

# U.S. Naval Observatory (USNO)

ManTech helps solve some of our nation's most pressing cyber and digital challenges. The key to our success is our people, who bring technical excellence, operational expertise and dedication to mission success. We take the sensitivity and importance of our work very seriously – and we're helping our customers win battles every day.

At USNO, ManTech is responsible for the complete Systems Engineering life-cycle planning, execution and postproduction support of a mission-critical multi-site network.

## System Design

ManTech provided research and development support for a new design, including architecture, and installation for all USNO sites. This design replaces the existing infrastructure to support the USNO mission. It consists of a new network infrastructure, Computer Network Defense (CND)



architecture, compute, Virtual Desktop Interface (VDI), and storage environments (Network Attached Storage (NAS) or Storage Area Network (SAN)). The requirements and design were produced in accordance with the SSC Atlantic engineering process and SPAWAR, technical authority process.

ManTech supports the architectural, design, engineering, testing, and integration activities necessary to maintain the CND and CND services, including Host-Based Security System (HBSS), Assured Compliance Assessment Solution (ACAS), Yellowdog Update Modifier (YUM), internal Domain Name System (DNS), and external DNS of the USNO Data Center in order to meet security requirements.

ManTech applies network and IT best practices to identify and mitigate security risks.

#### **System Installation and Integration**

ManTech installs and integrates the new systems and services at customer locations. The task includes site survey, site survey report, Installation Design Plan, the physical new infrastructure installation, system installation and integration, system migration/cutover, System Operational Verification Testing (SOVT) and final As-built drawings. ManTech's tasking also includes all power and infrastructure upgrades required to support the new network.

# **Cyber Security and System Accreditation**

ManTech is involved in conducting R&D assessments of leading-edge technologies as part of the cyber-security compliance effort. ManTech is providing life-cycle cyber

security engineering assistance to include the following:

- Performing hardware and software analysis, conducting DISA STIGS, developing all IA documentation including IA strategic plans
- Conducting network and component assessments as part of the RMF process
- Preparing the DIACAP/RFM documentation required for certification and system accreditation.

### **Software Analysis**

ManTech engineers are conducting testing, evaluating hardware and software components, and performing integration and operational testing. ManTech provided the planning, assessment, code review, remediation support, and documentation to support the accreditation of software applications and scripts. ManTech developed the Information Technology Service Management (ITSM) and Lifecycle Management process document(s) for customer developed software, code revisions, code testing and code promotions in order to meet mission objectives and operational requirements. In support we provide:

- Secure Software Life Cycle Design (SLDC) and Documentation
- Secure Distributed Teaming with SharePoint Design for Integrated Product Design Teams



- Secure Virtual Machine Design and Integration to Support Full SLDC moving Designs from Research and Development to Pre-Production Test and Production in a Virtual Machine Environment with integrated Repositories
- Secure Software Design in a fully STIGED and Controlled environment with development of Program Mitigation and Firewall Rule Definition
- Software and Library Review and Remitigation using State of Art Tools such as Fortify with Cyber Security Software Engineers with goal to obtain Authority To Operate Certification and Accreditation

