

TECHNICAL INSTRUCTION (NAVSEA TEMPLATE)

Ref: (a) NAVSEA 5252.242-9115 (TECHNICAL INSTRUCTIONS)

Enclosure (if applicable): []

This Technical Instruction (TI) is issued pursuant to reference (a) from my capacity as the Contracting Officer's Representative (COR) for the contract/order identified below. This TI is issued with the understanding that implementation is within the present scope of the contract/order and that it does not change the statement of work or other terms and conditions. Nothing herein should be construed as amending the subject contract/order or as changing any contractual requirements. If the contractor believes that compliance with anything herein would constitute a change in the requirements of the subject contract/order, the contractor should not accept the TI and notify the Procuring Contracting Officer (PCO), in writing, within ten (10) working days, specify the reason(s) for such belief, and take no further action. A copy should also be sent to the COR.

Note: The contractor shall inform the COR, in writing, when 75% of the costs allotted to this TI have been expended. Expenditures for this TI shall not exceed the allotted amount. This TI is contingent upon the availability of funds and performance shall not commence until funding has been obligated on the contract/order.

TI No./Revision No.	TI- 13 , Rev. 0			
TI Revision Issue Date (if applicable)				
Original TI Issue Date	3 Feb 2013			
Purpose of Revision (if applicable)				
Contract/Task Order No.	N00178-07-D-4963-0002			
Government Agency/Activity	NSWCDD			
Sponsoring Office	Organization		Code	
	Directed Energy Division		Q20	
Program/Technical Office	Name	Code	Telephone	Email Address
	[REDACTED]			
Contracting Officer's Representative (COR)	Name	Code	Telephone	Email Address
	[REDACTED]			
Procuring Contracting Officer (PCO)	Name	Code	Telephone	Email Address
	[REDACTED]			
Contractor	ATI			
Contractor POC	Name	Code	Telephone	Email Address
	Bill Taczak		540-663-0050	btaczak@appliedti.com
Severability	Severable <input checked="" type="checkbox"/> Non-Severable <input type="checkbox"/>			
Special Skills Required	Software engineering			
Applicable SOW/PBWS Paragraph Number(s)	C.2.5.1, C.2.5.2, C.2.5.3, C.2.5.5, C.2.5.6, C.2.5.7			
TI Title	Hybrid Predictive Avoidance and Safety System (HPASS) TM Development Effort)			
TI Description	Leverage FY13 efforts and data collection on the Navy's Laser Weapon System (LaWS) QRC to continue development of a Hybrid Predictive Avoidance and Safety System (HPASS). The intent is to develop a government-owned / government-controlled design for a "black box" predictive avoidance subsystem			

which will be provided as required Government Furnished Equipment (GFE) to the SSL-TM system developers. The FY14 efforts will focus on developing and integrating a prototype configuration and validation of software components including any additional components that must be developed as a result of the analysis of data collected as part of the FY13 efforts and in accordance with the signed HPASS System Requirements Document and signed HPASS Interface Control Document. Specific tasks are:

1. Enhance QRC SW Prototype – Upgrade the HPASS with updated real-time software (SW) architecture and enhanced algorithms, updated user interface, and validation against AFRL/Metetech/SERCO/LCH Code as appropriate. Upgrades include the closure calculator, Real-time Keep Out Cone (RT-KOC), Real-time susceptibility (RTS), dynamic calibration, and modes of HPASS.
2. Enhance QRC HW Prototype – Upgrade HPASS HW for mil-spec compliance, as applicable. Upgrade appropriate configuration, including simulated HW where required to conduct performance and failure testing. Provide three TM HPASS units.
3. Validate Upgraded System – Validation of TM HPASS HW and SW including integration, conduct of IV&V and numerical validation where required, and updated documentation and H/W and S/W architecture drawings. Provided internal V&V S/W and H/W testing plans and reports.
4. HPASS Configuration – Maintain configuration management of H/W and S/W configuration items. Provide monthly versioning updates and source code releases to government team. Maintain and deliver final TM HPASS Software Specification Requirements (SRS) and TM HPASS System Design Description (SDD).
5. HPASS Certification – Finalize HW/SW, complete architecture analysis and documentation to support required reviews and certifications as needed: May include support for Safety Analysis, Laser Clearing House (LCH) Certification, Information Assurance Accreditation, Anti-tamper requirements, Software System Safety Technical Review Panel (SSSTRP), and Weapon System Explosives Safety Review Board (WSESRB).
6. Documentation – Completion of all certification materials and all documentation and training material required and suitable for production level integration and operation of prototype system (Minimum required: System Manual, Operations and Maintenance Manual, and Training Manual). Support TM HPASS Program Reviews and technical interchange meetings as required, including a beta-Critical Design Review (CDR).

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Applicable Documents If none, insert N/A	HPASS Interface Control Document (ICD) and HPASS System Requirements Document (SRD)																																																		
Government Furnished Information (GFI), Government Furnished Equipment (GFE), Government Furnished Material (GFM); Government Furnished Facilities (GFF)	GFI: NA GFE: NA GFM: NA GFF: NA Other: NA																																																		
If none, insert N/A																																																			
Duty Location	N/A																																																		
Temporary Duty/ Travel Requirements If none, insert N/A	<p>Travel Authorization (TA) requests shall be submitted to and/or authorized by the Contracting Officer's Representative (COR).</p> <p>CONUS</p> <table border="1"> <thead> <tr> <th>Trips</th> <th>People</th> <th>Duration</th> <th>From</th> <th>Destination</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>OCONUS</p> <table border="1"> <thead> <tr> <th>Trips</th> <th>People</th> <th>Duration</th> <th>From</th> <th>Destination</th> </tr> </thead> <tbody> <tr> <td>N/A</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Trips	People	Duration	From	Destination																					Trips	People	Duration	From	Destination	N/A																			
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	A005: Final Integrated HPASS SW/HW Configuration;			
	A006: Computer Software Product End Items;			
	A007: Engineering Drawings: electrical and mechanical drawings for build, reproducibility, and documentation.			

Security Classification	Unclassified to Classified Secret
Hazard and Safety Information <i>(The checked (X) Hazard and Safety Instructions are applicable to this TI)</i>	<input type="checkbox"/> Known Hazards: (NA) <input type="checkbox"/> No Hazard or Safety Information applicable <input checked="" type="checkbox"/> Other (Specify: Training as required for all employees working on this TI: Laser Safety Training.) <input type="checkbox"/> Other (Specify: _____) <input type="checkbox"/> Other (Specify: _____)

TI ROM Cost Estimate:	Total Hours	ODCs	Travel	Total Estimate

This TI shall not be construed as a change to the terms or conditions of the subject contract/order.

PCO concurrence:



 (Signature)
 Contracting Officer

_____ Raj Soni _____ 02 Feb 14
 (print name) (date)

PARKER.ARLINE.W.1241946572

Digitally signed by PARKER.ARLINE.W.1241946572
 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USN,
 cn=PARKER.ARLINE.W.1241946572
 Date: 2014.02.02 11:51:09 -05'00'

 (Signature)
 Contracting Officer's Representative

_____ Arline Parker _____
 (print name) (date)

Acknowledgement of receipt by Contractor:



 (Signature)
 Authorized Representative of Contractor

_____ WILLIAM J. TACZAK JR. _____ 02 FEB 14
 (print name) (date)

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NOTE – ALL TECHNICAL INSTRUCTIONS MUST BE CONCURRED WITH BY THE PCO PRIOR TO RELEASE.

Copy to:

