PERFORMANCE WORK STATEMENT (PWS)

FOR

Advanced Data Assimilation and Mesoscale and Transport and Dispersion (ADAMTD) II Modeling

Task Order 01: Scientific and Software Engineering Support for the Numerical Weather Prediction (NWP) Workflow Management System

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1   DESCRIPTION OF SERVICES.

1.1   Introduction.

This is a non-personal services contract. The Government will neither supervise contractor employees nor control the method by which the contractor performs the required tasks. The contractor shall manage its employees and guard against any actions that are of the nature of personal services, or give the perception of personal services. The contractor shall notify the Contracting Officer (CO) immediately if they perceive any actions constitute personal services. These services shall not be used to perform any Inherently Governmental Functions.

1.2   Background.

This effort will provide the Air Force Technical Application Center (AFTAC) Meteorological Modeling and Analysis Mission (MMA) with scientific services and support in developing and maintaining state-of-the-art ensemble numerical weather prediction (NWP) systems and advanced source estimation applications to enhance operations by improving the accuracy of the simulations and characterizing uncertainties. The objective is to obtain meteorological modeling support in an effort to provide incremental improvements to AFTAC's existing meteorological and material transport and dispersion modeling capabilities. These improvements will enable AFTAC to better model the current state of the atmosphere and to better model the transport and dispersion of radiological effluents into the atmosphere. The contractor shall provide scientific and technical Research and Development (R&D) to recommend, develop, test, evaluate and deliver atmospheric data assimilation enhancements, atmospheric model enhancements, atmospheric transport and dispersion and source estimation technique enhancements, and enhancements to climatological analysis techniques.

1.3   Scope.

This task order provides scientific and software engineering support in maintaining and optimizing a state-of-the-art ensemble Numerical Weather Prediction (NWP) workflow management system to enhance AFTAC operations in-house and on remote HPC systems. Services include: maintaining the system, identifying major deficiencies within the system, advising the Government on the fixes and costs for each deficiency, and conducting a verification and validation study to determine optimal system settings for AFTAC's mission requirements.

1.4 **Period of Performance.**

The period of performance shall be 1 year from award date.

2 **SPECIFIC TASKS.**

2.1 **(O&M) Contractor shall provide task order management to ensure successful completion of this task order.**

2.1.1 Submit Monthly Status Report (A001).

2.1.2 Submit Monthly Contract Funds Status Report (A002).

2.2 **(O&M) Operations Support and Maintenance of the NWP Workflow Management Software.**

2.2.1 The Contractor shall ensure the fullest availability, quality, and security of the developed and deployed system (CDRL A001, A004, A005).

2.2.1.1 Provide troubleshooting and technical support to end user.

2.2.1.2 Ensure the system is operating correctly in AFTAC unclassified and classified high performance computing (HPC) operating environments, AFTAC CPE and CDE environments (if appropriate), and at least one of the unclassified and classified HPC operating systems that are part of the High Performance Computing Modernization Program (HPCMP).

2.2.1.3 Perform any required software updates to handle modifications to the model input data and operating environment. Document updates to system (CDRLs A004, A005).

2.2.1.4 Implement software and security updates to back-end software responsible for model generation. Document software implementation (CDRLs A004, A005).

2.2.1.5 Integrate modifications resulting from R&D efforts, identified bugs, and performance optimization analyses into the modeling system. Document integration of modifications (CDRLs A004, A005).

2.2.1.6 Maintain compliance with AFTAC's system requirements, including operating system and web browser version changes. Document changes to system (CDRLs A004, A005).

2.2.1.7 Provide minor modifications to the GUI to improve the user experience as well as implement ongoing bug fixes and performance optimizations. Document integration of modifications (CDRLs A004, A005).

2.2.1.8 Identify major deficiencies or missing content within the software and GUI. Advise how to address identified issues and estimate cost of the fix for each. Document recommendations (CDRL A003).

2.2.2 The Contractor shall engage end users and effectively communicate system information.

2.2.2.1 Maintain system documentation, including the user manual, standard operating procedures, training materials, system diagrams, version control, and installation packages (CDRLs A004, A005).

2.2.2.2   Routinely communicate with users to ensure changes and problems with the system are continually identified and resolved in a timely manner to ensure the system meets requirements and functional needs, as well as capturing user requests for ongoing functional or feature changes.

2.2.2.3   Provide user training and support and provide performance and progress reports as required.

2.2.2.4   Provide summary of actions taken and work performed in Monthly Status Report (A001).

2.3   (R&D) Augment the NWP Workflow Management Software Capabilities

2.3.1   The Contractor shall conduct a verification and validation study to determine optimal system settings for AFTAC's mission requirements. This shall at a minimum include investigation of critical meteorological model settings and data assimilation settings for satellite and radar derived data.

2.3.2   Perform a comprehensive verification of the NWP system to include parameters within the domain builder, data assimilation options, and namelist options modification. Document findings (CDRLs A003, A004, A005).

2.3.3   Determine optimal WRF Data Assimilation and Gridpoint Statistical Interpolation settings for AFTAC operations. Document recommendations (CDRLs A003, A005).

2.3.4   Provide a Final Technical Report which summarizes the work, assumptions, results, findings, and conclusions of tasking performed under section 2.3.1 (A006).

3 SERVICES SUMMARY (SS).

The contract service requirements are summarized in performance objectives that relate directly to mission essential services. The performance threshold briefly describes the minimally acceptable levels of service required for each requirement. The SS provides information on contract requirements and the expected level of contractor performance to be successful. These thresholds are critical to mission success. Procedures as set forth in the applicable Inspection clause in the contract will be used to remedy all deficiencies. The Government retains the right to inspect any item included in the contract.

PERFORMANCE OBJECTIVE	PWS /CDRL	PERFORMANCE THRESHOLD
SS # 1. The contractor shall provide timely and accurate monthly reports.	PWS Section 2, 5.16/CDRL A001 and A002	Reports due not later than the 15th calendar day of each month. Government-identified corrections/changes to be made within 5 business days of notification. No more than 1 late report per year.
SS # 2 Comply with all security requirements	PWS Section 5	Zero Security Violations
SS # 3 Provide software and documentation	PWS Section 2/CDRL A004 and A005	All software and documentation shall meet submission dates as specified at the task order level. Software Product Specifications (A004) are due when the software development and testing care completed, and NLT 30 calendar days prior to end of task order. All associated software documentation (A005) is due at the time of software delivery
SS #4 Technical Report	PWS Section 2/CDRL A003	Reports shall be complete and accurate. Draft shall be provided NLT fifteen (15) calendar days after completion of research/study or date of Government request. Final report due NLT ten (10) calendar days after Government review/comments received (if any). Reports shall not be disseminated beyond AFTAC.
SS #5 Final Technical Report	PWS Section 2/CDRL A006	Report shall be complete and accurate. Draft report shall be provided NLT seven (7) calendar days prior to the end of the period of performance. Corrections changes will be made NLT ten (10) calendar days after receipt of Government comments (if any). Reports shall not be disseminated beyond AFTAC.

4 GOVERNMENT FURNISHED SUPPLIES AND SERVICES.

4.1 Services.

NA

4.2 Facilities.

NA

4.3 Utilities.

NA

4.4 Equipment.

The Government will provide one secure telephone (STE) and associated hardware

4.5 Materials.

NA

5 SPECIAL REQUIREMENTS/INSTRUCTIONS.

5.1 Special IT Requirements

All IT products (requirements and solutions), to include software, hardware, processes and security products delivered to AFTAC as a requirement of this PWS shall adhere to the AFTAC Enterprise Infrastructure Baseline with any deviations approved by the AFTAC Infrastructure Strategy Council before delivery of the IT product. All IT deliveries are expected to integrate and conform to AFTAC's Enterprise Infrastructure Baseline. Hardware, storage, and database requirements must be identified as soon as possible and presented to the AFTAC Infrastructure Strategy Council for approval. (Reference Attachment: "CYS GOV CDE-CPE Baseline.v1" and "CYS JWICS CDE-CPE Baseline.v1").

This program expects the adoption and execution of the Preferred Agile Framework outlined by the Department of the Air Force, ensuring an architectural framework that can be adjusted throughout the period of performance. If feasible, adopting existing applications, components, and platforms is preferred over creating custom solutions.

Software solutions shall adhere to the AFTAC Software Development Strategy Document (SDSD), to include software security and quality considerations. Any deviations shall be presented to the AFTAC Software Strategy Council as soon as they are identified. (Reference Attachment: "SDSDv1.3_14Dec2021_signed").

All software developed for AFTAC will first be installed and tested in a development environment such as the Common Development Environment (CDE) at the appropriate classification level. The Contractor shall supply on-site support for installation of software into AFTAC's Continuous

Integration (CI) Pipeline. The contractor shall also provide support to install and configure any middleware necessary to run the delivered software. Some software will remain in the CDE indefinitely. This software is intended for installation in CDE and the operational environment The Contractor shall provide documentation as requested to support certification and accreditation processes as needed (A003, and/or A004, and/or A005, and/or A006) This determination will be defined at the Task Order level.

Software deliveries shall consist of source code of noncommercial software, all software dependencies, unit tests, related data, and associated license rights that are necessary across the life-cycle of that software, including development, testing, operations, and maintenance. This includes all artifacts necessary to reproduce, build, or recompile the software from its source code and required software libraries; to conduct required software testing; and to deploy on relevant system hardware. Binaries or executables without source code, unless identified as Commercial off the Shelf (COTS) with support, are not an acceptable delivery.

All software deliveries are complete after integration into AFTAC's CI Pipelines, installed and running in the CDE, and contain clean security scans (to include source code scans, third-party dependency scans, and ACAS scans) if intended for the operational environment. Onsite support for installation onto CDE and production/operational networks may be required, as well as assistance with integration and system testing efforts. The final software product is considered completed once it can be run by a Government employee on AFTAC systems and it produces the results the software was developed for.

The contractor shall provide to the Government all developed, modified, or converted source modules, processes, programs, scripts, operating instructions, databases, system files, documentation, test files and test conditions used to develop each approved systems change request. When specified by the Government, the contractor shall participate with the Government in testing the system. The Contractor shall provide documentation as requested to support certification and accreditation processes as needed.

5.2 Contractor Identification in the Government Workplace.

When conversing with Government personnel during business meetings, over the telephone or via electronic mail, the contractor shall identify themselves as such to avoid situations arising where sensitive topics might be better discussed solely between Government employees. The contractor shall identify themselves on any attendance sheet or any coordination documents they may review. Electronic mail signature blocks shall identify their company affiliation.

5.3 Industrial Security.

5.3.1   DD Form 254. Overarching security requirements and contractor access to classified information will be as specified in the DD Form 254, Department of Defense Security Classification attached to the contract. Key Management personnel, along with all technical personnel performing classified work on this contract, shall possess at least a SECRET clearance, at the time of contract award. Contractor will meet the requirements of the DD Form 254, and establish procedures for receipt, storage, and generation of classified material in accordance with DODD 5220.22.

5.3.2 Most work performed for the ADAMTD II effort will be at the UNCLASSIFIED level. However, discussions pertaining to technical details and computer specifications will have SECRET level security clearance requirements.

5.3.3 For Deliverables Associated with Software: Within twelve (12) months from contract initiation, the contractor shall establish and maintain a TOP SECRET/SCI security clearance and be DCID 6/4 eligible with a current SSBI for a minimum of one (1) or more individual(s) that will be onsite at the AFTAC building to train AFTAC staff and to install software deliverables required for each task order. The TS/SCI clearance is necessary for installation at AFTAC and not necessary for the contractor's facility.

5.3.4 The contractor shall identify project security risks and support the Government in the formation and implementation of plans to manage and reduce identified risk. The contractor shall ensure computer security requirements are integrated into system requirements definition, design, and development. The contractor shall ensure the Risk Management process is applied as described in DODD 5220.22. Security Test and Evaluation shall be performed in accordance with DODD 5220.22.

5.4 **Physical Security.**

The contractor shall safeguard all Government property provided for contractor use. At the close of each work period, Government facilities, property, and materials shall be secured.

5.4.1 Key Control. The contractor shall establish and implement methods of ensuring that all keys and key cards issued to the contractor by the Government are not lost or misplaced and are not used by unauthorized persons.

5.4.1.1 The contractor shall immediately report the occurrences of a lost or duplicate key to the COR.

5.4.1.2 In the event keys, other than master keys, are lost or duplicated, the contractor shall, upon written direction of the CO, rekey or replace the affected lock or locks; however, the Government, at its option, may replace the affected lock or locks or perform rekeying. When the replacement of locks or rekeying is performed by the Government, the total cost of rekeying 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 will be replaced by the Government and the total cost shall be deducted from the monthly payment due the contractor.

5.4.1.3 The contractor shall prohibit the use of keys issued by the Government 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's employees engaged in the performance of assigned work in those areas, or personnel authorized entrance by the COR.

5.4.2 Combinations and Codes. The contractor shall establish and implement methods of ensuring that all combinations and codes 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.

5.4.2.1 Access lock combinations are "Controlled Unclassified Information" and shall be protected from unauthorized personnel.

5.4.2.2 Combinations to security containers, secure rooms, or vaults are classified information and shall properly safeguarded. Only the contractor employees with proper security clearance and need-to-know will be given combinations to security containers, secure rooms, or vaults.

5.4.2.3 Security alarm access codes are "Controlled Unclassified Information" and shall be protected from unauthorized personnel. Security alarm access codes will be given to contractor employees who require entry into areas with security alarms. The contractor shall properly safeguard alarm access codes to prevent unauthorized disclosure.

5.5 **Privacy Act.**

Work on this contract requires the contractor to have access to Privacy Information. The contractor shall adhere to the Privacy Act, Title 5 of the US Code, Section 552a and applicable Agency rules and regulations.

5.6 **Location(s) of Work.**

The work to be performed under this contract shall be performed at the contractor's facility.

5.7 **Hours of Operation.**

5.7.1 Normal Hours of Operation. The contractor shall perform the services required under this contract during the following hours: 0800-1500 with flexible schedules permitted.

5.7.2 Recognized Holidays. The contractor is not required to provide service on the following days:

New Year's Day	Labor Day
Dr. Martin Luther King's Birthday	Columbus Day
Presidents' Day	Veterans Day
Memorial Day	Thanksgiving Day
Juneteenth	Christmas Day
Independence Day	

5.7.2.1 If the holiday falls on Saturday, it is observed on Friday. If the holiday falls on a Sunday, it is observed on Monday.

5.7.2.2 The contractor shall not report for duty and will not be reimbursed by the Government when the Government facility is closed due to a Federal holiday, local or national emergencies, administrative closings, or similar Government directed facility closings.

5.8 **Conservation of Utilities.**

The contractor shall operate under conditions which prevent the waste of utilities which include the following:

5.8.1 Government telephones shall be used only for official Government business.

5.9 **Records.**

The contractor shall create, maintain and dispose of only those Government required records that are specifically cited in this PWS or required by the provisions of a mandatory directive listed in

Appendix C, Applicable Publications & Instructions. If requested by the Government, the contractor shall provide the original record, or a reproducible copy of any such record within five (5) workdays of receipt of the request.

5.10 **Contractor Manpower Data Reporting.**

The below information is for informational purposes only and shall not be initiated by the contractor without written direction from the Contracting Officer:

5.10.1   Effective FY2020, the Department of Defense will no longer require contractors to report into the Enterprise-wide Contractor Reporting Application (eCMRA). For FY 2020, contractors shall begin reporting manpower data relating to the performance services contracts into the System for Award Management (www.sam.gov).

5.10.2   The following contracts are subject to Service Contract Reporting (SCR): Any purchase of services by a military department or Defense Agency, in excess of $3 Million, for services in the following Service Acquisition Portfolios:

5.10.2.1   Logistics management services;

5.10.2.2   Equipment related services;

5.10.2.3   Knowledge-based services;

5.10.2.4   Electronics & comms services.

5.10.3   SAM receives contract information from FPDS-NG. It will only enable reporting for entities with contracts that meet the above stated SCR thresholds.

5.10.4   Contractor shall be an entity registered in SAM, an individual SAM user account with the Entity Administrator, Entity Registration Representative, or Reporter role for that entity, and one or more contracts awarded to that entity which meet the SCR reporting thresholds.

5.10.5   Steps for Submitting a Service Contract Report (SCR).

5.10.5.1   Go to www.sam.gov and log in.

5.10.5.2   Select Entity Registrations and then select Service Contract Reporting.

5.10.5.3   SAM displays your entities which have service contracts and meet the reporting criteria. Select View by entity to see the service contracts for each entity.

5.10.5.4   Next, select Add for the service contract against which you want to create a Service Contract Report. Each service contract which meets the FAR Subpart 4.1703 reporting thresholds is displayed.

5.10.5.5   Next, the Complete Service Contract Report page will be displayed. SAM displays the contract details and allows you to report. Contractor is required to enter the following information:

5.10.5.5.1   Total Amount Invoiced: Total dollar amount invoiced for services performed during the previous Government fiscal year under the contract (this amount should include the prime and any subcontract amount).

5.10.5.6   Prime Contractor Hours Expended: Prime contractor direct labor hours expended on the services performed during the previous Government fiscal year. The amount you enter is automatically divided by 2,080 hours to calculate a Full Time Employee (FTE)

equivalent, displayed under the Prime Contractor Hours Expended as Prime Contractor FTEs.

5.10.5.7 Report any required Tier 1 subcontractor information by selecting the Add Tier 1 Subcontract Information button.

5.10.5.8 When you are ready to submit the report, select Submit. This saves your report and returns you to the Select Service Contract page where you can create other SCRs or edit an existing SCR.

5.10.6 Annual Reporting. Reporting inputs will be for the direct labor executed during the period of performance (PoP) for each Government fiscal year (FY), which runs 1 October through 30 September. While inputs may be reported any time during the FY, all data shall be reported no later than 31 October of each calendar year. The contractor shall provide reporting inputs for the final PoP of this contract no later than 30 calendar days after contract expiration. The contractor may direct technical questions about the SAM Service Contract Reporting tool to the Federal Service Desk FSD at https://www.fsd.gov/fsd-gov/home.do

5.11 Environmental Controls.

NA

5.12 Safety Requirements (If Applicable).

NA

5.13 Contractor Personnel Training.

5.13.1 DoD 8570 Registration.

5.13.2 DMDC shut down the DWC application in October 2019. The Cyberspace Support Squadron site is maintained for certifications for all Air Force members (Mil/Civ/AF-affiliated contractors): https://cyss.us.af.mil/cyss/certifiedWorkforce/ Click on Enter Certification and fill out the form.

5.14 Special Training, Certifications and Qualifications.

5.14.1 See section 2, 5.3, and 5.4. Contractor must have all training, certifications, and qualifications to meet the requirements laid out in those sections.

5.15 Kick-off Meeting and Periodic Progress Meetings.

The contractor shall attend an initial kick-off meeting (7 of days) after contract award. The CO, COR, and other Government personnel, as appropriate, may meet periodically with the contractor to review the contractor's performance. At these meetings the CO will apprise the contractor of how the Government views the contractor's performance and the contractor will apprise the Government of problems, if any, being experienced. Appropriate action shall be taken to resolve outstanding issues. Conferences and meetings requirements will be specified in each individual task order.

5.16 **Contractor Travel.**

Two, three-day trips for one contractor to AFTAC HQ (PASB, FL) are anticipated under this task order. All travel requirements (including destination, purpose, plans, agenda, itinerary, number and names of personnel, and dates) shall be pre-approved by the COR. Contractor shall submit a trip report upon completion of travel (A001). Costs for travel shall be billed on a strictly cost reimbursable basis IAW, the regulatory implementation of Public Law 99-234, FAR subpart 31.205-46 entitled Travel Costs and the limitation of funds specified in this contract (A002).

Travel Purpose	Destination	Number of Contractor Personnel	Travel Dates (Estimated)	Duration of Travel (Days)
Training	Patrick SFB, FL	2	Start of Award	4
Training	Patrick SFB, FL	2	End of Award	4

6   DELIVERABLES.

Reports and other data required in this PWS shall be submitted IAW the Contract Data Requirements List (CDRL) in Exhibit A of the contract.

CDRL #	Data Item Number	Data Item Description	PWS Para.	Delivery Schedule
A001	Dl-MGMT-80368A	STATUS REPORT	Section 2; Section 5.16	Reports due not later than the 15th calendar day of each month.
A002	DI-MISC-81468	CONTRACTOR FUNDS STATUS REPORT	Section 2; Section 5.16	Reports due not later than the 15th calendar day of each month
A003	DI-MGMT-80508B	TECHNICAL REPORT STUDY/SERVICES	Section 2	Draft shall be provided NLT fifteen (15) calendar days after completion of research/study. Final report due NLT ten (10) calendar days after Government review/comments received (if any).
A004	DI-IPSC-81441A	SOFTWARE PRODUCT SPECIFICATION (SPS)	Section 2	All SPS due when the software development and testing are completed and NLT 30 calendar days prior to end of task order PoP.
A005	DI-IPSC-81443A	SOFTWARE USER MANUAL (SUM)	Section 2	All SUM documentation/deliverables will be due at the time of software delivery.
A006	DI-MISC-80711A	FINAL SCIENTIFIC AND TECHNICAL REPORT	Section 2	Report shall be provided NLT seven (7) calendar days prior to the end of the period of performance. Corrections changes will be made NLT ten (10) calendar days after receipt of Government comments (if any).

APPENDIX A - ACRONYMS AND ABBREVIATIONS LIST

Acronym/Abbreviation	Definition
ADAMTD	Advanced Data Assimilation and Mesoscale and Transport & Dispersion
ATD	Atmospheric Transport and Dispersion
AF	Air Force
AFTAC	Air Force Technical Applications Center
CDRL	Contract Data Requirements List
CO	Contracting Officer
COR	Contracting Officer's Representative
DOD	Department of Defense
FAR	Federal Acquisition Regulation
IAW	In accordance with
MMA	Meteorological Modeling and Analysis
MPAS	Model for Prediction Across Scales
NWP	Numerical Weather Prediction
O&M	Operations and Maintenance
POP	Period of Performance
QA	Quality Assurance
QASP	Quality Assurance Surveillance Plan
R&D	Research and Development
RTD&E	Research, Test, Development and Evaluation

SFB	Space Force Base
SPS	Software Product Specification
SS	Services Summary
STILT	Stochastic Time-Inverted Lagrangian Transport
SUM	Software User Manual
USAF	United States Air Force

APPENDIX B - ESTIMATED WORKLOAD DATA

The historical workload data provided is for informational use only and is based upon historical data. Contractors shall propose based on their own technical approach.

ITEM	DESCRIPTION OF DATA	ESTIMATED QUANTITY
1	Program Manager	11
2	Senior Scientist	230
3	Associate Scientist	402
4	Software Engineer	496

APPENDIX C - APPLICABLE PUBLICATIONS & INSTRUCTIONS

Compliance with all publications, regulations and operating instructions provided by the Government is required when: They pertain to the procedures for materials expediting herein and where the contractor is authorized by the PWS to accomplish the work specified in the publication, regulation or operating instructions. The publications prescribe USAF policies, use of materials, procedures and processes applicable to the work requirements. The contractor is required to acquire and work on the latest version of the publication.

Publication/Instruction - Title	Applicable Paragraph/Chapter	PWS Paragraph
AFTAC GSSCG (current version)	Entire document	All

APPENDIX D - POSITION DESCRIPTIONS

Program Manager: Oversees cost, schedule, deliverables, and performance of ADAMTDII contract. Main point of contact with AFTAC's Contracting Officer Representative.

Experience- Minimum 2 years' experience overseeing cost, schedule, deliverables, and performance of contracts/acquisitions efforts with the government. Preferred experience would include program management to contracts similar to or greater in scope, length and deliverables requirements.
Duties- Provides monthly deliverables to COR, ensures deliverables
are on time and complete, and communicates with COR on any issues affecting schedule, cost, or performance.
Education- Bachelor's degree. Experience and/or prior service can serve as equivalent.

Please provide reasonable substantiating response supporting the Program Manager requirement.

Senior Scientist: Main technical oversight for ADAMTDII contract.

Experience- Minimum five years of experience overseeing and/or performing all tasks similar in scope and nature to tasks listed in PWS Section 2. Must have authored or coauthored technical deliverables similar in scope and complexity required for the ADAMTDII effort.
Duties- Provide technical oversight for the ADAMTDII effort.
Education- Minimum five years of experience or minimum of master's degree in meteorology or equivalent field.

Please provide reasonable substantiating response supporting the Senior Scientist requirement.

Associate Scientist: Technical mid-level scientist.

Experience- Minimum 2 years' experience performing tasks similar in scope and nature to the PWS.
Duties- Works closely with senior level scientist to provide deliverables similar to scope and nature of the ADAMTDII effort.
Education- Minimum Bachelor's Degree in meteorology or equivalent field.

Please provide reasonable substantiating response supporting the Associate Scientist requirement.

Software Engineer: Developer of software related needs of contract.

Experience- Minimum 2 years' experience performing tasks similar in scope and nature to the PWS.
Duties- Develop, document, and maintain software in accordance with the PWS requirements to include Workflow Management Software.
Education- Minimum Bachelor's Degree in Software Engineering or equivalent field.

Please provide reasonable substantiating response supporting the Software Engineer requirement.