) of that clause as it

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 40 of 42
	PIIN/SIIN W56HZV-04-R-0686	MOD/AMD

Name of Offeror or Contractor:

relates to the timing of e-mail or datafax submissions.

(d) Security Note: If you choose to password-protect access to your offer, you must provide the password to TACOM at least ten days prior to submitting the protected file. Contact the buyer to arrange a means of providing the password. Passwords used only for the purpose of write protecting files need not be provided.

(e) Electronic offers must include, as a minimum:

(1) The SF 1449 cover sheet filled out. SIGNATURE: For offers submitted via disk or CD ROM per (b)(1) above, this SF 1449 cover sheet must be signed and included electronically in your disk or CD. Clearly label the disc/CD ROM as described in paragraph (b)(1) above, adding the name and title of the signer authorizing your company, your company name, and then sign the LABEL itself. Datafaxed offers also must include a signed SF 1449 cover sheet. E-mailed offers must also include a signed SF 1449 cover sheet that can be either faxed or scanned. If faxed to the TACOM Network Fax Server (1-586-574-5527), you must annotate that it is being submitted together with your e-mailed offer. If scanned, attach it to your e-mail offer (or first e-mail message if you are sending multiple e-mails due to length).

(2) All applicable fill-in provisions from Sections A, B, F, and K of this solicitation. You may find Word versions of Section K provisions requiring your fill-in on our TACOM Business Opportunities webpage (<http://contracting.tacom.army.mil/mastersol/sectionk.htm>). You can fill them in and attach them to your offer. See the solicitation for which provisions are required. Also, Section E provisions filled in (if applicable): Inspection Point: Origin, TACOM clause 52.246-4028. All applicable fill-ins must be completed and submitted by the offeror.

(3) A statement of agreement to all the terms, conditions, and provisions of this solicitation.

(4) Any other information required by the solicitation.

(f) Please see FAR 15.207(c) for a description of the steps the Government shall take with regard to unreadable offers.

(g) Offerors shall make every effort to ensure that their offer is virus-free. Offers (or portions thereof) submitted which DO reflect the presence of a virus, or which are otherwise rendered unreadable by damage in either physical or electronic transit, shall be treated as "unreadable" per paragraph (f) above.

*Registered trademark

[End of Provision]

L-19 52.219-4003 HELP FOR SMALL, DISADVANTAGED AND WOMAN-OWNED FIRMS JUN/1997
(TACOM)

(a) Procurement Technical Assistance Centers (PTACs). The Federal Government has established over 100 PTACs around the nation to help small vendors do business with the Defense Department and other Government agencies. PTACs offer most of their services FREE OF CHARGE.

(b) PTACs provide their clients with...

- marketing advice
- information on sales opportunities and partnering prospects
- help with preparing offers
- matching your firm's services and products to Government requirements
- copies of Government specifications (sometimes for a fee)
- post-award guidance
- referrals to other business assistance resources
- newsletters, which typically discuss Government policy changes and upcoming seminars and trade fairs

(c) To find the PTAC nearest you, visit <http://www.dla.mil.ddas.default.htm> on the World Wide Web.

[End of Provision]

L-20 52.233-4000 NOTICE REGARDING TACOM OMBUDSPERSON AND AMC-LEVEL PROTEST PROGRAM AUG/1999
(TACOM)

(a) At the Tank-automotive and Armaments Command (TACOM) we have an ombudsperson office, which builds an extra communication avenue that our contractors can use.

Name of Offeror or Contractor:

(b) If you think that this solicitation contains inappropriate requirements, needs streamlining, or should be changed, you should first contact the buyer or the Procuring Contracting Officer (PCO).

(c) The buyer's name and phone number are on the cover page (SF 1449) of this solicitation in block number 7.

(d) If the buyer or PCO doesn't respond to the problem to your satisfaction, or if you want to make comments anonymously, you can contact the Ombudsperson's Office. Our Ombudsperson is Ms. LaRuth Shepherd. Her address, e-mail and phone number are:

U.S. Army TACOM
AMSTA-AQ-C (Ms. Shepherd)
Warren, MI 48397-5000

shepherl@tacom.army.mil

(586) 574-6597 or 6547

(e) If you contact Ms. Shepherd, please provide her with the following information:

- (1) TACOM solicitation number;
- (2) Name of PCO;
- (3) Problem description;
- (4) Summary of your discussions with the buyer/PCO.

(f) Another avenue you can use, if you wish to protest some feature of this acquisition, is to protest to TACOM's headquarters, the Army Materiel Command. The AMC-level protest program encourages interested parties to seek resolution of their concerns within AMC as an Alternative Dispute Resolution forum, rather than filing a protest with the General Accounting Office or other external forum. Contract award or performance is suspended during an AMC-level protest to the same extent, and within the same time periods, as would apply to a protest filed with the GAO. The AMC program has a goal of resolving protests within 20 working days from the date of filing. To be timely, AMC-level protests must be filed within the periods specified in subpart 33.103 of the Federal Acquisition Regulation.

(g) To file an AMC-level protest, send the protest to:

HQ Army Materiel Command
Office of Command Counsel
9301 Chapek Road, Rm 2-1SE3401
Ft. Belvoir, VA 22060

Fax number: (703) 806-8866/8875

If you have a web-browser, you can use the following HTTP to view the complete AMC-level protest procedures:

www.amc.army.mil/amc/command_counsel/protest/protest.html

[End of Provision]

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 42 of 42

PIIN/SIIN W56HZV-04-R-0686

MOD/AMD

Name of Offeror or Contractor:

SECTION M - EVALUATION FACTORS FOR AWARD

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
M-1	52.217-3	EVALUATION EXCLUSIVE OF OPTIONS	APR/1984
M-2	52.217-5	EVALUATION OF OPTIONS	JUL/1990
M-3	52.217-4003 (TACOM)	EVALUATION OF INCOMPLETE OPTION PRICING	FEB/1998

(a) Per FAR 17.203(d), offerors may price the option CLIN in this solicitation incrementally, by entering different option unit prices that will apply to different subquantities or quantity ranges (in the event that the Government elects to exercise less than 100% of the option). Notwithstanding this fact, the provision entitled EVALUATION OF OPTIONS (FAR 52.217-5, located elsewhere in this Section M) indicates that the Government's evaluation for contract award will include each offeror's price for 100% of the option quantity.

(b) In light of the above, if an offeror specifies unit prices that apply to one or more option quantity ranges, but does not specify a unit price for 100% of the option, we will evaluate that offer for award as follows. The option price for such offer shall be deemed to be the higher of (i) the unit price that applies to the basic (non-option) quantity, or (ii) the highest unit price that is identified against any range or subquantity of the option CLIN.

[End of Provision]