

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-09 , Rev. 0			
TI Revision Issue Date (if applicable)				
Original TI Issue Date	1 July 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	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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part of future development efforts. 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>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

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: #cccccc;"> <th style="width:10%;">Trips</th> <th style="width:10%;">People</th> <th style="width:15%;">Duration</th> <th style="width:20%;">From</th> <th style="width:25%;">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> </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> OCONUS <table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #cccccc;"> <th style="width:10%;">Trips</th> <th style="width:10%;">People</th> <th style="width:15%;">Duration</th> <th style="width:20%;">From</th> <th style="width:25%;">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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Deliverable(s)	<table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #cccccc;"> <th style="width:15%;">Deliverable Identifier</th> <th style="width:45%;">Description</th> <th style="width:10%;">Medium</th> <th style="width:15%;">Frequency</th> <th style="width:15%;">Due Date</th> </tr> </thead> <tbody> <tr> <td>A001</td> <td>Contractor's Progress, Status and Management Report</td> <td>Email</td> <td>Monthly</td> <td>TBD</td> </tr> <tr> <td>A002</td> <td>Presentation Material (sponsor format) - IPRs with HEL-JTO sponsor, technical, financial and programmatic reviews</td> <td>Email</td> <td>Quarterly and as Required</td> <td>TBD</td> </tr> <tr> <td>A003</td> <td>Revisions to Existing Government Documents - Reviews, edits, and updates of existing and developed PA-CoT documents including project technical, programmatic, and financial plans</td> <td>Email</td> <td>As Required</td> <td>TBD</td> </tr> </tbody> </table>	Deliverable Identifier	Description	Medium	Frequency	Due Date	A001	Contractor's Progress, Status and Management Report	Email	Monthly	TBD	A002	Presentation Material (sponsor format) - IPRs with HEL-JTO sponsor, technical, financial and programmatic reviews	Email	Quarterly and as Required	TBD	A003	Revisions to Existing Government Documents - Reviews, edits, and updates of existing and developed PA-CoT documents including project technical, programmatic, and financial plans	Email	As Required	TBD
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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
(The checked (X) Hazard and Safety Instructions are applicable to this TI)

Known Hazards: (NA)
 No Hazard or Safety Information applicable
 Other (Specify: _____)
 Other (Specify: _____)
 Other (Specify: _____)

TI ROM Cost Estimate:	<table border="1"> <tr> <td>0</td> <td>100</td> <td>200</td> <td>300</td> <td>400</td> <td>500</td> <td>600</td> <td>700</td> <td>800</td> <td>900</td> <td>1000</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	0	100	200	300	400	500	600	700	800	900	1000											
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This TI shall not be construed as a change to the terms or conditions of the subject contract/order.

PCO concurrence:

Christina S. Good
 (Signature)
 Contracting Officer

Christina S. Good
 (print name)

25 June 13
 (date)

Arline W. Parker
 (Signature)
 Contracting Officer's Representative

Arline W. Parker
 (print name)

25 June 2013
 (date)

Acknowledgement of receipt by Contractor:

[Redacted Signature]

(Signature)
 Authorized Representative of Contractor

(print name)

(date)

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

Copy to:

STEP-BY-STEP INSTRUCTIONS

The following table provides step-by-step instructions on how to complete the Technical Instruction (TI) template. The TI template is setup as a form. The grey boxes and check boxes indicate areas that are required to be filled out. To move through the fields simply use the tab key to move from one field to the next. If additional space is required for any block, continue on a separate sheet, indicating the relevant block name(s).

Routing should generally be as follows: The COR prepares the TI. If needed, the COR may obtain the ROM information from the contractor, including any travel and ODCs. Once the COR has finalized the TI, the COR submits the TI to the PCO for concurrence. After the PCO concurs, the PCO will return the TI to the COR for signature and submittal to the Contractor. The Contractor will return the signed TI to the COR. The signed TI will be maintained in the official COR file and the COR will make distribution as necessary.

BLOCK	INSTRUCTIONS (use the "Tab" button to navigate from field to field)
TI No./Revision No.	Assign a TI number. If the TI is revised, a revision number or letter is assigned.
TI Revision Date	Insert the date the TI revision is issued. This date will change with each subsequent revision.
Original TI Issue Date	Insert the date the original TI is issued. The issue date remains unchanged.
Purpose of Revision	Indicate the purpose of the revision, i.e., incremental funding, etc.
Contract/Task Order No.	Insert the contract and task/delivery order number (if applicable).
Government Agency/Activity	Insert the name of the agency/activity requesting the work, e.g., NAVSEA.
Sponsoring Office	Insert the sponsoring office's organization and code information, e.g. PEO-SUB and PMS 425.
Program/Technical Office	Insert the program/technical office's code information, e.g. John Doe, Code 25.
Contracting Officer's Representative (COR)	Identify the COR information.
Procuring Contracting Officer (PCO)	Identify the PCO information.
Contractor	Insert the name of the Prime Contractor who will be performing the work.
Contractor POC	Insert the Prime Contractor's information here.
Severability	Determine the severability of the tasking. (Note: Non-severable work represents a single undertaking or a requirement that was conceived as a single end product or result. Severable work, on the other hand, is conceived as a recurring requirement for the same type of service, to be furnished and paid for on an incremental basis).
Special Skills Required	Special skills required to complete the tasking must be identified here (e.g., welding certification, CPR training, etc.).
Applicable SOW/PBWS Paragraph Number(s)	Identify the applicable SOW/PBWS paragraph number.
TI Title	Insert brief TI title.

TI Description	This space is used to further identify or define the requirements. Do not insert (cut or paste) paragraphs from the SOW/PBWS in this area, as they are already identified in the "Applicable SOW/PBWS Paragraph Number(s)" block above. Do not provide instructions to the contractor as to how they are to accomplish the tasking, who they are to hire, or who they are to use as a subcontractor, as these determinations are made by the contractor.
Applicable Documents	Applicable documentation generally includes Mil-Standards/Specs, Special Instructions, etc. If none, insert N/A.
Government Furnished Information (GFI), Government Furnished Equipment (GFE), Government Furnished Material (GFM); Government Furnished Facilities (GFF)	Identify all Government Furnished Information, Equipment, Material, Facilities or other items provided by the Government, including the date provided/available, an adequate description, location, building number, serial numbers, model numbers and quantities, as applicable. Attachments may be used if the list is extensive, but should be identified in this block (e.g., "See Attachment 1 – Government Furnished Equipment"). If none, insert N/A.
Duty Location	Identify the location(s) where the work will be performed. This may be single or multiple locations on site, off site or both.
Temporary Duty/ Travel Requirements	Identify all travel anticipated to occur within the Continental United States (CONUS) or Outside the Continental United States (OCONUS). If none, insert N/A.
Funding Information	Identify the Labor or Other Direct Costs (ODC) funding identifier, followed by the associated Project or Program Name, appropriation FY, appropriation type and the funded amount, which can either be the total or an increment. If the TI is incrementally funded, the COR shall keep a running total of funding provided to date relative to the TI ROM total cost estimate in the official COR file.
Period of Performance	The period of performance identifies the time anticipated to complete the tasking.
Data Deliverable(s)	Identify all required data deliverables. Insert deliverable identifier (e.g., A001), description, required medium for delivery, frequency of delivery, and due date.
Security Classification	Identify Security Classification (e.g., Confidential; Secret; etc.). If no security classification is required or identified in the contract/TO, insert "Unclassified".
Hazard and Safety Information (The checked (X) Hazard and Safety Instructions are applicable to this TI)	Determine the appropriate Hazard and Safety Information. If there are "Known Hazards", list the known hazards. If known hazards are too numerous to mention, you may reference an attached document (e.g., see attached Exhibit 2 – List of Known Hazards"). Identify any unique instructions that deal with the identified known hazards.
ROM Cost Estimate	The COR shall fill-in total cost estimate information.