

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 HR0011-08-C-0021		3 EFFECTIVE DATE 08 Nov 2007		4. REQUISITION/PURCHASE REQUEST/PROJECT NO X02800	
5. ISSUED BY DARPA CMO ATTN: (b)(6) 3701 N. FAIRFAX DR. ARLINGTON VA 22203-1714		CODE HR0011	6 ADMINISTERED BY (If other than item 5) DCMA SPRINGFIELD BLDG. 1, ARDEC PICATINNY NJ 07806-8000		CODE S3101A
7. NAME AND ADDRESS OF CONTRACTOR (No. street city county state and zip code) PRINCETON LIGHTWAVE INC 2555 U.S. HIGHWAY 130 CRANBURY NJ 08512-3200			8 DELIVERY [] FOB ORIGIN [X] OTHER (See below) 9 DISCOUNT FOR PROMPT PAYMENT Net 30 Days 10 SUBMIT INVOICES 1 ITEM (1 copies unless otherwise specified) TO THE ADDRESS SHOWN IN: Section G		
CODE 3N0N2		FACILITY CODE		12. PAYMENT WILL BE MADE BY DPAS COLUMBUS CENTER NORTH ENTITLEMENT OPERATIONS P.O. BOX 162289 COLUMBUS OH 43216-2289	
11 SHIP TO/MARK FOR See Schedule		CODE	12. PAYMENT WILL BE MADE BY CODE HQ3337		
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					\$1,744,604.00
16. TABLE OF CONTENTS					
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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 copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) each provision, representation, certification, and specification, as are attached or incorporated by reference herein. (Attachments are listed herein.)			18 [] AWARD (Contractor is not required to sign this document.) Your offer on Solicitation Number _____ including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award contract contains the contract which consists of the following documents: (a) the Government's solicitation and your offer and (b) this award/contract. No further contractual document is necessary.		
19A NAME AND TITLE OF SIGNER (Type or print) Mark Itzler, Chief Technical Officer			20A. NAME AND TITLE OF CONTRACTING OFFICER		
19B NAME OF CONTRACTOR		19C DATE SIGNED	20B. UNITED STATES OF AMERICA		20C DATE SIGNED
BY <u>Mark Itzler</u> (Signature of person authorized to sign)		11/07/07	BY _____ (Signature of Contracting Officer)		11/08/07

Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	ESTIMATED COST	FIXED FEE	TOTAL EST. COST PLUS FIXED FEE
0001	Phase I The Contractor shall accomplish the eleven 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.	(b)(4)		\$1,744,604.00

See Exhibit A

ITEM NO	SUPPLIES/SERVICES	AMOUNT
000101	Funding for CLIN0001 AO No. X088/00	

ITEM NO	SUPPLIES/SERVICES	ESTIMATED COST	FIXED FEE	TOTAL EST. COST PLUS FIXED FEE
0002	Phase II The Contractor shall accomplish the ten tasks associated with Phase II in accordance with the Attachment (1) Statement of Work. Data deliverables/reports will be provided in accordance with Sections C and F.	(b)(4)		\$1,175,932.00

ITEM NO	SUPPLIES/SERVICES	ESTIMATED COST	FIXED FEE	TOTAL EST. COST PLUS FIXED FEE
0003	Phase II Option The Contractor shall accomplish the two tasks associated with Phase II Option in accordance with the Attachment (1) Statement of Work. Data deliverables/reports will be provided in accordance with Sections C and F.	(b)(4)		\$549,778.00

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 Item Number (CLIN) 0001, as well as those CLINs corresponding to any exercise Option (CLINs 0002 and 0003, as applicable), in accordance with the Statement of Work, Attachment 1 hereto, and as specified in the Contractor's proposal entitled "Geiger-mode APD Focal Plane Array Development", dated 17 September 2007, copies of which are in possession of both parties.

(b) In the event of an inconsistency between the provisions of this contract and the Contractor's proposal, the inconsistency shall be resolved by giving precedence in the following order: (1) the contract, (2) the attachments to the contract, and then (3) the Contractor's proposal.
(end of clause)

C-2 Reports and Other Deliverables

(a) All technical 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." The Government shall receive "unlimited rights" to this technical data, as defined in these clauses.

(b) In addition to those reports required by the Exhibit A, Contract Data Requirements List, the following report(s) must also be submitted as specified below:

1. FINAL REPORT

This report, prepared in accordance with DFARS 252.235-7011, shall document the results of the complete effort as set forth in the Statement of Work, Attachment 1 hereto. 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."

(1) 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

(2) All papers and articles published as a result of DARPA sponsored research shall include a statement reflecting that sponsorship.

(3) Distribution Statement B applies:

"Distribution authorized to U.S. Government agencies only due to Critical Technology and to prevent Premature Dissemination of Information. Other requests for this document shall be referred to DARPA Technical Information Office via email at tio@darpa.mil."

2. ADDITIONAL MISC. DELIVERABLES

The Contractor shall also deliver those items listed in the Contract Attachment (1) - Statement of Work under the paragraph entitled "Deliverables", as applicable. Briefing materials (hard and softcopy) for all briefings given to the Government shall be provided in the Contractor's format.

(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 designated at Section G herein.

CLAUSES INCORPORATED BY REFERENCE

52.243-8

Inspection Of Research And Development Cost
Reimbursement

MAY 2001

Section F - Deliveries or Performance

CLAUSES INCORPORATED BY REFERENCE

52.247-34

F.O.B. Destination

NOV 1991

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 6 November 2008.
- (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 12 months thereafter.
- (c) The period of performance for Option 2, as set forth in CLIN 0003, shall be from the effective date of the option exercise to and including 8 months thereafter.

(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:

Item No.	Description	Due Date (on or before)
0001	Mid-Term Report	See Exhibit A CDRL
0001	Final Report	6 November 2008
0001	Additional Misc. Deliverables	6 November 2008
0002*	Mid-Term Report	See Exhibit A CDRL
0002*	Final Report	12 months from option exercise
0002*	Additional Misc. Deliverables	12 months from option exercise
0003*	Mid-Term Report	See Exhibit A CDRL
0003*	Final Report	8 months from option exercise
0003*	Additional Misc. Deliverables	8 months from option exercise

*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: (b)(6)
3701 North Fairfax Drive
Arlington, VA 22203-1714
Email: (b)(6)@darpa.mil
(one copy each report)

(d) DARPA/IXO
Attn: (b)(6)
3701 North Fairfax Drive
Arlington, VA 22203-1714
Email: (b)(6)@darpa.mil
(one copy each report)

(e) DARPA/IXO
Attn: ADPM
3701 North Fairfax Drive
Arlington, VA 22203-1714
(one copy each report)

(f) COR
(b)(6)
AMSRD-CER-NV-ST-LT
10221 Burbeck Road
Fort Belvoir, VA 22060-5806
Phone: 703-704-2270
Email: (b)(6)@us.army.mil

(end of clause)

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: 9770400 1320 X088 P7P30 2525 DPAC 7 5327 S12136 63767E
AMOUNT: \$1,744,604.00
AO: X088/00
CIN 00000000000000000000000000000000: \$1,744,604.00

CLAUSES INCORPORATED BY FULL TEXT

G-1 Procuring Office Representative

(a) The Procuring Office Representative is (b)(6) DARPA/CMO, 3701 North Fairfax Drive,
Arlington, VA 22203-1714, telephone: 571-218-4949, e-mail: (b)(6)@darpa.mil.
(end of clause)

G-2 Electronic Submission of Payment Requests

(a) A "Cost Voucher" document identified by contract number shall be submitted for payment directly via the Internet to Wide Area Workflow (WAWF) at <https://wawf.cb.mil>. Supporting details for the cost voucher shall be attached to the WAWF "Cost Voucher" document.

- (1) For the Issue By DoDAAC and Admin DoDAAC fields, enter HR0011.
- (2) For the DCAA Auditor DoDAAC fields enter S3101A.
- (3) Leave the LPO DoDAAC field blank.

(b) Final cost vouchers shall be submitted for review and approval to DCMA:

DCMA Springfield
DoDAAC: S3101A
Bldg. 1, ARDEC
Picatinny, NJ 07806-5000

(end of clause)

G-3 Delegation of Authority for Contract Administration

(a) DCMA Springfield 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:

(b)(6)

AMSRD-CER-NV-ST-LT
10221 Burbeck Road
Fort Belvoir, VA 22060-5806
Phone: 703-704-2270
Email: (b)(6)@us.army.mil

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 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 written approval of the DARPA Technical Information Officer (DARPA/TIO). 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.

(b) When submitting material for written approval 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:

- Dr. Mark A. Itzler
- Dr. Sabbir Rangwala

(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 18 September 2007 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 forty-five (45) 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 (AUG 1998)," FAR 52.244-2, the Contracting Officer hereby consents to the placement of subcontract(s) with the following firm(s)/consultant(s) at the ceiling amounts specified:

NAME
(b)(4)

TOTAL AMOUNT

Phase I:

*Phase II (Option 1):

*Phase II (Option 2):

(b)(4)

*If option is exercised

(b) Approval must be obtained from the Administrative Contracting Officer to increase the use or number of subcontractors from the level established in subparagraph 1.

(end of clause)

H-11 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)

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
52.204-4	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
52.215-10	Price Reduction for Defective Cost or Pricing Data	OCT 1997
52.215-12	Subcontractor Cost or Pricing Data	OCT 1997
52.215-15	Pension Adjustments and Asset Reversions	OCT 2004
52.215-17	Waiver of Facilities Capital Cost of Money	OCT 1997
52.215-18	Reversion or Adjustment of Plans for Postretirement Benefits (PRB) Other than Pensions	JUL 2005
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	SEP 2007
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
52.223-14	Toxic Chemical Release Reporting	AUG 2003
52.225-13	Restrictions on Certain Foreign Purchases	FEB 2006
52.226-1	Utilization Of Indian Organizations And Indian-Owned Economic Enterprises	JUN 2000
52.227-2	Notice And Assistance Regarding Patent And Copyright Infringement	AUG 1996
52.228-7	Insurance--Liability To Third Persons	MAR 1996
52.232-9	Limitation On Withholding Of Payments	APR 1984
52.232-20	Limitation Of Cost	APR 1984
52.232-23 Alt I	Assignment of Claims (Jan 1986) - Alternate I	APR 1984
52.232-25	Prompt Payment	OCT 2003
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
52.243-2 Alt V	Changes--Cost-Reimbursement (Aug 1987) - Alternate V	APR 1984
52.244-6	Subcontracts for Commercial Items	MAR 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
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.204-7004 Alt A	Central Contractor Registration (52.204-7) Alternate A	SEP 2007
252.205-7000	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
252.211-7007	Item Unique Identification of Government Property	SEP 2007
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
252.225-7012	Preference For Certain Domestic Commodities	JAN 2007
252.226-7001	Utilization of Indian Organizations and Indian-Owned Economic Enterprises, and Native Hawaiian Small Business Concerns	SEP 2004
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
252.231-7000	Supplemental Cost Principles	DEC 1991
252.232-7003	Electronic Submission of Payment Requests	MAR 2007
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
252.242-7004	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

52.215-19 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)

52.217-9 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 28 months.

(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)

52.227-12 PATENT RIGHTS--RETENTION BY THE CONTRACTOR (LONG FORM) (JAN 1997)

(a) Definitions. "Invention" means any invention or discovery which is or may be patentable or otherwise protectable under title 35 of the United States Code or any novel variety of plant that is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321, et seq.).

"Made" when used in relation to any invention means the conception or first actual reduction to practice of such invention.

"Nonprofit organization" means a domestic university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.

"Practical application" means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

"Small business firm" means a small business concern as defined at section 2 of Pub. L. 85-536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standards for small business concerns involved in Government procurement and subcontracting at 13 CFR 121.3-8 and 13 CFR 121.3-12, respectively, will be used.

"Subject invention" means any invention of the Contractor conceived or first actually reduced to practice in the performance of work under this contract; provided, that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d)) must also occur during the period of contract performance.

(b) Allocation of principal rights. The Contractor may elect to retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this clause and 35 U.S.C. 203. With respect to any subject invention in which the Contractor elects to retain title, the Federal Government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world.

(c) Invention disclosure, election of title, and filing of patent applications by Contractor. (1) The Contractor shall disclose each subject invention to the Contracting Officer within 2 months after the inventor discloses it in writing to Contractor personnel responsible for patent matters or within 6 months after the Contractor becomes aware that a subject invention has been made, whichever is earlier. The disclosure to the Contracting Officer shall be in the form of a written report and shall identify the contract under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding, to the extent known at the time of the disclosure, of the nature, purpose, operation, and physical, chemical, biological, or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale, or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to the Contracting Officer, the Contractor shall promptly notify the Contracting Officer of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Contractor.

(2) The Contractor shall elect in writing whether or not to retain title to any such invention by notifying the Federal agency at the time of disclosure or within 8 months of disclosure, as to those countries (including the United States) in which the Contractor will retain title; provided, that in any case where publication, on sale, or public use has initiated the 1-year statutory period wherein valid patent protection can still be obtained in the United States, the period of election of title may be shortened by the agency to a date that is no more than 60 days prior to the end of the statutory period.

(3) The Contractor shall file its initial patent application on an elected invention within 1 year after election or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale, or public use. The Contractor shall file patent applications in additional countries (including the European Patent Office and under the Patent Cooperation Treaty) within either 10 months of the corresponding initial patent application or 6 months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications where such filing has been prohibited by a Secrecy Order.

(4) Requests for extension of the time for disclosure to the Contracting Officer, election, and filing may, at the discretion of the funding Federal agency, be granted, and will normally be granted unless the Contracting Officer has reason to believe that a particular extension would prejudice the Government's interest.

(d) Conditions when the Government may obtain title. The Contractor shall convey to the Federal agency, upon written request, title to any subject invention--

(1) If the Contractor elects not to retain title to a subject invention;

(2) If the Contractor fails to disclose or elect the subject invention within the times specified in paragraph (c) above (the agency may only request title within 60 days after learning of the Contractor's failure to report or elect within the specified times);

(3) In those countries in which the Contractor fails to file patent applications within the time specified in paragraph (c) above; provided, however, that if the Contractor has filed a patent application in a country after the times specified in paragraph (c) above, but prior to its receipt of the written request of the Federal agency, the Contractor shall continue to retain title in that country; or

(4) In any country in which the Contractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in reexamination or opposition proceeding on, a patent on a subject invention.

(e) Minimum rights to Contractor. (1) The Contractor shall retain a nonexclusive, royalty-free license throughout the world in each subject invention to which the Government obtains title except if the Contractor fails to disclose the subject invention within the times specified in paragraph (c) above. The Contractor's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the Contractor is a part and includes the right to grant sublicenses of the same scope to the extent the Contractor was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of the funding Federal agency except when transferred to the successor of that part of the Contractor's business to which the invention pertains.

(2) The Contractor's domestic license may be revoked or modified by the funding Federal agency to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions in the Federal Property Management Regulations and agency licensing regulations (if any). This license shall not be revoked in that field of use or the geographical areas in which the Contractor has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of the funding Federal agency to the extent the Contractor, its licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

(3) Before revocation or modification of the license, the funding Federal agency shall furnish the Contractor a written notice of its intention to revoke or modify the license, and the Contractor shall be allowed 30 days (or such other time as may be authorized by the funding Federal agency for good cause shown by the Contractor) after the notice to show cause why the license should not be revoked or modified. The Contractor has the right to appeal, in accordance with applicable agency licensing regulations and 37 CFR 404 concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of its license.

(f) Contractor action to protect the Government's interest. (1) The Contractor agrees to execute or to have executed and promptly deliver to the Federal agency all instruments necessary to (i) establish or confirm the rights the Government has throughout the world in those subject inventions to which the Contractor elects to retain title, and (ii) convey title to the Federal agency when requested under paragraph (d) above and subparagraph (n)(2) below, and to enable the Government to obtain patent protection throughout the world in that subject invention.

(2) The Contractor agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the Contractor each subject invention made under contract in order that the Contractor can comply with the disclosure provisions of paragraph (c) above, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by subparagraph (c)(1) above. The Contractor shall instruct such employees through employee agreements or other suitable educational programs on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

(3) The Contractor shall notify the Federal agency of any decision not to continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the expiration of the response period required by the relevant patent office.

(4) The Contractor agrees to include, within the specification of any United States patent application and any patent issuing thereon covering a subject invention, the following statement: "This invention was made with Government support under (identify the contract) awarded by (identify the Federal agency). The Government has certain rights in this invention."

(5) The Contractor shall establish and maintain active and effective procedures to assure that subject inventions are promptly identified and disclosed to Contractor personnel responsible for patent matters within 6 months of conception and/or first actual reduction to practice, whichever occurs first in performance of work under this contract. These procedures shall include the maintenance of laboratory notebooks or equivalent records and other

records as are reasonably necessary to document the conception and/or the first actual reduction to practice of subject inventions, and records that show that the procedures for identifying and disclosing the inventions are followed. Upon request, the Contractor shall furnish the Contracting Officer a description of such procedures for evaluation and for determination as to their effectiveness.

(6) The Contractor agrees, when licensing a subject invention, to arrange to avoid royalty charges on acquisitions involving Government funds, including funds derived through Military Assistance Program of the Government or otherwise derived through the Government, to refund any amounts received as royalty charges on the subject invention in acquisitions for, or on behalf of, the Government, and to provide for such refund in any instrument transferring rights in the invention to any party.

(7) The Contractor shall furnish the Contracting Officer the following:

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

(ii) A final report, within 3 months after completion of the contracted work, listing all subject inventions or stating that there were no such inventions, and listing all subcontracts at any tier containing a patent rights clause or stating that there were no such subcontracts.

(8) The Contractor shall promptly notify the Contracting Officer in writing upon the award of any subcontract at any tier containing a patent rights clause by identifying the subcontractor, the applicable patent rights clause, the work to be performed under the subcontract, and the dates of award and estimated completion. Upon request of the Contracting Officer, the Contractor shall furnish a copy of such subcontract, and no more frequently than annually, a listing of the subcontracts that have been awarded.

(9) In the event of a refusal by a prospective subcontractor to accept one of the clauses in subparagraph (g)(1) or (2) below, the Contractor (i) shall promptly submit a written notice to the Contracting Officer setting forth the subcontractor's reasons for such refusal and other pertinent information that may expedite disposition of the matter and (ii) shall not proceed with such subcontracting without the written authorization of the Contracting Officer.

(10) The Contractor shall provide, upon request, the filing date, serial number and title, a copy of the patent application (including an English-language version if filed in a language other than English), and patent number and issue date for any subject invention for which the Contractor has retained title.

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

(g) Subcontracts. (1) The Contractor shall include the clause at 52.227-11 of the Federal Acquisition Regulation (FAR), suitably modified to identify the parties, in all subcontracts, regardless of tier, for experimental, developmental, or research work to be performed by a small business firm or nonprofit organization. The subcontractor shall retain all rights provided for the Contractor in this clause, and the Contractor shall not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.

(2) The Contractor shall include this clause (FAR 52.227-12) in all other subcontracts, regardless of tier, for experimental, developmental, or research work.

(3) In the case of subcontracts, at any tier, when the prime award with the Federal agency was a contract (but not a grant or cooperative agreement), the agency, subcontractor, and the Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and the Federal agency with respect to those matters covered by this clause.

(h) Reporting utilization of subject inventions. The Contractor agrees to submit on request periodic reports no more

frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Contractor or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, and such other data and information as the agency may reasonably specify. The Contractor also agrees to provide additional reports as may be requested by the agency in connection with any march-in proceedings undertaken by the agency in accordance with paragraph (j) of this clause. To the extent data or information supplied under this paragraph is considered by the Contractor, its licensee or assignee to be privileged and confidential and is so marked, the agency agrees that, to the extent permitted by law, it shall not disclose such information to persons outside the Government.

(i) Preference for United States industry. Notwithstanding any other provision of this clause, the Contractor agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any products embodying the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by the Federal agency upon a showing by the Contractor or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

(j) March-in rights. The Contractor agrees that with respect to any subject invention in which it has acquired title, the Federal agency has the right in accordance with the procedures in FAR 27.304-1(g) to require the Contractor, an assignee, or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and if the Contractor, assignee, or exclusive licensee refuses such a request, the Federal agency has the right to grant such a license itself if the Federal agency determines that--

(1) Such action is necessary because the Contractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use;

(2) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the Contractor, assignee, or their licensees;

(3) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Contractor, assignee, or licensees; or

(4) Such action is necessary because the agreement required by paragraph (i) of this clause has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.

(k) Special provisions for contracts with nonprofit organizations. [Reserved]

(l) Communications.

All written notifications/reports 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 (<https://s-edison.info.nih.gov/Edlson/>).

(m) Other inventions. Nothing contained in this clause shall be deemed to grant to the Government any rights with respect to any invention other than a subject invention.

(n) Examination of records relating to inventions. (1) The Contracting Officer or any authorized representative shall, until 3 years after final payment under this contract, have the right to examine any books (including laboratory notebooks), records, and documents of the Contractor relating to the conception or first reduction to practice of inventions in the same field of technology as the work under this contract to determine whether--

(i) Any such inventions are subject inventions;

(ii) The Contractor has established and maintains the procedures required by subparagraphs (f)(2) and (f)(3) of this clause; and

(iii) The Contractor and its inventors have complied with the procedures.

(2) If the Contracting Officer determines that an inventor has not disclosed a subject invention to the Contractor in accordance with the procedures required by subparagraph (f)(5) of this clause, the Contracting Officer may, within 60 days after the determination, request title in accordance with subparagraphs (d)(2) and (d)(3) of this clause. However, if the Contractor establishes that the failure to disclose did not result from the Contractor's fault or negligence, the Contracting Officer shall not request title.

(3) If the Contracting Officer learns of an unreported Contractor invention which the Contracting Officer believes may be a subject invention, the Contractor may be required to disclose the invention to the agency for a determination of ownership rights.

(4) Any examination of records under this paragraph shall be subject to appropriate conditions to protect the confidentiality of the information involved.

(o) Withholding of payment (this paragraph does not apply to subcontracts). (1) Any time before final payment under this contract, the Contracting Officer may, in the Government's interest, withhold payment until a reserve not exceeding \$50,000 or 5 percent of the amount of the contract, whichever is less, shall have been set aside if, in the Contracting Officer's opinion, the Contractor fails to--

(i) Establish, maintain, and follow effective procedures for identifying and disclosing subject inventions pursuant to subparagraph (f)(5) above;

(ii) Disclose any subject invention pursuant to subparagraph (c)(1) above;

(iii) Deliver acceptable interim reports pursuant to subdivision (f)(7)(i) above; or

(iv) Provide the information regarding subcontracts pursuant to subparagraph (f)(8) of this clause.

(2) Such reserve or balance shall be withheld until the Contracting Officer has determined that the Contractor has rectified whatever deficiencies exist and has delivered all reports, disclosures, and other information required by this clause.

(3) Final payment under this contract shall not be made before the Contractor delivers to the Contracting Officer all disclosures of subject inventions required by subparagraph (c)(1) above, an acceptable final report pursuant to subdivision (f)(7)(ii) above, and all past due confirmatory instruments.

(4) The Contracting Officer may decrease or increase the sums withheld up to the maximum authorized above. No amount shall be withheld under this paragraph while the amount specified by this paragraph is being withheld under other provisions of the contract. The withholding of any amount or the subsequent payment thereof shall not be construed as a waiver of any Government right.

(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)

Section J - List of Documents, Exhibits and Other Attachments

Section J - List of Documents, Exhibits and Other Attachments

DOCUMENT TYPE	DESCRIPTION	PAGES	DATE
Exhibit A	Contract Data Requirements List (CDRL) – A001 (TFIMS Reporting)	8	2 Nov. 2007
Attachment I	Statement of Work - "Geiger-mode APD Focal Plane Array Development"	6	17 Sept. 2007

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO. 0001/0002/0003	B. EXHIBIT A	C. CATEGORY TDP TM- OTHER MISC
D. SYSTEM/ITEM GmAPD	E. CONTRACT/PR NO. HR0011-08-C-0021	F. CONTRACTOR Princeton Lightwave, Inc.

1. DATA ITEM NO. A001	2. TITLE OF DATA ITEM RESEARCH AND DEVELOPMENT (R&D) PROJECT SUMMARY	3. SUBTITLE T-FIMS QUARTERLY AND MONTHLY REPORTING
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4. AUTHORITY (Data Acquisition Document No.) DI-MISC-81612A	5. CONTRACT REFERENCE C-2	6. REQUIRING OFFICE IXO
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7. DD250 REQ SEE BLOCK 16	9. DIST STATEMENT REQUIRED B (See H-3)	10. FREQUENCY SEE BLOCK 16	12. DATE OF FIRST SUBMISSION SEE BLOCK 16	14. DISTRIBUTION	
8. APP CODE N		11. AS OF DATE 0	13. DATE OF SUBSEQUENT SUBMISSION N/A	b. COPIES	
				a. ADDRESSEE	Final
				Draft	Reg Repr

16. REMARKS
REFERENCE BLOCK 2, RESEARCH AND DEVELOPMENT PROJECT SUMMARY, AND BLOCK 4, DI-MISC-81612A.

FORMAT.

- GENERAL FORMAT INSTRUCTIONS: COMPLY WITH ALL INSTRUCTIONS DELINEATED ON THE DARPA T-FIMS WEB SITE (<http://www.tfims.darpa.mil>).
- SPECIAL INSTRUCTIONS. UPLOAD THE FOLLOWING ITEMS TO THE DARPA T-FIMS WEB SITE (<http://www.tfims.darpa.mil>).
 - PUBLICATIONS THIS PERIOD (3.1.7) IN ADOBE ACROBAT (PDF) FILE FORMAT.
 - UPDATED SCHEDULE AND MILESTONES (1.2.2.4) IN EITHER POWERPOINT (PPT), JPG, TIFF, OR PDF FILE FORMAT.
 - QUAD-CHART (1.2.2.7) IN MICROSOFT POWERPOINT (PPT) FILE FORMAT.

ELECTRONIC SUBMISSION. THE CONTRACTOR SHALL ACCESS THE DARPA T-FIMS WEB SITE (<http://www.tfims.darpa.mil>) AND ELECTRONICALLY SUBMIT ALL REQUIRED REPORTING INFORMATION FOLLOWING THE SPECIFICATIONS OUTLINED BELOW.

POST-AWARD INITIAL SUBMISSION REQUIREMENT.

- SUBMIT THE PERFORMING ORGANIZATION CONTACTS (1.1.2) WITHIN FIVE (5) CALENDAR DAYS AFTER CONTRACT AWARD TO T-FIMS HELP BY E-MAIL (Tfims-Help@darpa.mil) FOR AWARDEE USER ACCOUNT ACTIVATION.

CONTINUED ON THE NEXT PAGE.			15. TOTAL	
G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE	

CONTRACT DATA REQUIREMENTS LIST, DD FORM 1423 CONTINUATION SHEET

CLIN 0001/0002/0003 Exhibit A PR No. HR0011-08-C-0021

DATA ITEM No. A001

BLOCK 16, continued,

REPORTING TERMINOLOGY - QUARTERLY REPORTING PERIODS.

- JUL-SEP: COVERS PERFORMANCE FROM 1 JULY - 30 SEPTEMBER
- OCT-DEC: COVERS PERFORMANCE FROM 1 OCTOBER - 31 DECEMBER
- JAN-MAR: COVERS PERFORMANCE FROM 1 JANUARY - 31 MARCH
- APR-JUN: COVERS PERFORMANCE FROM 1 APRIL - 30 JUNE

QUARTERLY SUBMISSION REQUIREMENTS.

- FREQUENCY (BLOCK 10). INPUT FOUR (4) TIMES YEARLY, ONCE FOR EACH OF THE QUARTERLY REPORTING PERIODS CITED ABOVE, FOR THE DURATION OF THE CONTRACT.
- DATE OF FIRST SUBMISSION (BLOCK 12). SUBMIT WITHIN FIFTEEN (15) CALENDAR DAYS AFTER THE END OF MOST RECENT QUARTERLY REPORTING PERIOD
 - FOR REPORTING PERIOD JUL-SEP, DUE DATE IS OCTOBER 15
 - FOR REPORTING PERIOD OCT-DEC, DUE DATE IS JANUARY 15
 - FOR REPORTING PERIOD JAN-MAR, DUE DATE IS APRIL 15
 - FOR REPORTING PERIOD APR-JUN, DUE DATE IS JULY 15
- QUARTERLY CONTENT REQUIREMENTS.
 - MINIMAL INITIAL QUARTERLY SUBMISSION. IF THE AWARD OCCURS WITHIN THIRTY (30) CALENDAR DAYS PRIOR TO THE END OF THE QUARTERLY REPORTING PERIOD, SUBMIT PROJECT DESCRIPTION (1.2.2) ONLY.
 - FIRST QUARTERLY SUBMITTAL WILL CONTAIN RESPONSES TO ALL PROJECT INFORMATION (1), WITH THE EXCEPTION OF THE QUAD CHART (1.2.2.7); THE FUNDING REPORT (2), WITH THE EXCEPTION OF THE PROJECTED FUNDING INCREMENT (2.5); AND THE TECHNICAL REPORT (3).
 - FOR ALL OTHER QUARTERLY SUBMISSIONS, SUBMIT OR UPDATE THE ADMINISTRATIVE INFORMATION (1.1), INVOICES THIS PERIOD (2.2), PLANNED INCURRED EXPENSES (2.4), AND ALL THE INFORMATION UNDER THE TECHNICAL REPORT (3.)
 - IN ADDITION, SUBMIT THE FOLLOWING FOR THE APR-JUN QUARTERLY REPORTS.
 - QUAD CHART (1.2.2.7).
 - PROJECTED FUNDING INCREMENT (2.5).
 - IN ADDITION TO REPORTING THE PLANNED ACTIVITIES FOR THE NEXT MONTH (3.2.1.), INCLUDE A TOP-LEVEL BULLET LIST OF THE PLANNED ACTIVITIES FOR THE TIME PERIOD BEGINNING ON 1 AUGUST OF THE CURRENT YEAR AND ENDING ON 31 DECEMBER OF THE NEXT YEAR.

MONTHLY SUBMISSION REQUIREMENTS.

- FREQUENCY (BLOCK 10). INPUT TWELVE (12) TIMES YEARLY (MONTHLY) FOR THE DURATION OF THE CONTRACT.
- DATE OF FIRST SUBMISSION (BLOCK 12). SUBMIT WITHIN FIFTEEN (15) CALENDAR DAYS AFTER THE END OF THE FIRST CALENDAR MONTH BUT NO SOONER THAN THIRTY (30) DAYS AFTER AWARD.
- MONTHLY CONTENT REQUIREMENT.
 - FOR THE DURATION OF THE CONTRACT SUBMIT INCURRED EXPENSES THIS PERIOD (2.1) AS A LUMP SUM TOTAL ONLY.
 - FOR THE DURATION OF THE CONTRACT SUBMIT INVOICES THIS PERIOD (2.2) AS INVOICES ARE SUBMITTED TO DFAS FOR PAYMENT.

CLASSIFICATION. THE ENTIRE REPORT SHALL BE UNCLASSIFIED.

PROCURING CONTRACTING OFFICER (PCO), REFERENCE SF 26, BLOCK 5.

ADMINISTRATIVE CONTRACTING OFFICER (ACO) REFERENCE SF 26, BLOCK 6.

DD FORM 250 SHALL BE SUBMITTED WITH THE FINAL TECHNICAL REPORT (VIA WAWF)

DATA ITEM DESCRIPTION

Title: RESEARCH AND DEVELOPMENT (R&D) PROJECT SUMMARY

Number: DI-MISC-81612A

Approval Date: 20051215

AMSC Number: D7443

Limitation:

DTIC Applicable: N/A

GIDEP Applicable: N/A

Preparing Activity: OSD-SO (FOR DARPA/IXO)

Applicable Forms: N/A

Use, Relationships:

The R&D Project Summary reports key project administrative, programmatic, technical and financial data. The R&D Project Summary includes administrative and funding information, research objectives, innovative approaches, accomplishments, plans, technology transitions, technology transfers, and issues. The technical and financial information contained in the R&D Project Summary enables comprehensive assessment of project goals, progress and status. This Data Item Description (DID) contains format and content preparation instructions for the data product generated by specific and discrete task requirements as delineated in the contract statement of work (SOW).

Requirements:

1. Project Information:

1.1. Administrative Information:

1.1.1. Subcontractors: Verify each subcontractor.

1.1.2. Performing Organization Contacts:

1.1.2.1. Principal Investigator(s) Contact: Verify the name, organization, business address, business phone, business fax, and e-mail address of each principal investigator.

1.1.2.2. Administrative Contact: Verify the name, organization, business address, business phone, business fax, and e-mail address of the administrative point of contact.

1.1.2.3. Financial Data Contact: Verify the name, organization, business address, business phone, business fax, and e-mail address of the contact for financial data.

1.1.2.4. Programmatic/Technical Reporter Contact: If the Principal Investigator is not the reporter of the programmatic/technical data verify the name, organization, business address, business phone, business fax, and e-mail address of the programmatic/technical reporter point of contact.

1.2. Programmatic Information.

1.2.1. Project Uniform Resource Locator (URL). Provide the project URL.

1.2.2. Project Description.

1.2.2.1. Research Objectives.

1.2.2.2. Problem Description. Provide a concise description of the problem area addressed by this research project.

1.2.2.2.1. Research Goals. Identify specific research goals of this project. Identify and quantify expected performance improvements from this research. Identify new capabilities enabled by this research. Identify and discuss salient features and capabilities of developmental hardware and software prototypes.

1.2.2.2.2. Expected Impact. Describe the expected impact of the research project, if successful, to the problem area.

1.2.2.3. Technical Approach.

1.2.2.3.1. Detailed Description of Technical Approach. Provide a detailed description of the technical approach that will be used in this project to achieve the research goals. Specifically identify and discuss innovative aspects of the technical approach.

1.2.2.3.2. Comparison with Current Technology. Describe state-of-the-art approaches and the limitations within the context of the problem area addressed by this research.

1.2.2.4. Schedule and Milestones.

1.2.2.4.1. Schedule Graphic. Provide a graphic representation of the project schedule including detail down to the individual task effort level. Show all project milestones. Use absolute time designations for all dates.

1.2.2.4.2. Detailed Individual Task Descriptions. Provide detailed task descriptions for each individual task in the schedule graphic.

1.2.2.5. **Deliverables Description.** List and provide a detailed description for each planned deliverable. Specify receiving organization(s) and expected delivery dates for each deliverable.

1.2.2.6. **Technology Transition and Technology Transfer Targets and Plans.** Discuss plans for technology transition and transfer. Identify specific military and commercial organizations for technology transition or transfer. Specify anticipated dates for transition or transfer.

1.2.2.7. **Quad Chart.** Provide a Quad Chart as one (1) landscape-oriented page divided into four (4) quadrants and suitable for use in briefings using the following format:

Project Title	
<p>GRAPHIC:</p> <p>A visually compelling graphic that conveys the key technological idea(s) or the expected impact of the research.</p>	<p>NEW IDEAS:</p> <p>List at least 3 new technical ideas embodied by the research.</p>
<p>IMPACT:</p> <p>At least 3 quantitative statements discussing how this research can revolutionize an area of importance to the Department of Defense.</p>	<p>SCHEDULE:</p> <p>At least 2 scheduled events or project milestones per year, depicted on a horizontal timeline with at least Quarter resolution (3 month increments) starting with the Quarter that contains the project start and ending with the Quarter that contains the scheduled project end. Quarters begin on 1 October, 1 January, 1 April, and 1 July. Use absolute time designations for all dates.</p>

2. Funding Report.

- 2.1. **Incurred Expenses this Period.** Specify the expenses incurred during this reporting period (direct and indirect costs on the awardee's accounting system including labor, overhead, G&A, equipment purchases, travel, material, and any subcontract charges known by the prime).
- 2.2. **Invoices this Period.** Specify the invoice date, number, and amount of each invoice submitted during this reporting.
- 2.3. **Date Incurred Expenses will equal Obligated Funding.** Specify the anticipated dates that incurred expenses will equal 75% and 100% of the obligated funding, respectively.

24. **Planned Incurred Expenses.** Specify the total expenses planned to be incurred for each of the next three (3) quarters.
25. **Proposed Funding Increment.** Specify the funding increment required for the period beginning with "Date-Incurred Expenses will equal 100% of Obligated Funding" and ending with 31 December of the next calendar year. If contract ends prior to 31 December of the next calendar year, specify the funding increment required up to the contract end date. Obligated funding increments are additions to currently available funds, not add-ons to the total contract value.
26. **Issues or Concerns.** Summarize any funding, technical, programmatic and other issues or concerns as well as recommended actions for Government consideration. Indicate if an anticipated funding increment has not been received.

3. Technical Report

3.1. Project Progress

- 3.1.1. **Progress Against Proposed Objectives.** Update the status of the specific objective identified in the last reporting period as "Specific Objective for Next Period". For each objective, indicate if the objective was or was not accomplished. For each objective not accomplished, detail the current status of the objective.
- 3.1.2. **Technical Accomplishments This Period.** Describe the technical accomplishments made during this reporting period.
- 3.1.3. **Improvements to Progress This Period.** Provide a detailed, quantitative description of significant new features, capabilities and performance enhancements to hardware and software prototypes made during this period.
- 3.1.4. **Significant Changes in Technical Approach to Data.** Identify and provide a detailed description of and rationale for significant changes to the technical approach since the start of the research project.
- 3.1.5. **Deliverables This Period.** Report the deliverables (including Technology Transition and Transfer covered under 3.1.6.) submitted during this reporting period. List the Deliverable Name, Type of Deliverable (e.g. hardware or software item, demonstration, evaluation, design study or other documentation), and Date of Submission. List the Contact Line or Data Item Number (CLIN or DIN), when applicable. Specify the name, organization, business phone, fax number, and e-mail address of a point of contact for the organization(s) that received the deliverable.

3.1.6. Technology Transition and Transfer this Period.

3.1.6.1. Technology Transition and Transfer Description. List and describe the features and performance capabilities for each technology transitioned or transferred this period.

3.1.6.2. Technology Transition and Transfer List. For each technology transitioned or transferred this period, identify the specific military, commercial, or other transition or transfer organization(s) and the application context.

3.1.6.3. Technology Transition and Transfer Contacts. For each technology transitioned or transferred this period, specify the name, organization, business address, business phone, business fax, and e-mail address of a cognizant point of contact for the organization(s) that received the transitioned or transferred technology.

3.1.7. Publications this Period. Provide an electronic copy of each publication sponsored fully or in part by this contract during the reporting period. For each publication, specify the:

- (1) Title
- (2) Author(s)
- (3) Publication date
- (4) Publication venue (e.g. journal, conference or magazine name)
- (5) Publication keywords

3.1.8. Meetings and Presentations this Period. List all meetings (conferences, workshops, demonstrations, and other coordination meetings) participated in during the reporting period that were sponsored fully or in part by this contract. For each meeting, specify the:

- (1) Meeting Name
- (2) Meeting Purpose
- (3) Meeting Start and End Dates
- (4) Meeting Location (place and name of facility)
- (5) Meeting Attendees from this project
- (6) Presentations Made

3.1.9. Issues or Concerns. Summarize any funding, technical, programmatic, or other issues or concerns as well as recommended actions for Government consideration. Indicate if an anticipated funding increment has not been received.

3.2. Project Plans.

3.2.1. Planned Activities. Describe the planned activities for the next reporting period. Discuss the risks and payoffs corresponding to the planned activities. Include a discussion of planned experiments, demonstrations, presentations, and technical papers.

3.2.2. Specific Objectives for Next Period. Report the significant technical and programmatic objectives planned to be completed during the next reporting period. These are dynamic objectives driven by the progress of the project and not necessarily long-term milestones. Report specific and measurable objectives, rather than simple declarations of continued or sustained effort. For each objective, provide:

- (1) Objective Name
- (2) Objective Type.
- (3) Objective Description. Provide a description of the objective in terms of a specific performance capability to be achieved and in relation to project milestones.
- (4) Impact. State the significance to this project or related projects if the objective is or is not met.

END OF DL-MISC-81612A

STATEMENT OF WORK

ATTACHMENT 1

6 PAGES

WITHHELD IN ITS ENTIRETY

(b)(3): 10 USC § 2305 (g)

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			I. CONTRACT ID CODE U	PAGE OF PAGES 1 4
2. AMENDMENT/MODIFICATION NO. P00001	3. EFFECTIVE DATE 13-Dec-2007	4. REQUISITION/PURCHASE REQ. NO. SEE SCHEDULE		5. PROJECT NO. (If applicable)
6. ISSUED BY DARPA CMO ATTN: (b)(6) 3701 N. FAIRFAX DR. ARLINGTON VA 22203-1714	CODE HR0011	7. ADMINISTERED BY (If other than item 6) DCMA SPRINGFIELD BLDG. 1, ARDEC PICATINNY NJ 07806-5000		CODE S3101A
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code) PRINCETON LIGHTWAVE, INC 2555 US HIGHWAY 130 CRANBURY NJ 08512-3508			9A. AMENDMENT OF SOLICITATION NO.	
			9B. DATED (SEE ITEM 11)	
			X 10A. MOD. OF CONTRACT/ORDER NO. HR0011-08-C-0021	
			10B. DATED (SEE ITEM 13)	
CODE 3NXN2			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 data, 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: 52.232-20 "Limitation of Cost"				
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: bfalesca08196 The purpose of this modification is to correct administrative errors, as well as to re-distribute subcontractor funds and apply incremental funding in the amount of \$19,781(AO XD88/01) per Contractor's email dated 16 November 2007. See Pages 2-4.				
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) Mark Itzler, Chief Technical Officer			16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Stephen C. Davis, PCO TEL: 571-218-4949 EMAIL: Stephen.C.Davis@darpa.mil	
15B. CONTRACTOR/OFFEROR <i>Mark Itzler</i> (Signature of person authorized to sign)	15C. DATE SIGNED 12/13/07	(b)(6)	16C. DATE SIGNED 14 DEC 07	

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 \$19,781.00 from \$1,744,604.00 to \$1,764,385.00.

2. SECTION B - SUPPLIES OR SERVICES AND PRICES

CLIN 0001

The estimated/max cost has increased by \$19,781.00 from \$1,652,968.00 to \$1,672,749.00.

The total cost of this line item has increased by \$19,781.00 from \$1,744,604.00 to \$1,764,385.00.

CLIN 0003

The estimated/max cost has decreased by \$19,781.00 from \$541,285.00 to \$521,504.00.

The total cost of this line item has decreased by \$19,781.00 from \$549,778.00 to \$529,997.00.

SUBCLIN 000101 is modified in bold as follows:

ITEM NO		AMOUNT
000101	Funding for CLIN0001	
	AO No. X089/00	
	ACRN AA	
		\$1,744,604.00

SUBCLIN 000102 is added as follows:

ITEM NO		AMOUNT
000102	Funding for CLIN0001	
	AO No. X089/01	
	ACRN AB	
		\$19,781.00

Acctng Data: 9770400 1320 X089 P7P30 2525 DPAC 7 5406 S12136 63767E

Increase: \$19,781.00

Total: \$19,781.00

4. SECTION H - SPECIAL CONTRACT REQUIREMENTS

The following have been modified as highlighted in bold:

H-10 Consent to Subcontract

From:

NAME
(b)(4)

TOTAL AMOUNT

(b)(4)

To:

NAME

(b)(4)

***If option is exercised
(end of clause)**

5. Except as modified above, the terms and conditions of Contract No. HR0011-08-C-0020 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 | 8**

2. AMENDMENT/MODIFICATION NO.: **F00002** 3. EFFECTIVE DATE: **01-Feb-2008** 4. REQUISITION/PURCHASE REQ. NO.: **SEE SCHEDULE** 5. PROJECT NO. (If applicable):

6. ISSUED BY: **DARPA CMO ATTN: (b)(6) 3701 N. FAIRFAX DR. ARLINGTON VA 22203-1714** CODE: **HF0011** 7. ADMINISTERED BY (If other than item 6): **DCMA SPRINGFIELD BLDG. 1, ARDEC PICATINNY NJ 07808-5000** CODE: **S3101A**

8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code): **PRINCETON LIGHTWAVE, INC 2555 US HIGHWAY 130 CRANBURY NJ 08512-3808** 9A. AMENDMENT OF SOLICITATION NO.: 9B. DATED (SEE ITEM 11): 10A. MOD. OF CONTRACT/ORDER NO.: **HF0011-08-C-0021** 10B. DATED (SEE ITEM 13): **08-Nov-2007**

CODE **3N002** FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of offer is extended, 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).
 C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
 D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, 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: **bfalasca08356**
 The purpose of this modification is to correct administrative errors. See Pages 2-8.

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: **(b)(6)** 16C. DATE SIGNED: **31-Jan-2008**
 (Signature of person authorized to sign) (Signature of Contracting Officer)

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

1. SECTION F - DELIVERIES OR PERFORMANCE

The following Delivery Schedule for CLIN 0001 has been added:

DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
12 mths. ADC		CERDEC (b)(6) ARMY NIGHT VISION AND ELECTRONIC SENSORS 10221 BURBECK RD FT. BELVOIR VA 22060 703-704-2270 FOB: Destination	W26AAN

The following Delivery Schedule for CLIN 0002 has been added:

DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
12 mths. ADC		CERDEC (b)(6) ARMY NIGHT VISION AND ELECTRONIC SENSORS 10221 BURBECK RD FT. BELVOIR VA 22060 703-704-2270 FOB: Destination	W26AAN

The following Delivery Schedule for CLIN 0003 has been added:

DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
12 mths. ADC		CERDEC (b)(6) ARMY NIGHT VISION AND ELECTRONIC SENSORS 10221 BURBECK RD FT. BELVOIR VA 22060 703-704-2270 FOB: Destination	W26AAN

2. SECTION G - CONTRACT ADMINISTRATION DATA

The following has been modified as highlighted in bold:

G-2 **Electronic Submission of Payment Requests**

(a) A "Cost Voucher" document identified by contract number shall be submitted for payment directly via the Internet to Wide Area Workflow (WAWF) at <https://wawf.eb.mil>. Supporting details for the cost voucher shall be attached to the WAWF "Cost Voucher" document.

(1) For the Issue By DoDAAC and Admin DoDAAC fields, enter HR0011.

(2) For the DCAA Auditor DoDAAC fields enter S3101A.

(3) Leave the LPO DoDAAC field blank.

(b) Final cost vouchers shall be submitted for review and approval to DCAA:

**DCAA Southern New Jersey Branch Office
DoDAAC: HAA310
Woodcrest Pavillion
10 Melrose Avenue, Suite 200
Cherry Hill, NJ 08003**

(end of clause)

3. SECTION H - SPECIAL CONTRACT REQUIREMENTS

The following has been modified as highlighted in bold:

H-10 Consent to Subcontract

(a) Pursuant to the clause of the General Provisions entitled "Subcontracts (AUG 1998)," FAR 52.244-2, 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)(4)

***If option is exercised**

(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)

4. SECTION I - CONTRACT CLAUSES

a.) The following has been added by reference:

52.227-1 Alt I Authorization And Consent (Dec 2007) - Alternate I APR 1984

b.) The following has been added by full text:

52.227-11 PATENT RIGHTS--OWNERSHIP BY THE CONTRACTOR (DEC 2007)

(a) As used in this clause--

Invention means any invention or discovery that is or may be patentable or otherwise protectable under title 35 of the U.S. Code, or any variety of plant that is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321, et seq.)

Made means--

(1) When used in relation to any invention other than a plant variety, the conception or first actual reduction to practice of the invention; or

(2) When used in relation to a plant variety, that the Contractor has at least tentatively determined that the variety has been reproduced with recognized characteristics.

Nonprofit organization means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)), or any nonprofit scientific or educational organization qualified under a State nonprofit organization statute.

Practical application means to manufacture, in the case of a composition of product; to practice, in the case of a process or method; or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

Subject invention means any invention of the Contractor made in the performance of work under this contract.

(b) Contractor's rights. (1) **Ownership.** The Contractor may retain ownership of each subject invention throughout the world in accordance with the provisions of this clause.

(2) **License.** (i) The Contractor shall retain a nonexclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, unless the Contractor fails to disclose the invention within the times specified in paragraph (c) of this clause. The Contractor's license extends to any domestic subsidiaries and affiliates within the corporate structure of which the Contractor is a part, and includes the right to grant sublicenses to the extent the Contractor was legally obligated to do so at contract award. The license is transferable only with the written approval of the agency, except when transferred to the successor of that part of the Contractor's business to which the invention pertains.

(ii) The Contractor's license may be revoked or modified by the agency to the extent necessary to achieve expeditious practical application of the subject invention in a particular country in accordance with the procedures in FAR 27.302(i)(2) and 27.304-1(f).

(c) Contractor's obligations. (1) The Contractor shall disclose in writing each subject invention to the Contracting Officer within 2 months after the inventor discloses it in writing to Contractor personnel responsible for patent matters. The disclosure shall identify the inventor(s) and this contract under which the subject invention was made. It shall be sufficiently complete in technical detail to convey a clear understanding of the subject invention. The disclosure shall also identify any publication, on sale (i.e., sale or offer for sale), or public use of the subject invention, or whether a manuscript describing the subject invention has been submitted for publication and, if so, whether it has been accepted for publication. In addition, after disclosure to the agency, the Contractor shall promptly notify the Contracting Officer of the acceptance of any manuscript describing the subject invention for publication and any on sale or public use.

(2) The Contractor shall elect in writing whether or not to retain ownership of any subject invention by notifying the Contracting Officer within 2 years of disclosure to the agency. However, in any case where publication, on sale, or public use has initiated the 1-year statutory period during which valid patent protection can be obtained in the

United States, the period for election of title may be shortened by the agency to a date that is no more than 60 days prior to the end of the statutory period.

(3) The Contractor shall file either a provisional or a nonprovisional patent application or a Plant Variety Protection Application on an elected subject invention within 1 year after election. However, in any case where a publication, on sale, or public use has initiated the 1-year statutory period during which valid patent protection can be obtained in the United States, the Contractor shall file the application prior to the end of that statutory period. If the Contractor files a provisional application, it shall file a nonprovisional application within 10 months of the filing of the provisional application. The Contractor shall file patent applications in additional countries or international patent offices within either 10 months of the first filed patent application (whether provisional or nonprovisional) or 6 months from the date permission is granted by the Commissioner of Patents to file foreign patent applications where such filing has been prohibited by a Secrecy Order.

(4) The Contractor may request extensions of time for disclosure, election, or filing under paragraphs (c)(1), (c)(2), and (c)(3) of this clause.

(d) Government's rights--(1) Ownership. The Contractor shall assign to the agency, on written request, title to any subject invention--

(i) If the Contractor fails to disclose or elect ownership to the subject invention within the times specified in paragraph (c) of this clause, or elects not to retain ownership; provided, that the agency may request title only within 60 days after learning of the Contractor's failure to disclose or elect within the specified times.

(ii) In those countries in which the Contractor fails to file patent applications within the times specified in paragraph (c) of this clause; provided, however, that if the Contractor has filed a patent application in a country after the times specified in paragraph (c) of this clause, but prior to its receipt of the written request of the agency, the Contractor shall continue to retain ownership in that country.

(iii) In any country in which the Contractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in reexamination or opposition proceeding on, a patent on a subject invention.

(2) License. If the Contractor retains ownership of any subject invention, the Government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice, or have practiced for or on its behalf, the subject invention throughout the world.

(e) Contractor action to protect the Government's interest. (1) The Contractor shall execute or have executed and promptly deliver to the agency all instruments necessary to--

(i) Establish or confirm the rights the Government has throughout the world in those subject inventions in which the Contractor elects to retain ownership; and

(ii) Assign title to the agency when requested under paragraph (d) of this clause and to enable the Government to obtain patent protection and plant variety protection for that subject invention in any country.

(2) The Contractor shall require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in the Contractor's format, each subject invention in order that the Contractor can comply with the disclosure provisions of paragraph (c) of this clause, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. The disclosure format should require, as a minimum, the information required by paragraph (c)(1) of this clause. The Contractor shall instruct such employees, through employee agreements or other suitable educational programs, as to the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

(3) The Contractor shall notify the Contracting Officer of any decisions not to file a nonprovisional patent application, continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the expiration of the response or filing period required by the relevant patent office.

(4) The Contractor shall include, within the specification of any United States nonprovisional patent or plant variety protection application and any patent or plant variety protection certificate issuing thereon covering a subject invention, the following statement, "This invention was made with Government support under (identify the contract) awarded by (identify the agency). The Government has certain rights in the invention."

(f) Reporting on utilization of subject inventions. The Contractor shall submit, on request, periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining utilization of the subject invention that are being made by the Contractor or its licensees or assignees. The reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, and other data and information as the agency may reasonably specify. The Contractor also shall provide additional reports as may be requested by the agency in connection with any march-in proceeding undertaken by the agency in accordance with paragraph (h) of this clause. The Contractor also shall mark any utilization report as confidential/proprietary to help prevent inadvertent release outside the Government. As required by 35 U.S.C. 202(c)(5), the agency will not disclose that information to persons outside the Government without the Contractor's permission.

(g) Preference for United States industry. Notwithstanding any other provision of this clause, neither the Contractor nor any assignee shall grant to any person the exclusive right to use or sell any subject invention in the United States unless the person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for an agreement may be waived by the agency upon a showing by the Contractor or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States, or that under the circumstances domestic manufacture is not commercially feasible.

(h) March-in rights. The Contractor acknowledges that, with respect to any subject invention in which it has retained ownership, the agency has the right to require licensing pursuant to 35 U.S.C. 203 and 210(c), and in accordance with the procedures in 37 CFR 401.6 and any supplemental regulations of the agency in effect on the date of contract award.

(i) Special provisions for contracts with nonprofit organizations. If the Contractor is a nonprofit organization, it shall--

(1) Not assign rights to a subject invention in the United States without the written approval of the agency, except where an assignment is made to an organization that has as one of its primary functions the management of inventions, provided, that the assignee shall be subject to the same provisions as the Contractor;

(2) Share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (but through their agency if the agency deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. 202(e) and 37 CFR 401.10;

(3) Use the balance of any royalties or income earned by the Contractor with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions for the support of scientific research or education; and

(4) Make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business concerns, and give a preference to a small business concern when licensing a subject invention if the Contractor determines that the small business concern has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business concerns; provided, that the Contractor is also satisfied that the small business concern

has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the Contractor.

(5) Allow the Secretary of Commerce to review the Contractor's licensing program and decisions regarding small business applicants, and negotiate changes to its licensing policies, procedures, or practices with the Secretary of Commerce when the Secretary's review discloses that the Contractor could take reasonable steps to more effectively implement the requirements of paragraph (i)(4) of this clause.

(j) **Communications.** All written notifications/reports 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 (<https://e-edison.info.nih.gov/IEdison/>).

(k) **Subcontracts.** (1) The Contractor shall include the substance of this clause, including this paragraph (k), in all subcontracts for experimental, developmental, or research work to be performed by a small business concern or nonprofit organization.

(2) The Contractor shall include in all other subcontracts for experimental, developmental, or research work the substance of the patent rights clause required by FAR Subpart 27.3.

(3) At all tiers, the patent rights clause must be modified to identify the parties as follows: references to the Government are not changed, and the subcontractor has all rights and obligations of the Contractor in the clause. The Contractor shall not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.

(4) In subcontracts, at any tier, the agency, the subcontractor, and the Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and the agency with respect to the matters covered by the clause; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under paragraph (h) of this clause.

(End of clause)

c.) The following has been modified as highlighted in bold:

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. HR0011-08-C-0021.**

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

d.) The following has been deleted:

52.227-12 Patent Rights--Retention By The Contractor (Long Form) JAN 1997

5. A typographical error exists in Item 5. of Contract No. HR0011-08-C-0021 P00001, which incorrectly stated "Contract No. HR0011-08-C-0020"; it should have referenced "Contract No. HR0011-08-C-0021".

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6. Except as modified above, the terms and conditions of Contract No. HR0011-08-C-0021 shall remain unchanged and in full force and effect.

(End of Summary of Changes)