Requestor: jfabian

Company Name:Rite-Solutions, Inc.Contract:N00178-04-D-4115

Request Status: Approved

Date Updated: 12/11/2016 8:59 PM **Date Submitted:** 12/9/2016 1:18 PM

Review Comments:

Team Member Name: Spatial Integrated Systems Inc dba SIS

Existing SeaPort Prime: Yes

Address: 5716 Cleveland Street, Suite 100

City: Virginia Beach

State: VA

 Zip Code:
 23462-9613

 CAGE Code:
 1BLA0

 DUNS:
 176073633

EPOC Name: Loretta DeMaio

EPOC E-mail: loretta.demaio@sisinc.org

EPOC Phone Number: 252-522-1456

Large Business:NoSmall Business:YesSmall Disadvantaged Business:NoWoman Owned Business:NoEconomically Disadvantaged
Women-Owned Business:No

Hub Zone Representation: No
Veteran Small Business: No
Service Disabled Veteran Owned: No
Emerging Small Business: No
8(a) Program: No

Technical Capability: Spatial Integrated Systems, Inc., provides research and development;

engineering development; applications engineering; software development; system/subsystem design, development and implementation, prototype development, technical documentation and data support; system integration; system configuration management; CAD/CAM analysis and design support; collaboration and decision support system development, integration, and implementation of reverse engineering; product development/marketing.

Tasking: TBD

Functional Areas: 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.11 3.12, 3.15, 3.16, 3.18, 3.20, 3.21

Subcontracting Goal: SIS is a small business, of no special classification, and will help Rite-

Solutions in meeting their subcontracting goals.

Past Performance:

PP#1

Title: Advance Autonomous Operations of Unmanned Vehicles (UxS) Customer: Office of Naval Research, Robert Brizzolara, Code 333, 703-696-2597, Robert.Brizzolara@navv.mil

Brief Description: SIS is developing, integrating and performing tests on multiple autonomous control systems that are hardened for operational use in sea states up to and including Sea State 3 (including a hardened Electro-Optical / Infrared Camera system). The system performs self-diagnosis of the autonomous control and sensor suite while being able to alert Command and Control (C2) operators to the need for man-in-the-loop decisions. The system can be integrated across all USV platforms and, has the capability for the autonomous control to be self-tuning, supervisory learning, and selflearning.

SIS has developed this hardware / software system using CARACaS as the autonomy software base that allows "Sliding Autonomous Control", defined as the capability to switch between various levels of autonomous control, i.e. from remote control up to full autonomy, and that can be integrated across all USV platforms as specified by ONR. This system is being thoroughly tested and stressed through a Modeling & Simulation Lab and is modified as required by lab analysis. It is then installed on a USV for at-sea testing in a real-world environment. A test and data collection plan are submitted to the government for approval, a comprehensive collection of data is completed at-sea and a full analysis of the collected data is completed and delivered in a written report to the Sponsor.

Functional areas covered in execution of the contract and demonstrations include: technology development and integration, operational event design and scheduling, safety and risk management planning, engineering and networking, hardware and software development, integration and maintenance, program management, and personnel utilization.

PP#2

Title: Multi-Platform Autonomy "SeaMob"

Customer: OSD-SCO, under contract to Air Force Materiel Command, Andrew Nuss, 703-526-2727

Brief Description: Sea Mob is an OSD - Strategic Capabilities Office (SCO) project that is currently sunderway. Sea Mob is expected to operate over the horizon from its operator. The autonomy and command and control systems are being developed to natively support low-bandwidth updates and minimal human interaction. Advanced autonomous monitoring of health and safety data onboard will allow independent operation with less required bandwidth than was possible in the past. CASPER is used for planning, with emphasis on shared world model updates over low bandwidth LOS and BLOS links. Sea Mob's Phase 2 and 3 goals include a large number of craft acting in a cooperative warfare scenario. Functional areas covered in execution of the contract and demonstrations include: technology development and integration, operational event design and scheduling, safety and risk management planning, engineering and networking, hardware and software integration and maintenance, program management, and personnel utilization.

PP#3

Title: M&SWP 3.0

Customer: Defense Information Systems Agency (DISA), under subcontract to American Systems Corp., Robert "Bud" Sichler, 703-968-5135, Robert.Sichler@AmericanSystems.com

Brief Description: The core component of maintenance planning activities is the M&SWP 2.0 application. M&SWP 2.0 is a Navy custom IT system designed in the early 1990s to support the life cycle maintenance of submarines. It now supports the maintenance requirements for SUBMEPP, and CPA. It currently manages ship/platform class maintenance plans, produces depot availability work packages, schedules and manages intermediate level maintenance, and accounts for accomplished periodic maintenance

requirements. Other Navy-developed applications have been integrated with M&SWP 2.0 to forecast maintenance material requirements, maintain the history and documentation of accomplished maintenance, and perform reliability-centered maintenance analyses. The objective of M&SWP 3.0 is to perform a technology refresh by replacing M&SWP 2.0 and other miscellaneous applications, with a Commercial-Off The-Shelf (COTS) ship maintenance planning solution for all ships in the Navy that meet the requirements of the MPAS CBP. B. The M&SWP 3.0 software solution is required to perform a technology refresh by replacing an aging set of applications, including M&SWP 2.0, providing the capability for SUBMEPP, SURFMEPP and CPA to perform maintenance planning in a common and cost efficient manner.