

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-25 , Rev. 0			
TI Revision Issue Date (if applicable)				
Original TI Issue Date	1September 2014			
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
	Melissa Olson	Q21	540-284-0147	Melissa.Olson@navy.mil
Contracting Officer's Representative (COR)	Name	Code	Telephone	Email Address
	Arline Parker	Q20	540-284-0374	arline.parker@navy.mil
Procuring Contracting Officer (PCO)	Name	Code	Telephone	Email Address
	Dana Phillips	CS40	540-653-8871	Dana.phillips@navy.mil
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	Predictive Avoidance; Command and Control; Optical and HEL systems			
Applicable SOW/PBWS Paragraph Number(s)	C.2.1.1, C.2.1.2, C.2.1.4, C.2.2.1, C.2.2.2, C.2.2.3, C.2.4.1, C.2.4.2, C.2.5.1, C.2.5.2, C.2.5.4, C.2.5.5, C.2.5.7, C.2.6.1, C.2.6.2, C.2.7.1, C.2.7.2, C2.7.4			
TI Title	Predictive Avoidance and Airspace Deconfliction (PA/AD) Proof-of-Concept Development)			
TI Description	The Directed Energy Warfare Office (DEWO) and Code Q21 are involved in the development of Predictive Avoidance (PA) technologies and implementation approaches for integration with DoD High Energy Laser (HEL) weapon systems to support command and control (C2) and airspace Deconfliction (AD) functions. The intent of this effort is to develop government-owned / government-controlled design(s) as part of the development of a proof-of-concept demonstrator, and to provide insight to refinements as			

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	<p>part of future development efforts.</p> <p>Engineering support is required to assist the government in establishing the design, development, integration, and demonstration of a PA/AD proof-of-concept. Specific tasks are:</p> <ol style="list-style-type: none"> 1) Engineering Analysis: <ul style="list-style-type: none"> • Support collection, consolidation, analysis and reporting of DoD HEL-related systems and service-specific needs to define the PA/AD integration architecture and scope of the efforts for future tasks under this effort including the development/documentation of use-cases • Provide technical insight and guidance on capabilities, limitations, and performance of the PASS systems including implementation of algorithms, ICDs, HW and SW configuration, and available computational capabilities 2) System Development: <ul style="list-style-type: none"> • Assist the government in defining and documenting proof-of-concept and objective software and hardware architectures, interfaces, hardware requirements, software algorithms, and externally sourced information (e.g., Predictive Avoidance Approval Messages) • Support proof-of-concept software development efforts implementing the government specified algorithms for AD • As required provide materials required to integrate and demonstrate the proof-of-concept system including, but not limited to: computers, cabling, communications equipment (e.g., switches and routers), and tracking equipment/sensors • Support integration and testing of hardware and software subsystems and components • Provide software configuration management support during design and construction of the proof-of-concept solution • Support the development of systems engineering and related documentation including plans, reports, and presentations 3) Subsystem Development and Integration Support: <ul style="list-style-type: none"> • Support planning and coordination efforts in preparation for the proof-of-concept demonstration • Support proof-of-concept development, data collection, and data analysis in support of design refinement; focus of these efforts are to validate performance of subsystems and components in USMC representative environments
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Applicable Documents If none, insert N/A	Advanced PA-AD Statement of Work, CoT Interface Definition, HPASS 1.0 ICD)
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	Travel Authorization (TA) requests shall be submitted to and/or authorized by the Contracting Officer's Representative (COR). CONUS <table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #ADD8E6;"> <th style="padding: 5px;">Trips</th> <th style="padding: 5px;">People</th> <th style="padding: 5px;">Duration</th> <th style="padding: 5px;">From</th> <th style="padding: 5px;">Destination</th> </tr> </thead> <tbody> <tr><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td></tr> <tr><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td></tr> <tr><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td></tr> <tr><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td></tr> <tr><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td></tr> <tr><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td></tr> <tr><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td><td style="background-color: black;"> </td></tr> </tbody> </table> OCONUS <table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #ADD8E6;"> <th style="padding: 5px;">Trips</th> <th style="padding: 5px;">People</th> <th style="padding: 5px;">Duration</th> <th style="padding: 5px;">From</th> <th style="padding: 5px;">Destination</th> </tr> </thead> <tbody> <tr><td style="padding: 5px;">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> <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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Period of Performance	<table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #ADD8E6;"> <th style="padding: 5px;">FROM</th> <th style="padding: 5px;">TO</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">1 September 2014</td> <td style="padding: 5px;">1 September 2015</td> </tr> </tbody> </table>	FROM	TO	1 September 2014	1 September 2015
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A004	Technical Report – Contractor generated reports on studies, assessments, and testing	Email	As Required	TBD
A005	Computer Software Product End Items – Contractor developed software executables and (source code)	Email or CD	As Required	TBD
A007	Engineering Drawings - electrical and mechanical drawings for build, reproducibility, and documentation.	Email	As Required	TBD

Security Classification	Unclassified // For Official Use Only to 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 type="checkbox"/> Other (Specify: _____) <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

 (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: 2014.08.26 10:18:42 -04'00'
 Arline W. Parker

 (Signature)
 Contracting Officer's Representative

 (print name) _____ (date)

Acknowledgement of receipt by Contractor:

William J. Taczan Jr.
 (Signature)
 Authorized Representative of Contractor

WILLIAM J. TACZAN JR. 27 AUG 14
 (print name) (date)

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

Copy to: