

## Engineering Support

# TECHNICAL INSTRUCTION (TI)

<b>Issue Date of TI</b>	30 January 2009
<b>TI No.</b>	<b>0002</b>
<b>Contract No.</b>	N00178-07-D-5218/FC01
<b>Task Order No.</b>	FC01
<b>Revision/Description</b>	Rev 6 – POP change to 4/30/2011 to end services - Service is to end when funds are depleted or when POP is reached, whichever occurs first. Contractor is to not authorized to work at risk.
<b>Government Agency</b>	NSWC Crane
<b>Vendor</b>	Rex Systems, Inc.
<b>Vendor POC</b>	Thomas Guelzow, II, (715)723-9313
<b>Human Capital Checklist Approval Number</b>	N/A
<b>Special Skills Required</b>	N/A
<b>Applicable SOW Paragraph</b>	3.1, 3.2, 3.3, 3.4, 3.4.1, 3.4.2, 3.4.3, 3.4.4, 3.4.5, 3.4.5.1, 3.4.5.2, 3.4.5.3, 3.4.5.4, 3.4.5.5, 3.4.6, 3.4.7, 3.4.8, 3.4.9, 3.5
<b>Task Description</b>	<p>The identified tasks assist with the achievement and sustainment of the AN/SPS-49's specified operational availability through development of Technical Data Packages (TDP), construction of prototypes (engineering design models), upgrade and procure material, components, modules and assemblies to support the prototype (engineering design models) builds, upgrades or replace defective or obsolete components.</p> <p><b>TASKS:</b></p> <p><b>General:</b></p> <p>The Contractor shall coordinate and accomplish engineering activities required to establish and manage the following configuration items: perform support analyses, assess overall system supportability and performance specifications, and then utilizing the results of these studies to define and implement the best sustainment option.</p> <p>The Contractor shall recommend and implement the best solution to mitigate the supportability and operation of various radar components/ modules/assemblies that affect system/subsystem performance.</p>

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	<p>The Contractor shall develop prototype (engineering design models) builds for the AN/SPS-49 Radar.</p> <p><b>Engineering Support Services:</b></p> <p>The Contractor shall perform engineering analyses and technical support that shall involve reliability calculations, design trade-offs, system performance analysis and requirement analysis. The Contractor shall provide recommendations describing the best sustainment solution based on analysis and supportability.</p> <p>Contractor provided efforts for AN/SPS-49 shall include, but not be limited to, the following assemblies:</p> <ul style="list-style-type: none"> <li>• Establishment of a full and complete Technical Data Package (TDP) for the assemblies identified by NSWC Crane</li> <li>• Perform a Cost of Ownership analysis for assemblies identified by NSWC Crane</li> <li>• Develop Test Program Sets that will be executed on GFE for assemblies identified by NSWC Crane</li> <li>• Design and fabricate necessary test fixtures for use with the GFE to test and validate assemblies identified by NSWC Crane</li> <li>• Provide prototype modules/assemblies for validation at the Contractor site for functional test and delivery for acceptance testing to be performed by the Government.</li> </ul> <p>Programmatic/Program Support Services: The Contractor shall provide monthly updates on support efforts and participate in Working Group meetings/telephone conferences.</p> <p>The Contractor shall develop and deliver prototype units for concept demonstration and concept maturity. The Contractor shall receive prior approval from NSWC Crane in order to proceed with any prototyping efforts.</p>
<p><b>Applicable Documentation</b></p>	<p>IAW paragraph 2.0 of the basic order.</p>
<p><b>GFI, GFE, GFM</b></p>	<p>IAW paragraph 4.0 of the basic order and:</p> <p>The Government shall furnish the following equipment for use by the Contractor in performance of activities related to this TI:</p> <ul style="list-style-type: none"> <li>• Teradyne M9100 series Test Station for functional TPS development</li> </ul>

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	<ul style="list-style-type: none"> <li>Huntron CCA Test Station for non-powered TPS development</li> </ul> <p>LSK PCB fabrication equipment for supporting test fixture development and prototyping</p>
<b>Duty Location</b>	NSWC Crane; Chippewa Falls, WI
<b>Temporary Duty/Travel Requirements</b>	<p>IAW paragraph 6.2 of the basic order and: Chippewa Falls, WI to NSWC Crane: 15 Trips, 2 people; 1 trip/month for 2 people for 1 week/trip</p> <p>Chippewa Falls, WI to NSWC Crane: 5 Trips, 1 people</p> <p>Chippewa Falls, WI to Seattle WA: 1 Trips, 2 people</p> <p><b>Chippewa Falls, WI to North Reading, MA: 1 Trips, 5 people for 5 nights (R02)</b></p>
<b>SLIN Number(s)</b>	1000 and 3000
<b>Period of Performance (POP)</b>	IAW paragraph 6.3 of the basic order. POP is from 2/18/2009 through <b>4/30/2011</b> , continuous from date of TI contingent upon award of award terms and fund availability.
<b>Data Deliverable (s)</b>	<p>IAW paragraph 5.0 of the basic order. All deliverables shall be submitted to <a href="mailto:shirley.n.armstrong.ctr@navy.mil">shirley.n.armstrong.ctr@navy.mil</a> <a href="mailto:amy.haworth.ctr@navy.mil">amy.haworth.ctr@navy.mil</a> (R02)</p> <p>0002A = (A001) Commercial Drawings/models and Associated List DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002A = (A002) Computer Software Product End Item DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002B = (A003) Conceptual Design Drawings/models DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002C = (A004) Conference Agenda DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002D = (A005) Conference Minutes DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002E = (A006) Contract Work Breakdown Structure (CWBS)</p>

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	<p>DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002F = (A007) Contractor's Progress Status and Management Reports DUE: <del>Monthly on the 5th day of each month.</del> Monthly on the 15<sup>th</sup> day of each month. (R01)</p> <p>0002G = (A008) Developmental Design Drawings/models and Associated Lists DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002H = (A009) ECP DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002I = (A010) Engineering Drawings DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002J = (A011) GFI Deficiency Report DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002K = (A012) Instructional Media Design Package DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002L = (A013) Interface Design Document DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002M = (A014) Requirement Specification (IRS) DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002N = (A015) Logistics Support Analysis Record Data DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002O = (A016) Presentation Material DUE: As Required in accordance with basic order, modification and TI.</p>
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	<p>0002P = (A017) Drawings/Model and Associated Lists DUE:</p> <p>0002Q = (A018) Revision to Existing Government Documents DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002R = (A019) Scientific and Technical Reports DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002S = (A020) Software Development Plan DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002T = (A021) Software Requirements Specification DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002W = (A022) Software Test Plan DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002X = (A024) Software Version Description DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002Y = (A025) Status of GFE Report DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002Z = (A026) Technical Data Package DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002AA = (A027) Technical Report-Study/Services DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002AB = (A028) Test Plan DUE: As Required in accordance with basic order, modification and TI.</p> <p>0002AC = (A029) Test Procedures</p>
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	DUE: As Required in accordance with basic order, modification and TI.
<b>Security Classification</b>	IAW paragraph 6.1 -- SECRET
<b>Hazard and Safety Information</b>	IAW paragraph 6.6
<b>Requiring Technical Activity (RTA)</b>	Brian Callahan, <a href="mailto:brian.callahan@navy.mil">brian.callahan@navy.mil</a>
<b>Contracting Officer's Representative (COR)</b>	Jerry Harrison, 812-854-3742 Jerry.harrison@navy.mil

Contingent Upon Task Order Modification Issuance to Increase Funding  
 Funding is currently available on the Task Order