**NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)**

**PERFORMANCE WORK STATEMENT (PWS)**

***\*Note that this sample has been revised from the source document on the Government Point of Entry as necessary to align formatting and applicable FAR procedures.\****

## 1.0 GENERAL BACKGROUND

The Office of Observation (OBS) is responsible for many fielded operational observation networks and observing systems for the National Weather Service (NWS). Within OBS, the Surface and Upper Air Division (SUAD), located in Silver Spring, Md., is responsible for assisting in the management of the Automated Surface Observing System (ASOS) the Cooperative Observer Program (COOP), systems associated with the Upper Air Program and the Voluntary Observing Ship (VOS) Program

The Evaluation Branch and the Sterling Field Support Center (SFSC) are responsible for systems operations support, site systems management activities, and provide operations requirements for planned improvements to field systems. It provides support for Development Test, System Test, and Operational Test and Evaluation, as well as deployment and direct field support for surface and upper air observations. It develops operating standards, procedures, and documentation; manages quality control of surface and upper air observations. The SFSC designs, develops, maintains, and documents software for NWS field operational surface and upper air weather systems and develops special equipment and network systems applications. It also provides support for training for surface and upper air observations to the field and new equipment. It provides international support for the NWS for surface and upper air observations.

The SFSC is a service-oriented organization with tasking coming from outside the SFSC. The SFSC is a matrixed organization with four operational sections; these are the Test Section, Field Support Section, Quality Management and International Support Section, and the Maintenance Support Section. These sections work together to staff incoming projects with personnel having the appropriate skills. The figure below illustrates the workflow process.

Intuitively each section has its primary function within the facility, thus to facilitate the proper execution of incoming projects, work groups are established with personnel from each section. These work groups develop the plans, processes (may include training), create schedules, and build test beds/stands as needed to facilitate the proper execution of a project. Priority of work is generally given to projects. Personnel not involved in projects are expected to work on assignments within their assigned section. All work assigned to contract staff is by direction of the onsite Project Manager.

The Maintenance Support Section consists of a technically skilled group responsible for all physical resources including those related to new projects, sustains the equipment through regular maintenance, and continually makes improvements toward a state-of-the-art scientific facility. The expertise of this group includes IT support for infrastructure, test resource maintenance, facility maintenance, and test stand design. Working with other assigned groups/personnel this group facilitates the deployment of new systems/equipment.

The Field Support Section is responsible for directly supporting those observations the field performs. This group’s expertise is on NWS regional and field office procedures for current observing systems, meteorological evaluation of field observations, management of observation network, and the deployment of new observing systems on a planned or emergency basis. Their expertise on NWS equipment is developed during testing and is necessary for deployment. The range of content covered by their expertise includes the meteorological significance of the observation, the life cycle of the observing system (cradle to grave), and end-user feedback.

The Test Section is responsible for the testing and integration of new technology and processing into an observing system or as a separate, new system. This group’s expertise is in the science of old and new observing technology, performance metrics through meteorological data analysis, and field reference systems. The range of content covered by their expertise includes all things related to the observing system- sensors, software, instrumentation vehicles, and data acquisition systems. Contract staff will be matrixed across all sections throughout the project life cycle to efficiently manage the workload.

The Quality Assurance and International Support Section is the scientific backbone of the NWS Surface and Upper Air observing programs. This section provides continuity of service across supported programs and within the SFSC. Their focus is on the observing methodology and measurement uncertainty attributed to physical meteorological properties. They establish measurement standards and quality assurance practices, which are first exercised by the Test Section, then promulgated through the Field Support Section to NWS Field Offices and the international meteorological and climate communities. The expertise of this group includes metrology, quality assurance protocols and monitoring, high-quality standard reference instrumentation, and scientific evaluation of current NWS and international observing methods. The range of content covered by their expertise includes laboratory and testbed measurements, NWS measurement and observing standards, and interagency collaboration on atmospheric observations. Because of their expertise, this section supports international climate observing programs such as WMO (RIC, GRUAN, CIMO).

The following information is provided as background concerning some of the systems/networks supported.

The ASOS is the nation’s primary land-based surface weather observing network. It is a joint DOC/DOD/DOT project with over 1000 observing systems. The ASOS Program is designed to improve maintainability, measurement quality and utility, and ensure the requirements for NWS & Aviation forecasts are met. Other surface systems will be supported as requested by the TM.

COOP technical support includes the nationwide network of sensors that record weather information for use in the climate community. The sensors record a variety of meteorological measurements including temperature, dew point temperature, and precipitation accumulation. The COOP program has the need to move from the wired Minimum/Maximum Temperature System (MMTS) to a wireless solution.

The Voluntary Observing Ship Program (VOS) is a network of volunteer crew members on nearly 1,000 ships around the world that observe the weather at their location, encode each observation in a standard format, and send the data over satellite or radio to the many national meteorological services that have responsibility for marine weather forecasts. This data is archived for future use by climatologists and other scientists. The United States VOS Program services about one quarter of the world's VOS fleet, providing ships' crews with weather observer training, handbooks and forms, observation encoding software, barometer calibration, the Mariners Weather Log, and weather observing tools.

The NWS provides technical support for 102 Upper Air Observing System sites including 10 Cooperative Hurricane Upper Air Stations (CHUAS). All of these sites are supported by SFSC. These activities include the implementation of improved upper air observing equipment including the surface observing equipment (supports upper air operations), upper air tracking systems to include the migration to the 403 MHz band, radiosondes, and associated data acquisition and communication systems. The SFSC is also supporting the Alaska region in their plan to demonstrate the feasibility of using a hydrogen generator at select sites within the region.

In addition to the program related support, the contractor will be tasked to assist the Government with modernization and maintenance of the laboratory and associated resources and processes. This includes the developing and implementing a quality management program.

# SCOPE

The SFSC has a matrixed project orientated work environment; as such, flexibility is key to success. Tasking for the SFSC originates in seven functional areas, of these, four are program related, and three are specific to the SFSC. It is important to note the three non-programs related functions are critical to carrying out program-related support. The programs supported are; Cooperative Observing, Upper Air, Surface Observing and Shipboard observations. Support for these programs is a cradle to grave mission requirement, which includes system development, testing, deployment and field support including help desk functions.

The other three functional areas provide the infrastructure to support the SFSC’s test and evaluation programs and the NOAA and Weather Service’s commitment to the global weather community, including private industry. These functional areas are; (1) Quality Management and International Support (QM&IS), (2) infrastructure support, (3) the evaluation and advancements of new technologies. This includes operating and maintaining state-of-the-art labs for durability testing and the calibration of meteorological equipment (pressure, temperature, relative humidity, and winds) in a manner compliant with ISO 17025 or simply put analogous to a WMO Regional Instrumentation Center (RIC).

Because of the dynamic nature of the observing programs being modernized, and new program support the staffing level will increase over time reaching a maximum of about 58 personnel. It is estimated that the normal complement of personnel is 30 contractors to sustain minimal program test support, field support, laboratory and quality management support, and infrastructure support. Significant travel will be required throughout this contract to support field operations and deployment of new equipment. Staff will consist of both professional and technician type labor categories. It is estimated staffing requirements may start to decrease at the end of year three.

The Government Task Managers (TM) or their designees are responsible for Disseminating all tasks through the on-site contract Project Manager and setting priorities under each task order. Any changes in relation to price, schedule, or performance shall be authorized by the Contracting Officer. The Contractor shall be responsive to all tasks assigned under this task order.

# OBJECTIVE

Operate and maintain a state-of-the-art metrological laboratory/facility for the evaluation and life cycle support of equipment and software used to make meteorological observations. All calibration laboratories shall be operated in a manner which is compliant with ISO 17025. Contract staff shall support, conduct, and document SUAD’s test and evaluation projects in a manner which is consistent with government regulations listed below.

# APPLICABLE DOCUMENTS

#### Compliance Documents

The following documents provide specifications, standards, or guidelines that must be complied with to meet the requirements of this contract:

* + - * *SFSC Quality Manual (Draft)*
			* *SFSC Laboratories SOP*
			* *SFSC Test Plans & Test Reports*

#### Reference Documents

The following documents may be helpful to the Contractor in performing the work described in this document:

* + - * *NCSLI Publications*
			* *ISO 17025*
			* *WMO Publications*
			* *NWS Directives*

# PERFORMANCE REQUIREMENTS SUMMARY

This contract includes a Performance Requirements Summary (PRS) located in section 17.

## SPECIFIC REQUIREMENTS/TASKS

* The Contractor shall provide technical support services for programs under the purview of the Evaluation Branch.
* The Contractor shall be responsible for coordinating task activities and for reporting the completion of all milestones in accordance with agreed-to schedules. The contractor shall use an existing or future work request form to capture the day to day tasking.
* The contractor shall notify the requester and TM via email with the completed work request form attached upon completion of work.
* The Contractor shall notify the requester and TM one week before a due date, if it becomes apparent the date cannot be met.
* The Contractor shall collaborate with the Government to prepare task plans, staff work assignments, projected schedules and milestones for completion for each work assignment and deliver these to the Government TM for approval on a weekly basis.
* The Contractor shall provide status reports documenting work-in-progress or completed work and updated schedules on a weekly basis to the TM,
* The contractor shall ensure reports are delineated by task and by individual and include a list of all action items as well as a list of work orders created during the last week. The contractor shall ensure the observing systems in part or in entirety produce scientifically sound data, which conforms to National and International standards.
* The Contractor shall provide timely response to operational field problems and concerns related to operational systems.
* The Contractor shall perform activities associated with the integration and field deployment of new and modified observational equipment, software, and procedures.
* The Contractor shall assist in the development and/or evaluation of new technologies (including algorithms).
* The Contractor shall perform or support all facets of testing associated with supported programs.
	+ Experimental
	+ Developmental
	+ End-to-End tests
	+ System Test
	+ Operational Acceptance Test
* The Contractor shall support program related acquisitions to include, but not limited to:
	+ Equipment
	+ Calibration Services
	+ Software
* The Contractor shall support deployment of new and/or modified system
* The Contractor shall provide augmented operational support services as needed /as requested bases for mission related activities. Services include, but are not limited to:
	+ Modification note clarifications,
	+ Help desk support
* The Contractor shall develop and maintain government approved documents on SFSC activities and SFSC supported projects.
* The Contractor shall participate in government approved conferences associated with the SFSC mission.
* The Contractor shall prepare test plans, test procedures, and schedule of test activities for federal review.
* The Contractor shall prepare test reports and presentations in support of test activities.
* The Contractor shall prepare documents and attend conferences/meeting as requested by government TM
* The Contractor shall travel as requested by government TM
* The Contractor shall support resolution of deficiencies found in the operational releases of program/mission applications.
* The Contractor shall develop and maintain applications to support program activities, including system simulators
* The Contractor shall provide support to the Government during their public outreach activities
* The Contractor shall continue to improve the SFSC’s help desk support for operations (including CHUAS).
* The Contractor shall augment/support the NWS training and logistics support centers for current and new observing systems.
* The Contractor shall assist with or perform problem resolution and emergency response for supported activities on an as requested basis.
* The Contractor shall conduct data continuity studies in accordance with NWS policies and directives.
* Contractor shall use the Engineering Management Reporting System (EMRS) to create work orders for the following, but not limited to: IT change request, IT trouble tickets, equipment failures, and facility discrepancies.
* The Contractor shall conduct testing at locations other than Sterling (this may require maintenance of remote test beds)
* The Contractor shall develop or assist in the development of manuals, user guides, maintenance notes and other operational documents.
* The Contractor shall assist the government in maintaining state-of-the-art laboratories, which operate within the guidelines, established for a level three or four RIC. This includes but is not limited to observing systems, test beds, buildings and associated systems, chambers, wind tunnel, shop equipment, program-related system.
* At least two contractors shall obtain and maintain Certified Calibration Technician Credentials.
* All laboratories must be kept in a safe and presentable workspace, free from clutter and storage.
* The Contractor shall assist the Government in establishing a fee-for-service program and processes for evaluating new technologies.
* The Contractor shall collaborate with national and international communities involved with meteorological measurements and observations on behalf of the National Weather Service.

In addition to personnel, assigned fulltime to support the activities associated with this PWS, the Contractor shall be asked to provide specialized personnel on an as-needed basis to fill special project needs. From time to time, there will be physical requirements to install and tear down equipment/test beds at the SFSC and remote test sites.

# TASK ONE - Field Support

The Contractor shall operate and upgrade the SFSC US and Caribbean contact center functions. Hours of operation for Operational help desk contact support shall encompass the duration of two hour prior to 00Z until two hour after 12Z. The contact center is anticipated to provide support at two levels: Level I requirement requires staffing 7 days a week including holidays, Level II requires staffing 5 days a week and excludes holidays. Level I support is not anticipated to exceed a five year period, contingent on federal requirements.

The contact center is operated on an as-needed basis; thus when personnel are not actively engaged in field support, personnel shall work on activities associated with their primary assigned duties. Place of performance shall be conducted at the Sterling, VA and Silver Spring, Md offices; and under operational requirements that require staff to support alternate locations where extenuating circumstances arrived and has been approved by the COR.

* The Contractor shall operate a call center for supported programs.
* The Contractor shall implement a ticketing system, conforming to all the IT Security Requirements, for documenting and tracking calls.
* The Contractor shall provide Quality Control of the NWS supported systems
* The Contractor shall develop and provide onsite and offsite training for field personnel.
* The Contractor shall support activities associated with the deployment of new or modified systems
* The Contractor will assist the government in migration and support services of the ASOS Operations and Monitoring Center (AOMC) Support Center into SFSC operations and infrastructure.
* The Contractor shall produce monthly status reports

# TASK TWO. ASOS O&M Support

In general, testing and field support for ASOS O&M encompasses a wide range of activities supporting in-situ systems. The Contractor will write plans, reports, test, evaluate, and conduct analysis for, but not limited to:

* Developing and documenting meteorologically sound algorithms for use with NWS systems.
* Conduct tests for ASOS hardware and software to include the use of simulators.
* Assist in deployment of new or modified systems
* Assist headquarter and field sites with problem resolution
* Conduct data continuity studies
* Assist in the development of plans for acquisition review for equipment/materials to support test program activities.
* Supports ASOS SLEP as required.
* New Projects as requested
* Plan and support the activities associated with the acquisition of resources to support test programs. This includes generation of procurement documentation in the form of market research, requirements, justifications, and Statements of Works.
* The Contractor shall produce monthly reports for the ASOS TM
* The Contractor shall obtain a surface certification as noted in section 15 and the PRS

# TASK THREE. ASOS Service Life Extension Program (SLEP)

The SLEP is a tri-agency project created for modernization of the ASOS systems. The contractor will write plans, reports, test, evaluate and conduct testing on the new SLEP hardware and software for ASOS.

* Developing and documenting meteorologically sound algorithms for use with NWS systems.
* Conduct tests for ASOS hardware and software to include the use of simulators.
* Draft test procedures for Government review and approval to fully test the SLEP ACU/DCP system
* Assist headquarters with problem resolution
* Maintain and update the Rational Team Concert database Dynamic Object Oriented Requirements System (DOORS)
* Evaluation of New Technologies
* The Contractor shall produce monthly reports for the ASOS TM

# TASK FOUR. Upper Air O & M SUPPORT

In general, testing for upper-air O&M encompasses a wide range of activities including, but not limited to: writing test plans, reports, test, evaluate, and conduct analysis for, but not limited to:

* US and Caribbean Upper-Air networks
* Conduct radiosonde day and nighttime test flights (may include weekend and inclement weather).
* Test flights that may require travel to remote test sites as requested by the TM
* Balloon tests
* Engineering changes
* Radiosonde workstation software
* Support of System Tests and Operational Test and Evaluation as requested
* Evaluation of Automatic Launchers
* Evaluation of New Technologies
* New Projects as requested
* Develop user interfaces and databases to support evaluation and improvement within the RRS workstation (RWS) application, field inventory management capabilities, and other RWS improvements when requested by the Government.
* Conduct support flights for other SFSC mission requirements. This includes flight and environmental testing.
* The Contractor shall assist in activities related to Radiosonde Surface Observing Instrumentation System (RSOIS), Precision Digital Barometer (PDB), and Global Positioning System/Meteorology (GPSMet) upgrades.
* Contractor will assist in gathering procurement documentation in the form of market research, requirements, justifications and Statements of Works.
* The contractor shall assist with NPROVS processing of satellite and model data analysis.
* The Contractor shall produce monthly reports for the UA TM.
* The Contractor shall obtain an upper air certification as noted in section 15 and the PRS

# TASK FIVE. RFMP SUPPORT

RFMP support is limited to supporting the activities associated with the transition from 1680 MHz to 403 MHz. Contractor will write plans, reports, test, evaluate, and conduct analysis for, but not limited to:

* Test vendor evaluation to include field testing at the SFSC and remote locations
* Evaluation of vendor products within the chambers at the SFSC
* Participation within several NWSHQ working groups for this project
* Assist in deployment of new or modified systems.
* Support deployment activates for MROS and AROS
* Develop training materials
* Support call center activities
* Developing analysis tools
* Provide test result updates for use in the Rational Team Concert database (DOORS)
* The Contractor shall produce monthly reports for the RFMP TM

# TASK SIX. COOP SUPPORT

In general, testing and field support encompasses a wide range of activities supporting in situ systems. Contractor will write plans, reports, test, evaluate, and conduct analysis for, but not limited to:

* Wireless MMTS project
* Engineering Changes
* New technologies
* New projects as requested
* The Contractor shall produce monthly reports for the COOP TM.
* The Contractor will continue to support the NWS Training Center (NWSTC) by performing guest lectures, at their request.
* Assist in deployment of new or modified systems.
* Assist headquarter and field sites with problem resolution
* Contractor will assist in gathering procurement documentation in the form of quotes, requirements, justifications and Statements of Work.

# TASK SEVEN. VOS SUPPORT

The SFSC supports the NWS Voluntary Observing Ship (VOS) program by testing and characterizing the performance of new instrumentation introduced into its observing portfolio. The SFSC also serves as a contact center to assist VOS operations and conducts work request issued by program management. The contractor shall work with the federal TM to manage and improve VOS support efforts in the following, but not limited, ways:

* record all work request received from program management and field sites and report weekly on their status until completion;
* plan, coordinate, and implement hardware modifications, retrofits and rehabilitation to meet changing program requirements;
* provide logistical and technical assistance to program management and field sites;
* develop documentation to track program support and implement a quality assurance system; and
* Routinely participate in VOS meetings invited to by the program.
* The Contractor shall produce monthly reports for the VOS TM. For the duration of the project

# TASK EIGHT. Operations of Calibration Laboratories

The SFSC has three calibration laboratories and one environmental chamber laboratory. The calibration laboratories include a Pressure, Hygrothermometer, and Wind Speed Laboratories. The environmental chamber laboratory includes a couple large walk-in, Similitude, and Salt/Fog chambers. These labs are critical to the success of the SFSC test program. They allow the simulation of weather conditions and the uncertainty characterization of test measurements. The contractor shall work with the TM to develop methods and procedures to support the operations of SFSC laboratories and perform the following at a minimum:

* All laboratories shall be maintained in accordance with ISO 17025.
* annually calibrate the Primary Standards with external ISO 17025 accredited vendors;
* annually calibrate Secondary and Working Standards in-house;
* develop SOPs for using laboratory instrumentation and calibration standards;
* all relevant personnel shall be certified for using the laboratories in accordance with SFSC in- house certification processes;
* develop user guides for measurement systems;
* maintain performance history of measurement performance for measurement systems and standards;
* review and maintain all documentation for measurement systems and Standards;
* maintain proficiency in the use and application of laboratory instrumentation;
* use LabVIEW and other software languages to automate calibration procedures; and
* Maintain a safe, clean, and state-of-the-art laboratory.
* The Contractor shall produce monthly reports for the QA TM.

The contractor shall work with the TM to manage and maintain the SFSC support effort to the Pressure Standards Laboratory (PSL) Program. The contractor shall communicate to the TM status and schedule changes promptly and produce weekly status reports highlighting task completion schedules, work schedule variation, and other milestones. The current level of support to the PSL shall be maintained and improved upon. The contractor shall provide the following support at a minimum:

* conduct maintenance to the field barometers to ensure good performance;
* ten work days or less turnaround time for calibrating and resolving operation issues with field sites using barometers serviced by the PSL;
* limit field sites use of barometers that are past due their calibration date;
* assist the government in developing and instituting a quality assurance program;
* recommend logistic stocking levels
* shall conduct troubleshoot techniques to minimize operational equipment down time
* maintain a record of barometers performance and stability;
* maintain a database of status and location and monitor calibration cycle and performance of all fielded and un-fielded barometers calibrated by the PSL;
* test and troubleshoot returned barometers and use spare parts to repair unit if possible;
* Coordinate repair of barometers with manufacturer if it cannot be repaired in house;
* provide logistical and technical assistance to field;
* plan, coordinate, and implement hardware modifications, retrofits and rehabilitation to meet changing program requirements;
* develop SOPs for PSL operations, including but not limited to, updating SOPs for monitoring, receiving, evaluating functionality, calibrating, and shipping barometers;
* maintain PSL workspace areas clean and free of clutter;
* develop a continuity of operations document that covers procedures and management;
* record all work requests received from field sites and their status of completion

# TASK NINE. Quality Management and International Support

The SFSC has been working to establish a Quality Management and International Support (QM&IS) Section. This section is the scientific backbone of the SFSC and the NWS surface and upper air test programs. This section provides continuity of service across supported programs and within the SFSC. Their focus is on the observing methodology and measurement uncertainty attributed to physical meteorological properties. They establish measurement standards and quality assurance practices, which are first exercised by the Test Section, then promulgated through the Field Support Section to NWS Field Offices and the international meteorological and climate communities. The expertise of this group includes metrology, quality assurance protocols and monitoring, high-quality standard reference instrumentation, and scientific evaluation of current NWS and international observing methods

The QM&IS operates and maintains calibration laboratories for temperature, pressure, relative humidity, and winds. Historically these labs have only supported NWS operational observing programs. As a new role, these labs will be supporting NOAA's desire to become a leader in the global meteorological community; this section is/will be supporting international climate observing programs such as WMO (RIC, GRUAN, and CIMO). The goal for the base year of this contract is to have the pressure and wind laboratories compliant with the requirements for a WMO RIC. Other labs will be brought into compliance by the end of the first option period. The SFSC will also be fostering a fee-for-service program and avenues to collaborate with private industry for evaluation of new technologies. The overarching task is to assist the government with developing and maintaining state-of-the-art facilities dedicated to advancing observing technologies and processes. Tasks associated with this effort include but are not limited to the following:

* The Contractor shall maintain standards for Pressure Standards Laboratory. Support may include, but not be limited to:
	+ helping desk, updating website and inventory, changing batteries, replacing damaged parts, recalibrating, reprogramming the unit, and returning the instruments to a field site. (If the problem is more severe, then the unit(s) is returned to the manufacturer for repair under a negotiated RMA)
* The Contractor shall develop and maintain a quality assurance program in support of the facility test programs and laboratories operations. As a minimum this includes:
	+ Handbook of procedures
	+ Audit Plan
	+ Personnel Certification Program
	+ Workflow management plan.
	+ Ensure measurements are within NWS and WMO requirements for accuracy.
	+ Develop and maintain user’s guides for all laboratory resources.
	+ Develop SFSC documents on the theory of operation for laboratory standards and other basic sensor types as necessary.
	+ Maintain tractability and uncertainty records for laboratory and calibrated assets.
* The Contractor shall operate and maintain the SFSC Laboratories in a manner consistent with a level four RIC.
* The Contractor shall coordinate calibration cycles and track all units calibrated (including property control, calibration times and location of equipment).
* The Contractor shall support the NOAA/NWS WMO and other international initiatives as requested.
* The Contractor shall support the SFSC/NESDIS/Howard University GRUAN operations. This includes flight and environmental testing.
* The Contractor shall assist the Government in web application development and maintenance. This includes both the SFSC public and private websites.
* The Contractor shall upgrade software data analysis tools and procedures to automate the data collection and analysis. Contractor will conduct data analysis and conduct Quality Control to ensure the data is meteorologically sound. This can be done using either commercially and internally developed software. Contractor shall have familiarity with LABVIEW programming
* Contractor shall develop multiple databases and software interfaces to use with SFSC maintained equipment and systems. The Contractor shall develop a database with user interface for queries to support data storage for test programs. Contractor shall finish the relational database that stores all sensor (surface climate and upper air) and related data in the database. The database shall support/automate data acquisition, data analysis, and report writing
* Contractor shall also operate laboratory assets in support of test programs. The Contractor shall have at least two staff member’s proficient in the use of all laboratories at all times.
* The Contractor shall publish laboratory related documents.
* Contractor shall gathering quotes, and generates requirements, justifications, for acquisitions supporting the PWS.
* The Contractor shall produce monthly reports for the QA TM.

# TASK TEN. INFRASTRUCTURE SUPPORT

SFSC Infrastructure Support believes with technological innovation and improvements; the Sterling Field Support Center’s position within the National Weather Service shall be greatly enhanced. It strives to anticipate those technological needs and to provide the leadership to create and implement such innovations. The infrastructure Support Services Section contains three functional group components: Electronics Technicians, Facility maintenance staff, and Information Technology members. To succeed in this overall mission support, the following activities must be accomplished:

* The Contractor shall assist in creating an OSHA compliant work environment.
* The Contractor shall report all safety issues to government safety officer and assist in providing corrective actions. Staff will assist in maintaining Safety Occupancy manuals, Material Safety Sheets and Environmental hazard documents through periodical inspection.
* The Contractor shall report all security issues to government security officer and assist in providing corrective actions.
* The Contractor shall assist in the development and review of documents associated with installation, operation, and maintenance of equipment.
* The Contractor shall assist in the deployment of new/modified equipment to support field operations.
* The Contractor shall assist in administering the IT infrastructure to include, implementation of functional workstations as demands dictate.
* The Contractor shall develop Standard Operating Procedures (SOPs) for maintaining test assets, including the Sterling test chambers. The Contractor is authorized to have some SOP’s contain NWS proprietary information, which will be identified as proprietary. SOPs will be created on an as- needed basis for the Contractor to maintain proficiency. SOP development shall be approved by the appropriate Lead TM.
* The Contractor shall develop and maintain equipment status database for operational and non- operational systems (chambers, wind tunnels, test beds).
* The Contractor shall conduct operational evaluations of existing chambers and develop IT interfaces and Data Acquisition Systems for Chamber use.
* The Contractor shall assist in developing and maintaining a secure IT infrastructure by providing IT maintenance, documentation, and support at the SFSC managed facilities. This includes minor hardware, account setup, and installation of office application programs, and may include network assurance/security responsibilities for NWS required updates or modifications. Contractor shall also monitor and maintain the Voice over IP (VoIP) system. In addition, the contractors shall assist the Government with bringing IT resources up to DOC/NOAA standards.
* The Contractor shall assist in developing a professional work environment; including the organization and cleaning of all SFSC test assets, the replacement/surplus of old and obsolete equipment and implement a clean-as-you-go concept. Contractor will assist in the responsibility for safe operation of shop area and resources.
* The Contractor shall perform periodic and impromptu test site and test bed maintenance and upgrades on the legacy and future test equipment, to include IT support at the Sterling facility.
* The Contractor shall perform repairs and preventive maintenance on all physical facility resources or work with the government to have the necessary work completed.
* Contractor shall gathering quotes, and generates requirements, justifications, for acquisition supporting the PWS.
* The Contractor shall produce monthly reports for the Facility TM

## CONTRACTOR PERSONNEL

The Government requires that all contractors that have specific roles which support test programs or have Laboratory work as their primary function of their job, including the appropriate Project Manager, be certified to perform those functions. These contractors are required to earn the “Certificate of Authority to take Observations.” Or an SFSC certification to work in and operate laboratory equipment. These are required for safety of personnel and property. Duration for meeting this requirement is defined in TECHNICAL EXHIBIT 1. The National Weather Service as defined under SFSC Quality Manual (Draft) or other approved third party issues certificate. Additionally the Government requires that at least two people be certified calibration technicians. Duration for meeting this requirement is defined in TECHNICAL EXHIBIT 1. The certificate is issued by the authorized third party authority or upon satisfactory completion of the SFSC process/requirements.

# QUALIFIED PERSONNEL

#### KEY PERSONNEL

Before replacing any individual designated as *Key* by the Government, the Contractor shall notify the Contracting Officer no less than 15 business days in advance, submit written justification for replacement, and provide the name and qualifications of any proposed substitute(s). All proposed substitutes shall possess qualifications equal to or superior to those of the *Key* person being replaced, unless otherwise approved by the Contracting Officer. The Contractor shall not replace *Key* Contractor personnel without approval from the Contracting Officer. The following Contractor personnel are designated as Key for this requirement. Note: The Government may designate additional Contractor personnel as *Key* at the time of award.

* On-site Team Lead
* Personnel having a primary role in Quality Management
* Personnel having a primary role supporting CCT
* Personnel performing RFMP deployment roles

# PROJECT MANAGER/ONSITE TEAM LEAD

The Contractor shall provide an Onsite Team Lead who shall be responsible for all Contractor work performed under this PWS. The Team Lead shall be a single point of contact for the Contracting Officer and the COR. The name of the Team Lead, and the name(s) of any alternate(s) who shall act for the Contractor in the absence of the Team Lead, shall be provided to the Government as part of the Contractor's proposal. The Team Lead is further designated as *Key* by the Government. During any absence of the Project Manager, only one alternate shall have full authority to act for the Contractor on all matters relating to work performed under this contract. The Team Lead and all designated alternates shall be able to read, write, speak and understand English. Additionally, the Contractor shall not replace the Team Lead without prior notification to and approval from the Contracting Officer.

The Team Lead shall be available to the COR via telephone between the hours of 09:00 and 16:00 EST, Monday through Friday, and shall respond to a request for discussion or resolution of technical problems within 24 hours of notification.

# EMPLOYEE IDENTIFICATION

Contractor employees visiting Government facilities shall wear an identification badge that, at a minimum, displays the Contractor name, the employee’s photo, name, clearance-level, and badge expiration date. Visiting Contractor employees shall comply with all Government escort rules and requirements. All Contractor employees shall identify themselves as Contractors when their status is not readily apparent and display all identification and visitor badges in plain view above the waist at all times.

Contractor employees working on-site at Government facilities shall wear a Government issued identification badge. All Contractor employees shall identify themselves as Contractors when their status is not readily apparent (in meetings, when answering Government telephones, in e-mail messages, etc.) and display the Government issued badge in plain view above the waist at all times. Badges will not be worn in the shop area, laboratories or in other environments which present a safety hazard.

# EMPLOYEE CONDUCT

Contractor’s employees shall comply with all applicable Government regulations, policies and procedures (e.g., fire, safety, sanitation, environmental protection, security, “off limits” areas, etc.) when visiting or working at Government facilities. The Contractor shall ensure Contractor employees present a professional appearance at all times and that their conduct shall not reflect discredit on the United States or the NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION. The Team Lead shall ensure Contractor employees understand and abide by NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION established rules, regulations, and policies concerning safety and security.

# REMOVING EMPLOYEES FOR MISCONDUCT OR SECURITY REASONS

The Government may, at its sole discretion (in coordination with the Contracting Officer where practical), direct the Contractor to remove any Contractor employee from NOAA facilities for misconduct or security reasons. Removal does not relieve the Contractor of the responsibility to continue providing the services required under the contract. The Contracting Officer will provide the Contractor with a written explanation to support any request to remove an employee.

## SECURITY

Contractors will have access to unclassified Security and/or Acquisition Sensitive Information under this PWS. Contractor employees shall safeguard this information against unauthorized disclosure or dissemination and are required to sign an agreement of non-disclosure statement.

Contractors will abide by all security government established requirements, including local policies approved by the Governments Site manager and SFSC security officer.

#### Physical Security

The Contractor shall be responsible for safeguarding all Government property provided for Contractor use. At the close of each work period, Government facilities, equipment, and materials shall be secured.

#### Key Control:

The Contractor shall establish and implement methods of making sure all keys/key cards issued to the Contractor by the Government are not lost or misplaced and are not used by unauthorized persons.

NOTE: All references to keys include key cards. No keys issued to the Contractor by the Government shall be duplicated. The Contractor shall develop procedures covering key control that shall be included in the Government Quality Control Plan. Such procedures shall include turn-in of any issued keys by personnel who no longer require access to locked areas. The Contractor shall immediately report any occurrences of lost or duplicate keys/key cards to the Contracting Officer.

In the event keys, other than master keys, are lost or duplicated, the Contractor shall, upon direction of the Contracting Officer, re-key or replace the affected lock or locks; however, the Government, at its option, may replace the affected lock or locks or perform re-keying. When the replacement of locks or re-keying is performed by the Government, the total cost of re-keying or the replacement of the lock or locks shall be deducted from the monthly payment due the Contractor. In the event a master key is lost or duplicated, all locks and keys for that system shall be replaced by the Government and the total cost deducted from the monthly payment due the Contractor.

The Contractor shall prohibit the use of Government issued keys/key cards by any persons other than the Contractor’s employees. The Contractor shall prohibit the opening of locked areas by Contractor employees to permit entrance of persons other than Contractor employees engaged in the performance of assigned work in those areas, or personnel authorized entrance by the Contracting Officer.

#### Combination Control:

The Contractor shall establish and implement methods of ensuring that all lock combinations are not revealed to unauthorized persons. The Contractor shall ensure that lock combinations are changed when personnel having access to the combinations no longer have a need to know such combinations. These procedures shall be included in the Government’s Quality Control Plan.

#### Conservation of Utilities:

The Contractor shall instruct employees in utilities conservation practices. The Contractor shall be responsible for operating under conditions that preclude the waste of utilities, which include turning off the water faucets or valves after using the required amount to accomplish cleaning vehicles and equipment.

## PERIOD of Performance

The period of performance shall be for one (1) Base Year of 12 months and four (4) 12-month options.

# PLACE OF PERFORMANCE

The following place of performace have been designated: SFSC - located at 43741 Weather Service Rd, Sterling VA 20166 and NWS HQ - 1315 East West Highway Silver Spring, MD 20910. In addition, on an as needed basis; remote sites, such as State College, PA, Caribou, ME, San Juan, PR, etc., are used to support operations and testing. Contractor will work with government to establish new site to meet program objectives.

Any travel will be on a not-to-exceed basis and reimbursed in accordance with the Federal Travel Regulations. This may require travel to a site to assist in the problem-solving process or to implement a solution/problem work-around. The Contractor shall provide emergency response to operational problems within a negotiated timeline between all parties at the time of the request for support. The contractors working the help desk shall be able to assist with IT related system problems to provide overall support.

# HOURS OF OPERATION

The SFSC operates Monday through Friday between the hours of 8:00 A.M. and 4:30 P.M., with core hours between 9.00 A.M. and 3:00 P.M. All full time, non-shift work personnel are expected to work an 8 hour day which encompasses the core hours and begins no earlier than 5 AM. Part-time personnel have set schedules on which days they work; this part-time schedule will remain fixed and deviation is not allowed without prior approval of the TM. In addition, during significant weather events, assigned personnel may be required to work extended hours, including nights, weekends and holidays to cover the duration of the event. Schedules should be managed accordingly to provide weather event coverage.

Telework is not allowed, except under extenuating circumstances when approved in advance by the COR. Alternate work schedules are authorized but must include the core hours between 9:00 A.M. and 3:00 P.M. Alternate work schedules are allowed, however, it must be coordinated through the COR to alleviate scheduling conflicts and task staffing requirements . The Contractor shall provide the TM with a work schedule for all employees 30 days after award. The Sterling lead should ensure there is adequate coverage to meet mission requirements.

Hours of operation for contact support shall encompass the duration of two hours prior to 00Z until two hours after 12Z. see section 1.6.4).There are two helpdesk shifts, which must be covered; at least one contractor must be available to cover this for each shift. One shift is from 6 A.M. to 2:30 P.M. EDT and the other is 1:30 P.M. to 10:00 P.M. EDT. Since actual calls to the help desk are expected to be limited, personnel assigned a helpdesk shift will perform their daily duties when not working a helpdesk issue. Personnel working at locations other than SFSC will work the prescribed hours for the location and tasks assigned.

## TRAVEL

### Extensive Contractor travel shall be required to support this requirement. All travel required by the Government outside the local commuting area(s) will be reimbursed to the Contractor in accordance with the Federal Travel Regulations. The Contractor shall be responsible for obtaining COR approval (electronic mail is acceptable) for all reimbursable travel in advance of each travel event.

Contractor shall submit all Travel Request no later than 2 Business days upon official travel notification. Contractor shall provide a Travel Summary Report at the conclusion of all travel events. This report shall be submitted to the assigned TM within 5 business days upon conclusion of the travel event.

AUTHORIZATION OF GOVERNMENT PAID TRAVEL – FAR 31.205-46(2) (i)

Travel under this contract may be necessary in order to accomplish certain task(s) contained in this contract. Travel must be deemed necessary and authorized by the COR in order to be paid for by the Government. Except for exceptional circumstances, travel will not be reimbursed at more than applicable rates cited in the Federal Travel Regulations, prescribed by the General Services Administration, for travel in the conterminous 48 United States or the Standardized Regulations (Government Civilians, Foreign Areas), Section 925, "Maximum Travel Per Diem Allowances for Foreign Areas," prescribed by the Department of State, for travel in areas not covered above

# OTHER DIRECT COST (ODC)

Only the types of ODC specifically listed in the contract.

## POST AWARD CONFERENCE

The Contractor shall attend a Post Award Conference with the Contracting Officer and the COR no later than 5 business days after the date of award. The purpose of the Post Award Conference, which will be chaired by the Contracting Officer, is to discuss technical and contracting objectives of this contract and review the Contractor's draft project plan. The Post Award Conference will be held at the Government’s facility, located at SFSC or via teleconference.

## PROJECT PLAN

The Contractor shall prepare and submit a Business Continuity Plan (BCP) to the Government. The BCP Plan shall be due 20 business days after the date of award and will be updated on an annual basis. The BCP shall document Contractor plans and procedures to maintain support during an emergency, including natural disasters and acts of terrorism. The BCP, at a minimum, shall include the following:

 • A description of the Contractor’s emergency management procedures and policy

* A description of how the Contractor will account for their employees during an emergency
* How the Contractor will communicate with the Government during emergencies
* A list of primary and alternate Contractor points of contact, each with primary and alternate:
* Telephone numbers
* E-mail addresses

## BUSINESS CONTINUITY PLAN

The Contractor shall prepare and submit a Business Continuity Plan (BCP) to the Government. The BCP Plan shall be due 20 business days after the date of award and will be updated on an annual basis. The BCP shall document Contractor plans and procedures to maintain support during an emergency*,* including natural disasters and acts of terrorism. The BCP, at a minimum, shall include the following:

* A description of the Contractor’s emergency management procedures and policy
* A description of how the Contractor will account for their employees during an emergency
* How the Contractor will communicate with the Government during emergencies
* A list of primary and alternate Contractor points of contact, each with primary and alternate:
	+ Telephone numbers
	+ E-mail addresses

# Activation

Individual BCPs shall be activated immediately after determining that an emergency has occurred, Alternate work location shall be operational within 24 hours of activation or as specified by the Government, and shall be sustainable until the emergency situation is resolved and normal conditions are restored, In case of a life-threatening emergency, the COR shall immediately make contact with the Contractor’s Team Lead to ascertain the status of any Contractor personnel who were located in Government-controlled space affected by the emergency. When any disruption of normal, daily operations occurs, the Contractor’s Team Lead and the COR shall promptly open an effective means of communication and verify:

* Key points of contact (Government and contractor)
* Temporary work locations (alternate office spaces, telework, virtual offices, etc.)
* Means of communication available under the circumstances (e.g., email, webmail, telephone, FAX, courier, etc.)
* Essential Contractor work products expected to be continued, by priority

# Resources and Tools

The Government and Contractor’s Team Lead shall make use of the resources and tools available to continue contracted functions to the maximum extent possible under emergency circumstances.

Contractors shall obtain approval from the Contracting Officer prior to incurring costs over and above those allowed for under the terms of this contract.

## ADMINISTRATIVE DISSEMINATION

# PROGRESS REPORTS

The Team Lead shall provide a weekly progress report to the TM’s and COR via electronic mail. This report shall include a summary of all Contractor work performed, including a breakdown of labor hours by labor category, all direct costs by line item, an assessment of technical progress, schedule status, any travel conducted and any Contractor concerns or recommendations for the previous reporting period.

# PROGRESS MEETINGS

The Team Lead shall be responsible for keeping the COR informed about Contractor progress throughout the performance period of this contract, and ensure Contractor activities are aligned with NOAA objectives. At a minimum, the Team Lead shall review the status and results of Contractor performance with the TM and/or COR biweekly.

# GENERAL REPORT REQUIREMENTS

The Contractor shall provide all written reports in electronic format with read/write capability using applications that are compatible with NOAA workstations and Microsoft Office.

# PROTECTION OF INFORMATION

Contractor access to information protected under the Privacy Act is required under this PWS. Contractor employees shall safeguard this information against unauthorized disclosure or dissemination in accordance with the law and Government policy and regulation.

Contractor access to proprietary and procurement sensitive information is required under this PWS. Contractor employees shall safeguard this information against unauthorized disclosure or dissemination in accordance with the Privacy Act, OMB M06-16 (PII) and other pertinent laws and regulations governing the confidentiality of privileged information and Safeguarding Sensitive but Unclassified (SBU) (For Official Use Only) Information. The Contractor shall ensure that all Contractor personnel having access to business or procurement sensitive information sign a NOAA Non-Disclosure Agreement.

# SECTION 508 COMPLIANCE

To the extent possible all work associated with this PWS will comply with Section 508 of the Rehabilitation Act of 1973 (29 U.S.C. 794d) as amended by P.L. 105-220 under Title IV (Rehabilitation Act Amendments of 1998) all Electronic and Information Technology (EIT) developed, procured, maintained and/or used under this contract shall be in compliance with the “Electronic and Information Technology Accessibility Standards” set forth by the Architectural and Transportation Barriers Compliance Board (also referred to as the “Access Board”) in 36 CFR Part 1194.

# TASK DISSEMINATION AND REASSIGNMENT

### The Government TM or designee is responsible for disseminating all tasks and setting or changing priorities within the scope of the contract. If the Contractor has a question or concern about a particular work request, it will be brought to the attention of the requestor and/or TM for discussion and resolution. The Government may request re-assignment of Contractor staff if new or higher priorities within the scope of the contract exist. The TM or his designee will hold a review and coordination meeting with the contractor’s Project Manager once a week to identify and communicate priorities.

## GOVERNMENT TERMS & DEFINITIONS

|  |  |
| --- | --- |
| ACU | Acquisition Control Unit |
| ASOS | Automated Surface Observing System |
| Best Effort | That effort expended by the Contractor to perform within the awarded ceiling price all work specified in this task order (TO) and all other obligations under this TO and the basic contract. This effort includes providing required qualified personnel, properly supervised, and following industry accepted methodologies and other practices. The effort is further characterized by operating at all times with the Government’s best interest in mind, using efficient and effective methods, and demonstrating sound cost control. The effort must be identical to the effort that would be expended if this were a firm-fixed price TO and the contractor’s profits were dependent upon reducing costs while meeting the Government’s requirements in terms of quality and schedule. Failure to provide this required effort may result in the withholding of payment for hours expended that do not qualify as best effort or a reduction in the rate per hour to reflect decreased value of services received. |
| CCT | Certified Calibration Technician |
| CFR | Code of Federal Regulations |
| CHUAS | Cooperative Hurricane Upper Air Stations |
| CIMO | Commission for Instruments and Methods of Observation |
| COOP | Cooperative Observer Program |
| COR | Contracting Officer’s Representative: A representative from the requiring activity assigned by the Contracting Officer to perform surveillance and toact as liaison to the contractor. |
| DCP | Data Collection Platform |
| Defective Service | A service output that does not meet the standard of performance associated with it in the Performance Work Statement. |
| DOC | Department of Commerce |
| DOD | Department of Defense |
| DOT | Department of Transportation |
| EB | Evaluation Branch |
| ECP | Engineering Change Proposal |
| EDT | Eastern Daylight Time |
| EST | Eastern Standard Time |
| FAR | Federal Acquisition Regulations |
| FPR | Fisher and Porter Rain Gauge |
| GCOS | Global Climate Observing System |
| GRUAN | GCOS Reference Upper Air Network |
| IT | Information Technology |
| LOE | Level OF Effort |
| MMTS | Minimum/Maximum Temperature System |
| MS | Microsoft |
| NACI | National Agency Check and Inquiries |
| NWS | National Weather Service |
| NWSHQ | National Weather Service Headquarters |
| NWSTC | National Weather Service Training Center |
| OCD | Other Direct Cost |
| OO | Office of Observation |
| OS | Operating System |
| OSB | Observing Systems Branch |
| PI | Product Improvement |
| PSL | Pressure Standards Laboratory |
| PWS | Performance Work Statement |
| QA | Quality Assurance |
| QASP | Quality Assurance Surveillance Plan |
| QPL | Qualified Products List |
| RIC | Regional Instrument Center |
| RRS | Radiosonde Replacement Systems |
| SAC | Special Agency Check |
| SFSC | Sterling Field Support Center |
| SLEP | Service Life Extension Program |
| SOW | Statement of Work |
| SUAD | Surface and Upper Air Division |
| TO | Task Order |
| TM | Task Manager |
| VoIP | Voice Over Internet Protocol |
| WFO | Weather Service Forecast Office |
| Z | Zulu Time |

## GOVERNMENT FURNISHED RESOURCES

The Contractor shall use Government furnished facilities, property, equipment and supplies only for the performance of work under this contract, and shall be responsible for returning all Government furnished facilities, property, and equipment in good working condition, subject to normal wear and tear.

The Contractor shall use Government furnished information, data and documents only for the performance of work under this contract, and shall be responsible for returning all Government furnished information, data and documents to the Government at the end of the performance period. The Contractor shall not release Government furnished information, data and documents to outside parties without the prior and explicit consent of the Contracting Officer.

## CONTRACTOR FURNISHED PROPERTY

The Contractor shall furnish all facilities, materials, equipment and services necessary to fulfill the requirements of this contract, except for the Government Furnished Resources. Contractor shall assist in a yearly inventory account of all personal property.

## GOVERNMENT ACCEPTANCE PERIOD

The COR will review deliverables prior to acceptance and provide the contractor with an e-mail that provides documented reasons for non-acceptance. If the deliverable is acceptable, the COR will send an e-mail to the Contractor notifying it that the deliverable has been accepted.

The COR will have the right to reject or require correction of any deficiencies found in the deliverables that are contrary to the information contained in the contract. In the event of a rejected deliverable, the Contractor will be notified in writing by the COR of the specific reasons for rejection. The Contractor may have an opportunity to correct the rejected deliverable and return it per delivery instructions.

The COR will have five business days to review deliverables and make comments. The Contractor shall have five business days to make corrections and redeliver.

All other review times and schedules for deliverables shall be agreed upon by the parties based on the final approved Project Plan. The Contractor shall be responsible for timely delivery to Government personnel in the agreed upon review chain, at each stage of the review. The Contractor shall work with personnel reviewing the deliverables to assure that the established schedule is maintained.

## DELIVERABLES

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ITEM** | **PWS REF** | **DELIVERABLE****/ EVENT** | **DUE BY****(Business Days)** | **Medium/Format/# of Copies** | **DISTRIBUTION** |
| 1 | [7](#_32hioqz) | Kick Off Meeting | 5 days from Contract award | Conducted by CO or COR | CO, COR, TM |
| 2 | [8](#_1hmsyys) | Project Management Plan | 20 days from Contract award | 1 copy Submitted via email | COR |
| 3 | 2 | Government Property Accountability Report | 15th of the month | Email | COR, TM |
| 4 |  | LOE Spend Plan | 10 days of award15th of the month | Email | COR, TM |
| 5 | [3](#_z337ya) | Surface Observation Certification | 20 days upon contract award20 days upon hire date | NWS Issued | COR, TM |
| 6 | [3](#_z337ya) | Upper-Air Observation Certification | 20 days upon contract award20 days upon hire date | NWS Issued | COR, TM |
| 7 | [3](#_z337ya) | CCT Certification | 180 days upon contract award180 days upon hire date | NWS Issued OrAccredited Third Party | COR, TM |
| 8 | [6](#_23ckvvd) | Travel Summary Report | 5 Business days upon conclusion of the travel event | Email | COR, TM |
| 9 | [6](#_23ckvvd) | Travel Request | 2 Business days upon notification | Email | COR,TM |
| 10 | [2.9](#_44sinio) | Quality Management Plan | 180 days upon contract award | Email | COR,TM |
| 11 | [2](#_1t3h5sf) | MaintenanceCorrective Action records | 3 days upon task completion | Email | COR, TM |
| 12 | [2](#_1t3h5sf) | Preventative MaintenanceRecords | 3 days upon task completion | Email | COR, TM |
| 13 | [13](#_1mrcu09) | Complete Annual Inventory | 20 days upon notification | Email | COR, TM |
| 14 | [2](#_1t3h5sf) | Work Order Deliverables | Negotiated | Email | COR, TM |
| 15 | [2](#_1t3h5sf) | Work Order Closures | 5 days Upon Task Completion | Email | COR, TM |
| 16 | [2](#_1t3h5sf) | Project clean up | 1 days Upon Task Completion | Email | COR, TM |
| 17 | [2.5](#_26in1rg) | Site Meta-Data Records | 5 days Upon Task Completion | Email | COR, TM |
| 18 | [2.9](#_44sinio) | PSL equipment records | Weekly COB Friday | Email | COR, TM |
| 19 | [2](#_1t3h5sf) | Test Plans | Negotiated | Email | COR, TM |
| 20 | [2](#_1t3h5sf) | Periodic Test Report | Negotiated | Email | COR, TM |
| 21 | [2](#_1t3h5sf) | Interim Test Reports | Negotiated | Email | COR, TM |
| 22 | [2](#_1t3h5sf) | Final Test Reports | Negotiated | Email | COR, TM |
| 23 | [2](#_1t3h5sf) | Hardware Documentation | Negotiated | Email | COR, TM |
| 24 | [2](#_1t3h5sf) | Process/Build Document | Negotiated | Email | COR, TM |
| 25 | [2](#_1t3h5sf) | Design Specifications | 10 days prior to Design | Email | COR, TM |
| 26 | [2](#_1t3h5sf) | Design Reviews | After Governmentapproval of design specification | Email | COR, TM |
| 27 | [2](#_1t3h5sf) | Source code, executable code | 10 days after Completion of Acceptance TestInterim Deliveries | Email | COR, TM |
| 28 | [2](#_1t3h5sf) | Trouble Reports | Negotiated | Email | COR, TM |
| 29 | [3.1](#_3j2qqm3) | Key PersonnelReplacement Notification | 15 days prior | Email | CO, COR, TM |
| 30 | [9](#_41mghml) | Business Continuity Plan | 20 days after contract award | Email | CO, COR, TM |
| 31 | [2](#_1t3h5sf) | Software Release Notes | 10 days after Government Acceptance Test | Email | COR, TM |

## PERFORMANCE REQUIREMENTS SUMMARY (PRS).

The PRS plays an integral role in the administration of the contract. In addition to any applicable inspection clauses or other related terms and conditions contained in the contract, the PRS shall serve as a primary tool for inspection and acceptance of services as facilitated by the Contracting Officer’s Representative (COR). Evaluation of the Contractor’s overall performance shall be in accordance with the performance standards set forth in the PWS in its entirety but specifically the PRS, and will be conducted by the COR. The PRS constitutes a material aspect of the contract and will not be changed or otherwise modified without prior written approval of the Contracting Officer.

The PRS establishes key elements of Contractor performance that represent “mission essential” service requirements, which are identified in the table below in the “Service Output” column. The “Performance Objective” column represents the standard against which Contractor performance will be measured in relation to accomplishment of the corresponding service output. The performance objective or “standard” describes the minimum acceptable level of service by the Contractor for satisfactory performance. The “Acceptable Quality Level (AQL)” column displays the maximum allowable deviation from the performance objective, which, if exceeded, evokes the negative incentive specified in the table below.

|  |  |  |  |
| --- | --- | --- | --- |
| **Task** | **Performance Objective** | **Acceptable Quality Level (AQL)** | **Method of Surveillance** |
| Helpdesk support (2.0, 2.1) | The contractor shall maintain an operational helpdesk | 4 field complains per quarter | 100% surveillance |
| Purchase Request | Contractor shall execute spend plan via received purchase request no later than 5days after notification of PR requirement | NTE 30 days beyond date on spend plan | 100%surveillance |
| Project Clean up | Contractor shall cleanup project site 1 day after project completion | Site shall be cleaned up NLT 5 days after project completion | 100%surveillance |
| Task | Performance Objective | Acceptable Quality Level (AQL) | Method of Surveillance |
| Upper Air Certification | Contractor shall be certified within 20 days of onboarding | Contractor shall be certified NLT 30 days of onboarding | 100% surveillance |
| Surface Certification | Contractor shall be certified within 20 days of onboarding | Contractor shall be certified NLT 30 days of onboarding | 100% surveillance |
| Certified Calibration Technician (3.0) | Contractor shall be certified within 180 days of onboarding | Contractor shall be certified NLT 200 days of onboarding | 100% surveillance |
| PSL Audit | Contractor shall conduct audit Twice a year | No less than Two times in one year | 100% surveillance |

## Position Summary,

The following is the governments’ proposed staffing levels to fulfill mission requirements.

# Position Summary:



#### Automated Surface Observing System (ASOS O&M)



#### Automated Surface Observing System (ASOS SLEP)



#### Upper-Air (UA O&M)



#### Upper-AIR (UA RFMP)



#### Cooperative Observer Program (COOP)



#### General Support



#### Science Engineering and Support (SE&S)



#### Future Support (Optional)



## Non-exempt Employee

The following staff have been determined to be non-exempt personnel and shall have negotiated overtime tables provided.



1. **TECHNICAL EXHIBIT C - Position Descriptions (PD’s) Qualifications and Requirements**

#

# Administrative Assistant

Duties & Functions:

Performs administrative and office support activities for multiple supervisors. Duties may include fielding telephone calls, word processing, creating spreadsheets and presentations, and filing. Extensive software skills, Internet research abilities and strong communication skills are required. In addition, the Administrative Assistant shall manage the SFSC’s lobby area. Greets and directs all visitors, including vendors, clients, job candidates and customers. Ensures completions of paperwork, sign-in and security procedures comply with the federal and local requirements. Organize and provide documents, reports and information to department and external clients in a useful and well-organized manner. Position requires members to be able to meet physical requirements; able to lift heavy loads (not to exceed 50 lbs. without assistance). Additional duties include, but not limited to the following:

* Create and maintain active files
* Schedule travel, coordinate with travel agency to obtain the best possible trip and prepare travel expense reports accordingly
* Take and compile minutes of meeting
* Initiate purchase requisitions
* Order office supplies and equipment
* Maintain files and folders
* Maintain weekly schedules for employees
* Handle and screen telephone calls, routine mail and reallocate as required
* Create and maintain database records
* Manage calendars
* Plan and organize meetings and events
* Track and process annual fixed asset inventory

**Qualifications:**

Education:

Associate's degree in administrative assisting from an accredited institution of higher learning. Education can be substituted with three years commensurate experience in administrative assistance; resume must demonstrate correlated proficiency in field.

Certification Requirements:

Proficiency in the following: Microsoft Office (Word, Excel, and Power Point)

Experience:

Minimum of three years in a related career field.

This position is expected to complete work assignments from guidance provided by the project lead and supervisory direction. Independent work is given some latitude on the methods used to

achieve assigned goals. Individual is expected to be capable of seeking out solutions and resolving minor related issues.

# Business Analyst I

Duties & Functions:

Review, analyze and evaluate business systems and user needs. Document requirements, define scope and objectives and formulate systems to parallel overall business strategies. Individuals shall primarily serve as analysts and advisors to management on the evaluation of the effectiveness of government programs and operations or the productivity and efficiency of the management of Federal agencies or both.

Positions require knowledge of: the substantive nature of agency programs and activities; agency missions, policies, and objectives; management principles and processes; and the analytical and evaluative methods and techniques for assessing program development or execution and improving organizational effectiveness and efficiency.

This position also requires an understanding of basic budgetary and financial management principles and techniques as they relate to long range planning of programs and objectives. The work requires skill in: application of factfinding and investigative techniques; oral and written communications; and development of presentations and reports.

**Qualifications:**

Education:

A bachelor’s degree in business or related field.

Certification Requirements:

There are no certification requirements for this position

Experience:

Minimum of three years in a related career field.

This position is expected to complete work assignments from guidance provided by the project lead and supervisory direction. Independent work is expected to determine methods used to achieve assigned goals. Individual is expected to be capable of seeking out solutions and resolving minor related issues.

* Ability to work with diversity and multi-disciplinary teams
* Excellent time-management and organizational skills
* Outstanding verbal and written communication skills
* Detail-oriented and efficient

# Certified Calibration Technician I

Duties & Functions:

Candidate is responsible for conducting tests, calibrations, maintenance and repair of precision equipment. Supports and provides assistance to quality control team for calibration laboratories and environmental chambers. Calibration technicians will perform the functions and responsibilities associated with their assigned calibration systems or the operating procedures for environmental chambers. Calibration technicians cooperatively work with coworkers and supervisors under minimal supervision. Technician will train and work with other personnel in support of meteorological measurement programs.

For all secondary and working standards, technician will perform periodic calibrations in a manner which ensures no lapse in calibration. For primary standards, technician will work with appropriate personnel to have Standards calibrated in accordance with established timelines. Ensures laboratories are clean and all associated equipment is in proper working order.

Candidates must demonstrate proficiency and pass a certification test administered by the SFSC training officer or site managers.

**Qualifications:**

Education:

The calibration technicians shall have a two-year associate technical degree or have taken relevant courses of study and have one year of related work experience concepts or have equivalent documentation on the job training.

Certification Requirements:

Candidate must obtain a CCT within six month of hire.

Experience:

A calibration technician shall have solid technical skills. The technician must be able to analyze measurement data, write and follow calibration procedures, and generate calibration certificates and systematically troubleshoot processes and equipment. The exact skills required to be a calibration technician will be determined in part by the actual calibration work required by the position. Have one years of experience in calibration and troubleshooting of relevant Measurement and Test Equipment (M&TE), calibration standards, scientific equipment, and laboratory standards.

# Certified Calibration Technician II

Duties & Functions:

Candidate is responsible for conducting tests, calibrations, maintenance and repair of precision equipment. Supports and provides assistance to quality control team for calibration laboratories and environmental chambers. Calibration technicians will perform the functions and responsibilities associated with their assigned calibration systems or the operating procedures for environmental chambers. Calibration technicians cooperatively work with coworkers and supervisors under minimal supervision. Technician will train and work with other personnel in support of meteorological measurement programs.

For all secondary and working standards, technician will perform periodic calibrations in a manner which ensures no lapse in calibration. For primary standards, technicians will work with appropriate personnel to have Standards calibrated in accordance with established timelines. Ensures laboratories are clean and all associated equipment is in proper working order.

Candidates must demonstrate proficiency and pass a certification test administered by the SFSC training officer or site managers.

**Qualifications:**

Education:

The calibration technicians shall have a two-year associate technical degree or have taken relevant courses of study and have two years of related work experience concepts or have equivalent documentation on the job training.

Certification Requirements:

Candidate must obtain a CCT within six month of hire.

Experience:

A calibration technician shall have solid technical skills. The technician must be able to analyze measurement data, write and follow calibration procedures, and generate calibration certificates and systematically troubleshoot processes and equipment. The exact skills required to be a calibration technician will be determined in part by the actual calibration work required by the position. Has two years of experience in calibration and troubleshooting of relevant Measurement and Test Equipment (M&TE), calibration standards, scientific equipment, and laboratory standards.

# Computer Specialist I

Duties & Functions:

Computer Specialist is to assist in ensure the availability, integrity, reliability, availability of computer equipment and computer peripherals. Performs routine maintenance tasks for the following, but not limited to, maintain computer equipment, peripherals, voice over IP phones, copiers/printers, fax machines, laminators, etc. Additional duties required include activities such as, but not limited to, loading peripheral equipment such as cartages and printer paper for operational functions. Has knowledge of commonly-used concepts, practices, and procedures within a particular field. This position typically reports directly to the Network & System Administrator or Contractor Management Lead and may be required to report directly to the SFSC Site Manager. Assist in proper and accurate property control measures for all computer assets and report changes in status of such property directly to the SFSC Property Manager. All communications outside the SFSC pertaining to Network policy/implementation must have notified the above mentioned members or have received prior authorization prior to transition to any outside group either federal of non-federal entity. In addition, activities deemed, as an inherently governmental in function is not authorized.

**Qualifications:**

Education:

Associate's degree or its equivalent in Computer Science from an accredited institution of higher learning. Education can be substituted with three years commensurate experience in maintaining and supporting computers and associated peripheral, resume must demonstrate correlated proficiency.

Certification Requirements:

At least one certification required (i.e. A+, CCENT or CCNA, among others)

Experience:

Three years’ experience in repairing, installing, and support of IT software and hardware.

# Database Administrator

Duties & Functions:

Analyze database requirements to optimize development. Develops databases with web interfaces and documents their logical and physical processes, including but not limited to location, space, and access method. Develops standard queries for commonly needed data set and custom queries for unique project requirements as requested. Test and implement changes or new database designs. Work as part of the SFSC IT working group for developing, improving and implementing new ideas and programs.

**Qualifications:**

Education:

B.S. degree in Computer Science.

Certification Requirements:

Microsoft Certified Database Administrator (MCDBA).

Experience:

2 to 4 years of experience with database administration and development.

# Electronics Technician

Duties & Functions:

The Electronics Technician role is to ensure the availability, integrity, reliability, and recoverability of the Sterling Field Support Center’s mission critical systems. This position requires sophisticated technical experience to maintain program supported equipment. This position will ensure that Federal standards has been met and ensuring all program support equipment is maintained to operational standards, with low mean time between failures.

Candidates must have working knowledge of preventative maintenances programs such as Engineering Management Reporting System (EMRS) and FaciliWorks. Members must have a working knowledge of the following: Maintaining weather-supporting equipment such as: Automatic launching platforms, Hydrogen generation units, Radio-frequency tracking stations, and ground based weather collection systems. Maintaining supporting test equipment: Ground based test stands, Wind tunnels, balloon inflation systems, and high and low pressure gas systems. This position requires an extremely high level of analytical problem solving skills to diagnose and solve complex technology issues and thus requires the member must have excellent communications skills. This position reports directly to the Contract manager Lead and the SFSC Infrastructure manager. This position may require working off schedule and may require some travel, not to exceed three weeks per event. Position requires member to be able to meet physical requirements; able to lifting heavy loads (not to exceed 50 lbs. without assistance).

**Qualifications:**

Education:

High School Diploma or General Equivalency Diploma (GED)

Certification Requirements:

Contractor staff must be able to successfully complete all Government provided training course- work associated with the NWS program requirements. NWS Training courses are located at the NWS Training center Kansas City, Missouri and very from two to three weeks in duration.

Course required include, but not limited to ASOS Maintenance, Upper-Air Maintenance, and Climbing safety/rescue. Non-NWS provide courses required may include Forklift safety, Fiber optic, and Hydrogen generation maintenance courses. The Federal Government funds all initial courses on a one-time basis. The contractor is liable for any courses not successfully completed.

Experience:

Minimum of three years in a related career field.

This position is expected to complete work assignments from guidance provided by the project lead and supervisory direction. Independent work is given some latitude on the methods used to achieve assigned goals. Individual is expected to be capable of seeking out solutions and resolving minor related issues.

# Engineer

Duties & Functions:

Candidate serves as electrical engineer in support of the SFSC functional areas with respect to assigned programs. Functional areas are; product evaluation, test support, deployment and operational support. This includes but is not limited to all phases of testing, installation, troubleshooting and the review/development of technical documents.

**Qualifications:**

Education:

B.S. degree in the Engineering field. An advanced technical degree (M.S. or Ph.D.) is desired.

Certification Requirements:

There are no certification requirements for this position.

Experience:

Experience in the test and evaluation of meteorological observing equipment. This includes all associated test document and the development and maintenance of requirements and a process for validating them.

# Engineer Technician

Duties & Functions:

Is responsible for setting up, testing, operating, and the calibration of equipment used in the SFSC laboratories. Position requires the individual to maintain a CCT rating in order to augment staffing levels of the pressure calibration lab. In coordination with the SFSC Maintenance Support Section, candidate performs or assists in performing preventative maintenance and repairs of environmental chambers and other test resources. Is responsible for developing and maintaining SOPs, user guides, maintenance documents specific to laboratory resources. With assistance of the QM team candidate maintains maintenance records for all assets used in the laboratory.

Candidate documents service through reports and other paperwork. Prepare calibration certificates, data reports, SOPs, test plans and written recommendations for SFSC. The candidate is the document control manager for test and laboratory related documents. Oversee document management systems for SFSC. This includes maintaining the accuracy and integrity of laboratory documents throughout the document life cycle, which includes safe guarding, filing, archiving, retrieving, purging, and version control. Candidates must demonstrate proficiency and pass and certification test administered by the SFSC training officer or site managers.

**Qualifications**

Education:

Associated Degree in a scientific field.

Certification Requirements:

Candidate must obtain a CCT within six month of hire.

Experience

Must have at least eight years’ experience in a related field and hold a commercially issued CCT certification within six month of contract award.

# Facilities Technician

Duties & Functions:

The Facilities Technician I role is to ensure the availability, integrity, reliability, and recoverability of the Sterling Field Support Center’s facilities. This position requires experience to maintain basic facility associated equipment. This position will ensure that Federal standards has been met and ensuring all facility support equipment is maintained to operational standards, with low mean time between failures. Candidates must have working knowledge of preventative maintenances programs such as Engineering Management Reporting System (EMRS) and FaciliWorks. Members must have a working knowledge of the following: HVAC systems, General Compressor/Vacuum systems, Electrical systems (emergency generators, lighting, grounding, and lightening), vehicle maintenance, general shop equipment (table-saws, Radial Arm saws, grinders, metal shears, drill press, band saws, and punches), Plumbing systems ( water fountains, eyewash stations, sanitary flushing systems, back flush systems, and general pipe work)

This position reports directly to the Contract Lead and the SFSC Infrastructure manager. This position may require working off schedule and may require some travel, not to exceed three weeks per event. Additional Requirements include, but not limited to the following: Understand and follow oral and written instructions, ability to prioritize and manage multi-functional tasks, ability to work effectively under pressure, and against strict time constraints, ability to use standard powered and non-powered tools.

**Qualifications:**

Education:

High school diploma or General Equivalency Diploma (GED)

Certification Requirements:

Certification in HVAC systems

Experience:

Minimum of three years in a related career field.

Working Conditions:

* Be able to walk, bend, stoop, balance, crawl and reach for extended periods of time
* Must be able to utilize/view a PC and/or monitor
* Must be comfortable and able to work on a ladder of 20 feet
* Must be able to work independently without direct supervision
* Must have a valid Driver’s License

### Independent work is given some latitude on the methods used to achieve assigned goals. Individual is expected to be capable of seeking out solutions and resolving minor related issues.

Position requires member to be able to meet physical requirements: able to lifting heavy loads (not to exceed 50 lbs. without assistance).

# Information System Security Officer

Duties & Functions:

As the SFSC Information System Security Officer candidate is responsible for ensuring the implementation and maintenance of security controls in accordance with the Security Plan (SP) and NOAA/government policies. Candidate will be called on to provide guidance, oversight, and expertise, develop security documents or actually implement any security controls. Candidate will be required to coordinate, facilitate, or otherwise ensure certain activities are being performed. Candidate will coordinate and work with, management, technical staff, and other stakeholders in order to facilitate a government compliant network as defined by the FISMA boundary in which the SFSC resides. The following is a sample of some of the task candidate will be required to perform.

Creates information security strategies, both short-term and long-range, which are in compliance with SFSC requirements and government regulations.

Participates in Information Security and other IT related meetings to insure that security decisions are consistent with the confidentiality, integrity, and availability of information stored, used and transmitted, within and outside the organization.

Communicates risks and recommendations to mitigate risks to Government personnel.

Oversees all ongoing activities related to the development, implementation, and maintenance of the Government’s information security policies and procedures.

Assists other programs to ensure regulatory compliance in areas such as the Upper Air, ASOS, COOP and other test programs activities.

Ensures vulnerabilities are managed by directing or performing periodic vulnerability scans.

Is the point of contact for all security incidents within their area of responsibility and reports using the NOAA 47-43 form to the NOAA Computer Incident Response Team (NCIRT).

Compiles periodic reports to evaluate the health and compliance of SFSC network and IT resource.

Works with SFSC personnel to insure information security awareness.

Coordinate with government personnel to ensure sufficient resources are available and properly allocated to projects. This includes developing a budget and plan for IT tech refresh. Coordinates

and tracks project expenditures to ensure resources are used effectively and within budget, and provides periodic budget reports to the Site Manager.

Takes a proactive approach to preventing potential disaster situations by ensuring that proper protections are in place, such as intrusion detection and prevention systems, firewalls, and effective physical safeguards, and provides for the availability of computer resources by ensuring a continuity/disaster recovery plan is in place to offset the effects caused by intentional and unintentional acts. Is the point of contact for all security incidents within their area of responsibility and reports using the NOAA 47-43 form to the NOAA Computer Incident Response Team (NCIRT).

Remains competent and current through self-directed professional reading, developing professional contacts with the NWS and other originations, attending professional development courses, attending training, conferences, and/or courses as directed by the supervisor, and obtaining certifications relevant to job duties.

Contributes to the overall success the SFSC mission by performing all other duties and responsibilities as assigned.

**Qualifications**:

Education:

B.S. degree in Computer Science or other related field.

Certification Requirements:

Certified Information Systems Security Professional (CISSP) certification. Other IT security certification maybe substituted with government approval.

Experience:

Minimum of five years in this career field.

This position is expected to complete work assignments from guidance provided by the Project Management Lead with little supervisory direction. Independent work is given some latitude on the methods used to achieve assigned goals. Individual is expected to be capable of seeking out solutions and resolving minor related issues. Additional experience to include:

* + Ability to work with diversity and multi-disciplinary teams
	+ Excellent time-management and organizational skills
	+ Outstanding verbal and written communication skills
	+ Detail-oriented and efficient

# Meteorologist I

Duties & Functions:

The work includes basic and applied research into the conditions and phenomena of the atmosphere; the collection, analysis, evaluation, and interpretation of meteorological data to predict weather and determine climatological conditions for specific geographical areas; the development of new or the improvement of existing meteorological theory; and the development or improvement of meteorological methods, techniques, and instruments. Positions in this occupation require full professional knowledge and application of meteorological methods, techniques, and theory. Has knowledge of commonly used concepts, practices, and procedures within a particular field. Has working knowledge of measuring meteorological phenomena with scientific equipment and instrumentation. Develop test plans and reports for weather systems or components of the systems. Implement the processes and procedures to complete the test and write final reports. Briefings may be necessary on an ad-hoc basis. Work in a team environment. This position may require working off schedule and may require some travel, not to exceed three weeks per event.

**Qualifications:**

Education:

BS degree (or equivalent) in Meteorology.

Certification Requirements:

There are no certification requirements for this position.

Experience**:**

Familiar with the weather data collection systems, or familiar with weather based systems. Candidate must have a working proficiency of Microsoft Office Suite. 0 to 2 years of experience in related area.

# Meteorologist II

Duties & Functions:

The work includes basic and applied research into the conditions and phenomena of the atmosphere; the collection, analysis, evaluation, and interpretation of meteorological data to predict weather and determine climatological conditions for specific geographical areas; the development of new or the improvement of existing meteorological theory; and the development or improvement of meteorological methods, techniques, and instruments. Positions in this occupation require full professional knowledge and application of meteorological methods, techniques, and theory. Has knowledge of commonly used concepts, practices, and procedures within a particular field. Has working knowledge of measuring meteorological phenomena with scientific equipment and instrumentation. Develop test plans and reports for weather systems or components of the systems. Implement the processes and procedures to complete the test and write final reports. Briefings may be necessary on an ad-hoc basis. Work in a team environment. This position may require working off schedule and may require some travel, not to exceed three weeks per event. The candidate must be able to work with limited supervision and have the ability to work independently and as a team member.

**Qualifications:**

Education:

Should possess a BS degree (or equivalent) in Meteorology.

Certification Requirements:

There are no certification requirements for this position.

Experience**:**

Practical experience with weather data collection systems, or weather based systems. Candidate must have a working proficiency of Microsoft Office Suite. 2 to 6 years of experience in a related area is required.

# Meteorologist III

Duties & Functions:

The work includes basic and applied research into the conditions and phenomena of the atmosphere; the collection, analysis, evaluation, and interpretation of meteorological data to predict weather and determine climatological conditions for specific geographical areas; the development of new or the improvement of existing meteorological theory; and the development or improvement of meteorological methods, techniques, and instruments. Positions in this occupation require full professional knowledge and application of meteorological methods, techniques, and theory. Has knowledge of commonly used concepts, practices, and procedures within a particular field. Has working knowledge of measuring meteorological phenomena with scientific equipment and instrumentation. Develop test plans and reports for weather systems or components of the systems. Implement the processes and procedures to complete the test and write final reports. Briefings may be necessary on an ad-hoc basis. Work in a team environment. This position may require working off schedule and may require some travel, not to exceed three weeks per event. The candidate must be able to work with minimum supervision and have the ability to work independently and as a team member. The candidate must be able to lead a team and delegate accordingly to meet the mission of the test.

**Qualifications:**

Education:

Should possess a BS degree (or equivalent) in Meteorology, MS desired.

Certification Requirements:

There are no certification requirements for this position.

Experience**:**

Practical experience with weather data collection systems, or weather based systems. Candidate must have a working proficiency in Microsoft Office Suite. 6 or more years of experience in a related area is required.

# Network Administrator

Duties & Functions:

The Network Administrator’s role is to ensure the availability, integrity, reliability, security, and recoverability of the Sterling Field Support Center’s mission-critical systems, network, communication, and data continuity infrastructure. This position will ensure that Federal service standards are met in a timely manner and in coordination with project lead. This position will frequently engage with federal counterparts and will serve as a liaison between the SFSC and National Weather Service Headquarters located in Silver Spring, MD. This position reports directly to the Contractor Management Lead and the SFSC Site Manager. All communications outside the SFSC pertaining to Network policy/implementation must have notified the above- mentioned members or have received prior authorization prior to transition to any outside group either federal of non-federal entity. Develops and maintains a change manage process for the facility's IT assets and infrastructure. In support of IT related projects candidate will be required to crawl under desks, routing wires above ceiling tiles, and lifting heavy loads (not to exceed 50 lbs. without assistance).

**Qualifications:**

Education:

BS degree in Computer Science related field. Education can be substituted for a six years of commensurate experience.

Certification Requirements**:**

This position requires a minimum of 2 IT related certifications and one must be in the area of IT security.

Experience**:**

Minimum of 5 years’ experience in installing and implementing new software and hardware in support of mission-critical IT related programs and projects. Candidate must have experience in problem resolution and IT customer support.

# Physical Scientist I

Duties & Functions:

The work includes basic and applied research into the conditions and phenomena of the atmosphere; the collection, analysis, evaluation, and interpretation of meteorological data to predict weather and determine climatological conditions for specific geographical areas; the development of new or the improvement of existing meteorological theory; and the development or improvement of meteorological methods, techniques, and instruments. Positions in this occupation require full professional knowledge and application of meteorological methods, techniques, and theory. Has knowledge of commonly used concepts, practices, and procedures within a particular field. Has working knowledge of measuring meteorological phenomena with scientific equipment and instrumentation. Develop test plans and reports for weather systems or components of the systems. Implement the processes and procedures to complete the test and write final reports. Briefings may be necessary on an ad-hoc basis. Work in a team environment. This position may require working off schedule and may require some travel, not to exceed three weeks per event.

**Qualifications:**

Education:

BS degree in Physical Science (or equivalent).

Experience**:**

Familiar with weather data collection systems, or weather based systems. Candidate must have a working proficiency in Microsoft Office Suite. 0 to 2 years of experience in related areas.

# Physical Scientist II

Duties & Functions:

The work includes basic and applied research into the conditions and phenomena of the atmosphere; the collection, analysis, evaluation, and interpretation of meteorological data to predict weather and determine climatological conditions for specific geographical areas; the development of new or the improvement of existing meteorological theory; and the development or improvement of meteorological methods, techniques, and instruments. Positions in this occupation require full professional knowledge and application of meteorological methods, techniques, and theory. Has knowledge of commonly used concepts, practices, and procedures within a particular field. Has working knowledge of measuring meteorological phenomena with scientific equipment and instrumentation. Develop test plans and reports for weather systems or components of the systems. Implement the processes and procedures to complete the test and write final reports. Briefings may be necessary on an ad-hoc basis. Work in a team environment. This position may require working off schedule and may require some travel, not to exceed three weeks per event. The candidate must be able to work with limited supervision and have the ability to work independently and as a team member.

**Qualifications:**

Education:

Should possess a BS degree in Physical Science (or equivalent).

Experience**:**

Practical experience with weather data collection systems, or weather based systems is a must. Candidate must have a working proficiency of Microsoft Office Suite. 2 to 6 years of experience in a related area is required.

# Physical Scientist III

Duties & Functions:

The work includes basic and applied research into the conditions and phenomena of the atmosphere; the collection, analysis, evaluation, and interpretation of meteorological data to predict weather and determine climatological conditions for specific geographical areas; the development of new or the improvement of existing meteorological theory; and the development or improvement of meteorological methods, techniques, and instruments. Positions in this occupation require full professional knowledge and application of meteorological methods, techniques, and theory. Has knowledge of commonly used concepts, practices, and procedures within a particular field. Has working knowledge of measuring meteorological phenomena with scientific equipment and instrumentation. Develop test plans and reports for weather systems or components of the systems. Implement the processes and procedures to complete the test and write final reports. Briefings may be necessary on an ad-hoc basis. This position may require working off schedule and may require some travel, not to exceed three weeks per event. The candidate must be able to work with minimum supervision and have the ability to work independently and as a team member. The candidate must be able to lead a team and delegate accordingly to meet the mission of the test.

**Qualifications:**

Education:

BS degree in Physical Science (or equivalent), MS desired.

Experience**:**

Practical experience with weather data collection systems, or weather based systems is a must. Candidate must have a working proficiency in Microsoft Office Suite. 6 or more years of experience in a related area is required.

# Physical Scientist Technician I

Duties & Functions:

Candidate will perform the installation and checkout of meteorological equipment used operationally by the NWS and in support of the SFSC test and evaluation programs. Assigned person will maintain competency in the use of these systems. Candidate is required to operate environmental chambers and other laboratory equipment in support of their assigned program. Will perform periodic maintenance of laboratory resources, this may include calibration of meteorological sensors. Periodically demonstrate proficiency by exercising, reviewing and updating Test Procedures, Laboratory Operating Procedures (LOPs) and Standard Operating Procedures (SOPs). Candidate may be required to travel frequently in support of the SFSC test programs and for nationwide deployment of systems. Position require occasional outside work and the ability to do physical activities such as, but not limited to, crawling under desks, routing wires above ceiling tiles, lifting heavy loads (not to exceed 50 lbs. without assistance).

Incumbent will ensure appropriate records management, filing and storage of test and calibration documents. Candidate will assist in development of test procedures, SOPs and deployment documents. Performs the analysis of meteorological data to determine its validity and quality of the data. Troubleshoots problems and makes recommendations for corrective action.

**Qualifications:**

Education:

Successful completion of 2 years of study in a technical field or three years of experience in a technical field.

Experience**:**

Experience with metoerolocigal data acquisition systems.

# Programmer II

Duties & Functions:

Develops in house programs to support SFSC mission requirements. In general, this includes programs to normalize data sets, data acquisitions systems, command and control programs for testbeds and laboratory recourses. Candidate is responsible for modify and maintain existing software. Responsible for software change management and the safeguard of source code for in house developed software. Interfaces programs to web. Work as part of the SFSC IT working group for developing, improving and implementing new ideas and programs.

**Qualifications:**

Education:

B.S. degree in Computer Science or 4 years of applicable experience.

Certification Requirements:

Have at least the Microsoft Technology Associate (MTA) or Microsoft Certified Solutions Associate desired (MCSA).

Experience:

Experience developing programs for normalize of data sets, data acquisitions systems, command and control programs. This includes modern communication protocols for command and control.

# Project Coordinator

Duties & Functions:

The primary responsibility of a Program Coordinator is to ensure that the program is delivered properly. Performs coordination, scheduling, and reporting activates to ensure seamless deployment transition of meteorological systems for the NWS. Duties include working with multiple teams, conflicting priorities, creating a project plan, communications and interacting with people at all levels of the organizations.

In addition, the Program Coordinator shall be assigned to one primary NWS region, but may be required to augment as a backup to a secondary regional Program Coordinator. The Program Coordinator is responsible for the execution of NWS RFMP Deployment Plan. This includes Pre and Post Deployment activities as defined within the NWS RFPM Deployment plan.

Organize and provide documents, reports and information to department and external clients in a well-organized manner. Additional duties include, but not limited to the following:

* Create and maintain Metadata files
* Schedule travel, coordinate with travel agency to obtain the best possible trip and prepare travel expense reports accordingly
* Initiate Deployment meetings with Regional/WFO Offices
* Initiate purchase requisitions
* Plan and organize meetings and events
* Maintain schedules for RFMP Deployment teams
* Handle and screen telephone calls, routine mail and reallocate as required
* Create and maintain database records
* Manage calendars
* Plan and organize meetings and events
* Track Government Owned inventory
* Plan and Participate in Deployment Status meetings
* Ensuring implementation of policies and practices
* Maintaining budget and tracking expenditures/transactions

**Qualifications:**

Education:

Bachelor degree in business administration or relevant field from an accredited institution of higher learning. Education can be substituted with five years commensurate experience in Program/Project Coordinator; resume must demonstrate correlated proficiency in field.

Certification Requirements:

Experience:

Minimum of five years in a related career field.

This position is expected to complete work assignments from guidance provided by the Contractor Project Management lead with little supervisory direction. Independent work is given some latitude on the methods used to achieve assigned goals. Individual is expected to be capable of seeking out solutions and resolving minor related issues. Proficiency in Microsoft Office (Word, Excel, Project and PowerPoint)Additional experience to include:

* Proven experience as program coordinator or relevant position
* Knowledge of program management and development procedures
* Knowledge of budgeting, bookkeeping and reporting
* Ability to work with diversity and multi-disciplinary teams
* Excellent time-management and organizational skills
* Outstanding verbal and written communication skills
* Detail-oriented and efficient
	1. **Project Manager**

Duties & Functions:

The Program Manager is typically responsible for organizing, directing, and managing all aspects of contract operational support functions involving multiple complex and inter-related project tasks. Provide overall direction of program activities. Manage and maintain contractor interface with the customer. Consult with customer and contractor personnel to formulate and review task plans and deliverables, ensuring conformance with program and project task schedules and costs and contractual obligations. Establish and maintain technical reports to show progress of projects to management and customers, organize and assign responsibilities to subordinates, and oversee the successful completion of all assigned tasks. Group lead will be member of the SFSC quality management team.

**Qualifications:**

Education:

B.S. degree in Business Management or an advanced technical degree (M.S. or Ph.D.).

Certification Requirements:

There are no certification requirements for this position.

Experience:

At least 4 years of experience in supervising test and evaluation projects for metrological sensors, software and equipment. In order to assist the government in establishing a WMO Regional Instrumentation Center.

# Subject Matter Expert

Duties & Functions:

The Subject Mater Expert shall be experienced performing overall program management task including project planning, scheduling, tracking, and reporting: experience writing project management documentation such as a project charter/plan and/or a work breakdown structure: successful completion of a project whose results were implemented on a regional or national basis; experience in managing multiple projects simultaneously such as setting priorities among competing projects; experience planning and managing strategic program plans, and developing the necessary technical documentation for implementation; experience conducting program management activities independently and without review by a supervisor or senior employee; experience budget planning and budget execution; experience in conducting management studies and preparing reports with findings and recommendations; experience assisting in the assessment and evaluation of a program’s overall effectiveness; knowledge of federal regulations and statutes in installation of equipment at federal facilities; experience preparing analyses, reports, proposals, recommendations to management for administrative needs both orally and in writing; experience using qualitative or quantitative methods to analyze, assess and improve program effectiveness; experience using a database and project management software as tools for planning, coordinating, monitoring, tracking and/or reporting on administrative and programmatic activities for an organization; experience in identifying and resolving complex technical and programmatic problems; experience performing the following program analysis and evaluation functions:

* Extract relevant pieces of information from documents and other sources
* Used data analysis software packages and interpreted data
* Used a variety of methods to collect information
* Analyzed information to uncover patterns or trends
* Presented statistical data in easily understandable terms
* Analyzed information to determine validity of program data
* Evaluated program performance data and recommended changes to improve operations
* Provide written or oral recommendations to higher level officials to improve program

**Qualifications**:

Education:

B.S. degree in a scientific field.

Certification Requirements:

There are no certification requirements for this position.

Experience:

Minimum of ten years in this career field.

This position is expected to complete work assignments from guidance provided by the Project Management Lead with little supervisory direction. Independent work is required to achieve assigned goals. Advanced knowledge in a specialized field, such as engineering or metrology is

desired. Individual is expected to be capable of seeking out solutions and resolving all related issues. Additional experience to include:

* + Ability to work with diversity and multi-disciplinary teams
	+ Excellent time-management and organizational skills
	+ Outstanding verbal and written communication skills
	+ Detail-oriented and efficient

# System Administrator

Duties & Functions:

The System Administrator is responsible for providing technical support for both hardware and software issues encountered by users. Additional duties include; managing the configuration and operation of client-based computer operating systems, daily monitoring of the system and responding promptly to security issues and addressing any usability concerns that may arise, create and verify backups of data, respond to and resolve help desk requests/configuration management tickets, and upgrade systems and processes as required for enhanced functionality and security issue resolution. The System Administrator shall administrate all infrastructure, including firewalls, databases, malware protection software and other processes to insure routine patches and upgrades are applied. This postion shall monitor and verify that all systems are maintained within compliance with government security requirements.

**Qualifications**:

Education:

BS/Ba in Information Technology, Computer Science or a related discipline.

Certification Requirements:

There are no certification requirements for this position.

Experience:

Minimum of five years in this career field.

This position is expected to complete work assignments from guidance provided by the Project Management Lead with little supervisory direction. Independent work is given some latitude on the methods used to achieve assigned goals. Individual is expected to be capable of seeking out solutions and resolving minor related issues. Additional experience to include:

* Experience with databases, networks (LAN, WAN) and patch management
* Knowledge of system security (e.g. intrusion detection systems) and data backup/recovery
* Familiarity with various operating systems and platforms
* Ability to work with diversity and multi-disciplinary teams
* Excellent time-management and organizational skills
* Outstanding verbal and written communication skills
* Detail-oriented and efficient

# Technical Writer

Duties & Functions:

The Technical Writer is typically responsible for creating operating instructions, engineering manuals, modification notes, and “frequently asked questions” pages to help technical support staff, consumers, and other users. Consult with customer and contractor personnel to formulate and annotate the needs of end users. Applying their knowledge of the user of the product, may serve as part of a team conducting usability studies to help improve the design of a product that is in the prototype stage. Technical writer may conduct research on their topics through personal observation, library and Internet research, and discussions with technical specialists.

**Qualifications**:

Education:

B.S. degree in a bachelor’s degree in journalism, English, or communications.

Certification Requirements:

There are no certification requirements for this position.

Experience:

Minimum of two years in this career field.

This position is expected to complete work assignments from guidance provided by the Project Management Lead with little supervisory direction. Independent work is given some latitude on the methods used to achieve assigned goals. Individual is expected to be capable of seeking out solutions and resolving minor related issues. Additional experience to include:

* + Revise documents as new issues arise
	+ Gather usability feedback from customers, designers, and manufacturers
	+ Determine the needs of end users of technical documentation
	+ Study product samples and talk with product designers and developers
	+ Work with technical staff to make products easier to use and thus need fewer instructions
	+ Organize and write supporting documents for products
	+ Use photographs, drawings, diagrams, animation, and charts that increase users’ understanding
	+ Select appropriate medium for message or audience, such as manuals or online videos
	+ Standardize content across platforms and media
	+ Ability to work with diversity and multi-disciplinary teams
	+ Excellent time-management and organizational skills
	+ Outstanding verbal and written communication skills
	+ Detail-oriented and efficient