SECTION C DESCRIPTIONS AND SPECIFICATIONS

C-302 SPECIFICATIONS/STATEMENT OF WORK (DEC 1998)

Work under this contract shall be performed in accordance with the following Performance Work Statement (PWS):

Work under this task order shall be performed in accordance with the following Performance Work Statement (PWS):

SPAWARSYSCEN-CHARLESTON, Code 524, Network Architecture Engineering Branch, Teleport Management and Control System (TMCS)

1.0 INTRODUCTION

The Department of Navy, Space and Naval Warfare Systems Center Charleston (SSC Charleston) is responsible for the development of a Management and Control system which will be implemented through out the Department of Defense (DoD) Teleport Program. The Teleport Program is an ACAT IAM program currently being implemented by the Defense Information Systems Agency (DISA) Teleport Program Office (TPO) and Assistant Secretary of Defense National Information Infrastructure (ASD NII) as well as additional activities which support the current DoD Teleport program as it migrates to future generations. The program is divided into three generations spanning a timeframe from 2001 to 2012.

2.0 BACKGROUND

The mission of the DoD Teleport program is to provide the necessary satellite and terrestrial interfaces that are required for warfighters, who are deployed worldwide, access to the Defense Information Systems Network (DISN). Warfighter access must be seamless, interoperable, and economical while providing expanded communications, centralized integration, and contingency capacity.

The Teleport Management and Control System (TMCS) is an essential part of meeting this mission by providing the automation needed for technical control, nodal management, and resource management of the Teleport assets. TMCS allows the site operators to control, manage, and monitor the Teleport equipment via a single control system while providing an INMS circuit status to the RNOSC portion of the Theatre Network Operation Centers (TNCs) as well as situational awareness to the Global Satellite Support Centers (GSSC) / Regional Satellite Support Centers (RSSCs)

3.0 SCOPE

SPAWARSYSCEN Charleston, SC has been tasked with the responsibility to support various state-of-the-art communications initiatives. The responsibilities to support this effort are in conjunction with all tasks of the basic contract. In accomplishment of this tasking, the Contractor must be familiar with existing Teleport Management and Control System (TMCS) architecture, integration techniques, interfaces, and functional requirements, in providing support for the Teleport Management and Control System (TMCS) engineering, installation and In-Service Engineering Activity (ISEA) support.

4.0 PLACE OF PERFORMANCE

The work shall be performed at the contractor's facilities, SSC Charleston, and other government locations as follows:

a. Charleston, SC

b. Northwest, Chesapeake, VA

c. Ft. Monmouth, NJ

d. Wahiawa, HI

e. Lago Patria, Italy

f. Camp Roberts, CA

g. Fort Buckner, Japan

h. Ramstein, Germany

i. Landstuhl, Germany

j. Bahrain

k. National Capital Region.

5.0 APPLICABLE DIRECTIVES / REFERENCES

The contractor shall adhere to the following documents in accordance with paragraph 8.0, Performance Requirements:

a. DoD Teleport Generation 3 Analysis of Alternatives

b. DoD Teleport Program Plan

c. Navy Teleport Transition Plan

d. DoD Architecture Framework

e. DoDI 5200.40, DoD Information Technology Security Certification and Accreditation Process (DITSCAP).

f. Defense Information System Network (DISN) Mission Need Statement (MNS), 30 March 1995 (JROCM 047-95)

g. DISN Capstone Requirements Document (CRD), JROCM 048-96, 15 April 1996

h. Advanced Military (MILSATCOM) Capstone Requirements Document (CRD), US Space Command, 24 April 1998.

i. Memorandum of Agreement between United States Space Command and Defense

j. Information Systems Agency, 2 December 1999

k. Teleport ORD Approval, JROCM 140-00, 28 August 2000

l. Global Information Grid (GIG) Capstone Requirements Document (CRD), 30 August 2001 (JROCM 134-01)

m. CJCSI 6250.01 series (CJCSI 6250.01A, 10 December 2001), Satellite Communications

n. Joint Vision 2010

o. Joint Vision 2020

p. Teleport Program Generation 1 Milestone C (Production/Development) Acquisition Decision Memorandum (ADM), 7 June 2002

q. Teleport Program, Acquisition Program Baseline (APB) Agreement, 8 February 2005

r. Teleport Milestone C Acquisition Decision Memorandum (ADM) Amendment to Accelerate Generation I Mission Capability, 28 October 2002

s. Teleport Program Risk Management Plan, May 2003

t. DOD Directive 5000.1 series, The Defense Acquisition System, May 12, 2003

u. DOD Instruction 5000.2 series, Operation of the Defense Acquisition System, May 12, 2003

v. Defense Acquisition Guidebook, October 2004

w. Teleport Test and Evaluation Master Plan, 14 February 2003

x. Teleport Acquisition Decision Memorandum (ADM) Amendment to Purchase Extremely High Frequency (EHF) Terminals, April 2, 2003

y. CJCSI 6212.01 series (CJCSI 6212.01C, 20 November 2003), Interoperability and Supportability of Information Technology and National Security Systems

z. Teleport Program Configuration Management Plan, February 2004

aa. CJCSI 3170.01 series (CJCSI 3170.01E, 11 May 2005), Joint Capabilities Integration and Development System (JCIDS)

bb. CJCSM 3170.01 series (CJCSM 3170.01B, 11 May 2005), Operation of the Joint Capabilities Integration and Development System (JCIDS)

cc. Defense Planning Guidance (current)

dd. DOD Teleport Operational Requirements Document (ORD) (JROCM 116-04, July 9, 2004)

ee. Teleport Milestone C Acquisition Decision Memorandum (ADM) Amendment for Ka Band Capability and Technology Refreshment, February 9, 2005

ff. DOD Teleport Generation 2 Operational Requirements Document (ORD) (JROCM 091-05, May 2, 2005)

gg. SPAWAR CCB Handbook

hh. SPAWAR C4ISR Process Specification 402-042-06

ii. SPAWAR Installation Handbook

jj. DoD 5200.1-R, Information Security Program - Regulation, January 1997

kk. DoD Directive 8500.1, Information Assurance (IA), 24 October 2002

ll. DoD Instruction 8500.2, Information Assurance (IA) Implementation for Automated Information Systems, 6 February 2003

mm. DoD Information Technology Security Certification and Accreditation Process (DITSCAP) 5200.40, 7 October 1999

nn. DoD 8510.1-M, DoD Information Technology Security Certification and Accreditation Process (DITSCAP)

Application Manual, 31 July 2000

oo. DoD IA Publication 5239-13 (Certification and Accreditation of Navy IT Systems), December 2000

pp. Executive Order 12958, National Security Information, Executive Office of the President, July 1995

qq. Federal Information Processing Systems (FIPS) PUB 102, Guideline for Computer Security Certification

and Accreditation, National Institute of Standards and Technology (NIST), 27 September 1983

rr. DOD Teleport Management and Control Segment Specification Generation Two (SR-240-00-0005)

ss. N65236-DSEPROC-MAN-0001-1.4 Systems Engineering Process Manual, May 6, 2005

tt. N65236-DSWDPROC-MAN-0001-1.4 Software Development Process Manual, June 22,2005

6.0 SECURITY

Contractor's request for visit authorization shall be submitted in accordance with DOD 5220.22M (Industrial Security Manual for Safeguarding classified Information) not later than one week prior to visit. Request shall be forwarded via Space and Naval Warfare Systems Center (PO Box 190022, North Charleston, SC 29419-9022) Attn: Security Office, for certification of need to know by the specified COR/Task Order Manager (TOM). All personnel performing classified tasks under this project shall be cleared to a minimum of SECRET.

7.0 TASK ORDER MANAGER/COR DESIGNATION/

The Task Order Manager (TOM)/Contracting Officer's Representative (COR) for this task order is Charles (Chad) Morgan, Code 524, 843-218-4941, e-mail: chad.morgan@navy.mil An alternate technical point of contact is Ms. Tami Willis, Code 50P, 843-218-4764, e-mail tami.willis@navy.mil.

8.0 PERFORMANCE REQUIREMENTS

8.1 Engineering Support

8.1.1

Under this tasking the Contractor shall provide engineering support to SPAWAR-Charleston in the area of designing and implementing a Management and Control (M&C) capability for the DoD Teleport program. This support will include providing analysis of the requirements for specific element controllers within the various Teleport disciplines (SATCOM, Baseband, RF) and then to evaluate the various existing element controllers and solutions against these requirements. Additionally the Contractor shall provide an analysis to define an interface to integrate the control element into the overall TMCS architecture. The output of this task will be an M&C Element Interface Requirements document describing the M&C interfaces and capabilities for Teleport Generation Two, TMCS devices as directed by the TOM/COR or Alternate Technical Point of Contact. (Procurement)

8.1.2

Under this tasking the Contractor shall provide engineering support to SPAWAR-Charleston as a TMCS Subject Matter Expert (SME) in assistance of managing the TMCS project. The Contractor shall assist SPAWAR-Charleston in oversight of TMCS vendors, including TMCS development, testing, and integration and installation efforts. The Contractor shall assist SPAWAR-Charleston in managing milestones, risks, and performance during all aspects of the TMCS delivery cycles. (Procurement)

8.1.3

Under this tasking the Contractor shall support SPAWAR-Charleston in the attendance at various Integrated Product Team (IPT) meetings, including M&C, Integration and Implementation, and Baseband working group meetings. The Contractor shall provide SPAWAR-Charleston with all status as related to TMCS development, testing, integration and installation. (Procurement)

8.1.4

Under this tasking the Contractor shall support SPAWAR-Charleston with TMCS Installation and Integration activities at the Joint SATCOM Engineering Center (JSEC) as directed by the TOM/COR. These activities include but are not limited to: software integration and installation, TMCS training, hardware installation and integration, and TMCS software and interface testing. (Procurement)

8.1.5

Under this tasking the Contractor shall provide engineering support to SPAWAR-Charleston in the area of M&C system design. This support will include requirements definition and analysis, system design, evaluation and oversight of M&C systems as directed by the TOM/COR. (Procurement)

8.1.6

Under this tasking the Contractor shall provide engineering support to SPAWAR-Charleston in the area of designing, developing, and implementing a Management and Control (M&C) capability for the DoD Teleport program. This support will include a variety of tasks including, but not limited to: system engineering, software engineering, software development, technical support, testing, documentation, and integration support as necessary to support the TMCS Build 4 requirements as stated in the document titled DOD Teleport Management and Control Segment Specification Generation Two (SR-240-00-0005), including revisions and updates as they become available.

The Contractor shall prepare a Version Description Document (VDD) that describes the versions of each system component that shall be delivered for Build 4, for each site, including specific hardware and software configuration items. The Government will review the draft VDD. Once approved by the Government, this VDD shall become the version baseline for Build 4. This document shall be updated following any change or modification.

The Contractor shall work with the Government and other designated representatives in preparing a System Design Document (SDD) that describes the overall TMCS design and architecture, the base products used in the architecture, and the modifications made to the base product to satisfy the requirements of the TMCS specification. The SDD shall include a description of each software and hardware product, the relationship and interfaces between these products, functional and technical assumptions made in architecting the TMCS design, and the limitations, if any, of the TMCS design. All commercial standards used by the Contractor shall be identified in the SDD. The SDD shall also document design trade-offs, if any, made by the Contractor to meet cost or schedule restrictions. The Government shall review the draft SDD. Once approved by the Government, this SDD shall become the design baseline Build 4. (Procurement)

8.1.7

Under this tasking the Contractor shall provide engineering support to SPAWAR-Charleston in the area of designing, developing, and implementing a Management and Control (M&C) capability for the DoD Teleport program. This support will include a variety of tasks including, but not limited to; system engineering, software engineering, software development, technical support, testing, documentation, and integration support as necessary to support the TMCS Build 4 Simulator Upgrade. (Procurement)

8.1.8

The Contractor shall develop and submit for Government approval a TMCS Test Plan and Report for Build 4 that describes the Contractor's approach for testing. The plan shall include, but not be limited to, the following:

(a) Schedule of test, installation, and integration events

(b) Detailed test plans for Phase I and Phase II testing

(c) Identification of risks and mitigation plans for each phase

(d) Estimate of testing time required at the Joint SATCOM Engineering Center (JSEC)

(e) Detailed test plan for System Operation and Verification Test (SOVT)

(f) Generate Test Report addressing the outline of the Test Plan – include but limited to Pass/Fail/Unable to Observe (UTO)

As a method of risk reduction, the Contractor shall demonstrate the TMCS product in two (2) distinct tests. In Phase I testing, the Contractor shall demonstrate the product in terms of individual equipment control as defined in the TMCS specification. In Phase II testing, the Contractor shall demonstrate that the TMCS product performs all the requirements of the specification and is sufficiently mature for installation. The Contractor shall submit test reports from Phase I and Phase II for Government approval. The acceptance test shall be documented by a report of the System Operational Verification Test (SOVT). (Procurement)

8.1.9

The Contractor shall submit a Configuration Management Plan (CMP) for Build 4 that describes the standards and guidelines the Contractor shall follow to ensure the efficient control of the configuration baseline of the TMCS system. This plan shall cover the Configuration Items (CI) and Computer Software Configuration Items (CSCI) of the TMCS system including:

(a) Hardware,

(b) Software, and

(c) Supporting documents.

The CMP shall also describe the Contractor's plan for maintaining strict control of versions, changes, and updates and shall document the process for making changes to the baseline(s).

Additionally, the Contractor shall work in close conjunction with the Government's System Support Activity (SSA) to ensure strict configuration management control over all aspects of the TMCS system. The SSA is in place to maintain baseline description records to provide for configuration identification, change control, status accounting, compatibility, traceability, and integrity of configuration items for each build for each site. (Procurement)

8.1.10

Contractor shall participate in and support weekly status meetings, quarterly Technical Coordination Meetings (TCM), and system engineering meetings as scheduled. In these meetings, Contractor shall at a minimum provide the progress reports to date, milestone status, technical issues, and assessment of risk areas. The progress meetings will be held throughout the life of the contract. Support and participation shall be either on-site or telephonically.

TMCS program reviews and meetings between the Contractor and the Government will be conducted as described herein. Action items resulting from Contractor/Government reviews and meetings will be considered complete upon approval by the Government at the next program review. All meetings and reviews shall be held at the Government's facility unless otherwise specified by the Government. These meetings include the following:

a. Kick-Off Meeting

b. Technical Coordination Meetings

(Procurement)

8.2 Installation Support

8.2.1

The contractor shall provide personnel in support to the SSC Charleston TMCS Installation team. As a part of the SSC Charleston TMCS Installation the contractor's personnel will install and upgrade equipment, run and terminate cables, test connectivity; verify operation, red-line drawings, and other necessary tasks to support the SSC Charleston TMCS Installation team in accordance with the SSC Charleston TMCS Site Installation Plan. The contactor shall participate in and support weekly status meetings, quarterly Technical Coordination Meetings (TCM), and system engineering meetings as scheduled. The progress meetings will be held throughout the life of this contract. Support and participation shall be either on-site or telephonically. Contractor shall provide standard tools of the trade. (Procurement)

8.2.2

Following Government approval of the Implementation Readiness Review, the contractor shall deliver and install the software for the TMCS Build 4 system at the Teleport sites. The contractor shall provide vendor documentation in hardcopy and softcopy format as part of the demonstration for Government acceptance.

The TMCS shall be integrated with the Build 1, 2, and 3 equipment to be managed and controlled. The contractor shall demonstrate to the Government representative the ability of the TMCS system to meet the specification. The contractor shall conduct these tasks in such a manner that no unplanned or unapproved outages to the operation of the Teleport site occur during the TMCS installation, integration, and test.

Additionally, for each site, the contractor shall conduct a System Operational Verification Test (SOVT) at the completion of implementation of Build 4. The SOVT shall demonstrate and document that the system has been properly installed and provisioned, personnel are trained, all required equipment is properly connected, and the site is ready for operation. The SOVT will be conducted in two parts: Installation Checkout and System Performance Checkout.

8.2.2.1

Installation Checkout will consist of a Site Audit and an Inventory Survey: The contractor shall confirm that the TMCS is properly supported with the required equipment and publications.

a. Physical Configuration Inventory: The contractor shall complete a physical configuration audit including the recording of major subcomponent serial numbers.

b. Publication and Drawing Inventory: The contractor shall perform an inventory of publications and engineering drawings to ensure the site has been provide the appropriate technical and operator TMCS manuals, hardware, and software vendor supplied documentation, installation documentation, engineering drawings, and any other pertinent or required documentation.

c. Installation Inspection and Checkout: The contractor shall confirm the system has been installed in accordance with the specifications.

d. Cables and Connectors: The contractor shall perform a physical inspection of all cables and connectors to ensure they have been properly assembled, correctly terminated, and securely mated. In addition, the contractor shall verify that AC power is properly connected to the cabinets and to the individual equipment prior to energizing any of the equipment.

e. Mounting: The contractor shall ensure that the system, if rack mounted, is properly installed with sufficient clearance for servicing, full extension of all slides, full swing of all doors, and adequate cooling.

8.2.2.1

System Performance Checkout will consist of the following: