RFP NNG15499033R, ENCLOSURE 3

GOVERNMENT QUALITY ASSURANCE SURVEILLANCE PLAN

TECHNOLOGY AND INTEGRATED DISCIPLINE ENGINEERING SERVICES (TIDES)

CONTRACT NO. TBD

FOREWARD

Under performance-based acquisitions such as this, the Contractor assumes more responsibility and greater risk in exchange for more flexibility and less direct Government involvement in contract activities. However, the Government still has a responsibility to conduct surveillance. Surveillance spans a spectrum of Government involvement. Surveillance may be as simple as inspecting a delivered support or service at acceptance or as complex as continually monitoring contractor performance. To meet this responsibility, the Government needs to understand the risks involved in the Contractor's activity and how the Contractor is managing those risks.

This Government Quality Assurance Surveillance Plan has been prepared to describe the Government's surveillance of this contract. It is a "living" document that will be tailored to the contractor selected. The Government welcomes suggestions for improving this Plan. Of particular interest are ideas about which information the Government should monitor (i.e., metrics) and how the Government can most cost-effectively obtain the relevant performance data it needs.

TIDES
GOVERNMENT QUALITY ASSURANCE SURVEILLANCE PLAN

1.0 INTRODUCTION

1.1 Purpose

The purpose of this Government Quality Assurance Surveillance Plan (QASP) is to define the overall approach the NASA Goddard Space Flight Center (GSFC) intends to use to monitor and survey Contractor onsite and offsite performance under the Technology and Integrated Discipline Engineering Services (TIDES) Contract No. TBD. This QASP defines the process the Government expects to follow to obtain data, evaluate the Contractor, and determine if contract performance conforms to contract requirements. The goal is to balance the level of Government surveillance with perceived impacts and risks associated with performance hereunder. The QASP can be changed unilaterally by the Government at any time during the contract.

GSFC plans to utilize a surveillance team to evaluate Contractor performance and direct surveillance activities. The team will establish and rely on objective and subjective performance metrics based on the contract Statement of Work (SOW) and task orders issued thereunder, to evaluate Contractor performance against requirements.

The QASP is a Government-developed surveillance tool prepared in accordance with FAR 46.601 and NFS 1846.401. It is not part of the contract, per NFS 1846.401, but provided to the Contractor for informational purposes only.

1.2 Scope

This QASP identifies the program requirements, strategies, resources, review and control processes, surveillance activities, and metrics for continuous measurement of Contractor performance. This plan provides effective and systematic surveillance methods for evaluating the Contractor services, processes, and products provided under this contract. The Government may evaluate work at any time during the Contractor's work performance.

The intent of the QASP is to ensure that the Contractor performs in accordance with acceptable quality levels and the Government receives the quality of services and products called for in the contract. This QASP does not detail how the Contractor accomplishes the work. Rather, the QASP is based on the premise that the contractor, not the Government, is responsible for managing its quality controls and ensuring that performance meets the terms of the contract. The role of the Government is quality assurance to ensure contract standards are achieved.

The QASP is intended to be a "living" document from which resources and activities will evolve from one phase to another during the life of the contract, and will be updated as required and defined in this document.

This plan is applicable to any service or product provided, as well as all areas in which work is being performed by TIDES Contractor(s). Throughout this QASP, the term TIDES Contractor is used. In terms of this plan, it should be known that unless explicitly stated, this term is applicable to both the TIDES contractor and any and all subcontractors.

The surveillance program shall be a collaborative and integrated effort that includes all areas of contract management, including the following:

a. Engineering & Technology
b. Quality Assurance
c. Procurement/Subcontracting/Purchasing
d. Finance
e. Property
f. Environmental
g. Export Control
h. Safety and Health
i. Security

1.3 Program Definition and Contract Description

1.3.1 Program Background and Definition

The Applied Engineering and Technology Directorate (AETD) plans, organizes, and conducts a broad range of technical research and development activities in support of science applications at GSFC. Within AETD, the Mission Engineering and Systems Analysis Division (MESAD) is responsible for providing engineering expertise and support in the formulation, design, development, fabrication, integration, testing, verification, and operations of Guidance, Navigation and Control (GN&C) components, subsystems, and systems for multiple projects. The specific components, subsystems, and systems are ultimately integrated into the spacecraft to form a science observatory. It is these observatories that are launched to fulfill the mission of the GSFC.

1.3.2 Contract Goals and Objectives:

The GSFC goal for the TIDES contract is to enable mission success for every customer using TIDES services. In order to support this goal, the TIDES Contractor shall provide the Agency with services that are highly reliable and affordable and contribute to the safe operation of the mission. The Contractor shall implement a safety, health, and mission assurance program that provides a safe and healthy work environment, minimizes program risk, and maximizes NASA mission success.

The principal purpose of this Cost-Plus-Fixed-Fee, Indefinite Delivery Indefinite Quantity contract is to acquire engineering and related services to MESAD and related organizations, as required, for the formulation, design, development, fabrication, integration, testing, verification, and operations of guidance, navigation and control (GN&C) space flight and ground system hardware and software, including development and validation of new technologies to enable

future space and science missions. The emphasis in engineering services will be in the area of guidance, navigation, and control systems, which includes GN&C systems engineering, Attitude Control Systems (ACS) hardware and software development, and propulsion engineering and development.

To this end, the Contractor shall provide on/off-site multidisciplinary engineering services, pursuant to Task Orders issued by the Contracting Officer. These services shall include the personnel, facilities, and materials (unless otherwise provided by the Government) to accomplish the tasks. Task Orders will be issued to perform services in all aspects of mission and instrument development and implementation for components, subsystems, systems, science instruments, observatories, launch, ground system, spacecraft, and suborbital craft (e.g., aircraft, sounding rockets, unmanned aerial vehicles, balloons), including free-flying spacecraft, suborbital craft payloads, and Space Station payloads as well as ground support equipment, simulators, non-flight models, prototypes and flight hardware; candidate, feasibility, and systems definition studies; project management; systems engineering; analysis; preliminary design; detailed design; fabrication; assembly; integration; test and verification; test instrumentation; data systems management; launch and post-launch operations; research and technology unique to system development; documentation; maintenance; sustaining engineering; configuration management; mission assurance; architectural trades; performance, cost, and risk assessment; and systems safety.

1.4 Guiding Directives

The guiding documents for this surveillance effort include the Contract SOW, performance standards, deliverable requirements, and Task Order requirements as specified in issued Task Orders. The contract identifies general requirements and the Task Orders identify specific objectives or results desired for each issued Task Order requirement.

1.5 References and Applicable Documents

a. American National Standard Quality Systems - Model for Quality Assurance (QA) in Design, Development, Production, Installation and Servicing, American National Standards Institute (ANSI)/International Organization for Standardization (ISO)/American Society for Quality Control (ASQC) Q9001: 2000
b. American National Standard Quality Management System - Requirements, ANSI/ISO/ASQ Q9001: 2000
c. AS9100 Rev. C, Quality Management Systems - Requirements for Aviation, Space and Defense Organizations
d. NPR 7120.5E, NASA Space Flight Programs and Project Management Requirements
e. NPR 7120.7, NASA Information Technology and Institutional Infrastructure Program and Project Management Requirements
f. NPR 7150.2A, NASA Software Engineering Requirements
g. NPR 8705.4, Risk Classification for NASA Payloads
h. NPR 8715.7, Expendable Launch Vehicle Payload Safety Program
i. NPR 8735.2B, Management of Government Quality Assurance Functions for NASA Contracts

j. Goddard Procedural Requirements (GPR) 5100.2, Supplier Performance Evaluations
k. GPR 5100.4E, Supplier Assessment Process
l. GPR 7120.4D, Risk Management
m. GPR 7123.1A, System Engineering
n. GPR 8070.4B, Administration and Application of Goddard Rules for Design, Development, Verification and Operation of Flight Systems
o. GPR 8700.6B, Engineering Peer Reviews
p. GSFC-STD-1000F, Rules for the Design, Development, Verification, and Operation of Flight Systems
q. NASA/SP-2007-6105 Rev 1, NASA Systems Engineering Handbook
r. NASA-STD 8719.24, NASA Expendable Launch Vehicle Payload Safety Requirements
s. NASA-STD-8739.1A, Workmanship Standard for Polymeric Application on Electronic Assemblies
t. Association Connecting Electronics Industries (IPC) J-STD-001E, Requirements for Soldered Electrical and Electronic Assemblies
u. IPC-J-STD-001ES, Space Applications Electronic Hardware Addendum to IPC-J-STD-001E Requirements for Soldered Electrical and Electronic Subassemblies (except Chapter 10)
v. IPC-A-610E, Acceptability of Electronic Assemblies
w. NASA-STD-8739.4, Crimping, Interconnecting Cables, Harnesses, and Wiring
x. 320-MAR-1001D Standard Mission Assurance Requirements (MAR)

And any other documents that may be listed per each task order.

2.0 SURVEILLANCE STRATEGY AND APPROACH

2.1 General

There exists a wide-ranging spectrum associated with surveillance, ranging from oversight to insight. The strategy and approach to surveillance by GSFC for the TIDES contract, as detailed in this plan, is one that concentrates primarily on insight as opposed to oversight. However, some limited areas do exist where oversight is conducted either via GSFC exercising approval authority on contract-deliverable documentation in critical areas of performance or participation in the Contractor's configuration management process. Regardless, the Government reserves the right to initiate additional surveillance activities (insight or oversight) on an 'as-needed' basis, based upon circumstances and data collected (adverse trends, negative data points, lack of corrective action, etc.) via the surveillance activities defined in this plan. As applicable, any and all oversight activities would be communicated and coordinated with the Contractor and subsequently documented within this plan.

The level of risk and the impact of failure are major determinants in helping define the type of surveillance to be conducted. Clearly, if the impact of failure is minor and the level of risk is low, only a small amount of insight-driven surveillance would normally be needed. Conversely, if the impact of failure could be significant and the level of risk is high, more extensive surveillance (including possible oversight surveillance) is warranted.

This insight-based approach to surveillance will utilize and leverage the TIDES Contractor's Quality Assurance Plan (QAP) and Quality Management System (QMS). Definitions, requirements, and specifications contained in the contract, SOW, and referenced documents will establish a baseline for the surveillance activities. This insight-based approach will seek objective evidence and data that the TIDES Contractor's program and processes are functioning as intended in accordance with the terms of the contract. The focus will be on trusting the TIDES Contractor's QMS, and verifying that the TIDES Contractor is performing according to the policies, procedures, plans, and processes defined by their QMS.

GSFC will strive to use an insight-driven surveillance approach throughout the performance of this contract. The overall surveillance goal will be to obtain objective evidence and data that enable the Government to determine whether the Contractor's program and processes are functioning as intended in accordance with the terms of the contract. The focus will be on prevention rather than detection, i.e., emphasizing controlled processes and methods of operation, as opposed to relying solely upon inspection and test to identify problems.

This insight-based approach to surveillance as applied to the contract will result in lower levels of Government intervention, thus allowing the TIDES Contractor to assume full accountability and responsibility for integrity of processes. Although less obtrusive than oversight, this insight-based approach to surveillance continues to provide the Government with visibility into the TIDES Contractor's programmatic processes, technical processes, progress, and issues at all levels.

As required by FAR 42.1502 and GPR 5100.2, Supplier Performance Evaluations, the Contracting Officer (CO), in collaboration with the Contracting Officer's Representative (COR), will annually complete a Contractor Performance Assessment Reporting System (CPARS) evaluation, which will also be reviewed by the Contractor, and become a part of the Past Performance Information Retrieval System (PPIRS).

2.2 Surveillance Activity Limitations and Guidance

2.2.1 General

Surveillance of the TIDES contract, will be conducted on a non-interference basis and in a manner that will not unduly delay work being performed by the TIDES Contractor.

2.2.2 Insight

Insight is an assurance process that uses performance requirements and, if definable, performance metrics to ensure process capability, product quality and end-item effectiveness. Insight relies on gathering a minimum set of product or process data that provides adequate visibility into the integrity of the product or process. The data may be acquired from Contractor records, usually in a non-intrusive parallel method.

Insight as applied to this contract will result in lower levels of Government surveillance and allow the Contractor to assume increased responsibility and accountability for the integrity of processes. Insight will rely heavily on evaluating planned contract deliverables, performance standards, and existing Contractor procedures and working documents, if available.

2.2.3 Oversight

Oversight as applied to this contract will result in higher levels of Government surveillance. The Government will gather information pertaining to the Contractor's process through on-site involvement and/or inspection in the process and will monitor the process itself. The Government's involvement in the Contractor's performance, through oversight, will be determined necessary by the COR.

2.3 Surveillance Organization and Resources

2.3.1 General

The activities detailed in this plan will be supported and performed by a group of individuals, many with differing levels of responsibilities, but all maintaining a level of consistency in terms of the surveillance strategy, approach, and activities in general. Specific entities supporting the TIDES contract surveillance activities include the identified NASA personnel; TIDES Contractor QA Department personnel (including their subcontractors); and contractor support services and delegated agency personnel, if applicable. Each of these entities and their associated responsibilities/input to the surveillance activities on TIDES contract are described in the following paragraphs.

2.3.2 Surveillance Team

2.3.2.1 General Organization and Responsibilities

General organization and responsibilities of the Surveillance Team are as follows:

a. The surveillance team will be composed of key TIDES Government personnel. All surveillance activities will be implemented using NASA and contractor support personnel, a delegated agency (e.g., Defense Contract Management Agency [DCMA]), and/or a surveillance support contractor(s). The surveillance team may be composed of:

    1. GSFC Procurement Personnel (i.e., CO, Contract Specialist)
    2. GSFC's Engineering and Support personnel (i.e., COR, Task Monitor(s), and Resource/Financial Analyst(s)
    3. GSFC Safety & Health and Security personnel (both physical and Information Technology (IT) Security);
    4. GSFC Property Administrator personnel;
    5. Resident Office or Defense Contract Management Agency (DCMA) personnel;
    6. GSFC Safety and Mission Assurance Office (Code 300).

b. The team's primary purpose will be to provide direction for contract surveillance activities and to serve as the Government's focal point in reviewing and evaluating overall Contractor performance under the TIDES contract. The team will obtain information from various sources, including deliverable Contractor documents, communications with the Contractor, and reports by other personnel or representatives (e.g., Task Monitor(s), GSFC Health & Safety personnel, DCMA) who interact with the Contractor.

c. NASA/GSFC has the responsibility for independently assuring that the TIDES Contractor's operations meet NASA's contract performance requirements and enable success. As such, surveillance team members will have open access to all areas in which this contract is being performed and will interface directly with their TIDES Contractor counterparts. Government expertise with regards to the TIDES contract may be applied in the form of technical consultants and/or providing assistance at working group meetings, design/development and specification reviews, review board meetings, surveys, audits, program reviews, and as in-plant representatives. The team will document problems, concerns and issues, and take note of Contractor accomplishments. They will collect performance metric data, where applicable, and will participate in Contractor review meetings, such as those described herein. Information will flow from individual team members through the COR to surveillance team representatives, who will present issues and achievements at surveillance team meetings. Information gained from these formal and informal exchanges of ideas and collection of data will be compiled and evaluated as a continuous measure of contract performance.

d. All available information will be evaluated, and any action by GSFC will be determined based upon the scope and magnitude of any particular issue or problem. The surveillance team chairperson, the COR, will formally notify the CO of situations where it is perceived that the Contractor has failed to take prudent corrective or preventive action, of situations that increase risk, or of findings of continued contractual non-compliance.

2.3.2.2 TIDES Contracting Officer

TIDES CO responsibilities are as follows:

a. The CO is responsible for ensuring performance of all necessary actions for effective contracting, ensuring compliance with the terms of the contract, issuing task orders, and safeguarding the interests of the United States in its contractual relationships. Within the surveillance area the CO takes inputs from the Program/Project managers, COR, GSFC Safety and Mission Assurance Office, and others to establish the detailed surveillance requirements to be performed by NASA personnel, delegated to another Federal agency via a GSFC Letter of Delegation, or to be performed under contract by a surveillance support Contractor. The CO will also assure that the Contractor receives impartial, fair, and equitable treatment under this contract. The CO is ultimately responsible for the final determination of the adequacy of the contractor's performance.

b. The CO will complete an annual Contractor performance assessment report using the CPARS that will also be reviewed by the Contractor and become a part of the PPIRS.

2.3.2.3 TIDES Contracting Officer's Representative

TIDES COR responsibilities are as follows:

a. The COR is designated in writing by the CO to act as her or her authorized technical representative to assist in administering the contract. The COR monitors the technical work performed under the contract, evaluates Contractor performance, serves as the primary interface for the Contractor and the CO for all technical matters, reports on contract status to Program/Project Management, and recommends corrective action when necessary. The COR is not empowered to make any contractual commitments, authorize any contractual changes on the Government's behalf, or in any way direct the Contractor to operate in conflict with the contract terms and conditions. Any changes that the Contractor deems may affect the contract or task order value, terms, or conditions shall be referred to the CO for action. The COR's limitations of authority are contained in the NASA Form 1634, COR Delegation.

b. The COR assumes full responsibility for directing the surveillance activities identified in this plan. The COR also trains Task Monitors, on evaluation procedures for evaluating contractor performance.

c. The COR will assist the CO in the completion of the contract's annual performance assessment report using CPARS.

2.3.2.4 Task Monitors

GSFC Task Monitors are individuals appointed by the COR for developing Task Orders, reviewing the Contractor's Task Plans and Task Order reports, and monitoring Task Order performance. Task Orders will include quantitative metrics, as appropriate. Task Monitors provide detailed technical oversight of the Contractor's performance and report findings to the COR in a timely, complete and impartial fashion. While the Task Monitors may serve as a direct conduit to provide Government guidance and feedback to the Contractor on technical matters, the Task Monitors are not empowered to make any contractual commitments or to authorize any contractual changes on the Government's behalf.

2.3.2.5 Defense Contract Management Agency (DCMA)

A DCMA representative may be co-located with the Contractor. The DCMA representative is tasked to provide surveillance support in accordance with the provisions of the GSFC Letter of Delegation and this plan.

2.3.2.6 Systems Assurance Manager

GSFC Safety and Mission Assurance (SMA), Code 300, assigns a Chief Safety and Mission Assurance Officer (CSO) to provide surveillance support to assure that contractor and subcontractor(s) meet TIDES contract requirements. The CSO is the principle interface between the AETD Mission Engineering and Systems Analysis Division, Code 590, and Code 300 and has leadership responsibility for accomplishing overall TIDES contract QA surveillance within the guidelines of this plan. The SMA and its service support contractor are responsible for surveillance support of matters pertaining to hardware and software QA, systems reviews, system safety and reliability, parts, materials and processes, testing, and anomaly reporting/resolution. The CSO manages the collection of data and metrics from performance assurance, integration and test, fabrication, and system safety organizations and/or activities to facilitate the evaluation of TIDES Contractor performance.

2.3.2.7 TIDES Contractor Quality Assurance

It is expected that the selected TIDES Contractor will maintain a QA lead as part of its QMS. It is expected that the QA lead will perform QA-related activities for the TIDES efforts. The TIDES Contractor's QA lead will serve a vital role in the success of the surveillance efforts detailed in this plan. In particular, it is expected that the TIDES Contractor will task its QA lead to serve as a focal point for the Government in several areas including but not limited to provision of and access to all requested insight data/lifecycle-related assets and artifacts as they pertain to the insight areas described in this plan, and all QA-related activities conducted by this group.

The Government expects that as necessary and applicable, the QA lead may direct the Government to other groups/individuals supporting the TIDES effort in order to obtain requested insight data. These groups/individuals may include the TIDES Contractor's Program/Business

Management office and/or representatives, discipline engineers, Configuration Management representatives, etc.

2.4 Forms of Surveillance

2.4.1 General

Surveillance on TIDES contract will be performed using any of the primary surveillance forms applied to the insight areas described in Section 3 of this document, during applicable stages of the TIDES contract. These primary forms of surveillance are described below.

2.4.2 Communications

Communications is a general surveillance activity. Communications is a two-way process and includes both written and oral communication. Examples of written communications activities that may be used in conducting surveillance include:

a. Exchanges from the TIDES Contractor to the Government of plans, procedures, quality records, reports, etc., and/or provision of read-only access to repositories which retain these items.
b. Exchanges from the Government to TIDES Contractor of letters, reports, review results, etc.
c. Ad hoc information submitted by COR and/or Task Monitor(s), to the CO related to the TIDES Contractor's electronic mail.

Examples of oral communications activities that may be used in conducting surveillance include:

a. Informal telephone calls, teleconferences.
b. Informal verbal inquiries, discussions, engineering consultations.
c. Working group meetings, IPT participation, technical/status briefings, progress reviews, technical information meetings, and formal and informal reviews.
d. Informal discussions.

2.4.3 Management Reviews and Reporting

Examples of management review and reporting activities that may be used in conducting surveillance include:

a. Formal, process, and progress reviews
b. Review of contract deliverables
c. Documentation of problems, issues and concerns
d. Data collection reporting
e. Review of task order deliverables, products, and documentation

2.4.4 Engineering Peer Reviews

GPR 8700.6 will be used by NASA to review products developed under the TIDES contract at critical milestones. The Engineering Peer Review process will review the Contractor's readiness for hardware and software development throughout the product lifecycle, including nominal and contingency/emergency operations. AETD personnel will also use the Engineering Peer Review process in the event that special evaluations of TIDES Contractor activities are required, such as investigations of significant failures, major equipment failure, etc.

2.4.5 Participation in TIDES Contractor Configuration Management Processes

If identified as a task order requirement, NASA GSFC's Configuration Control Board (CCB) approval will be required for changes that affect TIDES contract capabilities and external interfaces. The TIDES Contractor is required to facilitate NASA insight into the contractor configuration management process. This process will be accomplished through NASA participation in the contractor configuration management process, and insight into TIDES Contractor configuration controlled documentation. AETD personnel monitor performance and activities with metrics. These metrics are used to assess contractor performance as well as to ensure mission customer requirements are met.

3. SURVEILLANCE ACTIVITIES

3.1 General

There exist specific insight areas that the Government and the TIDES Contractor shall concentrate on during applicable stages of contract performance. Each of these insight areas and the Government's expectations for these areas are described in Table 1.

Table 1. Surveillance Insight Areas

Area of Risk Identified	Impact to Government	Surveillance Team Activity
System Maintenance and Availability	System downtime or loss of functionality could result in loss of service to the user community	Review Contractor-developed maintenance plan for improvements. Review data and trouble data. Review corrective action performance.
Information Technology (IT) Security	Computer Security: Potential corruption and loss of data; disruption of schedule	Annual review of IT security plans and contingency test results and controls. Review compliance with GSFC policies, firewalls, protection software, vulnerability scans and external systems.
Configuration Management (CM) Documentation	Uncontrolled models, hardware, software, or documents could lead to erroneous results, incompatible interfaces, wasted resources, and/or mission failure	Periodically sample current documentation, and active management documents to verify compliance with the Contractor's CM System and CM Plan.
Property Management, Control, and Maintenance	Loss of or damage to equipment; potential schedule impact	Review Contractor property management techniques, compliance with policies, and record-keeping. Conduct periodic walkthrough inspections to ensure compliance with policies.
Safety	Loss of work-time or equipment, with schedule or cost impact	Evaluate compliance with the Contractor's Safety and Health Plan and safety requirements. Conduct periodic walkthrough inspections to ensure compliance with safety and health requirements.
Technical Documentation and Control	Loss of knowledge of processes and results	Periodically sample documents (review for accuracy) and ensure they are under CM control.
Process Controls	Degradation of work products; increase in safety risk; potential schedule impact	Periodically monitor, with the assistance of DCMA as needed, the Contractor's adherence to key processes and their internal audit schedules/results.
Continuous Risk Management	Technical, cost, schedule, safety, and program success	Periodically ensure that the Contractor is performing a Continuous Risk Management program that identifies, analyzes, tracks, mitigates, controls and reports on related risks.
Quality Management	Technical, cost, schedule, safety, and program success	Monitor the Contractor's internal and external audits for compliance with the Contractor's established Quality Management Systems, including ANSI/ISO/ASQ Q9001:2000 or AS 9100..

Table 1. Surveillance Insight Areas (continued)

Area of Risk Identified	Impact to Government	Surveillance Team Activity
Quality of Work Force	a. Inability to fill positions and meet commitments on scheduled deliverables or science results, including NASA Performance Metrics b. Additional cost resulting from decreased productivity of other staff reliant on unfilled positions c. Lack of expertise or inadequate experience in key areas d. Delayed data delivery and/or poor data quality	a. Monitor time required to fill positions, and evaluate Contractor efforts and approaches used to fill vacancies. b. Assess Contractor efforts to train staff in areas of required expertise. c. Evaluate Contractor technical performance d. Monitor progress and timeliness and evaluate the quality of data received.
Quality of Workmanship (End-Items)	a. Inability to meet commitments of scheduled deliverables b. Additional cost and time resulting from rework, nonconforming, latent defects	a. Monitor and track schedules and delivery due dates. b. Conduct/witness testing and inspections, when necessary. Ensure end-item deliverables conform prior to acceptance.
Schedule	Services or products not provided in a timely manner can impact project schedule and cost	Monitor progress via management reviews and reporting.
Cost and Funding	Cost Overrun: a. Inability to implement contract requirements within negotiated costs may lead to erosion of technical performance, delay, or deletion of work b. Reduction of work due to funding limitations/fluctuations	Monitor and track costs incurred through the NASA Form 533, NASA Contractor Financial Management Report submitted on a monthly and quarterly basis.
Organizational Conflicts of Interest (OCI) Avoidance	Potential restrictions, ineligible to perform, and/or unfair competitive advantage on future work	Monitor submittal, enforcement and compliance with Contractor OCI Avoidance Plan.
Environmental	Environmental damage to local and remote sites	Conduct periodic inspections to ensure compliance with environmental requirements.
Export Control	Violation of International Traffic in Arms Regulations (ITAR)	Ensure the Contractor has Technical Assistance Agreements as required by the NASA Export Control Program.
Technical Requirements: Quality of engineering data/studies/support	Mission delays/lost time/additional costs in redesign	COR/TM will track contractor progress and evaluate contractor deliverables

3.2 Surveillance Team Activities

The surveillance team members will participate in review meetings, if applicable. They will provide support, as necessary, with the development and approval of technical requirements; flow-down of requirements; and with design, development, production and test activities. They will also maintain insight into the Contractor's compliance with relevant deliverables submitted under the contract and services performed. When the Government has concerns regarding Contractor performance, surveillance team members may conduct independent audits of the Contractor's activities, processes, products, documentation and data, in order to provide assurance that the program is being implemented according to all requirements and specifications. These audits will normally be conducted with advance notification and coordinated with the Contractor. However, the Government reserves the right to conduct unscheduled audits when evidence indicates that Contractor performance is deficient.

The following selected surveillance team activities will be performed by various surveillance team members during applicable stages of contract performance:

3.2.1 Work Area/Floor Checks

The surveillance team members will make a physical inspection of the Contractor's onsite work semi-annually. In addition, the COR may make informal inspections, as required. These inspections are made to assure compliance with GSFC regulations regarding:

a. All Contractor employees have a GSFC identification badge.

b. The total number of Contractor employees provided onsite office space.

c. The Contractor's office space is physically separated from the Government's workspace and is properly identified by a sign with the contractor employee & company's name clearly displayed when possible.

d. The names and locations (buildings/room numbers) of the Contractor employees match their monthly onsite Personnel Identity Verification (PIV) Report.

e. The Contractor knows who the building's Facilities Operation Manager (FOM) is, and what his/her functions are.

f. The Contractor is familiar with the building emergency evacuation procedures.

g. The Contractor employees are aware that work area checks may be conducted at any time.

h. The Contractor is familiar with NASA and GSFC Policy Directives and Procedural Requirements as it pertains to ANSI/ISO/ASQ Q9001:2000 or AS 9100 governing onsite performance. These procedures can be accessed via the following NASA Online Directive Information System Website: http://nodis3.gsfc.nasa.gov/.

i. The Contractor is aware of the appropriate protection procedures for handling Government planning data and other Contractor confidential or financial data.

j. The Contractor employees are aware that the use of Government telephones is for official business only.

k. The Contractor employees are following the proper Checkout Procedures when leaving GSFC (e.g., returning PIV card (badges), library books). The PIV data forms will be checked against the monthly Onsite Reports to identify exiting employees.

l. The Contractor employees are aware of the GSFC IT Security compliance requirements.

m. The Contractor employees are aware of the Contractor's OCI Avoidance Plan and the appropriate Non-Disclosures.

In addition to checking conformance with GSFC regulations listed above, the COR may make periodic checks of the Contractor's workspace to assess adequacy of facilities, equipment, and materials.

3.2.2 Work Review and Performance Monitoring

The COR, with the assistance of the Task Monitors, will perform the following functions to evaluate the Contractor's performance:

a. Reviews specific SOW areas with the Task Monitors to assure that work being performed and deliverables are in accordance with the technical requirements of the SOW and timely.

   Reviews individual Task Orders with the Task Monitors to assure that each Task Order is technically within the scope of the contract and its personnel requirements and schedule are within the Contractor's capabilities. Reviews Contractor Task Plans to ensure that performance estimates are acceptable and that all milestones and deliverables have been identified.

b. Reviews the Contractor's monthly Progress Report for accuracy and completeness. Consults with Task Monitors, as necessary, to assess the fidelity of reports.

c. Meets monthly, or more often if required, with the Contractor's Program Manager to discuss overall contract management and performance, review staffing and schedule issues, and review cost related issues.

d. Certifies the Contractor's invoices for payment in accordance with GSFC procedures.

e. Perform QA inspections and QA witnessing/monitoring of tests.

f. In the event of a discrepancy in the Contractor's performance, the COR promptly notifies both the CO and the Contractor's Program Manager and arranges a meeting to rectify the situation.

3.2.3 Government Property Administration

The COR will carry out the following functions.

a. Review Contractor's request to purchase controlled property and facilities and make recommendations to the CO.

b. Validate that no property or facilities are being acquired without the CO's prior approval.

c. Review and approve Contractor's requests for acquisitions of supplies from Goddard's store stock.

d. Validate that all Installation-Accountable Government Property (IAGP) is being properly utilized and maintained.

e. Conduct periodic inspection of equipment and its location, compared to the data on the property records.

f. Validate that all existing and new equipment is properly tagged.

g. Validate that Government property is made available in accordance with the terms of the contract.

h. Validate that the Contractor does not modify or provide additional facilities, plant equipment, or real property at Goddard, except as specifically required by the contract, or as directed or approved in writing by the CO.

i. Validate that the Contractor is maintaining records for all offsite Government-Furnished Property (GFP).

j. Review all requests to move IAGP to an offsite location for a period longer than 30 days and ensure the required documentation has been properly completed and all required COR/CO signatures obtained on the GSFC 20-4.

3.2.4 Performance Monitoring

The COR will ensure that employer–employee relationships do not occur between Government and Contractor personnel. This is achieved if the following is adhered to:

a. Only the Contractor interviews prospective employees.

b. Only the Contractor’s Program Manager assigns work directly to the employees.

c. Only the Contractor approves timecards and absences.

d. Government personnel do not interfere with the Contractor regarding personnel and administrative prerogatives.

3.2.5 Safety

The responsibility for meeting all safety requirements rests with the Contractor. Surveillance team safety engineers and technical personnel will review Contractor-generated hazard analyses, safety compliance data packages or other safety-related documentation, as appropriate, to help ensure all safety requirements have been satisfied. Surveillance team personnel will also maintain insight into the Contractor's safety activities through the review of the Contractor's submitted Health and Safety Plan, and updates, as required by this contract.