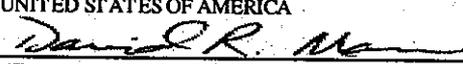


AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE	PAGE OF PAGES	
2. AMENDMENT/MODIFICATION NO. F00001			J	1	2
3. EFFECTIVE DATE 21-Dec-2007		4. REQUISITION/PURCHASE REQ. NO. M9545007RC74611		5. PROJECT NO. (if applicable)	
6. ISSUED BY MARCORSYS COM IWS ATTN: EDDIE.TAVARES.CTR@USMC.MIL BLDG 2200 LESTER ST QUANTICO VA 22134		CODE M67854	7. ADMINISTERED BY (If other than item 6)		CODE
			See Item 6		
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code) INSIGHT TECHNOLOGY INC. JIM COLLINS 9 AKIRA WAY LONDON DERRY NH 03053-3200			9A. AMENDMENT OF SOLICITATION NO.		
			9B. DATED (SEE ITEM 11)		
			X 10A. MOD. OF CONTRACT/ORDER NO. M67854-08-C-1034		
			X 10B. DATED (SEE ITEM 13) 21-Nov-2007		
CODE 0B107		FACILITY CODE			
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS					
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of offer <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended.					
Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.					
12. ACCOUNTING AND APPROPRIATION DATA (If required)					
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.					
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.					
X 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 <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.					
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Modification Control Number: tavares08972 The purpose of this modification is to correct the contractor's address to reflect the approved address in OCR.  Modification done by: Eddie Tavares Eddie.Tavares.CTR@USMC.MIL 703-432-3632					
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)		
			DAVE MARR / CONTRACTING OFFICER TEL: 703-432-3724 EMAIL: dave.d.marr@usmc.mil		
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED	16B. UNITED STATES OF AMERICA		16C. DATE SIGNED
(Signature of person authorized to sign)			BY 		21-Dec-2007
			(Signature of Contracting Officer)		

EXCEPTION TO SF 30  
APPROVED BY OIRM 11-84

30-105-04

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

**SECTION SF 30 BLOCK 14 CONTINUATION PAGE**

**SUMMARY OF CHANGES**

**SECTION SF 1449 - CONTINUATION SHEET**

**SOLICITATION/CONTRACT FORM**

The contractor organization address is changed from

**INSIGHT TECHNOLOGY INC.**

**JIM COLLINS**

**3 TECHNOLOGY DRIVE**

**LONDONDERRY NH 03053**

to

**INSIGHT TECHNOLOGY INC.**

**JIM COLLINS**

**9 AKIRA WAY**

**LONDONDERRY NH 03053-3200**

(End of Summary of Changes)

SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, AND 30				1. REQUISITION NUMBER M9545007RC74611	PAGE 1 OF 90
2. CONTRACT NO. M67854-08-C-1034	3. AWARD/EFFECTIVE DATE 21-Nov-2007	4. ORDER NUMBER	5. SOLICITATION NUMBER M67854-07-R-1083	6. SOLICITATION ISSUE DATE 11-May-2007	
7. FOR SOLICITATION INFORMATION CALL:	a. NAME MATT F. HOWES	b. TELEPHONE NUMBER (No Collect Calls) 703-432-3555	8. OFFER DUE DATE/LOCAL TIME 04:00 PM 30 May 2007		
9. ISSUED BY: MARCORSYSCOM IWS ATTN: EDDIE.TAVARES.CTR@USMC.MIL BLDG 2200 LESTER ST QUANTICO VA 22134  TEL: 703-432-3632 FAX: 703-432-3526	CODE M67854	10. THIS ACQUISITION IS <input checked="" type="checkbox"/> UNRESTRICTED <input type="checkbox"/> SET ASIDE: % FOR <input type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> HUBZONE SMALL BUSINESS <input type="checkbox"/> 8(A)  NAICS: 333314 SIZE STANDARD: 500		11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED <input type="checkbox"/> SEE SCHEDULE <input checked="" type="checkbox"/> 13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700) 13b. RATING DO-A5	
15. DELIVER TO MCLB ALBANY GENE PENDER MCLB ALBANY BLDG 1340 DR 9 ALBANY GA 31704-5000	CODE M98875	16. ADMINISTERED BY  <b>SEE ITEM 9</b>		CODE SCD: A	
17a. CONTRACTOR/OFFEROR INSIGHT TECHNOLOGY INC. JIM COLLINS 3 TECHNOLOGY DRIVE LONDONDERRY NH 03053  TEL: 603-626-4800	CODE 0B107	18a. PAYMENT WILL BE MADE BY DFAS-COLUMBUS CENTER NORTH ENTITLEMENT OPERATIONS P.O. BOX 182266 COLUMBUS OH 43218-2266		CODE HQ0337	
<input type="checkbox"/> 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER		18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a. UNLESS BLOCK BELOW IS CHECKED <input type="checkbox"/> SEE ADDENDUM			
19. ITEM NO.	20. SCHEDULE OF SUPPLIES/ SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
SEE SCHEDULE					
25. ACCOUNTING AND APPROPRIATION DATA See Schedule			26. TOTAL AWARD AMOUNT (For Govt. Use Only)  \$24,823,383.50		
<input type="checkbox"/> 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4, FAR 52.212-3, 52.212-5 ARE ATTACHED. ADDENDA <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED					
<input type="checkbox"/> 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4, FAR 52.212-5 IS ATTACHED. ADDENDA <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED					
28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN 2 COPIES TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN. <small>REF: FFR 10-19-07</small>			29. AWARD OF CONTRACT: REFERENCE <input type="checkbox"/> OFFER DATED 13-Sep-2007 YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS: SEE SCHEDULE		
30a. SIGNATURE OF OFFEROR/CONTRACTOR		31a. UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER)		31c. DATE SIGNED	
		<i>David R. Marr</i>		21-Nov-2007	
30b. NAME AND TITLE OF SIGNER (TYPE OR PRINT)	30c. DATE SIGNED	31b. NAME OF CONTRACTING OFFICER (TYPE OR PRINT) DAVE MARR / CONTRACTING OFFICER TEL: 703-432-3724 EMAIL: david.r.marr@usmc.mil			

AUTHORIZED FOR LOCAL REPRODUCTION  
PREVIOUS EDITION IS NOT USABLE

STANDARD FORM 1449 (REV 4/2002)  
Prescribed by GSA  
FAR (48 CFR) 53.212

**SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS  
(CONTINUED)**

19. ITEM NO.	20. SCHEDULE OF SUPPLIES/ SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
SEE SCHEDULE					

32a. QUANTITY IN COLUMN 21 HAS BEEN  
 RECEIVED  INSPECTED  ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED:

32b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE	32c. DATE	32d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE
--------------------------------------------------------	-----------	---------------------------------------------------------------------

32e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE	32f. TELEPHONE NUMBER OF AUTHORIZED GOVERNMENT REPRESENTATIVE
	32g. E-MAIL OF AUTHORIZED GOVERNMENT REPRESENTATIVE

33. SHIP NUMBER <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	34. VOUCHER NUMBER	35. AMOUNT VERIFIED CORRECT FOR	36. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	37. CHECK NUMBER
------------------------------------------------------------------------------------	--------------------	---------------------------------	------------------------------------------------------------------------------------------------------------------	------------------

38. S/R ACCOUNT NUMBER	39. S/R VOUCHER NUMBER	40. PAID BY
------------------------	------------------------	-------------

41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT 41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER	41c. DATE	42a. RECEIVED BY: (Print)	
	42b. RECEIVED AT: (Location)		
	42c. DATE REC'D (YY/MM/DD)	42d. TOTAL CONTAINERS	

Section SF 1449 - CONTINUATION SHEET

STATEMENT OF WORK

1.0 SCOPE:

This Statement of Work (SOW) defines the effort required for procurement and delivery of an Individual Weapon Night Sight Thermal (IWNS-T). This effort will be pursued as a commercial item purchase, pursuant to FAR 2.1, which provides the standard definition of a commercial item. Standard practices for "Acquisition of Commercial Items," as set forth in FAR 12.201, will be applied throughout the process. Additionally, the Contractor shall provide the requisite program management and logistics support to ensure that delivery schedules, performance requirements, and overall supportability of the IWNS-T system is accomplished as set forth in the contract.

This SOW includes the associated Program Management, Government Furnished Property, Meeting and Reviews, System Engineering, Producibility, Testing and Verification, Environment, Safety, and Occupational Health, Configuration Management, Unique Item Identification, Diminishing Manufacturing Sources and Material Shortages, Integrated Logistics Support, Logistics Demonstration, Maintenance Planning, Supply Support, Power, Technical Publications, Support Equipment, Manpower, Personnel, and Training, Packaging and Transportation, Software, and Contractor Performance Measurement.

The contractor is responsible for providing all/specific material, services and necessary support documentation needed to complete the tasks identified in this SOW.

2.0 APPLICABLE DOCUMENTS

The following documents specified form a part of this Statement of Work (SOW) to the extent specified herein. The most recent revision of the referenced document at the time of contract shall be used unless otherwise specified. In the event of conflict between the applicable documents and this SOW, the SOW shall take precedence. All second tier and below references cited in mandatory compliance documents shall be considered as guidance only. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

2.1 Military Standards and Specifications - Mandatory Compliance.

MIL-PRF-49506	Logistics Management Information
MIL-STD-129 P (3)	DoD Standard Practice Military Marking for Shipment and Storage
MIL-STD-130M	DoD Standard Practice Identification Marking of U.S. Military Property
MIL-STD-196E	DoD Standard Practice Joint Electronics Type Designation System
MIL-STD-810F (3)	DoD Test Method Standards for Environmental Engineering

	Considerations and Laboratory Tests
MIL-STD-882D	DoD Standard Practice System Safety
MIL-STD-1686	DoD Standard Practice Electrostatic Discharge Control Program for Protection of Electrical and Electronic Parts, Assemblies, and Equipment (Excluding Electrically Initiated Explosive Devices)
MIL-STD-2073-1D (1)	DoD Standard Practice Military Packaging
DoD Instruction 5000.64	Accountability and Management of DoD-Owned Equipment and Other Accountable Property
DoD 4140.1-R	DoD Supply Chain Material Management Regulation
DFARS	Clause 252.211-7003, Item Identification and Valuation
NAVSEAINST 9310.1B	Naval Lithium Battery Safety Program
TM S9310-AQ-SAF-010	Naval Lithium Battery Safety Program Responsibilities and Procedures

2.2 Military Standards and Specifications - Guidance Only.

Not Applicable.

2.3 Federal Standard - Mandatory.

Federal Regulation 49CFR

2.4 Drawings.

Not Applicable.

2.5 Handbooks - Guidance Only.

MIL-HDBK-61A Military Handbook Configuration Management Guidance

MIL-HDBK-502 DoD Handbook Acquisition Logistics

MIL-HDBK-512 DoD Handbook Parts Management

MIL-HDBK-781 DoD Handbook Reliability Test Methods, Plans and Environments for Engineering Development, Revision A

MIL-HDBK-1221 (3) DoD Handbook Evaluation of Commercial Off-the-Shelf Manuals

2.6 Other Government Documents. Unless otherwise stated, the following documents may be obtained from the Document Automation and Production Service, Building 4/D, 700 Robbins Avenue, Philadelphia, PA 19111-5094 or visit <http://dodssp.daps.mil>.

FED-STD-313D (1) Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished to Government Activities

PD-IWNS-T-001 Performance Description, requirements and desired attributes for the IWNS-T are contained as an attachment to the RFP.

2.7 Non-Government Documents.

ASTM D3951 Standard Practice for Commercial Packaging

ASTM D4169-01e1 Standard Practice for Performance Testing of Shipping Containers and Systems

(Copies of ASTM documents are available from [www.astm.org](http://www.astm.org) or American Society for Testing and Materials International, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.)

EIA-625 Requirements for Handling Electrostatic Discharge-Sensitive (ESDS) Device

EIA-649 National Consensus Standard for Configuration Management

(Copies of EIA documents are available from [www.eia.org](http://www.eia.org) or Electronic Industries Alliance Corporate Engineering Department, 2500 Wilson Boulevard, Arlington, VA, 22201.)

ISO 9001-2000 Quality Management Practices

(Copies of ISO documents are available from [www.iso.org](http://www.iso.org) or ISO Central Secretariat: International Organization for Standardization (ISO) 1, rue de Varembe, Case postale 56 CH-1211 Geneva 20, Switzerland.)

2.8 Forms.

DD Form 61 Application for Nomenclature Assignment

3.0 **REQUIREMENTS**

The contractor shall perform all tasks required and delineated in this SOW to test, produce, manufacture, deliver and prepare associated documentation, provide logistic support, provide technical support, technical manuals and deliver the IWNS-T in the quantity specified in the contract. The contractor shall provide all materials, equipment, hard tooling, personnel, and facilities necessary to manufacture, fabricate, integrate, produce, and deliver the types and quantities

of deliverables specified by the contract and meet the requirements of the vendor's proposed Performance Specification.

3.1 Technical Compliance with Purchase Description. The Contractor shall propose and deliver a system that is at a minimum, compliant with purchase description (PD) PD-IWNS-T-001. Technical compliance shall be based upon evidence (e.g. test or performance data) of the ability of the system to meet the attributes set forth in the PD, as well as conformance to the delivery schedule. The proposed performance specification that the selected Contractor submits will serve as the functional baseline within the contract, once formally accepted and released by the Government.

3.2 Program and Data Management.

3.2.1 Program Management. The contractor shall establish and maintain program management practices throughout the period of performance. Program management practices shall provide visibility into the contractors' organization and techniques used in managing the program, specifically subcontractor and data management. Documentation shall be readily available to Government representative(s) during planned visits.

DI-MGMT-80227, Contractor's Progress, Status and Management Report

3.2.2 Subcontractor Management. The contractor is responsible for performance of requirements delineated in this SOW, and shall institute appropriate management actions relative to subcontractor performance. Requirements that are contractually specified shall apply to subcontractor performance; however, the contractor shall be accountable for compliance subcontractors and is responsible for ensuring all deliverable products comply with the contract requirements.

3.2.3 Data Management System (DMS). The contractor shall establish a single, centralized system for management of all data required under this contract. The contractor, in developing information that will be furnished to the Government, shall make the maximum use of existing data and provide maximum multiple use of technical information. Specific data management functions shall include schedule control for deliverables, maintenance of deliverables, approval of deliverable format, distribution and delivery of data products. The system shall include facilities for storage of all data developed or utilized for this contract, and shall provide equal access to data by the Government. The contractor shall ensure all data is centrally available for Government review to ensure continuity of the system fabrication and supporting documentation. The Government reserves the right to review all data associated with and developed for the IWNS-T. Access to the DMS shall not require client software installation on Government computers.

3.2.3.1 Technical Proposal. The contractor's Technical Proposal, as negotiated and accepted by the Government, will be incorporated by reference into the resultant contract. Information contained in the Offeror's proposal regarding organization, staffing, manning levels, and experience or education qualifications of personnel that are to be utilized in performance of this contract shall also be incorporated into the resultant contract. Any changes in these arrangements are to be submitted to the contracting officer in advance for approval.

3.2.3.2 Schedule Planning. The contractor shall maintain an accurate schedule of program events

and recommend program schedules, including review and evaluation techniques, which provide for the earliest delivery schedule while at the same time satisfying all requirements in a cost effective manner. The program schedule shall include all significant events, and a Program Planning Milestone Chart shall depict major tasks and events from start to completion of the contract. The contractor shall notify the Government in writing of any anticipated or projected work stoppages or delays that will impact schedules.

3.2.3.3 Assignment of Responsibility and Authority. The contractor shall identify the organizational elements responsible for the conduct of the activities delineated in this SOW. Responsibilities shall be assigned and clear lines of authority defined for determining and controlling the resources necessary to satisfy each element of this SOW. The contractor's Program Manager shall be designated as key personnel. The contractor shall notify the Government within ten days of any changes regarding authority, responsibility, or key personnel changes made by the contractor during the period of performance.

3.2.3.4 Program Manager. The contractor shall designate a Program Manager (PM) who shall possess sufficient corporate authority to manage, direct, execute and control all elements of the contract. The PM shall serve as the primary point of contact between the contractor and the Government, and be responsible for the coordination of all contractor activities related to the contract.

### 3.3 Government Furnished Property.

3.3.1 Government Furnished Equipment (GFE)/Government Furnished Property (GFP). GFE/GFP in the form of AN/PVQ-31A/B Rifle Combat Optic (RCO), will be made available to the contractor in support of testing and verification. Items will be provided to the contractor within 30 days of receipt of contractor's written request to the Program Manager, Optics & Non-Lethal Systems (PM ONS), Marine Corps Systems Command (MARCORSYSCOM). Proposals shall list required delivery date of GFP to meet proposed delivery schedules. The contractor shall provide for accountability, security and storage for the GFP provided. The contractor shall inspect and inventory all GFP received and identify and report any discrepancies/deficiencies to include associated costs, materials, labor and test (if applicable) for repair of the GFP to like new conditions. Upon approval by the Government, the contractor shall conduct the necessary repair actions. The Government will forward an accountability agreement to the contractor for signature on an annual basis. The Management Control Activity, Marine Corps Logistics Base (Code 827-2/MCA), Albany, Georgia, is the control and coordination point for all Marine Corps GFE/GFP.

DI-MGMT-80389B/80596, Receipt of Government Material Report

3.3.2 Government Furnished Information. If required, the Government will provide Government Furnished Information (GFI) in the form of NVThermIP software, technical manuals for the AN/PVQ-31A/B Rifle Combat Optic (RCO), General Support tools lists, and other GFI as necessary. Please refer to Instructions to Offerors, Paragraph 2.3 for POC information and instructions. The Government will furnish the identified GFI in the contract upon written request from the contractor to the Marine Corps Systems Command program office. The contractor shall notify the Government of any deficiencies in the GFI received.

DI-MGMT-80389B/80596, Receipt of Government Material Report

3.4 Meetings, Formal Reviews, Conferences, and Audits.

3.4.1 Contractor Responsibilities. The contractor shall plan, host, attend, coordinate, support and conduct the meetings, formal reviews, conferences, and audits (hereinafter called "reviews"). The reviews shall be conducted at Government and contractor facilities. Reviews requiring demonstration and/or examination of equipment shall be conducted at the contractor's facility. All such reviews shall be included in the program schedule and may be held concurrently with the Government's approval. The contractor shall prepare agendas and conference presentation materials, and provide minutes and reports following each review. The Government reserves the right to cancel any review or to require any review to be scheduled at critical points during the period of performance. Action item documentation, assignment of responsibility for completion and due dates shall be determined prior to adjournment of all reviews. A summary of all action items, responsible parties, and estimated completion dates shall be included with the minutes. Conference Agenda and Conference Minutes shall be submitted in contractor format using Microsoft software.

3.4.2 Post Award Conference. The contractor shall host a Post Award Conference (PAC) at the contractor's facility within 30 days after Contract Award. The purpose of the PAC is for the contractor to review and demonstrate to the Government the management procedures, provide progress assessments, review of technical and other specialty area status, and to establish schedule dates for near term critical meetings/actions. The contractor shall present management, key personnel, and program implementation processes.

3.4.3 In-Process Review. In Process Reviews (IPR) will be held on a quarterly basis or as needed basis, at a date and location mutually agreed upon. The Government reserves the right to cancel any review or to require any review to be scheduled during the period of performance. The contractor's progress, management, technical support services (if any), integrated logistics support, administrative status, assurance of compliance with contract requirements, program status, funding, problem identification and resolutions shall be agenda items. Actual versus expected performance of each area shall be addressed. The contractor shall prepare presentation materials providing an overview of all agenda items.

3.4.4 Production Program Review. The Production Program Review (PPR) shall be performed to evaluate the contractor's production status, identify existing or projected manufacturing problems, and areas of risk. The PPR shall be conducted concurrently with the PAC. The contractor shall demonstrate status in the following areas: (1) attaining the program's production goals, (2) resolving manufacturing problems (or that a plan for their resolution acceptable to the Government has been developed), and (3) mitigating all production risks. At the Government's discretion, follow-on production program reviews may be held quarterly at the contractor's facility. The review dates shall be contractor-proposed, Government-approved, and incorporated into the program schedule. The agenda of the PPR shall include, as applicable, at least the following considerations:

a. A Manufacturing Program Review to include the overall manufacturing system and detailed factors such as: manufacturing organization, responsibilities, facilities and equipment, manufacturing methods, and production flow.

- b. A status review of all production efforts for schedule considerations.
- c. A status review of manufacturing technology and other previously recommended actions to reduce cost, manufacturing risk, and industrial base concerns.
- d. The identity of open production concerns which require additional direction/effort to minimize risk to the production program.
- e. A status review of production engineering efforts, tooling and test equipment demonstrations, and proofing of new materials, processes, methods, special tooling, test equipment.
- f. A status of the hazard list from Environment, Safety and Occupational Health (ESOH) analysis.
- g. The status of long lead items for production, if any.

3.5 System Engineering. The contractor shall establish and maintain an effective system engineering program throughout the production processes, which shall include the following tasks:

3.5.1 Procedures and Controls. The contractor shall maintain procedures and controls, which ensure products, obtained from suppliers, vendors and subcontractors meet reliability requirements.

3.5.2 Failure Reporting, Analysis, and Corrective Action System. The contractor shall provide to the Government the necessary documentation and reports to substantiate contractor claims of reliability, system performance, procedures for analysis of failures to determine cause, and documentation for recording corrective actions taken. The Failure Reporting, Analysis, and Corrective Action System (FRACAS) shall include uniform failure reporting, failure analysis reports and corrective actions. All hardware/software failures from system level shall be subject to these requirements throughout the production period. The contractor shall notify the Government within 24 hours of any critical failure, which impacts cost, schedule, producibility, or interface/performance. Failures, which are not defined as critical, shall be reported within ten (10) working days of the occurrence.

DI-RELI-80255, Failure Summary and Analysis Report  
DI-RELI-81315, Failure Analysis and Corrective Action Report

3.5.3 Nuclear, Biological, and Chemical Contamination Survivability. The contractor shall demonstrate that the IWNS-T meets the Nuclear, Biological, and Chemical (NBC) contamination survivability requirements cited in the Purchase Description PD-IWNS-T-001.

3.5.4 Quality Management System. The contractor's quality management system shall ensure product conformation to contractual requirements. The contractor shall make available all quality management documentation for the Government to review upon request.

3.6 Environment, Safety, and Occupational Health.

3.6.1 Safety Assessment Report. The contractor shall provide a Safety Assessment Report

(SAR) that documents the Safety Assessment and clearly identifies any residual risks of the IWNS-T. The SAR shall include a signed statement that all identified hazards have been eliminated or their associated risks controlled to acceptable levels and that the IWNS-T is ready to test, field or operate in accordance with MIL-STD-882D. The SAR shall include the lithium battery risk assessment, recommendations, procedures and other corrective actions to reduce hazards to an acceptable level. In addition, the contractor shall make recommendations applicable to hazards at the interface of this IWNS-T with other systems.

#### DI-SAFT-80102B, Safety Assessment Report

3.6.1.1 Lithium Battery Safety Qualification. The contractor shall develop a safety data package that shall document and demonstrate the stability of design and validity of any lithium battery selection, in accordance with NAVSEAINST 9310.1B and TM S9310-AQ-SAF-010 dated 19 Aug 2004. The contractor shall provide data from contractor testing of the complete system/item.

3.7. Configuration Management Process. The contractor shall maintain a configuration management (CM) process for the control of all hardware and software configuration documentation, media and parts representing or comprising the IWNS-T. The principles contained in EIA-649 and MIL-HDBK-61A may be used for guidance. The contractor's CM process shall consist of configuration identification, configuration control, configuration status accounting, and configuration audits. Consideration for interfacing with other acquisition requirements such as design review, assurance, and other program related disciplines shall be addressed. The contractor shall designate a CM representative to serve as a primary point of contact to the Government for all CM matters. The contractor's representative shall be responsible for any subcontractor's CM efforts. The contractor shall notify the Government of any changes at the contractor's facility, which affect the contractor's established CM process.

3.7.1 Configuration Identification. The contractor shall participate in a joint Government/contractor integrated team to designate configuration items (CIs) to be managed by the Government and those to be managed by the contractor at a lower level/tier. For those CIs that have been identified for Government control, the contractor shall provide form, fit, function, and interface documentation necessary for configuration status accounting. The contractor shall establish management practices for those lower level/tier CIs.

3.7.1.1 Configuration Status Accounting. The contractor shall establish and maintain a Configuration Status Accounting (CSA) database, which represents the configuration of the IWNS-T. All baselines and changes shall be documented in the contractor's CSA database. The contractor's CSA database shall permit acceptance of commercial product information; however, if requirements to report data outside of the contractor's CSA database or format exist, the information may be delivered as a supplement to prevent disruption to their existing system. The contractor's CSA database shall reconcile any differences between the supplier information and contractor practices to provide the Government with clear accountability of product information. Additionally, the CSA database shall provide a reliable source of configuration information to support IWNS-T activities, including program management, systems engineering, logistics support, and modification/maintenance actions. The contractor's CSA database shall be capable of providing CSA data in a digital format compatible with USMC's CSA automated information system, Configuration Management Information System (CMIS).

## DI-CMAN-81253A, Configuration Status Accounting Information

3.7.2 Parts Management Program. The contractor shall establish and maintain a Parts Management Program that will ensure the use of parts that meet contractual requirements, reduce proliferation of parts through standardization and enhance equipment reliability and supportability, and proactively manage obsolescence. Within 30 days after contract award, an internal company plan or procedure shall be made available to the Government for review and use. The Government may perform audits, verifications, inspections or evaluations to ascertain program conformance and adequacy of the implementing procedures. The procedures, planning and all other documentation media and data that define the Parts Control Program and the parts selected for use shall be made available to the Government for their review and use. The contractor may utilize MIL-HDBK-512 as a guide for developing and maintaining the parts management program.

3.7.3 Baseline Management. The contractor shall be responsible for maintaining the currency and accuracy of the established baseline to ensure form, fit, function and interface of the IWNS-T. The contractor shall establish definitive processes, which identify how the baseline will be managed/maintained. These processes shall be defined in the contractor's configuration management plan and made available for Government review.

3.7.3.1 Functional Baseline. The IWNS-T Performance Specification establishes the functional baseline once approved by the Government. Government approval shall be required prior to making changes that affect the functional baseline.

3.7.4 Configuration Control. The contractor shall implement configuration control methods and procedures, which maintain the integrity and traceability of an established baseline. Changes to established functional baselines shall only be made after Government approval of Engineering Change Proposals (ECP) and Request for Deviation (RFD). Sufficient supporting data to evaluate the proposed change, such as drawings, supplemental drawings, sketches, specifications, or manufacturer's data sheets, shall be submitted with ECP's and RFD's. Changes shall be identified to the affected assembly serial number, or if not part of an assembly, to the affected equipment serial number. The contractor's configuration control process shall be available for Government review. The contractor shall submit all configuration control documentation in a digital format specified by the Government.

### DI-CMAN-80639C, Engineering Change Proposal (ECP) DI-CMAN-80640C, Request for Deviation (RFD)

3.7.4.1 Engineering Change Proposals. Engineering Change Proposals (ECP) shall be submitted by the contractor, and shall be limited to those, which are necessary or offer significant benefit to the Government. MIL-HDBK-61 provides guidance concerning the classification of ECP's. Class I ECP's shall be submitted when changes are required to: (a) Correct deficiencies; (b) Add or modify interface or interoperability requirements; (c) Make a significant and measurable effectiveness change in the operational capabilities or logistics supportability of the system; (d) Effect substantial life cycle costs/savings; and (e) Prevent slippage in an approved production schedule. Class II ECP's shall be submitted by the contractor to the Government for classification concurrence for those engineering changes, which impacts none of the factors listed above. As a minimum, Class I ECP's

shall contain the following information: (a) Date prepared; (b) Originator; (c) ECP Classification; (d) ECP Number; (e) Reason/need for change; (f) System designation (nomenclature, model, P/N); (g) Name of part (or lowest assembly) affected to include part numbers; (h) Baselines affected (to include drawings, specifications, CAGE, revision level, etc.); (i) Title of change; (j) Description of change; (k) Effect on interfaces (Interchangeability and Interoperability); (l) Total costs/savings w/ breakout; (m) Retrofit information; (n) Ozone Depleting Substances; (o) Impact on any engineering disciplines (such as quality, environmental, safety, health, reliability, maintainability, etc.); (p) Justification for change; (q) Priority of change; (r) Impacts to any logistics support elements (such as software, manuals, spares, tools, etc.) being utilized by Government personnel in support of the product; and (s) Alternatives evaluated or considered.

#### DI-CMAN-80639C, Engineering Change Proposal (ECP)

3.7.4.2 Requests for Deviation. The contractor shall process Requests for Deviation (RFD) from current approved configuration documentation. Authorized deviations are a temporary departure from the requirements and do not constitute a change in an approved baseline. Submission of recurring deviations is discouraged and shall be minimized. Where it is determined that a change should be permanent, the contractor shall process an Engineering Change Proposal. MIL-HDBK-61 provides guidance concerning the classification of RFDs. As a minimum, the RFD shall contain the following information: (a) Date prepared; (b) Originator; (c) RFD Classification (critical, major or minor); (d) Designation for deviation (model/type, CAGE code, system designation, and deviation number); (e) Class of deviation; (f) Part Number affected; (g) Cost/Price data; (h) Effectivity; (i) Description of deviation; (j) Need for deviation; (k) Effect on delivery schedule; (l) Recommended corrective action; and (m) Alternatives evaluated.

#### DI-CMAN-80640C, Request for Deviation (RFD)

3.7.4.3 Notification of Changes to Commercial Equipment/Software. The contractor shall submit notification to the Government when changes occur to commercial equipment or software, which is being procured or fabricated by the contractor off-the-shelf, and the Government does not control the developer's design.

#### DI-MISC-80508A(CN), Technical Report - Study/Services

3.8 Integrated Logistic Support. The contractor shall plan and conduct an Integrated Logistics Support (ILS) program, which shall govern the management of the ILS effort. The ILS effort shall be conducted as an integral part of the development and integration process to define the range and depth of the required support, and address all applicable and related elements of logistics. The system will be delivered concurrently with a government approved operator manual; a Marine Corps tailored CLS package (Operator/Crew through Sustainment levels of maintenance), an applicable level of supply support to include spare and/or provisioned parts (relative to a Marine Corps Supportability Concept), warranty, and training data. (See sections 3.8.1, 3.8.2, and 3.9).

3.8.1. Warranty. The Contractor shall provide a warranty of the IWNS-T, covering any defects in material or workmanship or degradation of system operation due to manufacturing defects (relative to quality, defects in design, and conformance to performance specifications). The warranty period shall cover two (2) years from initial unit acceptance (service) and five (5) years initial storage

period to initial unit acceptance (storage). The Contractor will be responsible for the cost associated with shipping and handling of warranty returns (CONUS) to the originating center – both receiving systems from the Marine Corps to the Contractor, and returning systems from the Contractor to the Marine Corps. Warranty repair turn around time shall not exceed 5 working days after receipt of failed materials/IWNS-T at the contractor repair facility.

3.8.1.1 Warranty Procedures. Warranty issues shall be transacted between the authorized Marine Corps activities and the Contractor. If the defective IWNS-T is to be returned, the Marine Corps shall use the Equipment Repair Order (NAVMC 10925) to establish a Marine Corps equipment repair record for the system by serial number and defect(s), and pack and package the defective IWNS-T to prevent further damage and ship the system via the appropriate Marine Corps chain of custody to the Contractor. The Contractor shall have a means for the Marine Corps representatives to readily notify the contractor of warranty failures, 24 hours a day, 365 days a year (i.e., toll free number, voice mail, FAX number, email address, website). Upon notification by an authorized Marine Corps activity that a warranty failure has occurred, the Contractor will provide a Return Material Authorization (RMA) number and appropriate shipping instructions. A DD Form 1348 (Issue Release/Receipt Document) will accompany all shipments to the Contractor's facility including a return ship address. The Contractor will prepare a new DD 1149 (Requisition and Invoice/Shipping Document) for return shipments, to include system serialization data as part of the data requirements called for within DD 1149 block 4 (b).

Marine Corps units will provide the following information for return procedures:

Date:

Branch of Service:

UIC:

Intermediate Maintenance Activity Address:

Contact Name:

Street and Number:

City:

State/Country:

ZIP Code:

Commercial Telephone Number:

Commercial FAX Number:

Email Address:

Product Information Model:

Serial Number:

Reason for Return:

3.8.1.2. Warranty Exclusions. Contractor's warranty does not apply to any problems or failures that arise from improper installation or modification by other than Contractor, improper maintenance or storage or repair. Repair by authorized Marine Corps personnel will not void this warranty.

3.8.1.3. Warranty Returns. Government will return the Equipment to Contractor during the warranty period, transportation prepaid, for Contractor's examination and determination that such Equipment is defective and covered by the terms of the Warranty. However, if the equipment is deployed on a ship or if in a location that the Government cannot return the equipment during the Warranty period, and the Government has properly notified the Contractor that the equipment

malfunctioned during the Warranty period, Contractor will honor the Warranty as though the unit was returned during the Warranty period. The Warranty on any portion of the Equipment which has been repaired or replaced by Contractor under this Warranty shall be for the balance of the original Warranty period. This Warranty specifically covers the IWNS-T complete System. All warranty returns shall be followed up, in writing, in the form of a FRACAS Report that shall include a time-phased projection of when the threshold will be achieved or exceeded.

**3.8.2 Contractor Logistics Support (CLS).** This CLS Plan will be for repair, returns, updates, modification, and condemnation of units not under warranty. The contractor shall receive, inspect, conduct test and failure analysis and/or isolate each IWNS-T to determine the specific work required to restore to an operational condition or recommend condemnation. The contractor shall repair the IWNS-T that does not exceed the one time repair parts cost threshold (65% of the new IWNS-T cost or equal to or greater than 110% of the Major repair price as defined by the contract). The contractor shall proceed with the necessary repair only if the IWNS-T is determined to be defective. Disassembly shall be limited to the minimum extent possible. Should the estimated cost of repair exceed the one time repair parts cost threshold, the Contractor shall notify the DCMA/PCO representative and the Marine Corps designated representative in writing within 48 hours for disposition instructions. The Contractor shall be responsible for the procurement actions for all spares and repair parts required to accomplish the work specified in the SOW during the performance period. All parts and material used during the repair process shall meet or exceed the original specifications and technical data requirements of the applicable contracts. The contractor shall store all units, repair and spare parts in such a manner as to preclude any damage or loss. The contractor shall not be required to restore the IWNS-T to a like new cosmetic condition. Any damage to protective finishes shall be repaired to the extent necessary to provide adequate protection during field usage, corrosion prevention and structural integrity. The Contractor shall replace all damaged markings, identifications, and decals when the markings, identifications, or decals become unreadable. The Contractor shall ensure all repaired, upgraded, or modified systems meet or exceed the original performance. Scratches, delaminating or other optical flaws on the optics will be replaced only if it degrades system's performance or may deteriorate systems performance.

**3.8.2.1 Major/Moderate/Minor/Assessment Criteria.** The Contractor shall characterize non-warranty repairs as Major (Level 3), Moderate (Level 2), Minor (Level 1) or Assessment. Contractor Assessment or screening action cost will not exceed 1% of the new IWNS-T cost, for an IWNS-T as delivered to the Contractor by the Government for the purpose of CLS action that is determined to be Beyond Economical Repair (BER) as per paragraph 3.8.2 of this statement of work. Contractor Assessment or screening action cost will not exceed 4% of the new IWNS-T cost for an IWNS-T as delivered to the Contractor by the Government for the purpose of CLS action that is determined to require maintenance or exhibits no evidence of failure. Level 1 repair will not exceed 8% of the new IWNS-T cost. Level 2 repair will not exceed 40% of the new IWNS-T cost. Level 3 repair will not exceed 65% of the new IWNS-T cost or be equal to or greater than 110% of the Level 3 repair price as defined by the contract. The IWNS-T as delivered to the Contractor by the Government for CLS action that is determined to exceed 65% of the new IWNS-T cost or be equal to or greater than 110% of the Level 3 repair price as defined by the contract will be considered BER and be condemned. Condemnation status will be conditional upon Government receipt of test and failure analysis and/or fault isolation data from the Contractor and the Contractor's receipt in writing of Government condemnation concurrence from the DCMA/PCO representative and/or the Marine Corps designated representative.

3.8.2.2 Summary/Cost estimates. The Contractor will provide CLS summary/cost estimates during the life of the CLS contract, at a minimum of every six months (or upon request) to the DCMA/PCO representative and/or the Marine Corps designated representative. Contractor summary/cost estimates will be provided to the Government upon the Contractor's receipt of an IWNS-T submitted by the Government to the Contractor for CLS repair and the completion of Contractor test and failure analysis and/or fault isolation determination actions. Summaries/cost estimates for Levels 1, 2 and 3 will contain two tiers. Tier 1 of the Contractor summary/cost estimate will detail the Contractor's assessment/screening action task cost and the applicable Level of repair price (Level 1, 2 or 3). Tier 2 of the Contractor summary/cost estimate will detail the Contractor's itemized material cost required to complete the listed maintenance task (i.e. 1 cca, 1 cca mounting bracket, 1 seal) by part, sub-assembly and assembly.

3.8.2.3 Receipt and Inspections. Upon receipt at the contractor's facility, the Contractor and DCMA shall perform a joint incoming inspection. The incoming inspection shall check for the following:

1. IWNS-T identification visible damage or mishandling, completeness and accuracy of accompanying paperwork/documentation.
2. Deficiencies found, as a result of the incoming inspection shall be brought to the attention of the DCMA representative. Should a DCMA resident representative be unavailable for incoming inspection or final acceptance, a day-for-day slip in the repair turnaround time shall be allowed.

3.8.2.4 Inspection and Acceptance. Should a DCMA resident representative be unavailable for final inspection/acceptance, a day-to-day slip in the repair turnaround time shall be allowed. The Contractor shall ensure that each repaired and serviceable IWNS-T is packaged IAW best commercial practices.

3.8.2.5 The Contractor shall acknowledge receipt, inspect, conduct warranty status determination, determine major, moderate or minor repair, to any CLS claim within 48 hours, and the CLS claim shall be completed within five (5) working days.

Note: A working day constitutes the first normal working day (Monday through Friday), that the Contractor receives a CONUS Claim, i.e. a CLS claim is submitted on Fridays response will be no later than 0730 the following Wednesday.

3.8.2.6 The contractor shall track shipments to ensure direct and timely arrival to and from the field destination. The contractor shall immediately notify the appropriate Marine Corps designated representative and DCMA/PCO representative about any shipping problems or delivery delays that may be encountered.

3.9 Supply Support and Level of Repair Analysis. The Government will perform a Level of Repair Analysis at the Post Award Conference to review and determine the required supply support structure that ensures the potential availability and defines the by component applicability (within the context of supporting a limited organic support strategy) of Contractor provisioned parts,

components, and supplies. The contractor shall provide and disassemble production grade equipment, as deemed necessary by the Government, during this conference to validate and verify all provisioning documentation. At the Post Award Conference the Contractor shall furnish provisioning data as a product of the Post Award Conference at mutually agreed upon intervals after the conference. The Government will clarify any provisioning issues during the evolution of the data cleansing process. The contractor shall identify provisioning and other pre-procurement screening data to be submitted for Government screening. Provisioning and other pre-procurement screening data are used to identify existing National Stock Numbers (NSNs) for items, validate currency of an NSN, and aid in maximum use of known assets.

DI-ALSS-81529(PP), Logistics Management Information (LMI) Data Product  
DI-ALSS-81529 / DI-ALSS-81530, Logistics Management Information (LMI) Summaries

3.9.1 Provisioning Technical Documentation. The contractor shall develop/document Provisioning Technical Documentation to include, but not be limited to a Provisioning Parts List (PPL), Long Lead Time Items List (LLTIL), Common and Bulk Items List (CBIL), and any Design Change Notices (DCN). These lists shall contain the Data Products selection list. The Government at the Provisioning Guidance Conference (PGC) shall designate the format and medium of delivery. The frequency for submission of such lists shall also be designated at the PGC.

3.9.1.1 Provisioning Parts List. The Provisioning Parts List (PPL) shall contain the end item, component or assembly and all support items which can be disassembled, reassembled, or replaced at the Operator/Crew through Sustainment levels, and which, when combined, constitute the end item, component or assembly and shall include items such as parts, materials, connecting cabling, piping, and fittings required for the operation and maintenance of the end item, component, or assembly. The PPL is a tool used to determine the range of support items required to maintain the end item for an initial period of service. This includes all repairable Contractor Off-The-Shelf (COTS) items unless excluded by the provisioning requirements. It does not include a breakdown of Government furnished equipment. The PPL shall include items such as parts, materials, connecting cabling, piping, and fittings required for the operation and maintenance of the end item/equipment. The PPL shall contain all repair kits and repair parts required to maintain the end item, component, or assembly equipment unless excluded by the provisioning requirements or meeting the requirement for Common and Bulk Items List (CBIL) inclusion if CBIL is a contract requirement.

DI-ALSS-81529 / DI-ALSS-81530, Logistics Management Information (LMI) Summaries

3.9.2 Engineering Data for Provisioning. Engineering Data For Provisioning (EDFP) is technical data used to describe parts/equipment and consists of data such as specifications, standards, drawings, photographs, sketches and descriptions, and necessary assembly and general arrangement drawings, schematic drawings, schematic diagrams, wiring and cable diagrams necessary to indicate the physical characteristics, location, and/or function of the item. At a minimum, EDFP must provide:

- a. Technical information of items for maintenance support considerations
- b. Item identification/descriptions necessary for;
  - (1) Cataloging actions and assignment of a National Stock Number
  - (2) Review for item entry control

- (3) Standardization to include standardization/interchangeability
- (4) Item management coding
- (5) Identification/procurement of initial spares
- (6) Preparation of allowance/issue lists

The contractor shall furnish EDFP in the following order of precedence:

- a. Government or industry recognized specifications or standards
- b. Engineering drawings
- c. Commercial catalogs or catalog descriptions
- d. Sketches or photographs with brief descriptions of dimensional, material, mechanical, electrical, or other descriptive characteristics.

EDFP shall be submitted in hard copy. EDFP shall be marked in such a manner as to identify the proprietary rights (limited or unlimited). EDFP shall also be marked with the Provisioning Line Item Sequence Number (PLISN) in the upper right hand corner. EDFP shall NOT be provided when the item is:

- a. Identified as a Government specification or standard which completely describes the item including its dimensional, mechanical, and electrical characteristics
- b. Previously cataloged/assigned an active National Stock Number with type 1 item identification.

#### DI-ALSS-81529 / DI-ALSS-81530, Logistics Management Information (LMI) Summaries

3.9.3 Request for Nomenclature. The contractor shall submit a Request for Nomenclature in accordance with MIL-STD-196E for the IWNS-T. The contractor shall submit a DD Form 61 to meet this requirement. This requirement is mandatory for use in type designation of communications and electronic materiel.

#### DI-CMAN-81254A, Request for Nomenclature

#### 3.10 Technical Publications.

3.10.1 Commercial Manuals. The Contractor shall deliver a complete Government accepted commercial operator manual concurrent with first IWNS-T system delivery and CLIN 0001AA. The Contractor shall also provide a complete Government accepted field level commercial maintenance manual in accordance with CLIN 0004AA. Both of these commercial manuals shall contain installation, operation, troubleshooting and maintenance instructions.

The commercial operator manuals shall include a complete Operator/Crew level repair parts list (including exploded views of all assemblies and subassemblies). The field level commercial maintenance manual shall include a complete field through sustainment levels repair parts list (including exploded views of all assemblies and subassemblies).

The government will use MIL-HDBK-1221 (3) as a guide for review of submitted commercial manuals. The Government will provide changes to the manuals to format it to the users specified by the Government (i.e., the Marine Corps). The Government will provide the contractor with any changes resulting from TM reviews. The commercial operators manual shall be no larger

than 4 ½ x 6 inches. The field level commercial maintenance manual shall be no larger than 8½ x 11 inches.

The Government reserves the right to oversee the production and distribution of the IWNS-T field level commercial maintenance manual. A field level commercial maintenance manual start of work meeting shall be held concurrent with the post award conference to ensure all requirements are reviewed and agreed upon.

DI-TMSS-80527A, Commercial Off the Shelf (COTS) Manual and Supplemental Data

3.10.2 Copyright Release. The contractor shall identify copyrighted material, if any, and shall obtain the written approval of the copyright owner. The contractor shall furnish appropriate copyright release giving the Government permission to reproduce and use copyrighted information. When the contractor uses a manual, which covers a vendor's component(s) or a portion thereof, and the vendor's manual contains copyrighted material, the contractor shall be responsible for obtaining a copyright release from the vendor and providing the copyright release to the Government.

3.10.3 Change Pages/Modification Instructions. The contractor shall provide change pages/modification instructions to the manual as a result of approved changes to the baseline system. The Government requires notification of all changes and revisions to the manuals for the duration of this contract. Notice of new models/equipment, when they are available, is also required for Government information. The contractor shall develop change pages/modification instructions in support of paragraph 3.10.4, below.

3.10.4 Publications Quality Assurance/Quality Control. Quality Assurance/Quality Control is the responsibility of the contractor. The contractor shall ensure that the equipment publications are fully edited, reviewed, and validated to ensure compliance with specifications and are technically accurate and useable by the target audience.

3.10.5 Scheduling IPRs. Technical publication IPRs if required shall be held at the contractor's or designated Government facility. The contractor shall submit an IPR schedule for review during initial Guidance Conference if applicable. IPRs will be held prior to Government acceptance. The contractor may request IPRs when assistance or clarification is desired. The Government may require and the contractor may request additional IPRs irrespective of the schedule.

3.10.6 Disposition of IPR Findings. Discrepancies and/or deficiencies found as the result of the IPR shall be corrected prior to the next IPR.

3.10.7 Validation. The Contractor shall have a process in place that provides for the validation of the adequacy and technical accuracy of the technical manual.

3.10.8 Verification. Verifications shall be held for the operator's and maintenance manuals to verify operation/maintenance procedures, conformance to contract, and usability. Appropriate contractor personnel shall attend and assist at the Government's request. Upon completion of the verification effort, the contractor shall incorporate all verification changes and review comments at no additional cost to the Government.

3.10.9 Final Acceptance and Delivery. Final acceptance will be made by the Government to certify that all comments resulting from the verification and supplementation (if any) have been incorporated into the applicable final operator and maintenance drafts. The Contractor shall deliver the manuals in MS Word to include graphics on CD-ROM. Digital photographs shall be provided for each operator and maintenance task on a separate CD-ROM. Camera ready copy shall be provided for each manual.

3.11 Support Equipment. The contractor shall provide a listing of support equipment, which is defined as tools, and test equipment. Items currently in the Marine Corps inventory shall satisfy the requirement for support equipment. Listings of support equipment resident in the Marine Corps inventory are available from the Government upon the contractor's written request. If the contractor has determined that support equipment is not required, then an explanation is required on how and for how long the system is going to be maintained.

3.12 Transportation: the contractor will establish and maintain a transportation system for IWNS-T repairs including returns from the user location to the contractor for warranty and to/from the contractor for non-warranty repair. The contractor shall use both Marine Corps and commercial transportation services as the situation dictates, or as directed to send equipment to CONUS and OCONUS locations.

3.13 Close out: Should the contract be terminated prior to the end of the performance period, the Marine Corps shall have the option to purchase all remaining IWNS-T spares and repair parts.

3.14 Packaging, Handling, Storage and Transportation.  
The contractor shall be responsible for preservation and packaging of the deliverables under the terms of this statement of work. Packaging shall be in accordance with MIL-STD-2073-1D (1).

3.14.1 Preservation and Packaging. Shipments for immediate use shall be in accordance with the best commercial practices of ASTM D 3951-98. Items scheduled for overseas shipment shall be in accordance with ASTM D 3951-98, paragraph 6.1., Export requirements. Items scheduled for long-term storage (longer than 9 months) shall be in accordance with Level "A" requirements of MIL-STD-2073-1D and items scheduled for short-term storage shall be in accordance with Level "B" requirement. Marking of all items for shipment and storage shall be in accordance with MIL-STD-129.

3.14.2 Development of Marking Requirements. Marking shall be in accordance with MIL-STD-129P(3).

3.14.3 Engineering Changes. In the event an engineering change affects packaging design requirements for previously approved data, the contractor shall update the affected packaging data and submit it to the Government for approval.

DI-PACK-80120B, Preservation and Packing Data

3.14.4 UID Bar Code Identification Report.

3.14.4.1 Item Unique Identification (IUID). The Contractor shall implement specific Item Unique Identification (IUID) markings, as defined in MIL-STD-130M dated 2 Dec 2005, DoD Instruction

5000.64, DoD 4140.1-R, and DFARS clause 252.211-7003. The IUID marking shall be incorporated into existing data plates. The two-dimensional IUID data matrix shall be machine-readable with common optical scanning devices and be accompanied by the corresponding human readable markings when practical.

Information contained in the machine-readable code shall be: Manufacturer CAGE Code, Manufacturer part number, and serial number. This provides a valuable tool for asset tracking from acquisition through manufacture as well as item life cycle management.

The Contractor shall supply documentation in formats (written and electronic) that are readily usable by the Government with each shipment of equipment and/or repairables that the government purchases. The Contractor shall maintain all of this information in their Data Management System and the documentation shall be readily available to Government representative(s):

- NSN
- MFR P/N
- S/N

### 3.14.5 Preparation For Shipment

3.14.5.1 Packaging and marking of all deliverables shall be in accordance with the best commercial practice necessary to ensure the safe and timely delivery at destination. As guidance, MIL-STD 129P (3) may be used. Individual CLINs may provide specific instruction.

3.14.5.2 All reports shall prominently show on the cover of the report:

- a. Name and business address of the Contractor;
- b. Contract Number;
- c. Delivery Order Number;
- d. Date of Deliverable; and,

Receiving Party (i.e. requesting customer and Project Officer)

### PACKAGING AND MARKING

Packaging and Marking shall be conducted in accordance with Section 3.14 of the Statement of Work.

### REQUESTS FOR PAYMENT

#### G.1 REQUESTS FOR PAYMENT

## WAWF INSTRUCTIONS

In compliance with DFARS 252.232-7003, "Electronic Submission of Payment Requests (January 2007)", the United States Marine Corps (USMC) utilizes WAWF-RA to electronically process vendor requests for payment. The contractor is required to utilize this system when processing invoices and receiving reports under this contract - unless the provision at DFARS 252.232-7003(c) applies. The contractor shall (i) register to use WAWF-RA at <<https://wawf.eb.mil/>> and (ii) ensure an Electronic Business Point of Contact is designated in the Central Contractor Registration at <<http://www.ccr.gov>>, within ten (10) days after award of the contract or modification incorporating WAWF-RA into the contract.

The contractor is directed to use the "2 -in-1" format when processing invoices for "Combo" for supplies. For all requirements, the contractor shall use the Marine Corps Systems Command DODAAC M67854 and applicable extension PG13 (i.e., M67854PG13) as the DODAAC for all shipping addresses.

## WAWF SUPPORT / ASSISTANCE

The Marine Corps Systems Command WAWF Support points of contact is email:  
[QUAN\\_MCSC\\_DFM\\_MAO@usmc.mil](mailto:QUAN_MCSC_DFM_MAO@usmc.mil)

Or USMC Help Desk at CACI/UNITECH, 703-221-6911 OR 703-432-4442

The WAWF-Receive & Acceptance (RA) for this order is Joe Bernardoni and can be reached at (229) 639-5086 or e-mail [joseph.bernardoni@usmc.mil](mailto:joseph.bernardoni@usmc.mil)

## Data entry information for WAWF:

Payment Office DoDAAC: HQ0339  
Issue By DoDAAC: M67854  
Admin Office DoDAAC: S3319A  
Inspect by DoDAAC: S3319A  
Ship to DoDAAC: M67854 Extension PG13  
Contract Number: M67854-08-C-1034

Direct an additional email notification of invoices to:  
Contract Specialist: [eddie.tavares.ctr@usmc.mil](mailto:eddie.tavares.ctr@usmc.mil)  
Project Officer: [bryan.leahy@usmc.mil](mailto:bryan.leahy@usmc.mil)  
Receiving Acceptance Officer: [joseph.bernardoni@usmc.mil](mailto:joseph.bernardoni@usmc.mil)

## POINTS OF CONTACT

Mr. John J Wahl, Procuring Contracting Officer  
Phone 703-432-3568, Fax 703-432-3526  
Email: [john.wahl@usmc.mil](mailto:john.wahl@usmc.mil)

Eddie Tavares, Contracts Specialist  
Phone 703-432-3632 Fax 703-432-3526  
Email: [eddie.tavares.CTR@usmc.mil](mailto:eddie.tavares.CTR@usmc.mil)

Kate Winiarz, Administering Contracting Officer  
Phone 603 621 2964  
Email: [kathy.winiarz@DCMA.mil](mailto:kathy.winiarz@DCMA.mil)

Gary Foote, Quality Assurance Representative  
Phone 603 626 4800 ext 6690  
Email: [gary.foote@dcma.mil](mailto:gary.foote@dcma.mil)

Distribution List

Sherilyn Harrell  
Barbara Fielding  
Capt Bryan Leahy  
Andrea Harlow  
Angie Allen  
Pat Hall  
Kate Winiarz  
Gary Foote  
Joe Bernardoni  
Sandra Kellyware

SPECIAL CONTRACT REQUIREMENTS

EMPLOYMENT OF US GOVERNMENT PERSONNEL RESTRICTED

In performing this contract, the Contractor shall not use as a consultant or employ (on either a full or part time basis) any active duty U.S. Government personnel (civilian or military) without the prior written approval of the Contracting Officer. Such approval may be given only in circumstances where it is clear that no laws and no DoD or U.S. Government instructions, regulations, or policies might possibly be contravened and no appearance of conflict of interest will result.

ENGINEERING CHANGES

(a) After contract award, the Government may solicit, and the Contractor is encouraged to propose independently, engineering changes to the equipment, software specifications, or other requirements of this contract. These changes may be proposed to save money, to improve performance, to incorporate new technology, to save energy, or to satisfy increased data processing requirements. If the proposed changes are acceptable to both parties, the Contractor shall submit a priced change proposal to the Government for evaluation. Those proposed engineering changes (ECP) that are acceptable to the Government will be processed as modifications to the contract.

(b) This ENGINEERING CHANGES clause applies only to those proposed changes identified by the Contactor, as a proposal submitted pursuant to the provisions of this clause. At a minimum, the following information shall be submitted by the Contractor with each proposal:

(1) A description of the difference between the existing contract requirement and the proposed change, and the comparative advantages and disadvantages of each;

(2) Itemized requirements of the contract which must be changed if the proposal is adopted, and the proposed revision to the contract for each such change;

(3) An estimate of the changes in performance and cost, if any, that will result from adoption of the proposal;

(4) An evaluation of the effects the proposed change would have on collateral costs to the Government, such as Government-furnished property costs, costs of related items, and costs of maintenance and operation, and;

(5) A statement of the time by which the change order adopting the proposal must be issued so as to obtain the maximum benefits of the change(s) during the remainder of this contract. Also, any effect on the contract completion time or delivery schedule shall be identified.

(c) Engineering change proposals submitted to the Contracting Officer shall be processed expeditiously. The Government shall not be liable for proposal preparation costs or any delay in acting upon any proposal submitted pursuant to this clause. The Contractor has the right to withdraw, in whole or in part, any engineering change proposal not accepted by the Government within the period specified in the engineering change proposal. The decision of the Contracting Officer as to the acceptance of any proposal under this contract shall be final.

(d) The Contracting Officer may accept any engineering change proposal submitted pursuant to this clause by giving the Contractor written notice thereof. This written notice may be given by issuance of a modification to this contract. Unless and until a modification is executed to incorporate an engineering change proposal under this contract, the Contractor shall remain obligated to perform in accordance with the terms of the existing contract.

(e) If an engineering change proposal submitted pursuant to this clause is accepted and applied to this contract, an equitable adjustment in the contract price and in any other affected provisions of this contract shall be made in accordance with this clause and other applicable clauses of this contract. When the cost of performance of this contract is increased or decreased as a result of the change, the equitable adjustment increasing or decreasing the contract price shall be in accordance with the "CHANGES" clause rather than under this clause, but the resulting contract modification shall state that it is made pursuant to this clause.

(f) The Contractor is requested to identify specifically any information contained in the engineering change proposal which the Contractor considers confidential and/or proprietary and which the Contractor prefers not be disclosed to the public. The identification of information as confidential and/or proprietary is for informational purposes only and shall not be binding on the

Government to prevent disclosure of such information. Offerors are advised that such information may be subject to release upon request pursuant to the Freedom of Information Act (5 U.S.C. 552).

#### ENGINEERING CHANGE PROPOSALS

(a) Configuration Management. Configuration Management shall be managed by the contractor in accordance with 3.7 in the Statement of Work.

(b) Unauthorized Changes

(1) No order, statement, or conduct of Government personnel who might visit the contractor's facility or in any other manner communicate with contractor personnel during the performance of this contract shall constitute a change under the "CHANGES" clause of this contract.

(2) No understanding or agreement, contract modification, change order, or other matter deviating from or constituting an alteration or change of the terms of the contract shall be effective or binding upon the Government unless formalized by contractual documents executed by the Contracting Officer.

(3) The Contracting Officer is the only person authorized to approve changes in any of the requirements of this contract and, notwithstanding provisions contained elsewhere in the contract, the said authority remains solely with the Contracting Officer. In the event that the contractor effects any change at the direction of any person other than the Contracting Officer, the change will be considered to have been made without authority at the contractor's expense, and no adjustment shall be made in the contract price or other contract terms and conditions as consideration for the aforementioned unauthorized change. Further, should the unauthorized change be to the Government's detriment, the contractor may be held financially responsible for its correction.

#### NOTICE OF INCORPORATION OF REPRESENTATIONS AND CERTIFICATIONS.

The Representation, Certifications and Other Statement of Offerors section of this RFP will not be distributed with the contract; however, it is incorporated in and forms a part of the resultant contract as though furnished in full text herewith.

#### CENTRAL CONTRACTOR REGISTRATION

All contractors must ensure their registration within the Central Contractor Registration and remain registered throughout the period of performance. This is mandatory for award of any Government contract. To register, go on-line to <http://www.ccr.gov>.

#### WARRANTY AND NON-WARRANTY REPAIRS

(a) Quality Assurance Program. The contractor shall execute and maintain its comprehensive Quality Assurance (QA) program in accordance with, ISO 9001-2000 (or equivalent system, as agreed to between the contractor and the Government). The QA program shall establish

how the contractor will assure compliance to relevant specifications, drawings, quality procedures, certification of operations, and workmanship standards. There shall be provisions for the establishment and maintenance of an effective corrective action and disposition system for nonconforming material. The contractor is also responsible for assuring that all supplies and services procured from suppliers conform to established requirements.

(b) Warranty Performance System. The contractor shall establish and maintain a warranty performance system that identifies and documents all items to be warranted under this contract in accordance with 3.8 of the Statement of Work.

(c) Standard Commercial Warranty. The contractor shall provide a standard commercial warranty in accordance with 3.8 of the Statement of Work.

#### ORGANIZATIONAL CONFLICT OF INTEREST

(a) The Contractor understands and agrees that the Department of Defense will not consider it, its successors, or assignees (hereinafter referred to as the Contractor, as a source of supply for any system or major component thereof, or training related thereto, for which the Contractor provides technical support and management assistance under the contract. The Contractor further understands and agrees that it will not be allowed to be a subcontractor or consultant to a supplier of a system or any major components thereof, or training related thereto, for which the Contractor provides technical support and management assistance under this contract.

(b) If, under this contract, the Contractor assists the Department of Defense in the preparation of a Statement of Work, or provides material leading directly, predictably, and without delay to a Statement of Work, to be used in the competitive procurement of a system or services, the Contractor understands and agrees that for the period from effective date of contract through 1 year after contract completion it shall not be allowed to supply the services or the system or major components thereof, unless it is the sole source. The content of a Statement of Work shall not be considered predictable if more than one prime Contractor is involved in the preparation of material leading to it.

(c) The Contractor hereby understands and agrees that if work to be performed under this contract requires access to proprietary data of other companies, the Contractor must agree with such other companies to protect such data from unauthorized use or disclosure so long as it remains proprietary. Evidence of such agreement must be made available to the PCO upon request. Further, the Contractor agrees that it will not utilize the data obtained from such other companies in performing for the Department of Defense additional studies in the same field, which are obtained competitively.

(d) Under the provisions of this contract, the Contractor shall conduct a review of actual or potential Organization Conflict of Interest (OC of I) as defined in and within the meaning of FAR Subpart 9.5. If in the opinion of the Contractor the performance of a task directed under this contract will involve an actual or potential OC of I, the Contractor shall notify the Contracting Officer and provide justification in support of its opinion. The Contracting Officer will thereupon determine whether in fact the task does involve an OC of I. If the Contracting Officer determined that an OC of

If involved, the Contractor shall not perform said task unless the parties agree that the restrictions imposed by FAR Subpart 9.5 apply.

(e) Any subcontractor, which performs any work relative to this contract, shall be subject to paragraphs A through D above.

(f) The Contractor agrees to notify any subcontractor, which, pursuant to paragraph E above, is subject to paragraphs A through D above that it is so subject.

(g) The Government may waive the prohibitions imposed by this clause.

INSIGHT-PROPOSED PERF SPEC

**Attachment 2**

APPLICATION REVISION HISTORY  
NEXT ASSY USED ON REV DESCRIPTION DATE APPROVED  
CQB-001-A10 A Initial Release 10/16/07

APPROVERS  
(AS APPLICABLE) DATE

**INSIGHT  
TECHNOLOGY  
INCORPORATED**

9 AKIRA WAY  
LONDONDERRY, NH 03053  
PHONE: 603-626-4800  
FAX: 603-626-4888

**TITLE:**  
ENGINEERING

(b)(4)

**Performance Specification for the Individual  
Weapon Night Sight-Thermal (IWNS-T)**

QUALITY ASSURANCE SIZE CAGE CODE DWG NO REV

(b)(4)

**A 0B107 IPS-085 A**  
PROGRAM MANAGER

(b)(4)

Export Notice: This document contains technical data that is subject to either the International Traffic in Arms Regulations (22 CFR 120-130) or the Export Administration Regulations (15 CFR 730-774). U.S. government authorization may be required to transfer this data to foreign persons.

ii

**TABLE OF CONTENTS**

1 SCOPE .....	4
2 APPLICABLE DOCUMENTS.....	4
2.1 General .....	4
2.2 Government documents.....	4
2.2.1 Specifications, standards, and handbooks .....	4
2.2.2 Other Government documents, drawings, and publications .....	5
2.2.3 Non-Government publications.....	5

2.2.4 Order of precedence .....	5
3 REQUIREMENTS.....	5
3.1 Item Description .....	5
3.2 Major Component List.....	5
3.3 System Characteristics .....	5
3.4 Target Recognition.....	6
3.4.1 Minimum Resolvable Temperature (MRT).....	6
3.4.2 Signal Transfer Function (SITF) .....	6
3.5 Displayed Image Quality .....	6
3.6 Display Effects .....	6
3.7 Display Luminance.....	7
3.8 Display Brightness .....	7
3.9 Frame Rate .....	7
3.10 Display Imperfections .....	7
3.10.1 Image Characterization and Uniformity.....	8
3.10.2 Chevron and Bullet Drop Compensator .....	9
3.10.3 Horizontal Mil Scale.....	9
3.10.4 Sight Picture Geometry .....	9
3.10.5 Image Shift .....	9
3.10.6 Image Alignment .....	9
3.11 Weight.....	9
3.12 Physical Structure.....	10
3.12.1 Weapon Interface .....	10
3.12.2 Method of Attachment .....	10
3.12.3 RCO Interoperability.....	10
3.12.4 Detector Characteristics.....	10
3.12.5 Display Characteristics.....	10
3.13 Weapon Firing Heat Effects.....	10
3.14 Response outside FOV .....	11
3.15 Anti- reflection (Glint) .....	11
3.16 Body finish .....	11
3.17 Chemical Resistance.....	11
3.18 Ease of Use .....	12
3.19 Calibration.....	12
3.20 System Adjustments.....	12
3.21 System Power.....	13
3.21.1 Battery Life .....	13
3.21.2 Battery Type .....	13
3.21.3 Battery Indicator .....	13
3.21.4 Battery Replacement.....	13
3.21.5 Battery Insertion .....	13
3.22 Focus Range .....	13
3.23 Lens Covers.....	14
3.23.1 Objective Lens Protection.....	14
3.23.2 Eyepiece Lens Protection .....	14
3.24 Lens Abrasion Resistance.....	14
iii	
3.25 Carrying Case.....	14
3.26 Start-up Time .....	15
3.27 Effects of sun in the Field Of View.....	15
3.28 Suitability Characteristics .....	15
3.28.1 Hand-Held Thermal Optic .....	15
3.28.2 Reliability .....	16
3.28.3 Light Security.....	16
3.28.4 Noise Emissions.....	16
3.28.5 Altitude.....	16

3.28.6 Drop.....	16
3.28.7 Immersion/leakage.....	16
3.28.8 Temperature.....	16
3.28.9 Organizational Impact .....	16
3.28.10 Workmanship .....	17
3.29 Human Factors and Safety.....	17
3.29.1 Controls .....	17
3.29.2 Hazards .....	17
4 Technical Interpretations .....	18
4.1.1 Probability of Recognition.....	18
4.1.2 Clear Air Conditions .....	18
4.1.3 Operational.....	18
4.1.4 Damage.....	18
4.1.5 Degradation of Performance .....	18
4.1.6 Service Weapon.....	18
4.1.7 Day Optics.....	18
4.1.8 Battle Sight Zero (BZO)/Boresight/Zeroing .....	18
4.1.9 Stray Light .....	18
4.1.10 Flickering or Flashing .....	19
5 VERIFICATION.....	20
5.1 Assessment Matrix.....	21

**APPENDIX A Alignment Process and Equipment Description**

**APPENDIX B Position of Chevron and Bullet Drop Compensator**

**APPENDIX C Carrying Case**

4

**PERFORMANCE SPECIFICATION and REQUIREMENTS FOR THE  
Individual Weapon Night Sight – Thermal**

**Offeror IWNS-T Nomenclature:**

**Part Number:** CQB-001-A10

**Nomenclature:** IWNS-T

**Drawing No.** CQB-001-A10, Rev. A, 10-16-07

**1 SCOPE**

This Performance Specification establishes the performance parameters and characteristics for the Individual Weapon Night Sight – Thermal (IWNS-T) that the user requires. It is not a design specification because the IWNS-T is a commercial off-the-shelf

item being acquired to meet an urgent requirement.

**2 APPLICABLE DOCUMENTS**

**2.1 General**

The documents listed in this section may be needed, or may be used as guidance, to meet the requirements specified in Section 3 of this description. This section does not include documents cited in other sections of this document or recommended for additional information or as examples. The most recent revision of the referenced document at the time of contract shall be used unless otherwise specified.

**2.2 Government documents**

**2.2.1 Specifications, standards, and handbooks**

The following documents are mandatory sources of information. Their use is encouraged unless the manufacturer has equivalent documentation or specifications.

Either the Government document or vendor equivalent shall be used.

**Specifications**

MIL-C-675C (3) Coating of Glass Optical Elements (Anti-Reflection)  
MIL-F-14072 Finishes for Ground Based Electronic Equipment  
MIL-L-46000C Lubricant, Semi-Fluid (Automatic Weapons)  
MIL-PRF-63460D (I7) Lubricant, Cleaner And Preservative For Weapons And  
Weapons Systems  
MIL-PRF-13830B Performance Specifications, Optical Components for Fire  
Control Instruments

#### **Standards**

MIL-STD-129P (3) Military Marking for Shipment and Storage  
MIL-STD-130M Identification Marking of U.S. Military Property  
MIL-STD-810F (3) Test Method Standard for Environmental Engineering  
Considerations and Laboratory Testing  
MIL-STD-882D Department of Defense Standard practice for System Safety  
MIL-STD-1913 Dimensioning of Accessory Mounting Rail for Small Arms  
Weapons  
MIL-STD-1916 DoD Preferred Methods for Acceptance of Product  
MIL-STD-808A Finishes, Materials and Processes For Corrosion Prevention  
And Control In Support Equipment

5

#### **2.2.2 Other Government documents, drawings, and publications**

DFARS Clause 252.211-7003  
49 CFR Parts 100 to 185 Hazardous Materials Regulations (available from the US  
Department of Transportation)  
TM-11064-OI(1) Operator's Manual for the AN/PVQ-31A and AN/PVQ-31B

#### **2.2.3 Non-Government publications**

None

#### **2.2.4 Order of precedence**

In the event of conflict between this specification and any documents referenced herein,  
the requirements of this specification shall govern. Nothing in this document, however,  
supersedes applicable laws and regulations unless a specific exemption has been  
obtained.

### **3 REQUIREMENTS**

#### **3.1 Item Description**

The IWNS-T is a lightweight, thermal imager that is compatible and interoperable with  
the Rifle Combat Optic (RCO). The IWNS-T attaches to the service weapon using the  
MIL-STD-1913 rail system without changing the location of the RCO. The IWNS-T  
presents a thermal representation of object space to the user viewed through the RCO.  
The IWNS-T presents the same sight picture and geometry as seen through the RCO  
alone.

#### **3.2 Major Component List**

The manufacturer shall identify the final IWNS-T thermal imager configuration and  
system components list. The minimal system shall include:

- IWNS-T thermal imager
- Objective lens cover
- Light limiting eye piece cover (eyecup)
- View lens cover
- Soft carrying case
- Cleaning kit

- Two sets of (b)(4)
- Government approved operator manual
- Quick Reference Card
- Light prevention device or boot
- Video cable

### 3.3 System Characteristics

The IWNS-T system is being acquired to enhance the ability of Marine riflemen to recognize targets while looking thru the RCO in conditions of reduced visibility such as darkness and/or obscurants.

6

### 3.4 Target Recognition

The IWNS-T shall provide the operator an 80 percent probability of recognizing, an upright, moving man-sized target 0.5 meter wide x 1.5 meters high under clear air conditions, out to a range of (b)(4)

#### 3.4.1 Minimum Resolvable Temperature (MRT)

The two dimensional MRT shall not exceed the values listed in the table below. A minimum of two frequencies and MRT values shall be offered as system requirements. The below-listed MRT requirements are a composite of the vertical and horizontal MRT. *Temperature differences at the nominal Nyquist and half-Nyquist frequencies based on focal length and pixel pitch should be encapsulated in the spatial frequencies identified.*

#### IWNS-T MRT

##### Spatial Frequencies

(cycles/milliradian)

##### Temperature Difference

(°C)

(b)(4)

#### 3.4.2 Signal Transfer Function (SiTF)

For any brightness control setting and maximum gain control setting, the display luminance shall be equal to (b)(4) or greater percent of the maximum luminance for a target  $\Delta T$  (b)(4) or less. For any brightness control setting and minimum gain control setting, the display luminance shall be equal to (b)(4) less percent of the maximum luminance for a scene  $\Delta T$  (b)(4) or greater.

### 3.5 Displayed Image Quality

The IWNS-T shall not reduce the user's ability to effectively employ the RCO's Bullet Drop Compensator and chevron.

### 3.6 Display Effects

IWNS-T shall not introduce any effects that will cause a reduction in the user's ability to recognize and engage targets. Examples include decreased image resolution due to pixilation visible under 4x magnification, imaging latency or smearing during panning, intermittent operation, discernible image persistence, vibration or obscurations or foreign

matter that reduce the user's ability to effectively employ the RCO's chevron and Bullet Drop Compensator.

Spurious images and noise patterns shall not be discernible in the area under the chevron and Bullet Drop Compensator. Spurious images from targets or symbology shall not detract from normal operation, or degrade functionality, over the entire field of view.

7

There shall be no perceptible rotation of the scene. Narcissus (Reflection of a cooled detector assembly, interior housing, or optics on the focal plane) shall not be detectable in the IWNS-T display. The IWNS-T shall have no degradation of performance when used to observe, track, and/or fire at stationary or moving targets. The IWNS-T shall provide imagery to the operator that does not exhibit any periodic, aperiodic or random visible level of flicker or flashing defined as a non-operator-induced change in the device's output brightness, while viewing a uniformly illuminated background at any light level, and occurs more than one time while being viewed by an unaided eye for any duration of time.

The IWNS-T shall not be significantly affected by the operational characteristic of the host weapon. Momentary or intermittent operation image "upsets" during weapon fire are not considered significant if there is no operational impact. Momentary image "upsets" less than 200 ms in duration from the last round fired shall be allowed. Full recovery of the IWNS-T imagery shall occur in less than 100 milliseconds after completion of the interrupting event.

### **3.7 Display Luminance**

The luminescence of the display shall not vary by more than (b)(4) from the average across the entire display when the detector is imaging a thermally uniform scene. Both large and small area uniformities will be assessed with the IWNS-T viewing a uniform irradiance background having a temperature difference between (b)(4) from the ambient air condition over the specified operating temperature extremes. The IWNS-T

display uniformity shall apply following an internal sight calibration where provided, and at the ambient soak temperature at which the IWNS-T is powered up and initialized.

### **3.8 Display Brightness**

The display luminance shall be adjustable by the user. The range of display luminance shall be adequate to allow viewing in illumination conditions from bright sunshine to total

darkness without degrading system performance or inhibiting the operator's dark adapted vision. The adjustability range of the display shall be no less than (b)(4) to at least (b)(4)

### **3.9 Frame Rate**

The frame rate shall be (b)(4) for RS-170 and (b)(4) VGA operational modes.

### **3.10 Display Imperfections**

The system display shall have as few imperfections as possible. Display imperfections shall be assessed using the following criteria:

(b)(4)

(b)(4)

### 3.10.1 Image Characterization and Uniformity

Both large and small area uniformity requirements specified shall be measured with the IWNS-T viewing a uniform irradiance background having a temperature difference between (b)(4) from the ambient air condition over the specified operating temperature extremes. Uniformity shall be met at the video output over all specified SiTF settings. The IWNS-T uniformity requirements shall apply following an internal sight calibration, where provided, and at the ambient soak temperature at which the IWNS-T is powered up and initialized. Non-uniformity measures shall be exclusive of spatial and temporal noise. (See 3.10.1.5 and 3.10.1.6)

#### 3.10.1.1 Large area uniformity

The video level, for all fields of view, shall not vary from the average level by more than (b)(4) over the entire field of view, and shall not vary by more than (b)(4) over the average level in the central critical display area. The central critical display area is defined in 3.10.2.

#### 3.10.1.2 Small area uniformity

The video level, in any local area (b)(4) shall not vary by more than (b)(4) from the average level of the local area for local areas within the critical display area and shall not vary by more than (b)(4) from the average level of the local area for local areas outside of the critical display area.

#### 3.10.1.3 Defective channels/no-information pixels

This requirement applies to the IWNS-T sensor defective channels and pixels at the focal

plane array (FPA) output before uniformity correction/ normalization. The IWNS-T display itself shall not have or contribute to any dead or inactive lines of pixels.

No information

pixels shall not be visible to the operator when viewing a uniform background.

#### 3.10.1.4 Distortion

The IWNS-T scene image distortion shall not exceed (b)(4) the critical display area and

(b)(4) outside of the critical display area.

**3.10.1.5 Random temporal spatial noise** The IWNS-T shall have a total random temporal-spatial noise ( $\mu_{TVH}$ ) of no greater than (b)(4). The  $\mu_{TVH}$  requirements shall be met for all SiTF conditions.

9

**3.10.1.6 Spatial noise** The fixed pattern image spatial noise ( $\mu_{VH}$ ) shall not degrade more than the requirements stated in table below, when measured at the output of the IWNS-T after an internal calibration.

**Spatial Noise**

**Scene Temperature  
Delta from IWNS-T  
Housing  
Maximum Spatial  
Noise Allowed in  
°Kelvin (RMS)**

(b)(4)

### **3.10.2 Chevron and Bullet Drop Compensator**

The area of the display viewed under the RCO chevron and Bullet Drop Compensator shall have no imperfections visible under 4x magnification. Zone A and Zone B as depicted in Appendix B is defined as the IWNS-T display critical area. There shall be no bad pixels, no-information pixels, bad channels or other imperfections in that area as assessed using the criteria specified in 3.10.

### **3.10.3 Horizontal Mil Scale**

The display area seen when employing the Horizontal Mil Scale and other icons shall have minimal imperfections. The non-critical area pertaining to the Display and Focal Plane Array is defined as the area outside the critical area above. There shall be no display imperfections in this area that reduce the ability to employ the Horizontal Mil scale for its intended purpose as assessed using the criteria specified in 3.10.

### **3.10.4 Sight Picture Geometry**

The IWNS-T thermal imager shall present the same sight picture geometry to a Marine user as seen through the RCO alone. The IWNS-T image viewed with the RCO shall not alter the employment and effectiveness of the bullet drop compensator, battle-sight zero, or affect point of aim and point of impact of rounds on a target. When using the IWNS-T/RCO system to engage a target, an operator shall see the target in the same position, orientation, and size as that presented with the RCO alone. (see Appendix A)

### **3.10.5 Image Shift**

The IWNS-T shall not cause a change in the point of aim/point of impact of a service weapon round fired from a properly zeroed, RCO-service weapon system greater than (b)(4) of angle shall be performed as detailed in Appendix A.

### **3.10.6 Image Alignment**

There shall be no perceptible rotation of the scene when compared to the scene as seen through the RCO only. Any rotation shall be less than (b)(4)

### **3.11 Weight**

The IWNS-T shall weigh less than (b)(4) with batteries.

10

### **3.12 Physical Structure**

The physical size and structure of the IWNS-T shall not interfere with the mounting of the RCO and forward grip on the service weapons.

### 3.12.1 Weapon Interface

The IWNS-T shall be attachable to the service weapon using a MIL-STD-1913 rail.

### 3.12.2 Method of Attachment

The mounting system shall utilize (b)(4) as the method of attachment. The IWNS-T shall not require the use of tools to attach or remove the imager from the rail system.

### 3.12.3 RCO Interoperability

The IWNS-T shall not require a user to relocate the RCO to install the IWNS-T to the MIL-STD-1913 rail.

### 3.12.4 Detector Characteristics

Detector Type/Chemistry: (b)(4)

Detector Pixel pitch (microns) (b)(4)

Detector Size (pixels H x V): (b)(4)

### 3.12.5 Display Characteristics

Display Type (Technology): (b)(4)

Display Pixel Pitch (microns) (b)(4)

Display Size (pixels H x V): (b)(4)

#### 3.12.5.1 Shades of gray

The IWNS-T shall provide a minimum of (b)(4) of gray for the entire range of day/night operating conditions. For digital systems, the display shall provide at least (b)(4) bits (non-dithered) of (b)(4) brightness levels.

#### 3.12.5.2 Display color

The IWNS-T display shall be (b)(4)

#### 3.12.5.3 Operating orientation

The IWNS-T shall operate in any orientation without damage or degradation of performance.

### 3.13 Weapon Firing Heat Effects

The heat signature resulting from firing the service weapon, thermal blooming, shall not reduce the IWNS-T image quality or the ability of the operator to effectively employ the RCO chevron and Bullet Drop Compensator or to engage targets. (b)(4)

(b)(4)

11

(b)(4)

### 3.14 Response outside FOV

The response of the IWNS-T to sources of radiation ( $T = (b)(4)$ ) outside the displayed FOV by more (b)(4) degrees shall be less than (b)(4) of gray over the total range of operator controls.

### 3.15 Anti-reflection (Glint)

The IWNS-T shall incorporate anti-reflection technology to minimize glint from an external lens surface. (b)(4)

(b)(4)

### 3.16 Body finish

The IWNS-T shall prevent the operator's position from being revealed by providing a flat, non-specular finish on all external surfaces, except for the optical elements. The finish shall resist wear or diminishing of color during normal field use. (b)(4)

(b)(4)

### 3.17 Chemical Resistance

Coatings used on any external parts of the IWNS-T shall not be damaged by exposure to chemical agents, including sunscreen and insect repellants such as N,N-Diethyl-meta-Toluamide (DEET) and shall be in accordance with MIL-F-14072.

External surfaces of the IWNS-T shall not be damaged by exposure to the following decontamination agents, when these agents are applied by hand to the surfaces of the IWNS-T: M291 Skin Decontamination Kit (NSN 6850-01-276-1905), M100 Sorbent Decontamination System (NSN 4230-01-466-9095), High Test Hypochlorite (NSN 6840-01-065-2410), and Supertropical Bleach (NSN 6850-00-297-6653).

(b)(4)

12

### Type Description

(b)(4)

### 3.18 Ease of Use

The IWNS-T functions and controls shall be operable by users wearing shooter's or Nomex gloves.

### 3.19 Calibration

The IWNS-T shall provide a manual calibration function that allows operator initiated calibration of the system at any time after initial startup. The calibration shall be accessible through an electronic menu from no lower than the first menu layer, or from a

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002	Contractor Logistics Support (CLS) FFP CLS for year 1. FOB: Destination				
				NET AMT	\$0.00

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002AA	Major Repairs FFP Contractor shall furnish all tools, materials, equipment, facilities and personnel necessary to provide major repairs on the IWNS-T in accordance with Statement of Work, Paragraph 3.8.2 FOB: Destination MILSTRIP: M9545007RC74611 PURCHASE REQUEST NUMBER: M9545007RC74611	219	Each	(b)(4)	(b)(4)
				NET AMT	(b)(4)
				ACRN AB CIN: M9545007RC746110002	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002AB	Moderate Repairs FFP Contractor shall furnish all tools, materials, equipment, facilities and personnel necessary to provide moderate repairs on the IWNS-T in accordance with Statement of Work, Paragraph 3.8.2 FOB: Destination MILSTRIP: M9545007RC74611 PURCHASE REQUEST NUMBER: M9545007RC74611	219	Each	(b)(4)	(b)(4)

NET AMT

ACRN AB  
CIN: M9545007RC746110002

(b)(4)

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002AC	Minor Repairs FFP Contractor shall furnish all tools, materials, equipment, facilities and personnel necessary to provide minor repairs on the IWNS-T in accordance with Statement of Work, Paragraph 3.8.2 FOB: Destination MILSTRIP: M9545007RC74611 PURCHASE REQUEST NUMBER: M9545007RC74611	219	Each	(b)(4)	(b)(4)

NET AMT

ACRN AB  
CIN: M9545007RC746110002

(b)(4)

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003	Contractor Logistics Support (CLS) FFP CLS for year 2. FOB: Destination				
				NET AMT	\$0.00

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003AA	Major Repairs FFP Contractor shall furnish all tools, materials, equipment, facilities and personnel necessary to provide major repairs on the IWNS-T in accordance with Statement of Work, Paragraph 3.8.2 FOB: Destination MILSTRIP: M9545007RC74611 PURCHASE REQUEST NUMBER: M9545007RC74611	219	Each	(b)(4)	(b)(4)
				NET AMT	(b)(4)
				ACRN AB CIN: M9545007RC746110003	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003AB	Moderate Repairs FFP Contractor shall furnish all tools, materails, equipment, facilities and personnel necessary to provide major repairs on the IWNS-T in accordance with Statement of Work, Paragraph 3.8.2 FOB: Destination MILSTRIP: M9545007RC74611 PURCHASE REQUEST NUMBER: M9545007RC74611	219	Each	(b)(4)	(b)(4)

NET AMT (b)(4)

ACRN AB  
CIN: M9545007RC746110003

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003AC	Minor Repair FFP Contractor shall furnish all tools, materials, equipment, facilities and personnel necessary to provide minor repairs on the IWNS-T in accordance with Statement of Work, Paragraph 3.8.2 FOB: Destination MILSTRIP: M9545007RC74611 PURCHASE REQUEST NUMBER: M9545007RC74611	219	Each	(b)(4)	(b)(4)

NET AMT (b)(4)

ACRN AB  
CIN: M9545007RC746110003

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004	Field Level Comm Maint Manual FFP IWNS-T Field Level Comm Maint Manual FOB: Destination				
NET AMT					\$0.00

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004AA	Field Level Comm Maint Manual FFP IWNS-T Field Level Comm Maint Manual. See Statement of Work 3.10. FOB: Destination MILSTRIP: M9545007RC74611 PURCHASE REQUEST NUMBER: M9545007RC74611	10	Each	(b)(4)	(b)(4)
NET AMT					(b)(4)
ACRN AB CIN: M9545007RC746110004					

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005	Spare Parts/Logistics Management Info FFP FOB: Destination				
				NET AMT	\$0.00

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005AA	Lens Cover, Objective lens FFP FOB: Destination MILSTRIP: M9545007RC74611 MFR PART NR: IWT-060-02 PURCHASE REQUEST NUMBER: M9545007RC74611	500	Each	(b)(4)	(b)(4)
				NET AMT	(b)(4)
				ACRN AB	
				CIN: M9545007RC746110005	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005AC	Soft Carry case FFP FOB: Destination MILSTRIP: M9545007RC74611 MFR PART NR: ITI-500-A2 PURCHASE REQUEST NUMBER: M9545007RC74611	200	Each	(b)(4)	(b)(4)

---

NET AMT

ACRN AB  
CIN: M9545007RC746110005

(b)(4)

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005AE	RS-170 Adapter cable w/connector FFP Adapter cable with connector. FOB: Destination MILSTRIP: M9545007RC74611 MFR PART NR: TGS-104 PURCHASE REQUEST NUMBER: M9545007RC74611	500	Each	(b)(4)	(b)(4)

---

NET AMT

ACRN AB  
CIN: M9545007RC746110005

(b)(4)

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005AF	Cleaning Kit FFP Cleaning Kit	500	Each	(b)(4)	
FOB: Destination MILSTRIP: M9545007RC74611 MFR PART NR: ITI-011, ITI-013, ITI-015 PURCHASE REQUEST NUMBER: M9545007RC74611					

---

NET AMT

(b)(4)

ACRN AB  
CIN: M9545007RC746110005

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005AH	Light Limiting Eye Piece Cover FFP Light Limiting Eye Piece Cover	500	Each	(b)(4)	
FOB: Destination MILSTRIP: M9545007RC74611 MFR PART NR: CQB-630-02 PURCHASE REQUEST NUMBER: M9545007RC74611					

---

NET AMT

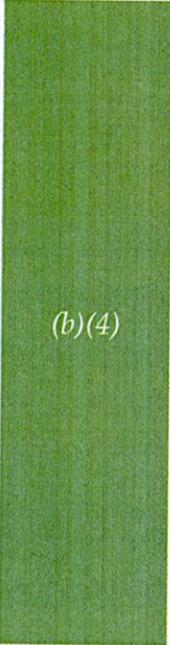
(b)(4)

ACRN AB  
CIN: M9545007RC746110005



0001	Origin	N/A	Origin	Government
0001AA	Origin	Government	Origin	Government
0002	Origin	N/A	Origin	Government
0002AA	Origin	Government	Origin	Government
0002AB	Origin	Government	Origin	Government
0002AC	Origin	Government	Origin	Government
0003	Origin	N/A	Origin	Government
0003AA	Origin	Government	Origin	Government
0003AB	Origin	Government	Origin	Government
0003AC	Origin	Government	Origin	Government
0004	Origin	N/A	Origin	Government
0004AA	Origin	Government	Origin	Government
0005	Origin	N/A	Origin	Government
0005AA	Origin	Government	Origin	Government
0005AC	Origin	Government	Origin	Government
0005AE	Origin	Government	Origin	Government
0005AF	Origin	Government	Origin	Government
0005AH	Origin	Government	Origin	Government
0005AJ	Origin	Government	Origin	Government
0005AK	Origin	Government	Origin	Government

**DELIVERY INFORMATION**

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
0001	N/A	N/A	N/A	N/A
0001AA		100	MCLB ALBANY GENE PENDER MCLB ALBANY BLDG 1340 DR 9 ALBANY GA 31704-5000 229-639-5534 FOB: Destination	M98875
0001AA		150	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875
0001AA		200	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875
0001AA		235	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875
0001AA		250	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875
0001AA		250	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875
0001AA		250	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875

0001AA	(b)(4)	250	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875
0001AA	(b)(4)	250	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875
0001AA	(b)(4)	250	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875
0001AA	(b)(4)	257	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875
0002	N/A	N/A	N/A	N/A
0002AA	POP 20-JAN-2008 TO 19-JAN-2009	N/A	MCLB ALBANY GENE PENDER MCLB ALBANY BLDG 1340 DR 9 ALBANY GA 31704-5000 229-639-5534 FOB: Destination	M98875
0002AB	POP 20-JAN-2008 TO 19-JAN-2009	N/A	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875
0002AC	POP 20-JAN-2008 TO 19-JAN-2009	N/A	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875
0003	N/A	N/A	N/A	N/A
0003AA	POP 20-JAN-2009 TO 19-JAN-2010	N/A	MCLB ALBANY GENE PENDER MCLB ALBANY BLDG 1340 DR 9 ALBANY GA 31704-5000 229-639-5534 FOB: Destination	M98875
0003AB	POP 20-JAN-2009 TO 19-JAN-2010	N/A	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875
0003AC	POP 20-JAN-2009 TO 19-JAN-2010	N/A	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875
0004	N/A	N/A	N/A	N/A
0004AA	(b)(4)	10	MCLB ALBANY GENE PENDER MCLB ALBANY BLDG 1340 DR 9 ALBANY GA 31704-5000 229-639-5534 FOB: Destination	M98875

0005	N/A	N/A	N/A	N/A
0005AA		500	MCLB ALBANY GENE PENDER MCLB ALBANY BLDG 1340 DR 9 ALBANY GA 31704-5000 229-639-5534 FOB: Destination	M98875
0005AC		200	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875
0005AE	(b)(4)	500	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875
0005AF		500	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875
0005AH		500	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875
0005AJ		500	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875
0005AK		500	(SAME AS PREVIOUS LOCATION) FOB: Destination	M98875

### ACCOUNTING AND APPROPRIATION DATA

AB: 17711094930 310 67854 067443 2D 4930BJ  
 COST CODE: 7RC74611136P  
 AMOUNT: \$24,823,383.50  
 CIN M9545007RC746110001  
 CIN M9545007RC746110002  
 CIN M9545007RC746110003  
 CIN M9545007RC746110004  
 CIN M9545007RC746110005

(b)(4)

### CLAUSES INCORPORATED BY REFERENCE

52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	APR 1984
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

52.204-4	Printed or Copied Double-Sided on Recycled Paper	AUG 2000
52.212-4	Contract Terms and Conditions--Commercial Items	FEB 2007
52.215-10	Price Reduction for Defective Cost or Pricing Data	OCT 1997
52.215-12	Subcontractor Cost or Pricing Data	OCT 1997
52.215-13	Subcontractor Cost or Pricing Data--Modifications	OCT 1997
52.222-3	Convict Labor	JUN 2003
52.222-21	Prohibition Of Segregated Facilities	FEB 1999
52.222-26	Equal Opportunity	APR 2002
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
52.223-3	Hazardous Material Identification And Material Safety Data	JAN 1997
52.223-14	Toxic Chemical Release Reporting	AUG 2003
52.224-1	Privacy Act Notification	APR 1984
52.224-2	Privacy Act	APR 1984
52.227-1	Authorization and Consent	JUL 1995
52.227-2	Notice And Assistance Regarding Patent And Copyright Infringement	AUG 1996
52.229-3	Federal, State And Local Taxes	APR 2003
52.232-1	Payments	APR 1984
52.232-8	Discounts For Prompt Payment	FEB 2002
52.232-17	Interest	JUN 1996
52.232-23	Assignment Of Claims	JAN 1986
52.233-1	Disputes	JUL 2002
52.233-1 Alt I	Disputes (Jul 2002) - Alternate I	DEC 1991
52.233-3	Protest After Award	AUG 1996
52.239-1	Privacy or Security Safeguards	AUG 1996
52.242-2	Production Progress Reports	APR 1991
52.242-13	Bankruptcy	JUL 1995
52.242-15	Stop-Work Order	AUG 1989
52.242-17	Government Delay Of Work	APR 1984
52.246-23	Limitation Of Liability	FEB 1997
52.247-34	F.O.B. Destination	NOV 1991
52.247-63	Preference For U.S. Flag Air Carriers	JUN 2003
52.249-2 Alt II	Termination For Convenience Of The Government (Fixed Price) (May 2004) - Alternate II	SEP 1996
52.249-8	Default (Fixed-Price Supply & Service)	APR 1984
252.201-7000	Contracting Officer's Representative	DEC 1991
252.203-7002	Display Of DOD Hotline Poster	DEC 1991
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.205-7000	Provision Of Information To Cooperative Agreement Holders	DEC 1991
252.211-7003	Item Identification and Valuation	JUN 2005
252.215-7000	Pricing Adjustments	DEC 1991
252.227-7015	Technical Data--Commercial Items	NOV 1995
252.227-7037	Validation of Restrictive Markings on Technical Data	SEP 1999

#### CLAUSES INCORPORATED BY FULL TEXT

#### 52.211-16 VARIATION IN QUANTITY (APR 1984)

(a) A variation in the quantity of any item called for by this contract will not be accepted unless the variation has

been caused by conditions of loading, shipping, or packing, or allowances in manufacturing processes, and then only to the extent, if any, specified in paragraph (b) below.

(b) The permissible variation shall be limited to:

n/a Percent increase

n/a Percent decrease

This increase or decrease shall apply to n/a.

(End of clause)

#### 52.211-17 DELIVERY OF EXCESS QUANTITIES (SEP 1989)

The Contractor is responsible for the delivery of each item quantity within allowable variations, if any. If the Contractor delivers and the Government receives quantities of any item in excess of the quantity called for (after considering any allowable variation in quantity), such excess quantities will be treated as being delivered for the convenience of the Contractor. The Government may retain such excess quantities up to \$250 in value without compensating the Contractor therefor, and the Contractor waives all right, title, or interests therein. Quantities in excess of \$250 will, at the option of the Government, either be returned at the Contractor's expense or retained and paid for by the Government at the contract unit price.

#### 52.215-11 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

(a) This clause shall become operative only for any modification to this contract involving a pricing adjustment expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, except that this clause does not apply to any modification if an exception under FAR 15.403-1 applies.

(b) If any price, including profit or fee, negotiated in connection with any modification under this clause, or any cost reimbursable under this contract, was increased by any significant amount because (1) the Contractor or a subcontractor furnished cost or pricing data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data, (2) a subcontractor or prospective subcontractor furnished the Contractor cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data, or (3) any of these parties furnished data of any description that were not accurate, the price or cost shall be reduced accordingly and the contract shall be modified to reflect the reduction. This right to a price reduction is limited to that resulting from defects in data relating to modifications for which this clause becomes operative under paragraph (a) of this clause.

(c) Any reduction in the contract price under paragraph (b) of this clause due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which--

(1) The actual subcontract; or

(2) The actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective cost or pricing data.

(d)(1) If the Contracting Officer determines under paragraph (b) of this clause that a price or cost reduction should be made, the Contractor agrees not to raise the following matters as a defense:

(i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current cost or pricing data had been submitted.

(ii) The Contracting Officer should have known that the cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer.

(iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract.

(iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.

(2)(i) Except as prohibited by subdivision (d)(2)(ii) of this clause, an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if--

(A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and

(B) The Contractor proves that the cost or pricing data were available before the "as of" date specified on its Certificate of Current Cost or Pricing Data, and that the data were not submitted before such date.

(ii) An offset shall not be allowed if--

(A) The understated data were known by the Contractor to be understated before the "as of" date specified on its Certificate of Current Cost or Pricing Data; or

(B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the "as of" date specified on its Certificate of Current Cost or Pricing Data.

(e) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid--

(1) Simple interest on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C. 6621(a)(2); and

A penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted cost or pricing data that were incomplete, inaccurate, or noncurrent.

(End of clause)

52.222-26 EQUAL OPPORTUNITY (APR 2002) ALTERNATE I (FEB 1999)

Notice. The following terms of this clause are waived for this contract: n/a.

(a) Definition. United States, as used in this clause, means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.

(b) If, during any 12-month period (including the 12 months preceding the award of this contract), the Contractor has been or is awarded nonexempt Federal contracts and/or subcontracts that have an aggregate value in excess of

\$10,000, the Contractor shall comply with paragraphs (b)(1) through (b)(11) of this clause, except for work performed outside the United States by employees who were not recruited within the United States. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.

(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. However, it shall not be a violation of this clause for the Contractor to extend a publicly announced preference in employment to Indians living on or near an Indian reservation, in connection with employment opportunities on or near an Indian reservation, as permitted by 41 CFR 60-1.5.

(2) The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. This shall include, but not be limited to, (i) employment, (ii) upgrading, (iii) demotion, (iv) transfer, (v) recruitment or recruitment advertising, (vi) layoff or termination, (vii) rates of pay or other forms of compensation, and (viii) selection for training, including apprenticeship.

(3) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause.

(4) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(5) The Contractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.

(6) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(7) The Contractor shall furnish to the contracting agency all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. The Contractor shall also file Standard Form 100 (EEO-1), or any successor form, as prescribed in 41 CFR part 60-1. Unless the Contractor has filed within the 12 months preceding the date of contract award, the Contractor shall, within 30 days after contract award, apply to either the regional Office of Federal Contract Compliance Programs (OFCCP) or the local office of the Equal Employment Opportunity Commission for the necessary forms.

(8) The Contractor shall permit access to its premises, during normal business hours, by the contracting agency or the OFCCP for the purpose of conducting on-site compliance evaluations and complaint investigations. The Contractor shall permit the Government to inspect and copy any books, accounts, records (including computerized records), and other material that may be relevant to the matter under investigation and pertinent to compliance with Executive Order 11246, as amended, and rules and regulations that implement the Executive Order.

(9) If the OFCCP determines that the Contractor is not in compliance with this clause or any rule, regulation, or order of the Secretary of Labor, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts, under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in Executive Order 11246, as amended; in the rules, regulations, and orders of the Secretary of Labor; or as otherwise provided by law.

(10) The Contractor shall include the terms and conditions of subparagraphs (b)(1) through (11) of this clause in every subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor.

(11) The Contractor shall take such action with respect to any subcontract or purchase order as the contracting officer may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance; provided, that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of any direction, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

(c) Notwithstanding any other clause in this contract, disputes relative to this clause will be governed by the procedures in 41 CFR 60-1.1.

(End of clause)

#### 52.223-9 ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL CONTENT FOR EPA-DESIGNATED PRODUCTS (AUG 2000)

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

Postconsumer material means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material."

Recovered material means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

(b) The Contractor, on completion of this contract, shall--

(1) Estimate the percentage of the total recovered material used in contract performance, including, if applicable, the percentage of postconsumer material content; and

(2) Submit this estimate to n/a [Contracting Officer complete in accordance with agency procedures].

(End of clause)

#### 52.243-7 NOTIFICATION OF CHANGES (APR 1984)

(a) Definitions.

"Contracting Officer," as used in this clause, does not include any representative of the Contracting Officer.

"Specifically authorized representative (SAR)," as used in this clause, means any person the Contracting Officer has so designated by written notice (a copy of which shall be provided to the Contractor) which shall refer to this subparagraph and shall be issued to the designated representative before the SAR exercises such authority.

(b) Notice. The primary purpose of this clause is to obtain prompt reporting of Government conduct that the Contractor considers to constitute a change to this contract. Except for changes identified as such in writing and signed by the Contracting Officer, the Contractor shall notify the Administrative Contracting Officer in writing, within 30 calendar days from the date that the Contractor identifies any Government conduct (including actions, inactions, and written or oral communications) that the Contractor regards as a change to the contract terms and conditions. On the basis of the most accurate information available to the Contractor, the notice shall state--

- (1) The date, nature, and circumstances of the conduct regarded as a change;
- (2) The name, function, and activity of each Government individual and Contractor official or employee involved in or knowledgeable about such conduct;
- (3) The identification of any documents and the substance of any oral communication involved in such conduct;
- (4) In the instance of alleged acceleration of scheduled performance or delivery, the basis upon which it arose;
- (5) The particular elements of contract performance for which the Contractor may seek an equitable adjustment under this clause, including--
  - (i) What contract line items have been or may be affected by the alleged change;
  - (ii) What labor or materials or both have been or may be added, deleted, or wasted by the alleged change;
  - (iii) To the extent practicable, what delay and disruption in the manner and sequence of performance and effect on continued performance have been or may be caused by the alleged change;
  - (iv) What adjustments to contract price, delivery schedule, and other provisions affected by the alleged change are estimated; and
- (6) The Contractor's estimate of the time by which the Government must respond to the Contractor's notice to minimize cost, delay or disruption of performance.

(c) Continued performance. Following submission of the notice required by (b) above, the Contractor shall diligently continue performance of this contract to the maximum extent possible in accordance with its terms and conditions as construed by the Contractor, unless the notice reports a direction of the Contracting Officer or a communication from a SAR of the Contracting Officer, in either of which events the Contractor shall continue performance; provided, however, that if the Contractor regards the direction or communication as a change as described in (b) above, notice shall be given in the manner provided. All directions, communications, interpretations, orders and similar actions of the SAR shall be reduced to writing and copies furnished to the Contractor and to the Contracting Officer. The Contracting Officer shall countermand any action which exceeds the authority of the SAR.

(d) Government response. The Contracting Officer shall promptly, within \_\_\_\_\_ calendar days after receipt of notice, respond to the notice in writing. In responding, the Contracting Officer shall either--

- (1) Confirm that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance;
- (2) Countermand any communication regarded as a change;
- (3) Deny that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance; or
- (4) In the event the Contractor's notice information is inadequate to make a decision under (1), (2), or (3) above, advise the Contractor what additional information is required, and establish the date by which it should be furnished and the date thereafter by which the Government will respond.

(e) Equitable adjustments.

- (1) If the Contracting Officer confirms that Government conduct effected a change as alleged by the Contractor, and the conduct causes an increase or decrease in the Contractor's cost of, or the time required for, performance of any

part of the work under this contract, whether changed or not changed by such conduct, an equitable adjustment shall be made--

- (i) In the contract price or delivery schedule or both; and
- (ii) In such other provisions of the contract as may be affected.

(2) The contract shall be modified in writing accordingly. In the case of drawings, designs or specifications which are defective and for which the Government is responsible, the equitable adjustment shall include the cost and time extension for delay reasonably incurred by the Contractor in attempting to comply with the defective drawings, designs or specifications before the Contractor identified, or reasonably should have identified, such defect. When the cost of property made obsolete or excess as a result of a change confirmed by the Contracting Officer under this clause is included in the equitable adjustment, the Contracting Officer shall have the right to prescribe the manner of disposition of the property. The equitable adjustment shall not include increased costs or time extensions for delay resulting from the Contractor's failure to provide notice or to continue performance as provided, respectively, in (b) and (c) above.

Note: The phrases "contract price" and "cost" wherever they appear in the clause, may be appropriately modified to apply to cost-reimbursement or incentive contracts, or to combinations thereof.

(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/vffara.htm>

(End of clause)

#### 52.253-1 COMPUTER GENERATED FORMS (JAN 1991)

(a) Any data required to be submitted on a Standard or Optional Form prescribed by the Federal Acquisition Regulation (FAR) may be submitted on a computer generated version of the form, provided there is no change to the name, content, or sequence of the data elements on the form, and provided the form carries the Standard or Optional Form number and edition date.

(b) Unless prohibited by agency regulations, any data required to be submitted on an agency unique form prescribed by an agency supplement to the FAR may be submitted on a computer generated version of the form provided there is no change to the name, content, or sequence of the data elements on the form and provided the form carries the agency form number and edition date.

(c) If the Contractor submits a computer generated version of a form that is different than the required form, then the rights and obligations of the parties will be determined based on the content of the required form.

(End of clause)

252.227-7030 TECHNICAL DATA--WITHHOLDING OF PAYMENT (MAR 2000)

(a) If technical data specified to be delivered under this contract, is not delivered within the time specified by this contract or is deficient upon delivery (including having restrictive markings not identified in the list described in the clause at 252.227-7013(e)(2) or 252.227-7018(e)(2) of this contract), the Contracting Officer may until such data is accepted by the Government, withhold payment to the Contractor of ten percent (10%) of the total contract price or amount unless a lesser withholding is specified in the contract. Payments shall not be withheld nor any other action taken pursuant to this paragraph when the Contractor's failure to make timely delivery or to deliver such data without deficiencies arises out of causes beyond the control and without the fault or negligence of the Contractor.

(b) The withholding of any amount or subsequent payment to the Contractor shall not be construed as a waiver of any rights accruing to the Government under this contract.

(End of clause)

252.243-7001 PRICING OF CONTRACT MODIFICATIONS (DEC 1991)

When costs are a factor in any price adjustment under this contract, the contract cost principles and procedures in FAR part 31 and DFARS part 231, in effect on the date of this contract, apply.

252.247-7023 Transportation of Supplies by Sea (MAY 2002)

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

- (1) "Components" means articles, materials, and supplies incorporated directly into end products at any level of manufacture, fabrication, or assembly by the Contractor or any subcontractor.
- (2) "Department of Defense" (DoD) means the Army, Navy, Air Force, Marine Corps, and defense agencies.
- (3) "Foreign flag vessel" means any vessel that is not a U.S.-flag vessel.
- (4) "Ocean transportation" means any transportation aboard a ship, vessel, boat, barge, or ferry through international waters.
- (5) "Subcontractor" means a supplier, materialman, distributor, or vendor at any level below the prime contractor whose contractual obligation to perform results from, or is conditioned upon, award of the prime contract and who is performing any part of the work or other requirement of the prime contract.
- (6) "Supplies" means all property, except land and interests in land, that is clearly identifiable for eventual use by or owned by the DoD at the time of transportation by sea.
  - (i) An item is clearly identifiable for eventual use by the DoD if, for example, the contract documentation contains a reference to a DoD contract number or a military destination.
  - (ii) "Supplies" includes (but is not limited to) public works; buildings and facilities; ships; floating equipment and vessels of every character, type, and description, with parts, subassemblies, accessories, and equipment; machine tools; material; equipment; stores of all kinds; end items; construction materials; and components of the foregoing.
- (7) "U.S.-flag vessel" means a vessel of the United States or belonging to the United States, including any vessel registered or having national status under the laws of the United States.

could injure an operator or other personnel. The design of IWNS-T knobs, buttons, latches, retained lens covers and connector caps, mounts, and protrusions shall eliminate snag hazards. The IWNS-T shall be designed to be safe under all conditions of normal use and fully compliant with the contract's Health Hazard Report/Safety Assessment Report (SAR).

18

#### **4 Technical Interpretations**

The following technical interpretations, as used in Section 3 are mandatory for this specification.

##### **4.1.1 Probability of Recognition**

Probability of recognition determination is based upon the NVTherm IP modeling software with modified Johnson criteria parameter  $V50 = 1.52$ , detection = recognition and other parameters as set forth in the Contractors Guidance, NVTherm IP Model Input

Parameters, IWNS-T. Additional determinations of probability of recognition may be made using field demonstrations or other tests.

##### **4.1.2 Clear Air Conditions**

Clear air conditions is defined as the ModTran Urban – 5 km visibility Aerosol model, US

– 1976 environment, with no smoke.

##### **4.1.3 Operational**

Operational is defined as producing a calibrated thermal image that can be used to detect, recognize, and engage targets.

##### **4.1.4 Damage**

Damage is the permanent deterioration of any physical characteristic including, but not limited to, surface material, corrosion, component durability, and safety, or the failure of coatings, adhesives, materials, hardware and fasteners.

##### **4.1.5 Degradation of Performance**

Degradation of performance is a cumulative change of the measured level of performance to a value that is greater than 110% or less than 90% while remaining within the specified performance requirements, or a change resulting in a measured level

of performance that is less than the minimum performance required by this purchase description. Cumulative change is that change which occurs or has occurred during one test or a series of tests.

##### **4.1.6 Service Weapon**

Service weapon is any of the following rifles; M16A4, M4, M4A1.

##### **4.1.7 Day Optics**

Rifle Combat Optic (RCO) Trijicon Model (TA31RCO-A4 and TA31RCO-M4).

##### **4.1.8 Battle Sight Zero (BZO)/Boresight/Zeroing**

BZO, Boresight, and Zeroing are as defined in TM-11064-01, change 1.

##### **4.1.9 Stray Light**

Stray visible light shall not be emitted from between the RCO and IWNS-T. The look angles of an observer to determine the emission of stray light is a sphere centered between the RCO-IWNS-T on the optical axis between the two systems.

19

#### **4.1.10 Flickering or Flashing**

A non-operator-induced change in the device's output brightness, while viewing a uniformly illuminated background at any light level that is periodic, aperiodic or random in

nature, and occurs more than one time while being viewed by an unaided eye for any duration of time.

20

### **5 VERIFICATION**

The elements of this Performance Specification are subject to assessment by the Government and the contractor. Not all elements will be tested, inspected or examined on a regular basis. However those that are significant may be tested or examined. The contract for the IWNS-T will provide details of quality and configuration control of the system.

Testing may be performed as part of the acceptance process by the Administrative Contracting Officer (ACO) or by the Defense Contract Management Agency (DCMA) or other entity. Acceptance Testing will be outlined in the contract for the IWNS-T.

The testing process may include inspection of the device in a laboratory environment such as the Electro-Optic Test Facility, or by the Night Vision and Electronic Sensors Directorate (NVESD) at Ft Belvoir. The testing process may also include inspection of the device under magnification to ensure compliance with this Performance Specification. Controlled vendor assessments may also be adequate.

#### **Classifications of System Assessments**

The Government desires to ensure that IWNS-T imagers and system components coming off the production line comply with the Government's Performance Specification and with stated configurations specified by the manufacturer. To accomplish this requirement, several levels of assessment may be performed. The Government reserves the right to be present at any assessment performed by the manufacturer or to review assessment reports and results from any assessment.

Assessments are classified as follows:

##### **a. Initial Production Testing (IPT)**

All IPT shall be performed by the contractor. Units from the initial production lot shall be furnished and tested to verify compliance with the requirements of this specification in accordance with the Assessment Matrix, by Analysis (A), Test (T), Inspection (I), or Demonstration (D) methods. Presence of one or more defects shall be cause for rejection of that unit and may be cause for rejection of the lot. IPT samples exhibiting deviations from requirements shall be reworked into compliance or shall be scrapped. They shall not be presented to the Government for acceptance until in full compliance with requirements.

##### **b. Acceptance Testing (AT)**

AT is performed on 100% of units delivered, by the same method as in IPT unless otherwise indicated. AT is also conducted as pre and post-test inspections for environmental and reliability testing. Testing is conducted in accordance with the

21

##### **c. Conformance Inspection (CI)**

Units from the standard production line shall be furnished and tested to verify conformance to the requirements of the IWNS-T Performance Specification and system

documentation as outlined the Assessment Matrix and the manufacturer's configuration control documentation.

### **5.1 Assessment Matrix**

The Assessment Matrix outlines the test groups, test frequency, and sampling plans for conformance inspections and 100% unit acceptance tests for the IWNS-T being procured under this contract. Omission of any performance requirement in the table does not relieve the contractor of meeting such requirement.

Assessments and verifications will be performed in accordance with Paragraphs 5a, b & c of this Specification and a government-approved test plan. Such test plan shall be submitted by the contractor to the government for approval within 15 days of contract award.

### **Requirement Paragraph Inspections IPT AT CI**

#### **3 REQUIREMENTS**

##### **3.1 Item Description**

##### **3.2 Major Component List: I I**

IWNS-T thermal imager I I

Objective lens cover I I

Light limiting eye piece cover  
(Eyecup)

I I

View lens cover I I

Soft carrying case I I

Cleaning kit I I

Two sets of batteries I I

Government approved operator  
manual and

I I

Quick Reference Card I I

Light prevention device or boot I I

Video cable I I

##### **3.3 System Characteristics D**

##### **3.4 Target Recognition A**

##### **3.4.1 Minimum Resolvable Temperature (MRT)**

T T

A=Analysis

D=Demonstration

I=Inspection

T=Test

Note 1: Analysis by previous IPT Results

Note 2: Monthly Conformance Inspection(CI); sampling per ANSI/ASQ Z1.4-2003, S-3, 1.5%AQL. CI testing will be conducted on subgroups on alternating months.

Note 3: Optical coatings evaluated as Receiving Inspection lots; sampling per ANSI/ASQ Z1.4-2003, S-3, 1.5%AQL.

Note 4: Each unit is subjected to weapon shock test and monitored to ensure there is no image degradation due to Weapon Firing Heat Effects.

22

### **Requirement Paragraph Inspections IPT AT CI**

IWNS-T MRT

See Table in 3.4.1

**IWNS-T MRT**

**Spatial Frequencies**

**(cycles/milliradian)**

**Temperature**

**Difference**

**(°C)**

(b)(4)

T T

3.4.2 Signal Transfer Function (SITF) (b)(4)

3.5 Displayed Image Quality (b)(4)

3.6 Display Effects (b)(4)

3.7 Display Luminance (b)(4)

3.8 Display Brightness (b)(4)

3.9 Frame Rate (b)(4)

3.10 Display Imperfections (b)(4)

3.10.1 Image Characterization and Uniformity A<sub>1</sub>

A=Analysis

D=Demonstration

I=Inspection

T=Test

Note 1: Analysis by previous IPT Results

Note 2: Monthly Conformance Inspection(CI); sampling per ANSI/ASQ Z1.4-2003, S-3, 1.5%AQL. CI testing will be conducted on subgroups on alternating months.

Note 3: Optical coatings evaluated as Receiving Inspection lots; sampling per ANSI/ASQ Z1.4-2003, S-3, 1.5%AQL.

Note 4: Each unit is subjected to weapon shock test and monitored to ensure there is no image degradation due to Weapon Firing Heat Effects.

23

**Requirement Paragraph Inspections IPT AT CI**

3.10.1.1 Large area uniformity

3.10.1.2 Small area uniformity (b)(4)

3.10.1.3 Defective channels/no-information pixels

(b)(4)

IWNS-T critical area (b)(4)

IWNS-T non-critical area (b)(4)

Image uniformity (b)(4)

3.10.1.4 Distortion (b)(4)

3.10.1.5 Random temporal spatial noise (b)(4)

3.10.1.6 Spatial noise (b)(4)

3.10.2 Chevron and Bullet Drop Compensator (b)(4)

3.10.3 Horizontal Mil Scale (b)(4)

3.10.4 Sight Picture Geometry (b)(4)

3.10.5 Image Shift (b)(4)

A=Analysis

D=Demonstration

I=Inspection

T=Test

Note 1: Analysis by previous IPT Results

Note 2: Monthly Conformance Inspection(CI); sampling per ANSI/ASQ Z1.4-2003, S-3, 1.5%AQL. CI testing will be conducted on subgroups on alternating months.

Note 3: Optical coatings evaluated as Receiving Inspection lots; sampling per ANSI/ASQ Z1.4-2003, S-3, 1.5%AQL.

Note 4: Each unit is subjected to weapon shock test and monitored to ensure there is no image degradation due to Weapon Firing Heat Effects.

24

### Requirement Paragraph Inspections IPT AT CI

3.10.6 Image Alignment (b)(4)

3.11 Weight (b)(4)

3.12 Physical Structure (b)(4)

3.12.1 Weapon Interface

3.12.2 Method of Attachment (b)(4)

3.12.3 RCO Interoperability (b)(4)

3.12.4 Detector Characteristics (b)(4)

Detector Type/Chemistry (b)(4)

Detector Pixel pitch (microns) (b)(4)

Detector Size (pixels H x V)

3.12.5 Display Characteristics (b)(4)

Display Type (Technology)

Display Pixel Pitch (microns) (b)(4)

Display Size (pixels H x V)

Shades of gray (b)(4)

3.12.5.2 Display color (b)(4)

3.12.5.3 Operating Orientation (b)(4)

A=Analysis

D=Demonstration

I=Inspection

T=Test

Note 1: Analysis by previous IPT Results

Note 2: Monthly Conformance Inspection(CI); sampling per ANSI/ASQ Z1.4-2003, S-3, 1.5%AQL. CI testing will be conducted on subgroups on alternating months.

Note 3: Optical coatings evaluated as Receiving Inspection lots; sampling per ANSI/ASQ Z1.4-2003, S-3, 1.5%AQL.

Note 4: Each unit is subjected to weapon shock test and monitored to ensure there is no image degradation due to Weapon Firing Heat Effects.

25

### Requirement Paragraph Inspections IPT AT CI

3.13 Weapon Firing Heat Effects (b)(4)

3.14 Response outside FOV (b)(4)

3.15 Anti- reflection (Glint) (b)(4)

3.16 Body finish

3.17 Chemical Resistance (b)(4)

3.18 Ease of Use (b)(4)

3.19 Calibration (b)(4)

3.20 System Adjustments (b)(4)

3.21 System Power

- 3.21.1 Battery Life (b)(4)
- 3.21.2 Battery Type (b)(4)
- 3.21.3 Battery Indicator (b)(4)
- 3.21.4 Battery Replacement (b)(4)
- 3.21.5 Battery Insertion (b)(4)

A=Analysis  
 D=Demonstration  
 I=Inspection  
 T=Test

Note 1: Analysis by previous IPT Results

Note 2: Monthly Conformance Inspection(CI); sampling per ANSI/ASQ Z1.4-2003, S-3, 1.5%AQL. CI testing will be conducted on subgroups on alternating months.

Note 3: Optical coatings evaluated as Receiving Inspection lots; sampling per ANSI/ASQ Z1.4-2003, S-3, 1.5%AQL.

Note 4: Each unit is subjected to weapon shock test and monitored to ensure there is no image degradation due to Weapon Firing Heat Effects.

26

**Requirement Paragraph Inspections IPT AT CI**

- 3.22 Focus Range (b)(4)
- 3.23 Lens Covers (b)(4)
- 3.24 Lens Abrasion Resistance (b)(4)
- 3.25 Carrying Case (b)(4)
- 3.26 Start-up Time (b)(4)
- 3.27 Effects of sun in the Field Of View (b)(4)
- 3.28 Suitability Characteristics (b)(4)
- 3.28.1 Hand-Held Thermal Optic (b)(4)
- 3.28.2 Reliability
- 3.28.2.1 Shock Resistance (b)(4)

(b)(4)  
 rounds

(b)(4)  
 rounds

3.28.2.2 Mean Time Between Failures (b)(4)

- 3.28.3 Light Security (b)(4)
- 3.28.4 Noise Emissions (b)(4)

A=Analysis  
 D=Demonstration  
 I=Inspection  
 T=Test

Note 1: Analysis by previous IPT Results

Note 2: Monthly Conformance Inspection(CI); sampling per ANSI/ASQ Z1.4-2003, S-3, 1.5%AQL. CI testing will be conducted on subgroups on alternating months.

Note 3: Optical coatings evaluated as Receiving Inspection lots; sampling per ANSI/ASQ Z1.4-2003, S-3, 1.5%AQL.

Note 4: Each unit is subjected to weapon shock test and monitored to ensure there is no image degradation due to Weapon Firing Heat Effects.

27

**Requirement Paragraph Inspections IPT AT CI**

- 3.28.5 Altitude (b)(4)
- 3.28.6 Drop (b)(4)
- 3.28.7 Immersion/leakage (b)(4)

3.28.8 Temperature (b)(4)

3.28.9 Organizational Impact (b)(4)

3.28.10 Workmanship (b)(4)

### 3.29 Human Factors and Safety

3.29.1 Controls (b)(4)

3.29.2 Hazards (b)(4)

A=Analysis

D=Demonstration

I=Inspection

T=Test

Note 1: Analysis by previous IPT Results

Note 2: Monthly Conformance Inspection(CI); sampling per ANSI/ASQ Z1.4-2003, S-3, 1.5%AQL. CI testing will be conducted on subgroups on alternating months.

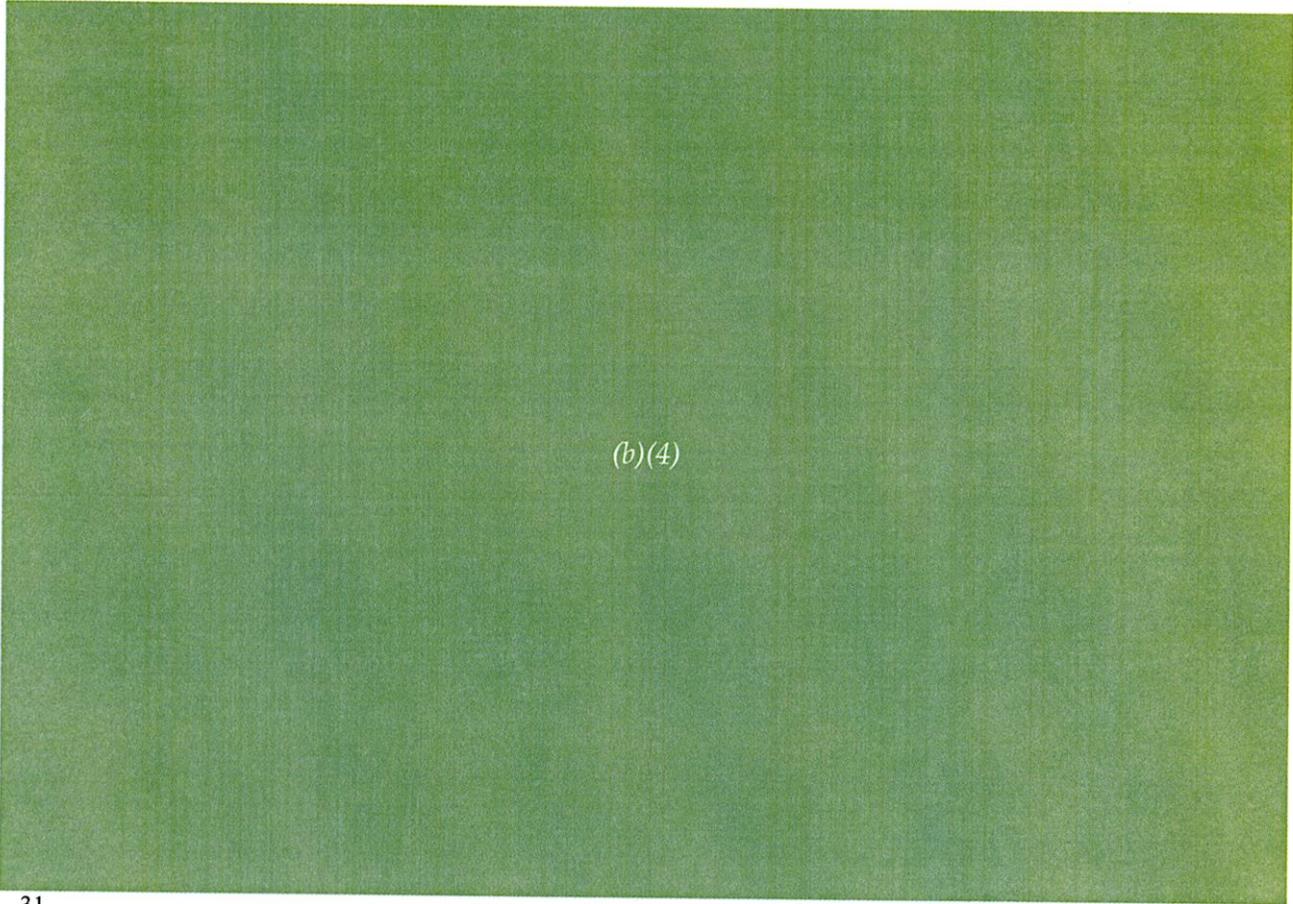
Note 3: Optical coatings evaluated as Receiving Inspection lots; sampling per ANSI/ASQ Z1.4-2003, S-3, 1.5%AQL.

Note 4: Each unit is subjected to weapon shock test and monitored to ensure there is no image degradation due to Weapon Firing Heat Effects.

28

## APPENDIX A

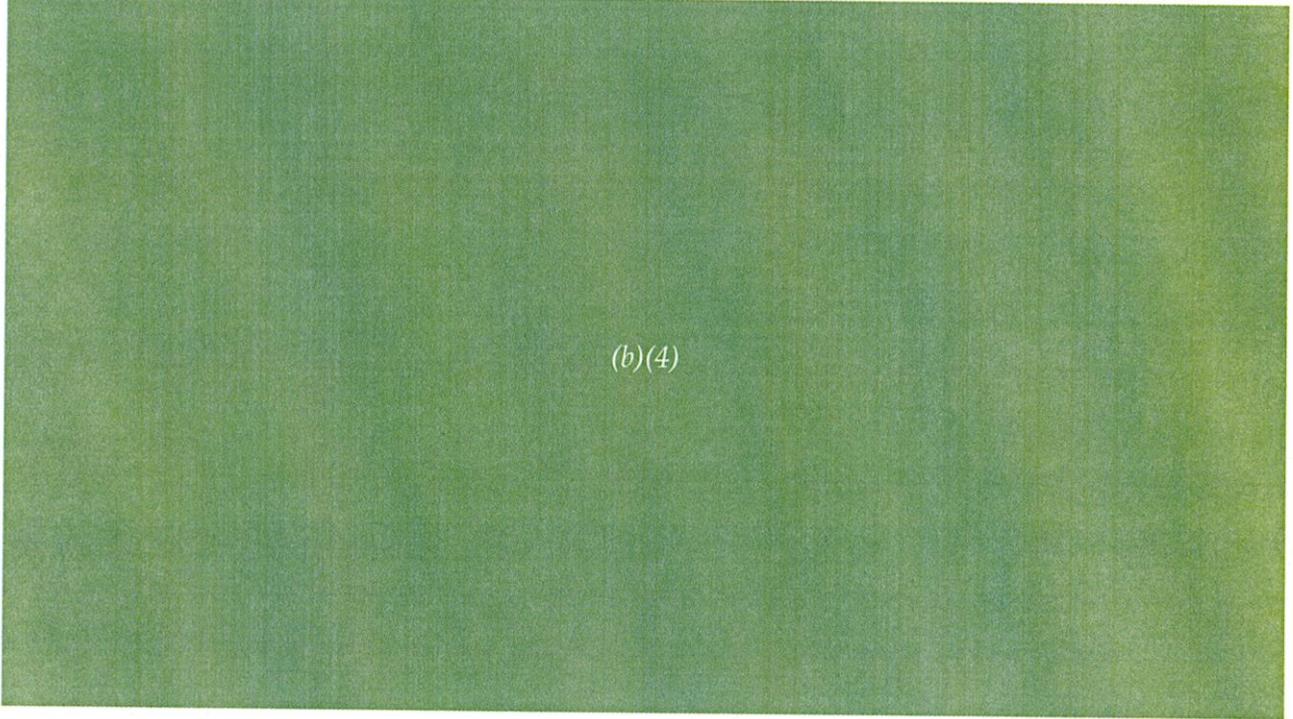
(b)(4)



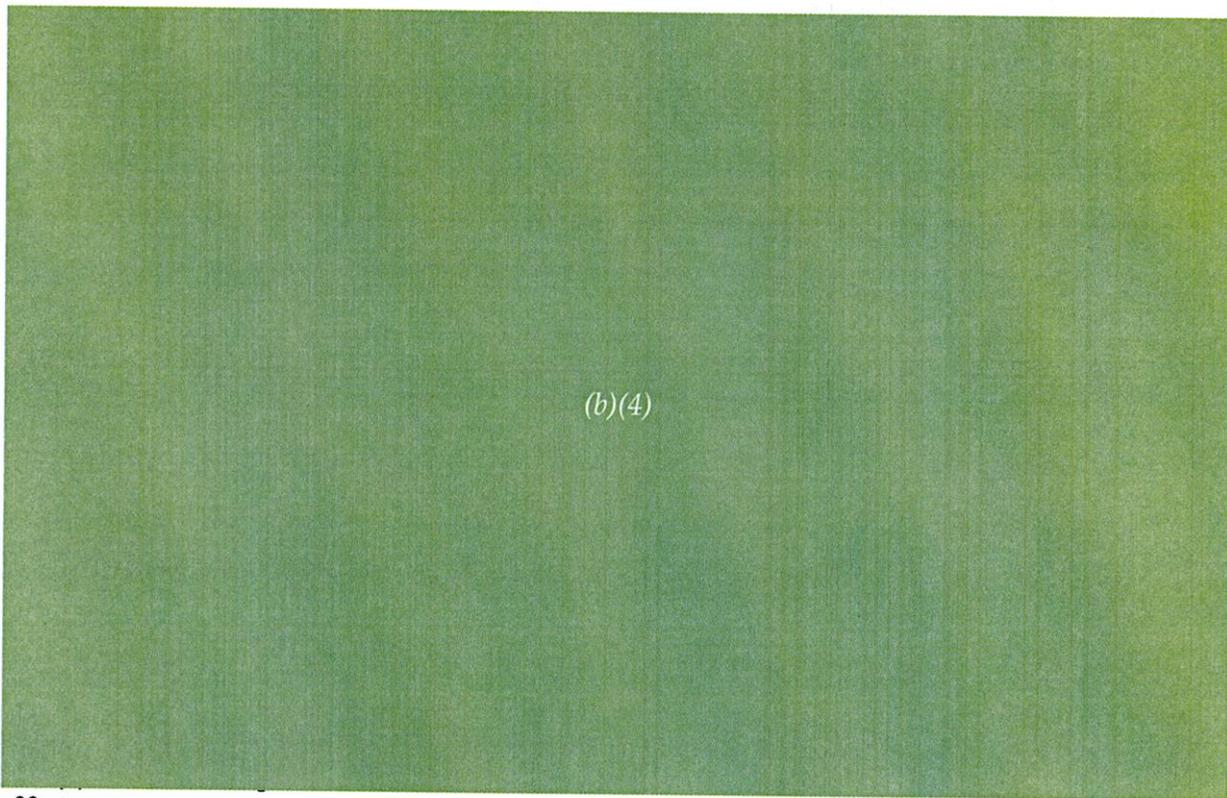
(b)(4)

31

**APPENDIX B**



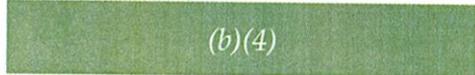
(b)(4)



(b)(4)

33

**APPENDIX C**



(b)(4)

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
---------	-------------------	----------	------	------------	--------

0001 Ind Wpn Night Sight Thermal (IWNS-T)  
FFP

Prior to the delivery of the first 100 units listed in CLIN 0001, the Government shall require that the contractor demonstrate reliability in accordance with attachment 2 of contract M67854-08-C-1034 (Section 3.28.2-Reliability). Demonstration of reliability shall be jointly observed at Insight's facility with testing of a single unit of the first 100 units at a threshold no less than 5,000 rounds.

FOB: Destination  
MILSTRIP: M9545007RC74611  
PURCHASE REQUEST NUMBER: M9545007RC74611

---

NET AMT	\$0.00
---------	--------

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
---------	-------------------	----------	------	------------	--------

0001AA

IWNS-T  
FFP

2,192

Each

(b)(4)

(b)(4)

IWNS-T and associated equipment over-packed with soft case. Associated equipment includes, mount, view and objective lens covers, two sets of batteries, spare battery cassette (if required), light-limiting eye piece cover, operator manual, quick reference card, cleaning kit, anti-reflection device (if required), and standard commercial & storage warranty. Additionally, all Government approved technical data shall be delivered concurrently.

FOB: Destination  
MILSTRIP: M9545007RC74611  
MFR PART NR: IWT-001-A3  
PURCHASE REQUEST NUMBER: M9545007RC74611

---

NET AMT	(b)(4)
---------	--------

ACRN AB  
CIN: M9545007RC746110001

(b)(4)

manual control on the IWNS-T.

### **3.20 System Adjustments**

Any Automatic Gain Control feature on the IWNS-T shall be defeatable. A manual gain control function shall be provided which, when activated, would override the automatic gain function and provide manual gain control. (b)(4)

(b)(4)

The IWNS-T shall allow the operator to manually adjust polarity, brightness, and gain. These adjustments shall be accessible from (b)(4)

(b)(4)

13

### **3.21 System Power**

#### **3.21.1 Battery Life**

The IWNS-T shall remain continuously operational (present a useable thermal image), on one load of internal battery power, in continuous power-on mode, at an air temperature of 32 degrees F for at least (b)(4)

(b)(4)

#### **3.21.2 Battery Type**

The IWNS-T utilizes (b)(4)

(b)(4)

#### **3.21.3 Battery Indicator**

The IWNS-T shall have an indicator within the field of view of the RCO but outside the display area used by the chevron and Bullet Drop Compensator that will notify the user when approximately 30 minutes of battery life remain. (b)(4)

(b)(4)

#### **3.21.4 Battery Replacement**

The battery shall be easily replaced without using tools and without having to remove the sight from the weapon and with one hand. (b)(4)

(b)(4)

#### **3.21.5 Battery Insertion**

The system shall identify or communicate the proper method to insert the batteries to minimize the possibility of incorrect insertion as well as reverse-polarity damage. (b)(4)

(b)(4)

(b)(4)

### 3.22 Focus Range

By means of fixed or adjustable focus, the IWNS-T shall have a focus range of (b)(4) meters

to infinity. For an adjustable focus, the operator shall be able to adjust focus over the entire focus range with one continuous motion that shall not exceed (b)(4) of rotation.

14

### 3.23 Lens Covers

The IWNS-T shall include protective, retained covers for the external lenses. The IWNST

shall have protective devices that protect the optical elements from scratching and damage during transport and storage and at all times the IWNS-T is not in use. The lens

cover shall remain out of the field of view during weapon firing. The lens cover shall be a

field replaceable item at the organizational (unit) maintenance level. The lens covers shall not come into contact with the optical surface of the lenses when closed. The lens covers shall be securely attachable over the exterior lenses such that they shall not easily be removed inadvertently during normal movement, unpacking and packing in carry/storage cases, or in storage.

(b)(4)

### 3.24 Lens Abrasion Resistance

All external lenses of the IWNS-T shall be resistant to scratching and the abrasive effects

of sand, dust, and grit.

(b)(4)

(b)(4)

### 3.25 Carrying Case

The IWNS-T shall include a soft carrying case that employs the MOLLE style weave. The case shall keep the contents dry and protected from incidental damage, and shall be

capable of attaching to individual load bearing equipment. The case shall be sized to accommodate the IWNS-T imager, mount, lens covers, two sets of batteries, spare battery cassette (if required), light-limiting eye piece cover, operator manual, quick reference card, cleaning kit, and anti-reflection device (if required). The soft case shall be MOLLE compatible, constructed of Coyote 476/498 color in 1000 Denier Cordura® , coated with an approved water resistant material on the interior, and reinforced with 1 inch Coyote 476/498 color, Type III A-A 55301 webbing. The Coyote 476/498 color must

15

be the same for the case and web strapping, and any buckles, slide locks, zippers, cord locks, snaps, and tension locks. MOLLE interlocking weave consists of multiple horizontal rows of Type III A-A 55301, 1 inch webbing, spaced parallel allowing a 1 ½ inch space between the lower edge of the top row and upper edge of the lower row, vertically double stitched at 1 ½ inch increments along the same axis for rows, which will

allow MOLLE components to be vertically secured with the standard Type III A-A 55301,

1 inch web straps. The soft case shall also have at least two MOLLE horizontal interlocking weave attachment points to externally attach the case to the MOLLE pack, load bearing vest, or protective armor. The soft case shall also have two vertical interlocking weave straps of reinforced Type III A-A 55301, 1 inch webbing, with retaining

snaps to allow users to attach the case. "Reinforced" is defined as a minimum of doubled

webbing. ALICE clips are not an acceptable alternative, and shall not be used. The case

shall have the dimensions of 4.5 in x 10 in x 7 in. The carrying case to be supplied with the IWNS-T shall meet the aforementioned design, size, and color requirements of this paragraph and the Material Specifications for the Soft Carrying Case for the IWNS-T document, Attachment 8 to M67854-07-1083. See appendix C for visual details.

### 3.26 Start-up Time

The IWNS-T shall present a useable thermal image within (b)(4) of being turned on at a temperature of 15 degrees F.

### 3.27 Effects of sun in the Field Of View

The IWNS-T shall not exhibit permanent degradation or damage resulting from the effects of the sun in the FOV for solar angles of less than (b)(4) to the horizon, or the sun within (b)(4) of the FOV, or when the sun is allowed to track across the FOV

of a moving IWNS-T. Temporary latent images are permissible provided they are

capable of being adjusted out by the operator. Repetitive adjustments are permissible within a (b)(4) period from exposure. The IWNS-T shall suffer no degradation or damage resulting from the effects of the sun when the protective lens cover is blocking the objective.

### **3.28 Suitability Characteristics**

The IWNS-T system shall enhance the ability of Marine riflemen to recognize targets while looking thru the RCO in conditions of reduced visibility such as darkness and/or obscurants. Suitability for combat use includes a variety of factors such as availability, reliability, and the ability to withstand combat environments.

#### **3.28.1 Hand-Held Thermal Optic**

The IWNS-T shall be usable as a standalone, hand-held thermal optic. (b)(4)

(b)(4)

16

#### **3.28.2 Reliability.**

##### **3.28.2.1 Shock Resistance**

The IWNS-T shall withstand the firing of a minimum of (b)(4) rounds with no physical damage or performance degradation.

##### **3.28.2.2 Mean Time Between Failures**

The IWNS-T shall have a Mean Time Between Failures (MTBF) of (b)(4) hours or greater.

#### **3.28.3 Light Security**

The IWNS-T shall incorporate a method to prevent light from being observed from the IWNS-T that can be detected by an unaided human eye from (b)(4)

(b)(4)

#### **3.28.4 Noise Emissions**

The IWNS-T shall not emit noise that is detectable by the unaided human ear beyond (b)(4) (b)(4)

#### **3.28.5 Altitude**

The IWNS-T shall remain operationally capable to a pressure altitude of 15,000 feet as tested in accordance with MIL-STD-810F (3) 500.4-II, and shall be transportable at an altitude of 30,000 feet, at tested to MIL-STD-810F (3) 500.4-I.

#### **3.28.6 Drop**

The IWNS-T shall remain operationally capable after having been dropped on any surface or corner while attached to the weapon, after a (b)(4) drop onto a barrier consisting of two sheets of construction-grade ¾" thick 4x8 fir plywood backed by

concrete per MIL-STD-810F, Method 516.5, Procedure IV.

### **3.28.7 Immersion/leakage**

The IWNS-T imager shall be waterproof, without the use of a waterproof bag, when submerged down to (b)(4) of seawater for (b)(4) per MIL-STD-810F, Method 512.4, Procedure I.

### **3.28.8 Temperature**

The IWNS-T shall remain operationally capable in temperatures ranging from (b)(4) degrees F to (b)(4) degrees F.

### **3.28.9 Organizational Impact**

The IWNS-T shall not have special storage requirements beyond those already in place for existing optical equipment.

17

### **3.28.10 Workmanship**

After IWNS-T fabrication, parts and assembled equipment shall be free of foreign material. Screws and bolts shall show no evidence of cross threading, mutilation or burrs, and shall be firmly secured. The ends of shielding or braiding shall be secured to prevent fraying. The edges of fabric shall be secured to prevent unraveling. Glass parts shall be free of cracks, chips, inclusions, and scratches that affect system performance. Plastic parts shall be free of chips, warping, blistering, and burns. Metallic parts shall be free of corrosion and missing coatings.

(b)(4)

## **3.29 Human Factors and Safety**

### **3.29.1 Controls**

(b)(4)

### **3.29.2 Hazards**

The IWNS-T shall not have any ocular or other safety hazards such as sharp edges that

- (b)(1) The Contractor shall use U.S.-flag vessels when transporting any supplies by sea under this contract.
- (2) A subcontractor transporting supplies by sea under this contract shall use U.S.-flag vessels if--
- (i) This contract is a construction contract; or
  - (ii) The supplies being transported are--
    - (A) Noncommercial items; or
    - (B) Commercial items that--
      - (1) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it contracts for f.o.b. destination shipment);
      - (2) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or
      - (3) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.
- (c) The Contractor and its subcontractors may request that the Contracting Officer authorize shipment in foreign-flag vessels, or designate available U.S.-flag vessels, if the Contractor or a subcontractor believes that --
- (1) U.S.-flag vessels are not available for timely shipment;
  - (2) The freight charges are inordinately excessive or unreasonable; or
  - (3) Freight charges are higher than charges to private persons for transportation of like goods.
- (d) The Contractor must submit any request for use of other than U.S.-flag vessels in writing to the Contracting Officer at least 45 days prior to the sailing date necessary to meet its delivery schedules. The Contracting Officer will process requests submitted after such date(s) as expeditiously as possible, but the Contracting Officer's failure to grant approvals to meet the shipper's sailing date will not of itself constitute a compensable delay under this or any other clause of this contract. Requests shall contain at a minimum --
- (1) Type, weight, and cube of cargo;
  - (2) Required shipping date;
  - (3) Special handling and discharge requirements;
  - (4) Loading and discharge points;
  - (5) Name of shipper and consignee;
  - (6) Prime contract number; and
  - (7) A documented description of efforts made to secure U.S.-flag vessels, including points of contact (with names and telephone numbers) with at least two U.S.-flag carriers contacted. Copies of telephone notes, telegraphic and facsimile message or letters will be sufficient for this purpose.
- (e) The Contractor shall, within 30 days after each shipment covered by this clause, provide the Contracting Officer and the Maritime Administration, Office of Cargo Preference, U.S. Department of Transportation, 400 Seventh

Street SW., Washington, DC 20590, one copy of the rated on board vessel operating carrier's ocean bill of lading, which shall contain the following information:

- (1) Prime contract number;
- (2) Name of vessel;
- (3) Vessel flag of registry;
- (4) Date of loading;
- (5) Port of loading;
- (6) Port of final discharge;
- (7) Description of commodity;
- (8) Gross weight in pounds and cubic feet if available;
- (9) Total ocean freight in U.S. dollars; and
- (10) Name of the steamship company.

(f) The Contractor shall provide with its final invoice under this contract a representation that to the best of its knowledge and belief--

- (1) No ocean transportation was used in the performance of this contract;
- (2) Ocean transportation was used and only U.S.-flag vessels were used for all ocean shipments under the contract;
- (3) Ocean transportation was used, and the Contractor had the written consent of the Contracting Officer for all non-U.S.-flag ocean transportation; or
- (4) Ocean transportation was used and some or all of the shipments were made on non-U.S.-flag vessels without the written consent of the Contracting Officer. The Contractor shall describe these shipments in the following format:

ITEM DESCRIPTION	CONTRACT LINE ITEMS	QUANTITY
---------------------	------------------------	----------


TOTAL

(g) If the final invoice does not include the required representation, the Government will reject and return it to the Contractor as an improper invoice for the purposes of the Prompt Payment clause of this contract. In the event there has been unauthorized use of non-U.S.-flag vessels in the performance of this contract, the Contracting Officer is entitled to equitably adjust the contract, based on the unauthorized use.

(h) In the award of subcontracts for the types of supplies described in paragraph (b)(2) of this clause, the Contractor shall flow down the requirements of this clause as follows:

- (1) The Contractor shall insert the substance of this clause, including this paragraph (h), in subcontracts that exceed the simplified acquisition threshold in part 2 of the Federal Acquisition Regulation.

(2) The Contractor shall insert the substance of paragraphs (a) through (e) of this clause, and this paragraph (h), in subcontracts that are at or below the simplified acquisition threshold in part 2 of the Federal Acquisition Regulation.

(End of clause)

**LIST OF ATTACHMENTS**

DOCUMENT TYPE	DESCRIPTION	PAGES	DATE
Attachment 1	CDRLS	15	10 Apr 07
Attachment 2	Performance Specification for IWNS-T	33	16 Oct 07

**CONTRACT DATA REQUIREMENT LIST**

**ATTACHMENT 1**

CONTRACT DATA REQUIREMENTS LIST (1 Data Item)				Form Approved OMB No. 0704-0188		
<small>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.</small>						
A. CONTRACT LINE ITEM NO.		B. EXHIBIT	C. CATEGORY:			
			TDP    TM    OTHER    X			
D. SYSTEM/ITEM IWNS-T		E. CONTRACT/PR NO. M67854-08-C-1034		F. CONTRACTOR		
1. DATA ITEM NO. D001	2. TITLE OF DATA ITEM LOGISTICS MANAGEMENT INFORMATION (LMI) DATA PRODUCT		3. SUBTITLE PROVISIONING PLAN			
4. AUTHORITY (Data Acquisition Document No.) DI-ALSS-81529(PP)		5. CONTRACT REFERENCE Sec C para 3.9.2		6. REQUIRING OFFICE MARCORSYSCOM (PM)		
7. DD 250 REQ LT	9. DIST STATEMENT D	10. FREQUENCY ONE/R	12. DATE OF 1ST SUBMISSION 30 Days after PGC	14. DISTRIBUTION		
8. APP CODE A		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION ASREQ	a. ADDRESSEE	b. COPIES	
16. REMARKS  BLK 9 - The following information shall be included on the deliverable:				MCSG	Draft	Final
				(DM)	1	1
				MCI RA		

17. PRIC GROUP

18. ESTIMA TOTAL

		1	1		
	15. TOTAL ----->		?	?	
	<b>G. PREPARED BY</b>	<b>H. DATE</b>	<b>I. APPROVED BY</b>		<b>J. DATE</b>





**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.	B. EXHIBIT	C. CATEGORY:	TTP	TM	OTHER	X
---------------------------	------------	--------------	-----	----	-------	---

D. SYSTEM/ITEM IWNS-T	E. CONTRACT/PR NO. M67854-08-C-1034	F. CONTRACTOR
--------------------------	----------------------------------------	---------------

1. DATA ITEM NO. B007	2. TITLE OF DATA ITEM REQUEST FOR DEVIATION (RFD)	3. SUBTITLE
--------------------------	------------------------------------------------------	-------------

4. AUTHORITY (Data Acquisition Document No.) DI-CMAN-80640C	5. CONTRACT REFERENCE Sec H3 para 1.3, 1.3.2	6. REQUIRING OFFICE MARCORSYSCOM (PM)
----------------------------------------------------------------	-------------------------------------------------	------------------------------------------

7. DD 250 REQ LT	9. DIST STATEMENT D	10. FREQUENCY ASREQ	12. DATE OF 1ST SUBMISSION SEE BLK 16	14. DISTRIBUTION
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION	a. ADDRESSEE

16. REMARKS	15. TOTAL		
	Draft	Final	Repro
<p>BLK 9 - DISTRIBUTION STATEMENT D: Distribution authorized to the DoD and U.S. DoD contractors only. Other requests shall be referred to Marine Corps Systems Command, Infantry Weapons, Optics and Non-Lethal Systems.</p> <p>WARNING: This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., sec. 2751, et seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et seq. Violation of these export laws are subject to severe criminal penalties. Disseminate in accordance with the provisions of DoD Directive 5230.25.</p> <p>BLK 12 - Deviations shall be submitted for all changes which affect Government approved baselines. The opportunity to submit deviations shall extend through contract finalization. In addition, deviations shall be submitted at the request of the Government.</p> <p>BLK 13 - The Government requires 30 calendar days to review. The contractor shall submit final 15 days after receipt of Government comments.</p> <p>BLK 14 - Draft, regular, and reproducible copy shall be delivered in MS Office 2000 document and posted to a contractor established and maintained website/integrated data environment. The contractor shall notify the Government of deliverable availability.</p>	MCSO		
	(DIA)	1	
	MCTDA		
	(S&S)	1	
	DCMA	1	1
	4		

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
----------------	---------	----------------	---------

**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.		B. EXHIBIT		C. CATEGORY: TDP    TM    OTHER    X			
D. SYSTEM/ITEM IWN5-T		E. CONTRACT/PR NO. M67854-08-C-1034		F. CONTRACTOR			
1. DATA ITEM NO. B005	2. TITLE OF DATA ITEM CONFIGURATION STATUS ACCOUNTING			3. SUBTITLE			
4. AUTHORITY (Data Acquisition Document No.) DI-CMAN-81253A		5. CONTRACT REFERENCE Sec H3 para 3.7.1.1		6. REQUIRING OFFICE MARCORSYSCOM (PM)			
7. DD 250 REQ LT	9. DIST STATEMENT D	10. FREQUENCY As req	12. DATE OF 1ST SUBMISSION See Blk 16	14. DISTRIBUTION			
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION SEE BLK 16	a. ADDRESSEE		b. COPIES	
16. REMARKS						Draft	
						Final	
BLK 9 - DISTRIBUTION STATEMENT D: Distribution authorized to the DoD and U.S. DoD contractors only. Other requests shall be referred to Marine Corps Systems Command, Infantry Weapons, Optics and Non-Lethal Systems.				MARCOR.			
				/DMA		1	
WARNING: This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., sec. 2751, et seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et seq. Violation of these export laws are subject to severe criminal penalties. Disseminate in accordance with the provisions of DoD Directive 5230.25.				MCI DA.			
				(566-1)		1	
BLK 10/13 - Contractor shall submit initial configuration status accounting information. Submit quarterly for first production year. Contractor shall, thereafter, submit when changes occur to configuration data. The Government requires 15 calendar days to review. The contractor shall submit final 10 days after receipt of Government comments.							
BLK 14 - Draft, regular, and reproducible copy shall be delivered in MS Office 2000 document and posted to a contractor established and maintained website/integrated data environment. The contractor shall notify the Government of deliverable availability.							
				15. TOTAL ----->		1    2	
G. PREPARED BY		H. DATE		I. APPROVED BY		J. DATE	

17. PRICE GROUP

18. ESTIMATED TOTAL PRICE





**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.		B. EXHIBIT		C. CATEGORY: TDP    TM    OTHER    Y			
D. SYSTEM/ITEM IWNS-T		E. CONTRACT/PR NO. M67854-08-C-1034		F. CONTRACTOR			
1. DATA ITEM NO. A002	2. TITLE OF DATA ITEM RECEIPT OF GOVERNMENT MATERIEL			3. SUBTITLE			
4. AUTHORITY (Data Acquisition Document No.) DI-MGMT-80389B/80596		5. CONTRACT REFERENCE Sec C para 3.3.1. 3.3.2		6. REQUIRING OFFICE MARCORSYSCOM (PM)			
7. DD 250 REQ LT	9. DIST STATEMENT D	10. FREQUENCY ASREQ	12. DATE OF 1ST SUBMISSION SEE BLK 16	14. DISTRIBUTION			
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION	a. ADDRESSEE	b. COPIES Draft    Final Reg    Repro		
<p>16. REMARKS</p> <p>BLK 9 - DISTRIBUTION STATEMENT D: Distribution authorized to the DoD and U.S. DoD contractors only. Other requests shall be referred to Marine Corps Systems Command, Infantry Weapons, Optics and Non-Lethal Systems.</p> <p>WARNING: This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., sec. 2751, et seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et seq. Violation of these export laws are subject to severe criminal penalties. Disseminate in accordance with the provisions of DoD Directive 5230.25.</p> <p>BLK 12 - Submit 10 days after receipt of GFE. BLK 12 - Submit 10 days after discovery of discrepancy with GFI.</p> <p>BLK 14 - Regular copy shall be delivered in PDF document and posted to a contractor established and maintained website/integrated data environment.</p>				MCSO			
				(DMA)		1	
				MCSO			
				(572 2)		1	
15. TOTAL ----->					2		
G. PREPARED BY		H. DATE		I. APPROVED BY			
				J. DATE			

17. PRICE GROUP

18. ESTIMATED TOTAL PRICE

**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.		B. EXHIBIT		C. CATEGORY: TDP    TM    OTHER    X		
D. SYSTEM/ITEM IWNS-T		E. CONTRACT/PR NO. M67854-08-C-1034		F. CONTRACTOR		
1. DATA ITEM NO. B008	2. TITLE OF DATA ITEM TECHNICAL REPORT - STUDY/SERVICES			3. SUBTITLE CHANGE NOTIFICATION		
4. AUTHORITY (Data Acquisition Document No.) DI-MISC-80508A(CN)		5. CONTRACT REFERENCE Sec H3 para 1.3.3		6. REQUIRING OFFICE MARCORSYSCOM (PM)		
7. DD 250 REQ LT	9. DIST STATEMENT D	10. FREQUENCY ASREQ	12. DATE OF 1ST SUBMISSION SEE BLK 16	14. DISTRIBUTION		
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION	a. ADDRESSEE	b. COPIES Draft    Final Reg    Repro	
<p>16. REMARKS</p> <p>BLK 9 - DISTRIBUTION STATEMENT D: Distribution authorized to the DoD and U.S. DoD contractors only. Other requests shall be referred to Marine Corps Systems Command, Infantry Weapons, Optics and Non-Lethal Systems.</p> <p>WARNING: This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., sec. 2751, et seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et seq. Violation of these export laws are subject to severe criminal penalties. Disseminate in accordance with the provisions of DoD Directive 5230.25.</p> <p>BLK 12 - Notifications shall be submitted for all changes which affect Government established baselines. The opportunity to submit notifications shall extend through contract finalization. In addition, notifications shall be submitted at the request of the Government.</p> <p>BLK 14 - Draft, regular, and reproducible copy shall be delivered in MS Office 2000 document and posted to a contractor established and maintained website/integrated data environment. The contractor shall notify the Government of deliverable availability.</p>				MCSO		
				(DMA)	1	
				MCI DA		
				(EGG 1)	2	
				DCMA	1	1
				15. TOTAL →	3	
G. PREPARED BY		H. DATE		I. APPROVED BY		
				J. DATE		

17. PRICE GROUP

18. ESTIMATED TOTAL PRICE



# 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.		B. EXHIBIT		C. CATEGORY: TDP    TM    OTHER    X		
D. SYSTEM/ITEM IWNS-T		E. CONTRACT/PR NO. M67854-08-C-1034		F. CONTRACTOR		
1. DATA ITEM NO. B002	2. TITLE OF DATA ITEM FAILURE SUMMARY AND ANALYSIS REPORT			3. SUBTITLE		
4. AUTHORITY (Data Acquisition Document No.) DI-RELI-80255		5. CONTRACT REFERENCE Sec C para 3.5.2.3. 3.5.2.3.1. 3.7.8.1		6. REQUIRING OFFICE MARCORSYSCOM (PM)		
7. DD 250 REQ LT	9. DIST STATEMENT D	10. FREQUENCY As Req	12. DATE OF 1ST SUBMISSION SEE BLK 16	14. DISTRIBUTION		
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION SEE BLK 16	a. ADDRESSEE	b. COPIES	
16. REMARKS					Draft	Final
					Reg	Repro
<p>BLK 9 - DISTRIBUTION STATEMENT D: Distribution authorized to the DoD and U.S. DoD contractors only. Other requests shall be referred to Marine Corps Systems Command, Infantry Weapons, Optics and Non-Lethal Systems.</p> <p>WARNING: This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., sec. 2751, et seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et seq. Violation of these export laws are subject to severe criminal penalties. Disseminate in accordance with the provisions of DoD Directive 5230.25.</p> <p>BLK 12 - Submit Preliminary Report within 15 days after test failure.</p> <p>BLK 13 - Submit Final Report within 30 days after test failure.</p> <p>BLK 14 - Draft, regular, and reproducible copy shall be delivered in MS Office 2000 document and posted to a contractor established and maintained website/integrated data environment. The contractor shall notify the Government of deliverable availability.</p>				MCCO.		
				(DMA)	1	
G. PREPARED BY		H. DATE		I. APPROVED BY		J. DATE

17. PRICE GROUP

18. ESTIMATED TOTAL PRICE

**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.		B. EXHIBIT		C. CATEGORY: TOP    TM    OTHER    Y		
D. SYSTEM/ITEM IWNS-T		E. CONTRACT/PR NO. M67854-08-C-1034		F. CONTRACTOR		
1. DATA ITEM NO. B003	2. TITLE OF DATA ITEM FAILURE ANALYSIS AND CORRECTIVE ACTION REPORT			3. SUBTITLE		
4. AUTHORITY (Data Acquisition Document No.) DI-RELI-81315		5. CONTRACT REFERENCE Sec C para 3.5.2.3, 3.7.8.2		6. REQUIRING OFFICE MARCORSYSCOM (PM)		
7. DD 250 REQ LT	9. DIST STATEMENT D	10. FREQUENCY ASREQ	12. DATE OF 1ST SUBMISSION SEE BLK 16	14. DISTRIBUTION		
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION	a. ADDRESSEE	b. COPIES	
16. REMARKS					Draft	Final
					Reg	Repro
<p>BLK 9 - The following information shall be included on the deliverable: DISTRIBUTION STATEMENT D: Distribution authorized to DOD and US DOD contractors only. Other request shall be referred to MCSC, Infantry Weapons, Oprics and non-lethal systems.</p> <p>BLK 12 - Submit __ days after test failure.</p> <p>(NOTE: Consideration needs to be given to delivery of this data via electronic/digital means and/or posted to websites/online databases vice hard copy. If that is desired, here is some possible wording -</p> <p>'BLK 14 - Draft, regular, and reproducible copy shall be delivered in MS Office 2000 document and posted to a contractor established and maintained website/integrated data environment. The contractor shall notify the Government of deliverable availability.'</p>				MCSC.		
				(DMA)	1	
G. PREPARED BY		H. DATE		I. APPROVED BY		
				J. DATE		

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE