

AWARD/CONTRACT		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)		RATING		PAGE OF PAGES 1 26	
2. CONTRACT (Proc. Inst. Ident.) NO. HR0011-09-C-0016		3. EFFECTIVE DATE 21 Nov 2008		4. REQUISITION/PURCHASE REQUEST/PROJECT NO. X924/00			
5. ISSUED BY DARPA CMO ATTN: STEPHEN C. DAVIS 3701 N. FAIRFAX DR. ARLINGTON VA 22203-1714		CODE HR0011	6. ADMINISTERED BY (if other than item 5) DCMA LOS ANGELES P.O. BOX 9608 MISSION HILLS CA 91346-9608		CODE S0512A		
7. NAME AND ADDRESS OF CONTRACTOR (No. street, city, county, state and zip code) TELEDYNE SCIENTIFIC & IMAGING LLC 1049 CAMINO DOS RIOS THOUSAND OAKS CA 91360-2362				8. DELIVERY [] FOB ORIGIN [X] OTHER (See below)			
				9. DISCOUNT FOR PROMPT PAYMENT Net 30 days.			
				10. SUBMIT INVOICES 1 (4 copies unless otherwise specified) TO THE ADDRESS SHOWN IN:		ITEM Section G	
CODE 2D609		FACILITY CODE					
11. SHIP TO/MARK FOR U.S. ARMY RESEARCH LABORATORY T. GORDON BROWN ATTN: AMSRD-ARL-WM-BA ABERDEEN PROVING GROUNDS MD 21005-5069		CODE WB13LT	12. PAYMENT WILL BE MADE BY DFAS COLUMBUS CENTER WEST ENTITLEMENT OPERATIONS P.O. BOX 182381 COLUMBUS OH 43218-2381		CODE HQ0339		
13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: [] 10 U.S.C. 2304(c) [] 41 U.S.C. 253(c) []				14. ACCOUNTING AND APPROPRIATION DATA See Schedule			
15A. ITEM NO.	15B. SUPPLIES/ SERVICES		15C. QUANTITY	15D. UNIT	15E. UNIT PRICE	15F. AMOUNT	
SEE SCHEDULE							
15G. TOTAL AMOUNT OF CONTRACT						\$9,593,369.00	
16. TABLE OF CONTENTS							
(X)	SEC.	DESCRIPTION	PAGE(S)	(X)	SEC.	DESCRIPTION	PAGE(S)
PART I - THE SCHEDULE				PART II - CONTRACT CLAUSES			
X	A	SOLICITATION/ CONTRACT FORM	1	X	I	CONTRACT CLAUSES	20 - 25
X	B	SUPPLIES OR SERVICES AND PRICES/ COSTS	2 - 3	PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS			
X	C	DESCRIPTION/ SPECS/ WORK STATEMENT	4 - 6	X	J	LIST OF ATTACHMENTS	26
X	D	PACKAGING AND MARKING	7	PART IV - REPRESENTATIONS AND INSTRUCTIONS			
X	E	INSPECTION AND ACCEPTANCE	8	K	REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS		
X	F	DELIVERIES OR PERFORMANCE	9 - 11		L INSTRS, CONDS, AND NOTICES TO OFFERORS		
X	G	CONTRACT ADMINISTRATION DATA	12 - 14		M EVALUATION FACTORS FOR AWARD		
X	H	SPECIAL CONTRACT REQUIREMENTS	15 - 19				
CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE							
17. [X] CONTRACTOR'S NEGOTIATED AGREEMENT Contractor is required to sign this document and return 1 copy to issuing office. Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein.				18. [] AWARD (Contractor is not required to sign this document.) Your offer on Solicitation Number			
19. (b)(4) (Signature of person authorized to sign)				20A. NAME OF CONTRACTING OFFICER STEPHEN C. DAVIS Contracting Officer TEL: (b)(4) EMAIL:			
19C. DATE SIGNED 11/24/08				20C. DATE SIGNED 24 Nov 08			

Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	ESTIMATED COST	FIXED FEE	TOTAL EST. COST PLUS FIXED FEE
0001	<p>EXACTO Phase I</p> <p>CPFF</p> <p>The Contractor shall accomplish the tasks associated with Phase I in accordance with the Attachment (1) Statement of Work. Data deliverables/reports will be provided in accordance with Sections C and F.</p> <p>FOB: Destination</p>	(b)(4)		<p>\$9,593,369.00</p> <p>\$9,593,369.00</p>

See Exhibit A

ITEM NO	AMOUNT
000101	Funding for CLIN 0001
	AO No. X924/00
	ACRN AA
	\$1,650,000.00

ITEM NO	SUPPLIES/SERVICES	ESTIMATED COST	FIXED FEE	TOTAL EST. COST PLUS FIXED FEE
0002			(b)(4)	\$243,576.00
OPTION	EXACTO Phase I Option CPFF The Contractor shall accomplish the tasks associated with Phase I in accordance with the Attachment (1) Statement of Work. Data deliverables/reports will be provided in accordance with Sections C and F. FOB: Destination			\$243,576.00

Section C - Descriptions and Specifications

CLAUSES INCORPORATED BY FULL TEXT

C-1 Scope of Work

- (a) The Contractor shall furnish the necessary personnel, materials, facilities, and other services as may be required to perform Contract Line Items (CLINs) 0001, in accordance with the Statement of Work, Attachment 1 hereto.
(end of clause)

C-2 Reports and Other Deliverables

- (a) The Contractor shall submit the following reports and other deliverables in accordance with the delivery schedule set forth in Section F. Reports and other deliverables shall be submitted in writing, as defined in FAR 2.101, or as specified below:

(1) R&D STATUS REPORT

This brief narrative, not to exceed five pages in length, shall contain the following:

- (i) For first report only; the date work actually started.
- (ii) Description of progress during the reporting period, supported by reasons for any change in approach reported previously
- (iii) Planned activities and milestones for the next reporting period.
- (iv) Description of any major items of experimental or special equipment purchased or constructed during the reporting period.
- (v) Notification of any changes in key personnel associated with the contract during the reporting period.
- (vi) Summary of substantive information derived from noteworthy trips, meetings, and special conferences held in connection with the contract during the reporting period.
- (vii) Summary of all problems or areas of concern.
- (viii) Related accomplishments since last report.
- (ix) Fiscal status, to include reporting of summary level financial data in the following format:
(next page)

R&D STATUS REPORT
PROGRAM FINANCIAL STATUS

Work Breakdown		Cumulative to Date			At Completion	
Structure or Task Element	Planned Expend	Actual Expend	% Budget Compl	At Compl	Latest Revised Estimate	Remarks
Subtotal: _____						
Management Reserve: _____						
Or Unallocated Resources: _____						
TOTAL: _____						

Note: Budget at completion changes only with the amount of any scope changes. (Not affected by underrun or overrun)

Based on currently authorized work:

Is current funding sufficient for the current fiscal year (FY)? (Explain in narrative if "NO")

YES NO

What is the next FY funding requirement at current anticipated levels?

\$ _____

Have you included in the report narrative any explanation of the above data and are they cross-referenced?

YES NO

(2) FINAL REPORT

This report shall document the results of the complete effort and should be delivered at the completion of the contract. If the Government chooses to exercise the options under this contract, the due date for the final report is extended accordingly. Title pages shall include a disclaimer worded substantially as follows:

"The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the official policies, either expressly or implied, of the Defense Advanced Research Projects Agency or the U.S. Government."

The Final Technical Report summary shall include:

Task Objectives
Technical Problems
General Methodology (i.e., literature review, laboratory experiments, surveys, etc.)
Technical Results
Important Findings and Conclusions
Significant Hardware Development
Special Comments
Implications for Further Research
Standard Form 298, August 1998

(b) Reports delivered by the Contractor in the performance of the contract shall be considered "Technical Data" as defined in Section I contract clauses entitled "Rights in Technical Data - Noncommercial Items" and "Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation."

(c) Bulky Reports shall be mailed by other than first-class mail unless the urgency of submission requires use of first-class mail. In this situation, one copy shall be mailed first-class and the remaining copies forwarded by less than first-class.

(d) All papers and articles published as a result of DARPA sponsored research shall include a statement reflecting the sponsorship. In addition, a bibliography of the titles and authors of all such papers are to be included in the Final Technical Report

(1) The cover or title page of each of the above reports or publications prepared, will have the following citation:

Sponsored by
Defense Advanced Research Projects Agency
Information Processing Techniques Office (IPTO)
Program: EXACTO
ARPA Order No. X924/00, Program Code: 8G10
Issued by DARPA/CMO under Contract No. HR0011-09-C-0016

(2) The title page shall include a disclaimer worded substantially as follows:

"The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the official policies, either expressly or implied, of the Defense Advanced Research Projects Agency or the U.S. Government."

(3) All technical reports must (i) be prepared in accordance with American National Standards Institute (ANSI) Standard Z39.18; (ii) include a Standard Form 298, August 1998; and (iii) be marked with an appropriate Distribution Statement.

(end of clause)

Section D - Packaging and Marking

CLAUSES INCORPORATED BY FULL TEXT

D-1 Packaging and Marking

- (a) All items shall be preserved, packaged, packed and marked in accordance with best commercial practices to meet the packing requirements of the carrier, and to ensure safe delivery at destination.
(end of clause)

Section E - Inspection and Acceptance

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at destination by the Contracting Officer's Representative (COR) identified at Section G herein.

CLAUSES INCORPORATED BY REFERENCE

52.246-8	Inspection Of Research And Development Cost Reimbursement	MAY 2001
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Section F - Deliveries or Performance

CLAUSES INCORPORATED BY REFERENCE

52.247-34	F.O.B. Destination	NOV 1991
52.247-55	F.O.B. Point For Delivery Of Government-Furnished Property	JUN 2003

CLAUSES INCORPORATED BY FULL TEXT

F-1 Term of Contract

- (a) The term of the contract commences on the effective date of the contract and continues through 21 May 2010.
- (b) The period of performance for Option 1, as set forth in CLIN 0002, shall be from the effective date of the option exercise to and including 9 months.
- (end of clause)

F-2 Reports and Other Deliverables

- (a) Delivery of all reports and other deliverables shall be made to the addressee specified in F-3 entitled "Report Distribution" in accordance with the following:

<u>Description</u>	<u>Due Date (on or before)</u>
-R&D Status Reports (per Clause C-2)	Monthly
-Updates on SRR documentation	Quarterly
-System Design Reviews	As required
-SRR Deliverables	21 January 2009
-SRR meeting	
-Final TDAP	
-System level requirements, Draft segment level requirements and interface definitions	
-HITL Simulation Design review	21 March 2009
(b)(4)	
-PDR deliverables	21 May 2010
-PDR meeting	
-PDR report of prototype system to be built in Phase II	
-HITL Simulation results report	21 May 2010

Note: Reports other than R&D Status Reports shall be in Contractor's format.

*If Option is exercised

(end of clause)

F-3 Report Distribution

(a) Defense Technical Information Center

- (1) Email: TR@dtic.mil
(one electronic copy of the Final Technical Report, if unclassified)

OR

- (2) Attn: DTIC-BCS
8725 John J. Kingman Road, Suite 0944
Fort Belvoir, VA 22060-0944
(two hard copies of the Final Technical Report if unclassified)

(b) DARPA/Library
3701 North Fairfax Drive
Arlington, VA 22203-1714
Email: library@darpa.mil
(one copy of the Final Technical Report)

(c) DARPA/CMO
Attn: Mr. Stephen C. Davis
3701 North Fairfax Drive
Arlington, VA 22203-1714
Email: Stephen.C.Davis@darpa.mil
Phone: 571-218-4949
(one copy each report)

(d) DARPA/TTO
Attn: Dr. Lyndall Beamer
3701 North Fairfax Drive
Arlington, VA 22203-1714
Email: Lyndall.Beamer@darpa.mil
(one copy each report)

(e) DARPA/TTO
Attn: ADPM
3701 North Fairfax Drive
Arlington, VA 22203-1714
Email: Jeffrey.Smith@darpa.mil
(one copy each report)

(f) COR

T. Gordon Brown
U.S. Army Research Laboratory
ATTN: AMSRD-ARL-WM-BA
Aberdeen Proving Grounds, MD 21005-5069
Email: brown@arl.army.mil

Phone: (410) 306-0737

F-4 Notice Regarding Late Delivery

- (a) In the event the Contractor anticipates difficulty in complying with the contract delivery schedule, the Contractor shall immediately notify the Contracting Officer in writing, giving pertinent details, including the date by which it expects to make delivery; PROVIDED, however, that this date shall be informational only in character and the receipt thereof shall not be construed as a waiver by the Government of any contract delivery schedule, or any rights or remedies provided by law or under this contract.
- (end of clause)

Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

AA: 9780400 1320 X924 P8G10 2525 DPAC 8 5340 S12136 62702E
 AMOUNT: \$1,650,000.00
 AO: X924/00
 CIN 00000000000000000000000000000000: \$1,650,000.00

CLAUSES INCORPORATED BY FULL TEXT

G-1 Procuring Office Representative

(a) The Procuring Office Representative is Stephen C. Davis, DARPA/CMO, 3701 North Fairfax Drive, Arlington, VA 22203-1714, telephone: 571-218-4949, e-mail: Stephen.C.Davis@darpa.mil.
 (end of clause)

G-2 Electronic Submission of Payment Requests

(a) Invoices for goods received or services rendered under this contract shall be submitted electronically through Wide Area Work Flow – Receipt and Acceptance (WAWF):

(1) Vendors that have never used WAWF shall follow the directions in the WAWF Vendor Getting Started Guide available at the following website:

<http://www.dfas.mil/contractorpay/electroniccommerce/wideareaworkflow.html>. This website also contains links for Vendor training and practice. Additional support can be obtained by calling WAWF Customer Service at 866-618-5988.

(2) Back up documentation (such as timesheets, monthly status reports, etc.) can be included and attached to the invoice in WAWF. Attachments should be in PDF format, but Attachments created in any Microsoft Office product may be attached. Total limit for the size of files per invoice is 5 megabytes.

(b) The following information, regarding invoice routing DoDAAC's, must be entered for completion of the invoice in WAWF:

WAWF Invoice Type:	Select Cost Voucher
Issuing Office DoDAAC	HR0011
Admin Office DoDAAC	S0512A
Service Approver DoDAAC (Cost Voucher)	W813LT
DCAA Office DoDAAC	HAA619
Paying Office DoDAAC	HQ0339

(c) Cost Vouchers from Contractors approved by DCAA for direct billing will be directly routed to DFAS. Cost Vouchers from Contractors not approved for direct billing will be routed to DCAA for approval before the Cost Voucher is routed to DFAS. All Final Cost Voucher submissions will be routed to the Service Approver for approval. The DCAA office for this award is:

DCAA San Fernando Valley Branch Office
 DoDAAC: HAA619
 6230 Van Nuys Blvd, Federal Building
 Suite 2018
 Van Nuys, CA 91401-2724

(d) For each invoice/cost voucher submitted for payment, the contractor shall also e-mail the WAWF automated invoice notice directly to the following points of contact:

Name	E-mail	Phone	Role
T. Gordon Brown	brown@arl.army.mil	410-306-0737	COR

G-3 Delegation of Authority for Contract Administration

(a) DCMA Los Angeles (DoDAAC: S0512A) is hereby designated as the Contracting Officer's authorized representative for administering this contract in accordance with current directives.
 (end of clause)

G-4 Contracting Officer's Representative (COR)

(a) Performance of work under this contract shall be subject to the technical direction of:

T. Gordon Brown
 U.S. Army Research Laboratory
 ATTN: AMSRD-ARL-WM-BA
 Aberdeen Proving Grounds, MD 21005-5069
 Email: brown@arl.army.mil
 Phone: (410) 306-0737

Such technical direction includes those instructions to the Contractor necessary to accomplish the Statement of Work. The COR is not otherwise authorized to make any representations or commitments of any kind on behalf of the Contracting Officer or the Government. The COR does not have the authority to alter the Contractor's obligations or to change the specifications of the contract.

(b) Technical direction shall not include any direction which:

- (1) Constitutes additional work outside the scope of work;
- (2) Constitutes a change as defined in Section I contract clause entitled "Changes";
- (3) In any manner causes an increase or decrease in the total estimated cost or the time required for contract performance; or
- (4) Changes any of the stated terms, conditions, or specifications of the contract.

(end of clause)

G-5 Payment Instructions for Multiple Accounting Classification Citations

(a) Payments under contract line items funded by multiple accounting classification citations shall be made from the earliest available fiscal year funding sources. The earliest assigned ACRN must be fully disbursed before making disbursements from a succeeding ACRN.

(end of clause)

G-6 Incremental Funding

(a) This contract shall be subject to incremental funding with \$1,650,000 presently made available for performance under this contract. It is estimated that the funds presently available are sufficient to permit the Contractor's performance through 31 January 2009. Except in accordance with the Section I clause FAR 52.232-22, "Limitation of Funds," no legal liability of the part of the Government for payment of any money in excess of \$1,650,000 shall arise unless and until additional funds are made available by the Contracting Officer through a modification to this contract.

(end of clause)

G-7 Payment of Cost and Fee

(a) As consideration for the proper performance of work required under this contract, the Contractor shall be paid as follows:

(1) Costs, as provided for under Section I contract clause titled "Allowable Cost and Payment" not to exceed the amount set forth as "Total Estimated Cost" in Section B, and subject further to those Section I clauses entitled "Limitation of Cost" or "Limitation of Funds".

(2) A fixed fee in the amount set forth as "Fixed Fee" in Section B, in accordance with the Section I contract clause entitled "Fixed Fee". The Contractor may bill on each invoice the amount of the fixed fee bearing the same percentage to the total fixed fee as the amount of cost billed bears to the total estimated cost.

(end of clause)

Section H - Special Contract Requirements

CLAUSES INCORPORATED BY FULL TEXT

H-1 Contracting Officer

(a) Notwithstanding any other provision of this contract, the Contracting Officer is the only individual authorized to redirect the effort or in any way amend or modify any of the terms of this contract. If, as a result of technical discussions, it is desirable to alter contract obligations or statement of work, a modification must be issued in writing and signed by the Contracting Officer.

(end of clause)

H-2 Type of Contract

(a) This is a Cost Plus Fixed Fee completion contract.

(end of clause)

H-3 Public Release or Dissemination of Information

(a) There shall be no dissemination or publication, except within and between the Contractor and any subcontractors, of information developed under this contract or contained in the reports to be furnished pursuant to this contract without prior review for sensitive, proprietary and/or export control information or data by the DARPA Technical Information Officer (DARPA/TIO). The Government will identify any such information for removal. All technical reports will be given proper review by appropriate authority to determine which Distribution Statement is to be applied prior to the initial distribution of these reports by the Contractor. Papers resulting from unclassified contracted fundamental research are exempt from prepublication controls and this review requirement, pursuant to DoD Instruction 5230.27 dated October 6, 1987. Any publications shall incorporate an Acknowledgement of Support and Disclaimer in accordance with DFARS 252.235.7010.

(b) When submitting material for review and comment for open publication as described in subparagraph (a) above, the Contractor must submit a request for public release request to the DARPA TIO and include the following information: 1) Document Information: document title, document author, short plain-language description of technology discussed in the material (approx 30 words), number of pages (or minutes of video) and document type (briefing, report, abstract, article, or paper); 2) Event Information: event type (conference, principle investigator meeting, article or paper), event date, desired date for DARPA's approval; 3) DARPA Sponsor: DARPA Program Manager, DARPA office, and contract number; and 4) Contractor's Information: POC name, e-mail and phone. Allow four weeks for processing; due dates under four weeks require a justification. Unusual electronic file formats may require additional processing time. Requests can be sent either via e-mail to tio@darpa.mil or via 3701 North Fairfax Drive, Arlington VA 22203-1714, telephone (571) 218-4235. Refer to www.darpa.mil/tio for information about DARPA's public release process.

(end of clause)

H-4 Key Personnel

(a) The Contractor shall notify the Contracting Officer prior to making any change in key personnel. Key personnel are defined as follows:

(b)(4)





(b) The Contractor must demonstrate that the qualifications of the prospective personnel are equal to or better than the qualifications of the personnel being replaced. Notwithstanding any of the foregoing provisions, key personnel shall be furnished unless the Contractor has demonstrated to the satisfaction of the COR that the qualifications of the proposed substitute personnel are equal to or better than the qualifications of the personnel being replaced.

(end of clause)

H-5 Restrictions on Printing

(a) Unless otherwise authorized in writing by the Contracting Officer, reports, data, or other written material produced using funds provided by this contract and submitted hereunder shall be reproduced only by duplicating processes and shall not exceed 5,000 single page reports or a total of 25,000 pages of a multiple-page report. These restrictions do not preclude the writing, editing, preparation of manuscript or reproducible copy of related illustrative materials if required as part of this contract, or incidental printing such as forms or materials necessary to be used by the Contractor to respond to the terms of the contract.

(end of clause)

H-6 Contractor Representations and Certifications

(a) The Contractor's Representations and Certifications dated 10 October 2008 (as well as those listed in the Online Representations and Certifications Application, dated 17 January 2008) are incorporated herein by reference.

(end of clause)

H-7 Insurance Schedule

(a) The Contractor shall maintain the types of insurance listed in FAR 28.307-2 (a), (b) and (c), with the minimum amounts of liability indicated therein. The types of insurance coverage listed in paragraphs (d) and (e) shall also be maintained when applicable.

(end of clause)

H-8 Travel

(a) Reimbursement for travel-related expenses shall be in accordance with the Contractor's approved travel policy. The Federal Travel Regulations, Joint Travel Regulations (JTR), and Standardized Regulations as stated in FAR 31.205-46 will be used as a guide in determining reasonableness of per diem costs. Costs for travel shall be allowable subject to the provisions of FAR 31.205-46.

(b) In connection with direct charge to the contract of travel-related expenses, the Contractor shall hold travel to the minimum required to meet the objectives of the contract, and substantial deviations from the amount of travel agreed to during contract negotiation shall not be made without the authorization of the Contracting Officer.

When applicable, the Contractor shall notify the COR of proposed travel of an employee beyond that agreed to during negotiations.

(c) Approval of the Contracting Officer shall be obtained in advance for attendance by personnel at training courses, seminars, and other meetings not directly related to contract performance if the costs for the courses, seminars, and other meetings are charged to the contract.

(d) All foreign travel shall be authorized and approved in advance, in writing, by the Contracting Officer. Request for such travel must be submitted to the Contracting Officer at least 30 days in advance of traveler's anticipated departure date, and shall include traveler's itinerary of United States Flag Air Carriers.

(end of clause)

H-9 Metric System

(a) The Defense Advanced Research Projects Agency (DARPA) will consider the use of the metric system in all of its activities consistent with operational, economical, technical and safety requirements.

(b) The metric system will be considered for use in all new designs. When it is deemed not to be in the best interest of the DoD to provide metric design, justification shall be provided.

(c) Physical and operational interfaces between metric items and U.S. customary items will be designed to assure that interchangeability and interoperability will not be affected.

(d) Existing designs dimensioned in U.S. customary units will be converted to metric units only if determined to be necessary or advantageous. Unnecessary retrofit of existing systems with new metric components will be avoided where both the new metric and existing units are interchangeable and interoperable. Normally, the system of measurement in which an item is originally designed will be retained for the life of the item.

(e) During the metric transition phase hybrid metric and U.S. customary designs will be necessary and acceptable. Material components, parts, subassemblies, and semi-fabricated material, which are of adequate or when it is otherwise specifically determined to be in the best interest of the Department of Defense. Bulk materials will be specified and accepted in metric units when it is expedient or economical to do so.

(f) Technical reports, studies, and position papers, (except those pertaining to items dimensioned in U.S. customary units) will include metric units of measurement in addition to or in lieu of U.S. customary units. With respect to existing contracts, this requirement applies only if such documentation can be obtained without an increase in contract costs.

(g) Use of the dual dimensions (i.e., both metric and U.S. customary dimensions) on drawings will be avoided unless it is determined in specific instances that such usage will be beneficial. However, the use of tables on the document to translate dimensions from one system of measurement to the other is acceptable.

(end of clause)

H-10 Consent to Subcontract

(a) Pursuant to the clause of the General Provisions entitled "Subcontracts (JUN 2007)," FAR 52.244-2(j), the Contracting Officer hereby consents to the placement of subcontract(s) with the following firm(s)/consultant(s) at the ceiling amounts specified:

NAME	TOTAL AMOUNT
(b)(4)	

(b) Approval must be obtained from the Administrative Contracting Officer to increase the use or number of subcontractors from the level established in subparagraph a.
(end of clause)

H-12 Small Business Subcontracting Plan and Goals

(a) The Contractor's Small Business Subcontracting Plan, dated 1 October 2008, is incorporated herein and made a part of this contract by reference.
(end of clause)

H-18 Proprietary Technical Data and Computer Software

(a) Any deliverable technical data or computer software developed or generated at private expense and considered to be proprietary by the Contractor or subcontractors shall be delivered in accordance with DFARS 252.227-7013 and 252.227-7014. A list of such data and/or software is incorporated into the contract as Attachment No. 2.
(end of clause)

H-19 Consultants

(a) The contractor is authorized to use the following consultants to the extent indicated:

Name	Total Amount
(b)(4)	(b)(4)

H-21 Export Control Clause

Should this project develop beyond fundamental research (basic and applied research ordinarily published and shared broadly within the scientific community) with military or dual-use applications the following apply:

(a) The contractor shall comply with all U. S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120 through 130, and the Export Administration Regulations (EAR), 15 CFR Parts 730 through 799, in the performance of this contract. In the absence of available license exemptions/exceptions, the Contractor shall be responsible for obtaining the appropriate

licenses or other approvals, if required, for exports of (including deemed exports) hardware, technical data, and software, or for the provision of technical assistance.

(b) The Contractor shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of this contract, including instances where the work is to be performed on-site at any Government installation (whether in or outside the United States), where the foreign person will have access to export-controlled technical data or software.

(c) The Contractor shall be responsible for all regulatory record keeping requirements associated with the use of licenses and license exemptions/exceptions.

(d) The Contractor shall be responsible for ensuring that the provisions of this clause apply to its subcontractors.
(end of clause)

H-22 Invention Disclosure and Reports

All written communications required by this clause shall be submitted to the Administrative Contracting Officer (ACO). All required reporting shall be accomplished using the i-Edison.gov reporting website (<http://s-edison.info.nih.gov/iEdison/>)
(end of clause)

Section I - Contract Clauses

CLAUSES INCORPORATED BY REFERENCE

52.202-1	Definitions	JUL 2004
52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	APR 1984
52.203-6	Restrictions On Subcontractor Sales To The Government	SEP 2006
52.203-7	Anti-Kickback Procedures	JUL 1995
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity	JAN 1997
52.203-10	Price Or Fee Adjustment For Illegal Or Improper Activity	JAN 1997
52.203-12	Limitation On Payments To Influence Certain Federal Transactions	SEP 2007
52.204-2	Security Requirements	AUG 1996
52.204-4	Printed or Copied Double-Sided on Recycled Paper	AUG 2000
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	SEP 2006
52.215-2	Audit and Records--Negotiation	JUN 1999
52.215-2 Alt II	Audit and Records--Negotiation (Jun 1999) - Alternate II	APR 1998
52.215-8	Order of Precedence--Uniform Contract Format	OCT 1997
52.215-10	Price Reduction for Defective Cost or Pricing Data	OCT 1997
52.215-12	Subcontractor Cost or Pricing Data	OCT 1997
52.215-14	Integrity of Unit Prices	OCT 1997
52.215-15	Pension Adjustments and Asset Reversions	OCT 2004
52.215-18	Reversion or Adjustment of Plans for Postretirement Benefits (PRB) Other than Pensions	JUL 2005
52.215-21	Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data--Modifications	OCT 1997
52.216-7	Allowable Cost And Payment	DEC 2002
52.216-8	Fixed Fee	MAR 1997
52.219-8	Utilization of Small Business Concerns	MAY 2004
52.219-9	Small Business Subcontracting Plan	APR 2008
52.219-16	Liquidated Damages-Subcontracting Plan	JAN 1999
52.222-3	Convict Labor	JUN 2003
52.222-21	Prohibition Of Segregated Facilities	FEB 1999
52.222-26	Equal Opportunity	MAR 2007
52.222-35	Equal Opportunity For Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans	SEP 2006
52.222-36	Affirmative Action For Workers With Disabilities	JUN 1998
52.222-37	Employment Reports On Special Disabled Veterans, Veterans Of The Vietnam Era, and Other Eligible Veterans	SEP 2006
52.222-39	Notification of Employee Rights Concerning Payment of Union Dues or Fees	DEC 2004
52.222-50	Combating Trafficking in Persons	AUG 2007
52.222-53	Exemption from Application of the Service Contract Act to Contracts for Certain Services--Requirements	NOV 2007
52.223-14	Toxic Chemical Release Reporting	AUG 2003
52.225-13	Restrictions on Certain Foreign Purchases	JUN 2008
52.226-1	Utilization Of Indian Organizations And Indian-Owned Economic Enterprises	JUN 2000

52.227-1 Alt I	Authorization And Consent (Dec 2007) - Alternate I	APR 1984
52.227-2	Notice And Assistance Regarding Patent And Copyright Infringement	DEC 2007
52.227-10	Filing Of Patent Applications--Classified Subject Matter	DEC 2007
52.228-7	Insurance--Liability To Third Persons	MAR 1996
52.230-2	Cost Accounting Standards	OCT 2008
52.230-6	Administration of Cost Accounting Standards	MAR 2008
52.232-9	Limitation On Withholding Of Payments	APR 1984
52.232-20	Limitation Of Cost	APR 1984
52.232-22	Limitation Of Funds	APR 1984
52.232-23 Alt I	Assignment of Claims (Jan 1986) - Alternate I	APR 1984
52.232-25	Prompt Payment	OCT 2008
52.232-33	Payment by Electronic Funds Transfer--Central Contractor Registration	OCT 2003
52.233-1	Disputes	JUL 2002
52.233-3 Alt I	Protest After Award (Aug 1996) - Alternate I	JUN 1985
52.242-1	Notice of Intent to Disallow Costs	APR 1984
52.242-3	Penalties for Unallowable Costs	MAY 2001
52.242-4	Certification of Final Indirect Costs	JAN 1997
52.242-13	Bankruptcy	JUL 1995
52.242-15 Alt I	Stop-Work Order (Aug 1989) - Alternate I	APR 1984
52.243-2 Alt V	Changes--Cost-Reimbursement (Aug 1987) - Alternate V	APR 1984
52.244-5	Competition In Subcontracting	DEC 1996
52.244-6	Subcontracts for Commercial Items	MAR 2007
52.245-1 (Dev)	Government Property (June 2007)	JUN 2007
52.245-9	Use And Charges	JUN 2007
52.249-6	Termination (Cost Reimbursement)	MAY 2004
52.249-14	Excusable Delays	APR 1984
52.253-1	Computer Generated Forms	JAN 1991
252.201-7000	Contracting Officer's Representative	DEC 1991
252.203-7001	Prohibition On Persons Convicted of Fraud or Other Defense-Contract-Related Felonies	DEC 2004
252.204-7000	Disclosure Of Information	DEC 1991
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.204-7004 Alt A	Central Contractor Registration (52.204-7) Alternate A	SEP 2007
252.204-7005	Oral Attestation of Security Responsibilities	NOV 2001
252.204-7008	Requirements for Contracts Involving Export-Controlled Items	JUL 2008
252.205-7000	Provision Of Information To Cooperative Agreement Holders	DEC 1991
252.209-7004	Subcontracting With Firms That Are Owned or Controlled By The Government of a Terrorist Country	DEC 2006
252.215-7000	Pricing Adjustments	DEC 1991
252.215-7002	Cost Estimating System Requirements	DEC 2006
252.219-7003	Small Business Subcontracting Plan (DOD Contracts)	APR 2007
252.223-7004	Drug Free Work Force	SEP 1988
252.225-7002	Qualifying Country Sources As Subcontractors	APR 2003
252.225-7006	Quarterly Reporting of Actual Contract Performance Outside the United States	MAY 2007
252.225-7012	Preference For Certain Domestic Commodities	MAR 2008
252.226-7001	Utilization of Indian Organizations and Indian-Owned Economic Enterprises, and Native Hawaiian Small Business Concerns	SEP 2004

252.227-7013	Rights in Technical Data--Noncommercial Items	NOV 1995
252.227-7014	Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation	JUN 1995
252.227-7015	Technical Data--Commercial Items	NOV 1995
252.227-7016	Rights in Bid or Proposal Information	JUN 1995
252.227-7019	Validation of Asserted Restrictions--Computer Software	JUN 1995
252.227-7027	Deferred Ordering Of Technical Data Or Computer Software	APR 1988
252.227-7037	Validation of Restrictive Markings on Technical Data	SEP 1999
252.227-7038	Patent Rights--Ownership by the Contractor (Large Business)	DEC 2007
252.231-7000	Supplemental Cost Principles	DEC 1991
252.232-7003	Electronic Submission of Payment Requests and Receiving Reports	MAR 2008
252.232-7010	Levies on Contract Payments	DEC 2006
252.235-7010	Acknowledgment of Support and Disclaimer	MAY 1995
252.235-7011	Final Scientific or Technical Report	NOV 2004
252.239-7001	Information Assurance Contractor Training and Certification	JAN 2008
252.242-7004	Material Management And Accounting System	NOV 2005
252.243-7002	Requests for Equitable Adjustment	MAR 1998
252.244-7000	Subcontracts for Commercial Items and Commercial Components (DoD Contracts)	JAN 2007
252.247-7023	Transportation of Supplies by Sea	MAY 2002
252.247-7024	Notification Of Transportation Of Supplies By Sea	MAR 2000

CLAUSES INCORPORATED BY FULL TEXT

52.203-14 DISPLAY OF HOTLINE POSTER(S) (DEC 2007)

(a) Definition.

United States, as used in this clause, means the 50 States, the District of Columbia, and outlying areas.

(b) Display of fraud hotline poster(s). Except as provided in paragraph (c)--

(1) During contract performance in the United States, the Contractor shall prominently display in common work areas within business segments performing work under this contract and at contract work sites--

(i) Any agency fraud hotline poster or Department of Homeland Security (DHS) fraud hotline poster identified in paragraph (b)(3) of this clause; and

(ii) Any DHS fraud hotline poster subsequently identified by the Contracting Officer.

(2) Additionally, if the Contractor maintains a company website as a method of providing information to employees, the Contractor shall display an electronic version of the poster(s) at the website.

(3) Any required posters may be obtained as follows:

Poster(s) Obtain from:

DoD Inspector General, ATTN: Defense Hotline, 400 Army Navy Drive, Washington, DC 22202-2884

(c) If the Contractor has implemented a business ethics and conduct awareness program, including a reporting mechanism, such as a hotline poster, then the Contractor need not display any agency fraud hotline posters as required in paragraph (b) of this clause, other than any required DHS posters.

(d) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (d), in all subcontracts that exceed \$5,000,000, except when the subcontract--

(1) Is for the acquisition of a commercial item; or

(2) Is performed entirely outside the United States.

(End of clause)

52.215-19 NOTIFICATION OF OWNERSHIP CHANGES (OCT 1997)

(a) The Contractor shall make the following notifications in writing:

(1) When the Contractor becomes aware that a change in its ownership has occurred, or is certain to occur, that could result in changes in the valuation of its capitalized assets in the accounting records, the Contractor shall notify the Administrative Contracting Officer (ACO) within 30 days.

(2) The Contractor shall also notify the ACO within 30 days whenever changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership.

(b) The Contractor shall--

(1) Maintain current, accurate, and complete inventory records of assets and their costs;

(2) Provide the ACO or designated representative ready access to the records upon request;

(3) Ensure that all individual and grouped assets, their capitalized values, accumulated depreciation or amortization, and remaining useful lives are identified accurately before and after each of the Contractor's ownership changes; and

(4) Retain and continue to maintain depreciation and amortization schedules based on the asset records maintained before each Contractor ownership change.

The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR 15.408(k).

(End of clause)

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 \$0.00 or the overtime premium is paid for work --

(1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of

production equipment, or occasional production bottlenecks of a sporadic nature;

(2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;

(3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or

(4) That will result in lower overall costs to the Government.

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

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

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

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

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

* Insert either "zero" or the dollar amount agreed to during negotiations. The inserted figure does not apply to the exceptions in paragraph (a)(1) through (a)(4) of the clause.

(End of clause)

52.233-4 APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM (OCT 2004)

United States law will apply to resolve any claim of breach of this contract.

(End of clause)

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

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

(End of clause)

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 Defense Federal Acquisition Regulation Supplement (48 CFR Chapter 2) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

(End of clause)

252.204-7006 BILLING INSTRUCTIONS (OCT 2005)

When submitting a request for payment, the Contractor shall--

(a) Identify the contract line item(s) on the payment request that reasonably reflect contract work performance; and

(b) Separately identify a payment amount for each contract line item included in the payment request.

(End of clause)

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 Defense Advanced Research Projects Agency (DARPA) under Contract No. HR0011-09-C-0016.

(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 DARPA.

Section J - List of Documents, Exhibits and Other Attachments

DOCUMENT TYPE	DESCRIPTION	PAGES	DATE
Attachment 1	Statement of Work	15	19 Nov. 2008
Attachment 2	Identification and Assertion of Restrictions on the Government's Use, Release or Disclosure of Technical Data and Computer Software	1	3 Nov. 2008
Attachment 3	Contracting Officer's Representative Memorandum	3	12 Nov. 2008
Attachment 4	DD Form 254	4	[]

19 November 2008

Page 1 of 15

PHASE I

1 PROGRAM MANAGEMENT

1.1 PHASE I PROGRAM MANAGEMENT

1.1.1 Subcontract Management

Duration: 18 months

Main Deliverables: Monthly Subcontract Incremental Funding Plan

Objective: Implement milestone-driven incremental funding.

Approach: The contractor shall conduct continuous reviews of cost/schedule performance; subcontract deliverables and schedule; spend plan compliance and identify/resolve disconnects.

Exit criteria: Monthly subcontract incremental funding plan.

1.1.2 Programmatic Reporting

Duration: 18 months

Main Deliverables: Monthly Cost Reports

Objective: Maintain timely financial and other programmatic reporting. Attend technical interchange and program review meetings.

Approach: The contractor shall incorporate TS&I financial reporting system data on weekly basis into program actual spending model

Exit criteria: Monthly Cost reports

1.1.3 Transition Planning

Duration: 6 months

Main Deliverables: Phase II & II Transition Plan

TBE

Approach: The contractor shall work with DARPA and users to establish criteria for manufacturing partners. The contractor shall select transition partners and develop transition plan.

Exit criteria: Plan for Phase II and III Transition activities.

2 SYSTEMS ENGINEERING

2.1 PROTOTYPE SYSTEM DESIGN

2.1.1 Preliminary System Definition / Development

Duration: 17 months

Main Deliverables: SRR, Final TDAP, PDR

TASK 2.1.1.1

Concept Definition

TBE

Objective: Iterative process to refine the operations concept definition.

Approach: The contractor shall establish baseline system operations concept consistent with tradable and non-tradable requirements; conduct trades analyses; perform sensitivity analyses; refine system operations concept.

Exit criteria: Refined system operations concept – Trades analysis process definition and results document; sensitivity analysis process definition and results document; refined operations concept definition document. Complete SRR.

TASK 2.1.1.2

Objectives and Requirements Specification

TBE

Objective: Identify system- and component-level objectives and requirements.

Approach: The contractor shall refine system- and component-level technical objectives and requirements per operations concept; maintain requirements, metrics allocation and traceability using established databases.

Exit criteria: Coordinated and agreed-upon system- and component-level objectives and requirements. Requirements Verification & Traceability matrix (RVTM).

TASK 2.1.1.3

19 November 2008

Page 2 of 15

Preliminary Component/System Design

Lead: TBE

Participants: ALL

Objective: Establish the preliminary system architecture.

Approach: The contractor shall integrate component-specific architectures; assess to identify/resolve disconnects; establish preliminary system design. The contractor shall conduct PDR.

Exit criteria: Defined preliminary system architecture. System/component configuration definition document; updated system integration plan.

TASK 2.1.1.4

System Design Simulation/Evaluation

Lead: TBE

Participants: ALL

Objective: Establish a system simulation capability.

Approach: The contractor shall design and develop software-based system simulation given preliminary system/component architecture, objectives and requirements.

Exit criteria: Integrated system simulation. Simulation software and operations process documentation.

TASK 2.1.1.5

Component/System Risk Identification and Mitigation

Lead: TS&I

Objective: Identify risk items, and coordinate risk mitigation.

Approach: The contractor shall establish the Risk Oversight Board; identify, categorize, prioritize, and coordinate risks and risk mitigation. The contractor shall complete TDAP.

Exit criteria: Phase I risks at TRL 4 or higher. Risk Oversight Board proceedings; updated RVTM.

2.1.2 Preliminary System Integration and Test

Duration: 17 months

Main Deliverables: HITL Simulation Plan & Results

TASK 2.1.2.1

Component Functionality Assessment

TBE

Objective: Assess individual component operations relative to objectives and prescribed requirements

Approach: The contractor shall develop component ops assessment plan; analyze component functionality tests results. The contractor shall prepare HITL Simulation Plan.

Exit criteria: Component functionality in accordance with prescribed requirements. Component functionality assessment plans; component functionality assessment results documents.

TASK 2.1.2.2

Component/Framework Interface Assessment

TBE

Objective: Integrate test framework models (e.g., physics-based environmental models) and individual components; assess individual component/framework interfaces.

Approach: The contractor shall develop component/framework ops assessment plan; analyze component/framework functionality tests.

Exit criteria: Component/framework functionality in accordance with prescribed requirements. Component / framework functionality assessment plans; component/framework functionality assessment results documents.

TASK 2.1.2.3

Component-to-Component Integration

TBE

Objective: Integrate corresponding pairs of components and assess operations.

Approach: The contractor shall define pair-wise component preliminary interface specifications; develop pair-wise component operations assessment plans; analyze pair-wise component functionality tests.

Exit criteria: Pair-wise component functionality per prescribed requirements. Pair-wise component functionality assessment plans; pair-wise component functionality assessment results documents.

TASK 2.1.2.4

System Integration

19 November 2008

Page 3 of 15

TBE

Objective: Define and develop system-level interface specifications.

Approach: The contractor shall develop system-level interface definitions and control specifications; complete preliminary interface assessments to ensure system interoperability.

Exit criteria: Interface definitions and control specs for all components complete. Interface definition and control specifications for all components; interface interoperability assessment results documentation.

TASK 2.1.2.5

System Functionality Assessment

TBE

Objective: Assess system functionality relative to objectives and requirements.

Approach: The contractor shall develop system functionality assessment plan; analyze system functionality tests results.

Exit criteria: System functionality assessment complete – System functionality assessment plan; system functionality assessment results documents.

TASK 2.1.2.6

System Verification and Validation

TBE

Objective: Qualify and quantify system performance relative to prescribed requirements.

Approach: The contractor shall qualify and quantify system functionality relative to requirements.

Exit criteria: Verification / validation of system-level requirements. System functionality verification and validation results documentation; updated RVTM.

TASK 2.1.2.7

Test Results Reporting and Documentation

TBE

Objective: Formal reporting and documentation of test results

Approach: The contractor shall compile test results on a per test basis for inclusion in reviews and in deliverables.

Exit criteria: Approved reporting and documentation of applicable test results. Formal reporting and documentation of test results.

3 GUIDANCE & CONTROL SOFTWARE

3.1 PHASE I GUIDANCE & CONTROL



HR0011-09-C-0016

5 pages denied in full pursuant to 5 U.S.C. § 552 (b)(4)

19 November 2008

Page 9 of 15

5 RIFLE

5.1 PHASE I RIFLE





6 OPTICAL SYSTEMS



HR0011-09-C-0016

1 page denied in full pursuant to 5 U.S.C. § 552 (b)(4)

19 November 2008

Page 12 of 15

(b)(4)

6.1.4 Optical System Integration and Test

Main Deliverable: Command Link Testbed for HITL

TASK 6.1.4.1

Data Interoperability

TS&I

Objective: Maintain compatibility in shared data.

Approach: The contractor shall define data exchange protocols and interface control documents.

Exit criteria: Data exchange protocols and interface control documents.

TASK 6.1.4.2

Functional Assessment

TS&I

Objective: Integration of subassemblies for HITL tests.

Approach: The contractor shall test subsystems for following data exchange protocols and ICDs and train system engineering team.

Exit criteria: Smooth integration of optical subsystems and test data in HILT.

TASK 6.1.4.3

Performance Assessment

TS&I

Objective: Test subassemblies for hardware in the loop tests

Approach: The contractor shall characterize command link testbed and compare with simulations.

Exit criteria: High fidelity command link testbed for HITL tests.

7 SYSTEM TEST

7.1 PHASE I HARDWARE IN THE LOOP (HITL) TEST

7.1.1 Facility

Main Deliverable: HITL Test Facility

(b)(4)

TASK 7.1.1.2

Physical Structure Requirements

TS&I, (b)(4)

Objective: Develop and document physical facility requirements to support HITL testing capability.

Approach: The contractor shall identify and document facility support required by HITL test configuration architectures and configuration items; analyze and aggregate configuration requirements to develop consolidated facility requirements list.

19 November 2008

Page 13 of 15

Exit criteria: Facility requirements defined and validated (validation by analysis to show that HITL testing activities fully supported by facility). HITL Facility Requirements and Analysis Report

(b)(4)



7.1.2 Operations/Test Implementation

Main Deliverable: HITL Test Procedure

TASK 7.1.2.1

Procedures development

TS&I, (b)(4)

Objective: Develop the procedure for a HITL test such that results are repeatable (within expected bounds of uncertainty in HITL set up), test objectives are satisfied, and test integrity is ensured

Approach: The contractor shall define test objectives; define planned test runs and develop test run matrix; identify configuration; document test operations procedures; document configuration/data management procedures; validate procedures through dry runs; identify data to be collected and logged; identify performance measures to be derived from the data/observations/logs

Exit criteria: HITL Test Procedure. Test procedure developed and validated through dry runs

TASK 7.1.2.2

Functional Test Capability

TS&I, (b)(4)

Objective: Provide functional HITL test capability for incremental testing and Monte Carlo testing

Approach: The contractor shall integrate hardware and software as it becomes available, in coordination with the applicable component developers; operate the HITL through Phase I for all incremental preliminary system design testing and the final Monte Carlo testing

Exit Criteria: Incremental test capability consistent the developmental/operational requirements

OPTION 1

1 PROGRAM MANAGEMENT

1.1 PHASE I PROGRAM MANAGEMENT

1.1.1 Subcontract Management: (BASELINE & OPTION 1)

Duration: 18 months

Main Deliverables: Monthly Subcontract Incremental Funding Plan

Objective: Implement milestone-driven incremental funding.

Approach: The contractor shall conduct continuous reviews of cost/schedule performance; subcontract deliverables and schedule; spend plan compliance and identify/resolve disconnects.

Exit criteria: Monthly subcontract incremental funding plan for additional subcontractor tasking.



HR0011-09-C-0016

1 page denied in full pursuant to 5 U.S.C. § 552 (b)(4)

3 November 2008

Page 1 of 1



Should Commercial-off-the-Shelf software be required, it will be provided with the standard commercial licenses offered by the developer.





DEFENSE ADVANCED RESEARCH PROJECTS AGENCY
3701 NORTH FAIRFAX DRIVE
ARLINGTON, VA 22203-1714

Attachment 3

MEMORANDUM FOR CONTRACTING OFFICER'S REPRESENTATIVE

FROM: DARPA, Contracts Management Office
TO: T. Gordon Brown, Army Research Laboratory
SUBJECT: Appointment as Contracting Officer's Representative (COR)

1. You are hereby appointed as the Contracting Officer's Representative for:

Contract Number: HR0011-09-C-0016
Contractor: Teledyne Scientific & Imaging, LLC
Program Description: EXACTO

2. This appointment authorizes and designates you to perform the following duties and/or responsibilities as specified herein:

- a. Furnish plans, schedules, specifications, descriptions, and other documents to the contractor as required by the contract.
- b. Assist the contractor in interpreting technical aspects of the contract specifications/statement of work. Differences of opinion and interpretations which could affect the terms and conditions of the contract will be referred to the contracting officer for resolution.
- c. Provide Government recommendations/approvals to the contractor promptly in all cases where the contract calls for technical approval.
- d. Observe, monitor, and assess the contractor's performance under the terms of the contract. This includes reporting promptly to the contracting officer any failures, delays, or significant deviations of performance, quality, costs, or other actions which might jeopardize contract performance.

3. In the performance of the duties delegated to you in this letter, you are cautioned that you could be held personally liable for actions taken or directions given by you to the contractor that are beyond the authorities given to you in this letter. The duties or authorities in this letter are not delegable; therefore, you must advise the Contracting Officer or the Contract Administrator/Specialist immediately when you are unable to perform these duties.

4. In your dealings with the contractor you must not give technical direction as though the contractor's employees are Government employees. You must maintain a formal, arms-


length relationship with the contractor in order to avoid even an appearance that the contract is one for personal services. If the contractor's performance takes place in a Government facility, then to the maximum extent practicable, the contractor's work area should be physically separated from areas in which Government employees work, and communication with the contractor's employees on contractual matters should be only through that contractor employee(s) designated by the contractor to supervise them. You must not give any direction to the contractor that is not authorized by the statement of work because it is not the intent of the Government that a contractor be required to do anything that is not included in the contract.

5. You are responsible for providing prompt notification to the contracting officer any significant deficiencies with respect to contractor performance or other actions which might jeopardize contract performance.
6. You are not authorized by this letter to take any action, either directly or indirectly, that could result in a change in the pricing, quantity, quality, place of performance, delivery schedule or any other terms and conditions of the basic contract, or to direct the accomplishment of effort which would exceed the scope of the basic contract. You must be especially cautious in providing interpretation of the specifications/ statement of work. The agreement reached or technical direction given must be formalized in writing with copies to the contracting officer. You shall also inform the contractor that if he believes that the COR's interpretation is erroneous, the contractor must notify the contracting officer in writing concerning the details of his position.
7. Specific duties in addition to those above are as follows:
 - a. Control all government technical interfaces with the contractor.
 - b. Ensure that copies of government technical correspondence are forwarded to the contracting officer for placement in the contract file.
 - c. Promptly furnish documentation on any requests for change, deviation, or waiver (whether generated by the Government or the contractor) to the contracting officer for appropriate action.
 - d. Review and, if required (i.e., Fixed Price Payments), accept invoices submitted through WAWF as stipulated in Section G of the Contract.
 - e. Provide required review of Patent/Invention Disclosures made in I-Edison (<http://www.iedison.gov>).
 - f. The COR must maintain a separate file for each contract for which he/she acts as COR. The file should serve as a repository and record of all documents and communications between the contractor and the COR. At a minimum, the file must include a copy of the contract and all modifications as well as the COR appointment letter. Examples of other file documentation may include:


- Reports required per the contract, e.g. interim and final technical or patent reports
- Memoranda for Record documenting important contract discussions
- Records of formal meetings, e.g. post award conference, program reviews, etc.

g. Assist ACO and/or PCO, as requested, with closeout activities at completion of contract period of performance.

8. If this is your first appointment as a COR or if you have not performed COR duties within the last two years, and in order to comply with DFARS 201.6-2, you must complete COR training immediately so that you can properly execute your responsibilities under this contract. A good source of COR training is available via a web-based module, CLC 106, "Contracting Officer Representative with a Mission Focus" at www.dau.mil.
9. Your appointment as COR for this effort expires 18 months after date of contract.
10. Your good judgment in performing your duties under the contract will have an important effect on the value of the performance obtained by the Government.


STEPHEN C. DAVIS
Contracting Officer

4 Nov 08
Date



T. GORDON BROWN
Contracting Officer's Representative

12 Nov 2008
Date

HR0011-09-C-0016

DD Form 254

4 pages denied in full pursuant to 5 U.S.C. § 552
(b)(2)(High)

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. F00001		3. EFFECTIVE DATE 07-Jan-2009		4. REQUISITION/PURCHASE REQ. NO. X924/00		5. PROJECT NO. (If applicable)	
6. ISSUED BY DARPA CMO ATTN: STEPHEN C DAVIS 3701 N. FAIRFAX DR. ARLINGTON VA 22203-1714		CODE HR0011		7. ADMINISTERED BY (If other than item 6) DCMA LOS ANGELES P.O. BOX 9608 MISSION HILLS CA 91346-9608		CODE S0512A	
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code) TELEDYNE SCIENTIFIC & IMAGING, LLC 1049 CAMINO DOS RIOS THOUSAND OAKS CA 91360-2362				9A. AMENDMENT OF SOLICITATION NO.			
				9B. DATED (SEE ITEM 11)			
				X 10A. MOD. OF CONTRACT/ORDER NO. HR0011-09-C-0016			
				X 10B. DATED (SEE ITEM 13) 21-Nov-2008			
CODE 2D609		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of offer <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
X C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: the "Changes" Clause.							
D. OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return <u>1</u> copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Modification Control Number: bflasca09176 The purpose of this modification is to incorporate a DD Form 254 to the contract. See Page 2.							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) STEVE DAVIS / CONTRACTING OFFICER TEL: 571-218-4949 EMAIL: Stephen.C.Davis@darpa.mil			
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA BY  (Signature of Contracting Officer)		16C. DATE SIGNED 26-Jan-2009	

EXCEPTION TO SF 30
APPROVED BY OIRM 11-84

30-105-04

STANDARD FORM 30 (Rev. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES


1. SECTION J – LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

The following has been modified as highlighted in bold:

DOCUMENT TYPE	DESCRIPTION	PAGES	DATE
Attachment 1	Statement of Work	15	19 Nov. 2008
Attachment 2	Identification and Assertion of Restrictions on the Government's Use, Release or Disclosure of Technical Data and Computer Software	1	3 Nov. 2008
Attachment 3	Contracting Officer's Representative Memorandum	3	12 Nov. 2008
Attachment 4	DD Form 254	4	20 Nov. 2008

2. Except as modified above, the terms and conditions of Contract No. HR0011-09-C-0016 shall remain unchanged and in full force and effect.

(End of Summary of Changes)

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U		PAGE OF PAGES 1 3	
2. AMENDMENT/MODIFICATION NO. P00002		3. EFFECTIVE DATE 26-Jan-2009		4. REQUISITION/PURCHASE REQ. NO. SEE SCHEDULE		5. PROJECT NO. (If applicable)	
6. ISSUED BY DARPA CMO ATTN: STEPHEN C DAVIS 3701 N. FAIRFAX DR. ARLINGTON VA 22203-1714		CODE HR0011		7. ADMINISTERED BY (If other than item 6) DCMA LOS ANGELES P.O. BOX 9608 MISSION HILLS CA 91346-9608		CODE S0512A	
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code) TELEDYNE SCIENTIFIC & IMAGING, LLC 1049 CAMINO DOS RIOS THOUSAND OAKS CA 91360-2362				9A. AMENDMENT OF SOLICITATION NO.			
				9B. DATED (SEE ITEM 11)			
				X 10A. MOD. OF CONTRACT/ORDER NO. HR0011-09-C-0016			
				X 10B. DATED (SEE ITEM 13) 21-Nov-2008			
CODE 2D609		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of offer <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required) See Schedule							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
X D. OTHER (Specify type of modification and authority) Unilateral: FAR 52.232-22 "Limitation of Funds"							
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Modification Control Number: bfa1asca09366 The purpose of this modification is to provide incremental funding in the amount of \$6,610,000 (AO X924/01). See Pages 2-3.							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) STEVE DAVIS / CONTRACTING OFFICER TEL: 571-218-4949 EMAIL: Stephen.C.Davis@darpa.mil			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA BY 		16C. DATE SIGNED 26-Jan-2009	
(Signature of person authorized to sign)				(Signature of Contracting Officer)			

EXCEPTION TO SF 30
APPROVED BY OIRM 11-84

30-105-04

STANDARD FORM 30 (Rev. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

1. SECTION B - SUPPLIES OR SERVICES AND PRICES

SUBCLIN 000102 is added as follows:

ITEM NO		AMOUNT
000102	Funding for CLIN 0001	
	AO No. X924/01	
	ACRN AB	\$6,610,000.00

2. SECTION G - CONTRACT ADMINISTRATION DATA

Accounting and Appropriation

a) Summary for the Payment Office

As a result of this modification, the total funded amount for this document was increased by \$6,610,000.00 from \$1,650,000.00 to \$8,260,000.00.

b) SUBCLIN 000102:

Funding on SUBCLIN 000102 is initiated as follows:

ACRN: AB

CIN: 00000000000000000000000000000000

Acctng Data: 9790400 1320 X924 P9G10 2525 DPAC 9 5088 S12136 62702E

Increase: \$6,610,000.00

Total: \$6,610,000.00

c) The following have been modified as highlighted in bold:

G-6 Incremental Funding

(a) This contract shall be subject to incremental funding with **\$8,260,000** presently made available for performance under this contract. It is estimated that the funds presently available are sufficient to permit the Contractor's performance through 31 January 2010. Except in accordance with the Section I clause FAR 52.232-22, "Limitation of Funds," no legal liability of the part of the Government for payment of any money in excess of **\$8,260,000** shall arise unless and until additional funds are made available by the Contracting Officer through a modification to this contract.

(end of clause)

3. Except as modified above, the terms and conditions of the contract shall remain unchanged and in full force and effect.

(End of Summary of Changes)

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. P00003		3. EFFECTIVE DATE 04-Mar-2009		4. REQUISITION/PURCHASE REQ. NO. SEE SCHEDULE		5. PROJECT NO. (If applicable)	
6. ISSUED BY DARPA CMO ATTN: STEPHEN C DAVIS 3701 N. FAIRFAX DR. ARLINGTON VA 22203-1714		CODE HR0011		7. ADMINISTERED BY (If other than item 6) DCMA LOS ANGELES P.O. BOX 9808 MISSION HILLS CA 91346-9808		CODE S0512A	
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code) TELEDYNE SCIENTIFIC & IMAGING, LLC 1049 CAMINO DOS RIOS THOUSAND OAKS CA 91360-2362				9A. AMENDMENT OF SOLICITATION NO.			
				9B. DATED (SEE ITEM 11)			
				X 10A. MOD. OF CONTRACT/ORDER NO. HR0011-09-C-0016			
				X 10B. DATED (SEE ITEM 13) 21-Nov-2008			
CODE 2D609		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACT/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
X C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: the "Changes" Clause.							
D. OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return <u>1</u> copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Modification Control Number: bfalasca09483 The purpose of this modification is to incorporate a clause to the contract. See Page 2.							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) STEVE DAVIS / CONTRACTING OFFICER TEL: 571-218-4949 EMAIL: Stephen.C.Davis@darpa.mil			
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA BY  (Signature of Contracting Officer)		16C. DATE SIGNED 19-Mar-2009	

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

1. SECTION I - CONTRACT CLAUSES

The following has been added by full text:

52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)

(a) The Government may extend the term of this contract by written notice to the Contractor within 30 days; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.


(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 18 months.

(End of clause)

2. Except as modified above, the terms and conditions of the contract shall remain unchanged and in full force and effect.

(End of Summary of Changes)

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. P00004		3. EFFECTIVE DATE 22-Jun-2009		4. REQUISITION/PURCHASE REQ. NO. SEE SCHEDULE		5. PROJECT NO. (If applicable)	
6. ISSUED BY DARPA CMO ATTN: STEPHEN C DAVIS 3701 N. FAIRFAX DR. ARLINGTON VA 22203-1714		CODE HR0011		7. ADMINISTERED BY (If other than item 6) DCMA LOS ANGELES P.O. BOX 9608 MISSION HILLS CA 91346-9608		CODE S0512A	
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code) TELEDYNE SCIENTIFIC & IMAGING, LLC 1049 CAMINO DOS RIOS THOUSAND OAKS CA 91360-2362				9A. AMENDMENT OF SOLICITATION NO.			
				9B. DATED (SEE ITEM 11)			
				X 10A. MOD. OF CONTRACT/ORDER NO. HR0011-09-C-0016			
				X 10B. DATED (SEE ITEM 13) 21-Nov-2008			
CODE 2D609		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
X C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: the "Changes" Clause.							
D. OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return <u>1</u> copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Modification Control Number: bfalasca09796 The purpose of this modification is to amend the list of subcontractors. This modification does not result in a change to the current value of the contract. See Page 2.							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) STEVE DAVIS / CONTRACTING OFFICER TEL: 571-218-4949 EMAIL: Stephen.C.Davis@darpa.mil			
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA BY  (Signature of Contracting Officer)		16C. DATE SIGNED 22-Jun-2009	

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

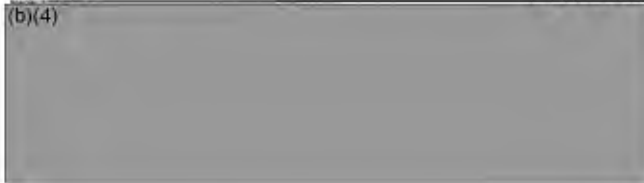
SUMMARY OF CHANGES**1. SECTION H - SPECIAL CONTRACT REQUIREMENTS**

The following has been added as highlighted in bold:

H-10 Consent to Subcontract

(a) Pursuant to the clause of the General Provisions entitled "Subcontracts (JUN 2007)," FAR 52.244-2(j), the Contracting Officer hereby consents to the placement of subcontract(s) with the following firm(s)/consultant(s) at the ceiling amounts specified:

<u>NAME</u>	<u>TOTAL AMOUNT</u>
(b)(4)	




(b) Approval must be obtained from the Administrative Contracting Officer to increase the use or number of subcontractors from the level established in subparagraph a.
(end of clause)



2. Except as modified above, the terms and conditions of the contract shall remain unchanged and in full force and effect.

(End of Summary of Changes)

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. P00005		3. EFFECTIVE DATE 14-Jul-2009		4. REQUISITION/PURCHASE REQ. NO. SEE SCHEDULE		5. PROJECT NO. (If applicable)	
6. ISSUED BY DARPA CMO ATTN: STEPHEN C DAVIS 3701 N. FAIRFAX DR. ARLINGTON VA 22203-1714		CODE HR0011		7. ADMINISTERED BY (If other than item 6) DCMA LOS ANGELES P.O. BOX 9808 MISSION HILLS CA 91346-9808		CODE S0512A	
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code) TELEDYNE SCIENTIFIC & IMAGING, LLC 1049 CAMINO DOS RIOS THOUSAND OAKS CA 91360-2362				9A. AMENDMENT OF SOLICITATION NO.			
				9B. DATED (SEE ITEM 11)			
				X 10A. MOD. OF CONTRACT/ORDER NO. HR0011-09-C-0016			
				10B. DATED (SEE ITEM 13) X 21-Nov-2008			
CODE 2D609		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of offer <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required) See Schedule							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
X D. OTHER (Specify type of modification and authority) Unilateral: FAR 52.232-22 "Limitation of Funds"							
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Modification Control Number: bflasca09931 The purpose of this modification is to provide incremental funding in the amount of \$25,000 (AO X924/02). See Page 2.							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) STEVE DAVIS / CONTRACTING OFFICER TEL: 571-218-4949 EMAIL: Stephen.C.Davis@darpa.mil			
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA BY 		16C. DATE SIGNED 14-Jul-2009	

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

1. SECTION B - SUPPLIES OR SERVICES AND PRICES

SUBCLIN 000103 is added as follows:

ITEM NO		AMOUNT
000103	Funding for CLIN 0001	
	AO No. X924/02	
	ACRN AB	\$25,000.00

2. SECTION G - CONTRACT ADMINISTRATION DATA

Accounting and Appropriation

a) Summary for the Payment Office

As a result of this modification, the total funded amount for this document was increased by \$25,000.00 from \$8,260,000.00 to \$8,285,000.00.

b) SUBCLIN 000103:

Funding on SUBCLIN 000103 is initiated as follows:

ACRN: AB

CIN: 00000000000000000000000000000000

Acctng Data: 9790400 1320 X924 P9G10 2525 DPAC 9 5088 S12136 62702E

Increase: \$25,000.00

Total: \$25,000.00


c) The following have been modified as highlighted in bold:

G-6 Incremental Funding

(a) This contract shall be subject to incremental funding with **\$8,285,000** presently made available for performance under this contract. It is estimated that the funds presently available are sufficient to permit the Contractor's performance through **31 June 2010**. Except in accordance with the Section I clause FAR 52.232-22, "Limitation of Funds," no legal liability of the part of the Government for payment of any money in excess of **\$8,285,000** shall arise unless and until additional funds are made available by the Contracting Officer through a modification to this contract.
(end of clause)

3. Except as modified above, the terms and conditions of the contract shall remain unchanged and in full force and effect.

(End of Summary of Changes)

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U		PAGE OF PAGES 1 5	
2. AMENDMENT/MODIFICATION NO. P00006		3. EFFECTIVE DATE 11-Nov-2009		4. REQUISITION/PURCHASE REQ. NO. SEE SCHEDULE		5. PROJECT NO. (If applicable)	
6. ISSUED BY DARPA CMO ATTN: STEPHEN C DAVIS 3701 N. FAIRFAX DR. ARLINGTON VA 22203-1714		CODE HR0011		7. ADMINISTERED BY (If other than item 6) DCMALOS ANGELES P.O. BOX 9608 MISSION HILLS CA 91346-9608		CODE S0512A	
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code) TELEDYNE SCIENTIFIC & IMAGING, LLC 1049 CAMINO DOS RIOS THOUSAND OAKS CA 91360-2362				9A. AMENDMENT OF SOLICITATION NO.			
				9B. DATED (SEE ITEM 11)			
				X 10A. MOD. OF CONTRACT/ORDER NO. HR0011-09-C-0016			
				X 10B. DATED (SEE ITEM 13) 21-Nov-2008			
CODE 2D609		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required) See Schedule							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
X C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: the "Changes" Clause.							
D. OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return <u>1</u> copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Modification Control Number: bflasca1072 The purpose of this modification is to replace the CLIN 0002 Option with additional in-scope work. This modification increases the value of the contract and provides funding in the amount of \$55,669 (AO X924/03). See Pages 2-5.							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) STEVE DAVIS / CONTRACTING OFFICER TEL: 571-218-4949 EMAIL: Stephen.C.Davis@darpa.mil			
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA BY  (Signature of Contracting Officer)		16C. DATE SIGNED 16-Nov-2009	

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

1. SECTION A - SOLICITATION/CONTRACT FORM

The total cost of this contract was increased by \$55,669.00 from \$9,593,369.00 to \$9,649,038.00.

2. SECTION B - SUPPLIES OR SERVICES AND PRICES

a) CLIN 0002 has been amended as follows:

FROM:

ITEM NO	SUPPLIES/SERVICES	ESTIMATED COST	FIXED FEE	TOTAL EST. COST PLUS FIXED FEE
0002				\$243,576.00
OPTION	EXACTO Phase I Option CPFF The Contractor shall accomplish the tasks associated with Phase I in accordance with the Attachment (1) Statement of Work. Data deliverables/reports will be provided in accordance with Sections C and F. FOB: Destination			\$243,576.00

TO:

ITEM NO	SUPPLIES/SERVICES	ESTIMATED COST	FIXED FEE	TOTAL EST. COST PLUS FIXED FEE
0002				\$55,669.00
	EXACTO Target Tracking Algorithm CPFF The Contractor shall accomplish the tasks associated with Phase I in accordance with the Attachment (1) Statement of Work. Data deliverables/reports will be provided in accordance with Sections C and F. FOB: Destination			\$55,669.00

b) SUBCLIN 000201 is added as follows:

ITEM NO

000201

Funding for CLIN 0002

AMOUNT

AO No. X924/03

ACRN AB

\$55,669.00

3. SECTION C - DESCRIPTIONS AND SPECIFICATIONS

The following have been modified as highlighted in bold:

C-1 Scope of Work

- (a) The Contractor shall furnish the necessary personnel, materials, facilities, and other services as may be required to perform Contract Line Items (CLINs) 0001 **and 0002**, in accordance with the Statement of Work, Attachment 1 hereto.
(end of clause)

4. SECTION F - DELIVERIES OR PERFORMANCE

The following have been modified as highlighted in bold:

F-1 Term of Contract

- (a) The term of the contract commences on the effective date of the contract and continues through 21 May 2010.

- (b) The period of performance of CLIN 0002 shall be from 11 November 2009 and continue through 21 May 2010**
(end of clause)

F-2 Reports and Other Deliverables

- (a) Delivery of all reports and other deliverables shall be made to the addressee specified in F-3 entitled "Report Distribution" in accordance with the following:

<u>Description</u>	<u>Due Date (on or before)</u>
-R&D Status Reports (per Clause C-2)	Monthly
-Updates on SRR documentation	Quarterly
-System Design Reviews	As required
-SRR Deliverables	21 January 2009
-SRR meeting	
-Final TDAP	
-System level requirements, Draft segment level requirements and interface definitions	
-HITL Simulation Design review	21 March 2009
-Reports on major component tests:	

[REDACTED]
 -PDR deliverables 21 May 2010
 -PDR meeting
 -PDR report of prototype system
 to be built in Phase II
 -HITL Simulation results report 21 May 2010
 [REDACTED]

Note: Reports other than R&D Status Reports shall be in Contractor's format.

****Note: All references to the previous Option status of CLIN 0002 have been removed****

(end of clause)

5. SECTION G - CONTRACT ADMINISTRATION DATA

Accounting and Appropriation

a) Summary for the Payment Office

As a result of this modification, the total funded amount for this document was increased by \$55,669.00 from \$8,285,000.00 to \$8,340,669.00.

b) SUBCLIN 000201:

Funding on SUBCLIN 000201 is initiated as follows:

ACRN: AB
 CIN: 00000000000000000000000000000000
 Acctng Data: 9790400 1320 X924 P9G10 2525 DPAC 9 5088 S12136 62702E
 Increase: \$55,669.00
 Total: \$55,669.00

c) The following have been modified as highlighted in bold:

G-6 Incremental Funding

(a) This contract shall be subject to incremental funding with **\$8,340,669** presently made available for performance under this contract. It is estimated that the funds presently available are sufficient to permit the Contractor's performance through 21 January 2010. Except in accordance with the Section I clause FAR 52.232-22, "Limitation of Funds," no legal liability of the part of the Government for payment of any money in excess of **\$8,340,669** shall arise unless and until additional funds are made available by the Contracting Officer through a modification to this contract. **CLIN 0002 is henceforth fully funded.**

(end of clause)

6. SECTION J - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

The following has been added as highlighted in bold:

DOCUMENT TYPE	DESCRIPTION	PAGES	DATE
Attachment 1	Statement of Work	14	9 Nov. 2009
Attachment 2	Identification and Assertion	1	3 Nov. 2008

of Restrictions on the Government's
Use, Release or Disclosure of
Technical Data and Computer Software

Attachment 3	Contracting Officer's Representative Memorandum	3	12 Nov. 2008
Attachment 4	DD Form 254	4	20 Nov. 2008

7. Except as modified above, the terms and conditions of the contract shall remain unchanged and in full force and effect.

(End of Summary of Changes)

9 November 2009

Page 1 of 14

CLIN 0001

1 PROGRAM MANAGEMENT

1.1 PHASE I PROGRAM MANAGEMENT

1.1.1 Subcontract Management

Duration: 18 months

Main Deliverables: Monthly Subcontract Incremental Funding Plan

Objective: Implement milestone-driven incremental funding.

Approach: The contractor shall conduct continuous reviews of cost/schedule performance; subcontract deliverables and schedule; spend plan compliance and identify/resolve disconnects.

Exit criteria: Monthly subcontract incremental funding plan.

1.1.2 Programmatic Reporting

Duration: 18 months

Main Deliverables: Monthly Cost Reports

Objective: Maintain timely financial and other programmatic reporting. Attend technical interchange and program review meetings.

Approach: The contractor shall incorporate TS&I financial reporting system data on weekly basis into program actual spending model

Exit criteria: Monthly Cost reports

1.1.3 Transition Planning

Duration: 6 months

Main Deliverables: Phase II & II Transition Plan

Approach: The contractor shall work with DARPA and users to establish criteria for manufacturing partners. The contractor shall select transition partners and develop transition plan.

Exit criteria: Plan for Phase II and III Transition activities.

2 SYSTEMS ENGINEERING

2.1 PROTOTYPE SYSTEM DESIGN

2.1.1 Preliminary System Definition / Development

Duration: 17 months

Main Deliverables: SRR, Final TDAP, PDR

TASK 2.1.1.1

Concept Definition

TBE

Objective: Iterative process to refine the operations concept definition.

Approach: The contractor shall establish baseline system operations concept consistent with tradable and non-tradable requirements; conduct trades analyses; perform sensitivity analyses; refine system operations concept.

Exit criteria: Refined system operations concept – Trades analysis process definition and results document; sensitivity analysis process definition and results document; refined operations concept definition document. Complete SRR.

TASK 2.1.1.2

Objectives and Requirements Specification

TBE

Objective: Identify system- and component-level objectives and requirements.

Approach: The contractor shall refine system- and component-level technical objectives and requirements per operations concept; maintain requirements, metrics allocation and traceability using established databases.

Exit criteria: Coordinated and agreed-upon system- and component-level objectives and requirements. Requirements Verification & Traceability matrix (RVTM).

TASK 2.1.1.3

Preliminary Component/System Design

Lead: TBE

Participants: ALL

Objective: Establish the preliminary system architecture.

Approach: The contractor shall integrate component-specific architectures; assess to identify/resolve disconnects; establish preliminary system design. The contractor shall conduct PDR.

Exit criteria: Defined preliminary system architecture. System/component configuration definition document; updated system integration plan.

TASK 2.1.1.4

System Design Simulation/Evaluation

Lead: TBE

Participants: ALL

Objective: Establish a system simulation capability.

Approach: The contractor shall design and develop software-based system simulation given preliminary system/component architecture, objectives and requirements.

Exit criteria: Integrated system simulation. Simulation software and operations process documentation.

TASK 2.1.1.5

Component/System Risk Identification and Mitigation

Lead: TS&I

Objective: Identify risk items, and coordinate risk mitigation.

Approach: The contractor shall establish the Risk Oversight Board; identify, categorize, prioritize, and coordinate risks and risk mitigation. The contractor shall complete TDAP.

Exit criteria: Phase I risks at TRL 4 or higher. Risk Oversight Board proceedings; updated RVTM.

2.1.2 Preliminary System Integration and Test

Duration: 17 months

Main Deliverables: HITL Simulation Plan & Results

TASK 2.1.2.1

Component Functionality Assessment

TBE

Objective: Assess individual component operations relative to objectives and prescribed requirements

Approach: The contractor shall develop component ops assessment plan; analyze component functionality tests results. The contractor shall prepare HITL Simulation Plan.

Exit criteria: Component functionality in accordance with prescribed requirements. Component functionality assessment plans; component functionality assessment results documents.

TASK 2.1.2.2

Component/Framework Interface Assessment

TBE

Objective: Integrate test framework models (e.g., physics-based environmental models) and individual components; assess individual component/framework interfaces.

Approach: The contractor shall develop component/framework ops assessment plan; analyze component/framework functionality tests.

Exit criteria: Component/framework functionality in accordance with prescribed requirements. Component / framework functionality assessment plans; component/framework functionality assessment results documents.

TASK 2.1.2.3

Component-to-Component Integration

TBE

Objective: Integrate corresponding pairs of components and assess operations.

Approach: The contractor shall define pair-wise component preliminary interface specifications; develop pair-wise component operations assessment plans; analyze pair-wise component functionality tests.

Exit criteria: Pair-wise component functionality per prescribed requirements. Pair-wise component functionality assessment plans; pair-wise component functionality assessment results documents.

TASK 2.1.2.4

System Integration

9 November 2009

Page 3 of 14

TBE

Objective: Define and develop system-level interface specifications.

Approach: The contractor shall develop system-level interface definitions and control specifications; complete preliminary interface assessments to ensure system interoperability.

Exit criteria: Interface definitions and control specs for all components complete. Interface definition and control specifications for all components; interface interoperability assessment results documentation.

TASK 2.1.2.5

System Functionality Assessment

TBE

Objective: Assess system functionality relative to objectives and requirements.

Approach: The contractor shall develop system functionality assessment plan; analyze system functionality tests results.

Exit criteria: System functionality assessment complete – System functionality assessment plan; system functionality assessment results documents.

TASK 2.1.2.6

System Verification and Validation

TBE

Objective: Qualify and quantify system performance relative to prescribed requirements.

Approach: The contractor shall qualify and quantify system functionality relative to requirements.

Exit criteria: Verification / validation of system-level requirements. System functionality verification and validation results documentation; updated RVTM.

TASK 2.1.2.7

Test Results Reporting and Documentation

TBE

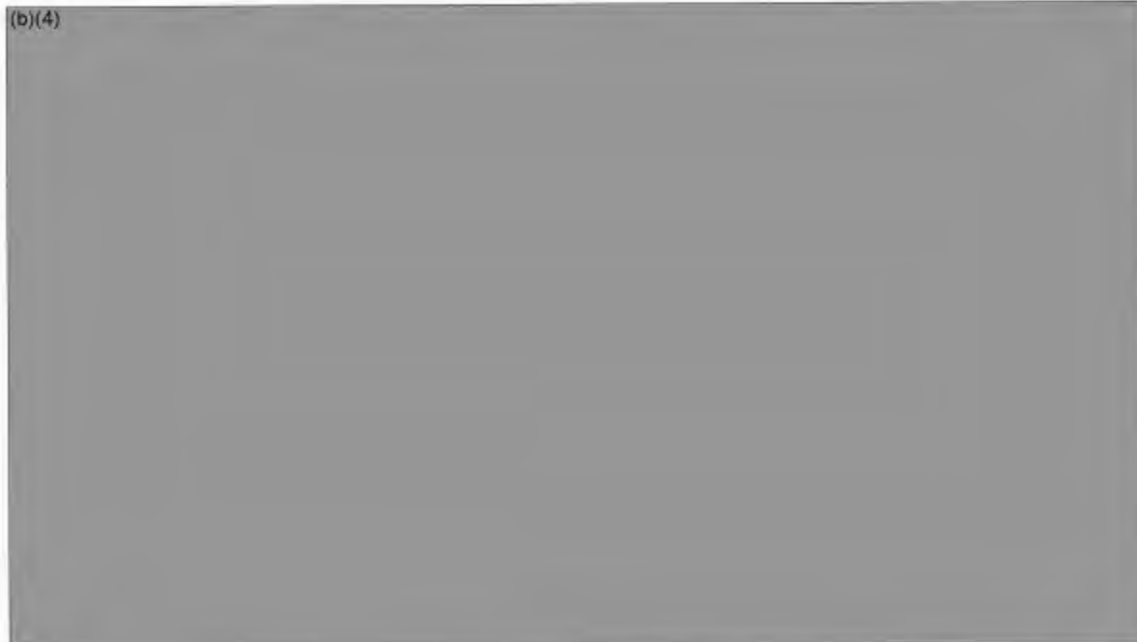
Objective: Formal reporting and documentation of test results

Approach: The contractor shall compile test results on a per test basis for inclusion in reviews and in deliverables.

Exit criteria: Approved reporting and documentation of applicable test results. Formal reporting and documentation of test results.

3 GUIDANCE & CONTROL SOFTWARE

3.1 PHASE I GUIDANCE & CONTROL



TASK 3.1.1.3

Algorithm Test, Comparisons to Design/Simulation



HR0011-09-C-0016

7 pages denied in full pursuant to 5 U.S.C. § 552 (b)(4)

6.1.4 Optical System Integration and Test

Main Deliverable: Command Link Testbed for HITL

TASK 6.1.4.1

Data Interoperability

TS&I

Objective: Maintain compatibility in shared data.

Approach: The contractor shall define data exchange protocols and interface control documents.

Exit criteria: Data exchange protocols and interface control documents.

TASK 6.1.4.2

Functional Assessment

TS&I

Objective: Integration of subassemblies for HITL tests.

Approach: The contractor shall test subsystems for following data exchange protocols and ICDs and train system engineering team.

Exit criteria: Smooth integration of optical subsystems and test data in HILT.

TASK 6.1.4.3

Performance Assessment

TS&I

Objective: Test subassemblies for hardware in the loop tests

Approach: The contractor shall characterize command link testbed and compare with simulations.

Exit criteria: High fidelity command link testbed for HITL tests.

7 SYSTEM TEST

7.1 PHASE I HARDWARE IN THE LOOP (HITL) TEST

7.1.1 Facility

Main Deliverable: HITL Test Facility



7.1.2 Operations/Test Implementation

Main Deliverable: HITL Test Procedure

TASK 7.1.2.1

Procedures development

TS&I, [REDACTED]

Objective: Develop the procedure for a HITL test such that results are repeatable (within expected bounds of uncertainty in HTIL set up), test objectives are satisfied, and test integrity is ensured

Approach: The contractor shall define test objectives; define planned test runs and develop test run matrix; identify configuration; document test operations procedures; document configuration/data management procedures; validate procedures through dry runs; identify data to be collected and logged; identify performance measures to be derived from the data/observations/logs

Exit criteria: HITL Test Procedure. Test procedure developed and validated through dry runs

TASK 7.1.2.2

Functional Test Capability

TS&I, [REDACTED]


Objective: Provide functional HITL test capability for incremental testing and Monte Carlo testing

Approach: The contractor shall integrate hardware and software as it becomes available, in coordination with the applicable component developers; operate the HITL through Phase I for all incremental preliminary system design testing and the final Monte Carlo testing

Exit Criteria: Incremental test capability consistent the developmental/operational requirements

CLIN 0002



AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. P00007		3. EFFECTIVE DATE 25-Jan-2010		4. REQUISITION/PURCHASE REQ. NO. SEE SCHEDULE		5. PROJECT NO. (If applicable)	
6. ISSUED BY DARPA CMO ATTN: STEPHEN C DAVIS 3701 N. FAIRFAX DR. ARLINGTON VA 22203-1714		CODE HR0011		7. ADMINISTERED BY (If other than item 6) DCMA LOS ANGELES P.O. BOX 9608 MISSION HILLS CA 91346-9608		CODE S0512A	
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code) TELEDYNE SCIENTIFIC & IMAGING, LLC 1049 CAMINO DOS RIOS THOUSAND OAKS CA 91360-2362				9A. AMENDMENT OF SOLICITATION NO.			
				9B. DATED (SEE ITEM 11)			
				X 10A. MOD. OF CONTRACT/ORDER NO. HR0011-09-C-0016			
				X 10B. DATED (SEE ITEM 13) 21-Nov-2008			
CODE 2D609		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required) See Schedule							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACT ORDERS IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
X D. OTHER (Specify type of modification and authority) Unilateral: FAR 52.232-22 "Limitation of Funds"							
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Modification Control Number: bflasca10293 The purpose of this modification is to provide incremental funding in the amount of \$1,308,369 (AO X924/04). See Page 2.							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) STEVE DAVIS / CONTRACTING OFFICER TEL: 571-218-4949 EMAIL: Stephen.C.Davis@darpa.mil			
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA BY 		16C. DATE SIGNED 25-Jan-2010	

EXCEPTION TO SF 30
APPROVED BY OIRM 11-84

30-105-04

STANDARD FORM 30 (Rev. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

1. SECTION B - SUPPLIES OR SERVICES AND PRICES

SUBCLIN 000104 is added as follows:

ITEM NO		AMOUNT
000104	Funding for CLIN 0001	
	AO No. X924/04	
	ACRN AC	\$1,308,369.00

2. SECTION G - CONTRACT ADMINISTRATION DATA

Accounting and Appropriation

a) Summary for the Payment Office

As a result of this modification, the total funded amount for this document was increased by \$1,308,369.00 from \$8,340,669.00 to \$9,649,038.00.

b) SUBCLIN 000104:

Funding on SUBCLIN 000104 is initiated as follows:

ACRN: AC

CIN: 00000000000000000000000000000000

Acctng Data: 9700400 1320 X924 P0G10 2525 DPAC 0 5018 S12136 62702E

Increase: \$1,308,369.00

Total: \$1,308,369.00

c) The following have been modified as highlighted in bold:

G-6 Incremental Funding

(a) This contract shall be subject to incremental funding with **\$9,649,038** presently made available for performance under this contract. It is estimated that the funds presently available are sufficient to permit the Contractor's performance through **21 May 2010**. Except in accordance with the Section I clause FAR 52.232-22, "Limitation of Funds," no legal liability of the part of the Government for payment of any money in excess of **\$9,649,038** shall arise unless and until additional funds are made available by the Contracting Officer through a modification to this contract. **CLIN 0001 and CLIN 0002** are henceforth fully funded.
(end of clause)

3. Except as modified above, the terms and conditions of the contract shall remain unchanged and in full force and effect.

(End of Summary of Changes)