

Checkout, Assembly and Payload Processing Services Contract

Performance Surveillance Plan

Attachment J-8

1.0 INTRODUCTION

1.1 Background: The Checkout, Assembly and Payload Processing Services (CAPPS) Performance Surveillance Plan has been developed to describe the government's general plan in providing effective and systematic surveillance and reporting of all aspects of CAPPS contract performance. This plan recognizes the responsibility of the contractor to carry out its own quality control obligations in the performance of this contract. Implementation of the surveillance plan is expected to be a dynamic process resulting in frequent updates throughout the life of this contract. Surveillance will be accomplished via insight/oversight into the contractor's performance against requirements listed in the CAPPS Statement of Work (SOW) and performance standards listed in Appendix A of this plan. Surveillance can be performed in an insight, oversight (first-time, high risk or out of family operations) or a combination mode as determined by the government using a risk-based decision process. In addition to meeting the SOW requirements, the contractor is responsible for providing services that meet or exceed the following overarching CAPPS contract objectives.

Objective 1:

Safety, Technical, Management, Customer Satisfaction and Socioeconomic Considerations
- Includes proactive resource protection, effective and innovative technical performance, management excellence utilizing risk based business systems, customer satisfaction, socioeconomic consideration and flexibility in meeting changing mission requirements.

Objective 2:

Best Value – safe, cost effective, technically proficient and excellent customer service

Objective 3:

Process Improvement - includes proactive integrated process analysis and improvement, innovations in payload processing and support functions, and reductions in payload processing time.

Objective 4:

ISS Associate Contract Agreements – Includes a joint performance focus with other ISS contractors, ISS end-to-end process improvements, and template reduction initiatives.

Objective 5:

Area of Emphasis Performance – includes specific focus on areas of concern to the government.

The contractor's degree of success in achieving these objectives will be measured as indicators of contractor performance and will be the foundation of the performance/award fee evaluation.

1.2 Responsibilities: Responsibilities for each entity involved in CAPPS surveillance and performance evaluation are described below.

1.2.1 The CAPPS Contracting Officer (CO) is responsible for contract management and ensuring compliance with the terms of the contract.

1.2.2 The primary COTR function is to serve as technical liaison between the Contractor and the CO. The COTR is responsible for monitoring the Contractor's performance and delivery of the final product and/or services under the contract. The COTR is responsible

for assimilating performance surveillance data summaries into a performance/award fee report and presenting to the Award Fee Board (AFB) including the Fee Determining Official (FDO).

1.2.3 The CO/COTR will maintain insight into the CAPPS contractor performance using performance monitors for their area of responsibility. The COTR provides centralized direction to the various performance monitors, initiates the call for input from performance monitors, consolidates all findings into a performance assessment, and presents the findings/assessments to the CO, AFB, and FDO.

1.3 Documentation: The contractor provides contract assessment reports per Performance Assessment Plan and Performance Assessment Reports (DR-51), and contract deliverables to the ISS/Payload Processing Directorate Business office (UB-L). UB-L will integrate the surveillance data and prepare a variety of reports and presentations.

2.0 SURVEILLANCE METHODOLOGY

Reference NPG 7120.5B, NASA Program and Project Management Processes and Requirements

Surveillance will be accomplished through continual monitoring and verification of contract performance including activity status and documentation analysis to ensure that specified requirements are satisfied. Surveillance can be performed in an insight, oversight (first-time and high risk operations) or a combination mode as determined by the government using a risk-based decision process. The strategy will change over the life of the contract as programs supported by KSC progress. As additional risk information is collected on the programs, the surveillance strategy will be adjusted accordingly to reflect any increase or decrease in risk. The implementation of surveillance may vary in different parts of the contract. There are a variety of surveillance tools including, but not limited to, customer feedback, management information systems, metrics, audit/checklist, sampling, analysis, observation or inspection.

2.1 Surveillance Strategy:

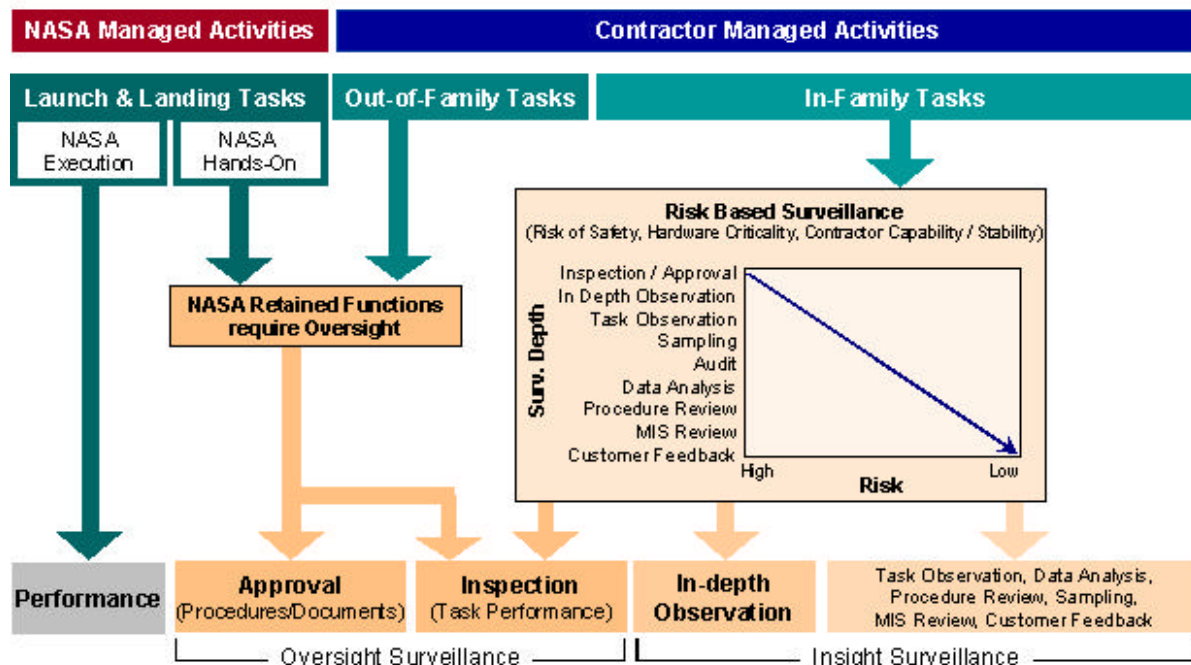
Reference - NPG 8735.2, Management of Government Safety and Mission Assurance Surveillance Functions for NASA Contracts

The government has established a surveillance strategy that is consistent with and complementary to the overall contracting strategy, the contract incentive mechanisms, and the program's identified risks. This surveillance strategy identifies the overall approach to surveillance that will be applied. The strategy also identifies where along the surveillance spectrum the government intends to perform its surveillance, from total oversight at one end the surveillance spectrum to total insight at the other end.

Oversight typically entails onsite, in-line involvement with the CAPPS Contractor's processes and generally includes detailed monitoring of the process itself. In contrast insight typically entails monitoring a minimum set of product or process data to provide an adequate understanding of the product or process.

The strategy will change over the life of the contract and as the KSC supported programs' progress and more risk information identifies where changes are necessary or beneficial to reflect either an increase or decrease in risk. Also the implementation of surveillance may be different for various parts of contract.

Processing Surveillance Model



NASA will use a risk management approach and apply Penetration Levels based on level of risk of each area:

- High Risk Areas = Higher Penetration
- Low Risk Areas = Lower Penetration

Penetration levels will be adjusted as risk areas and their severity change over the life of the contract. NASA will penetrate to a level that assures the contractor is doing the right things.

2.2 Surveillance Definitions:

References - NPG 8735.2, Management of Government Safety and Mission Assurance Surveillance Functions for NASA Contracts and NSTS 08126, Revision H, Shuttle Program Problem Reporting and Corrective Action (PRACA) System Requirements

In-Family: In-family conditions involve one or more of the following:

1. Manufacturing, processing, and operations within the experience base as program-accepted performance.
2. A problem that was previously experienced, analyzed, and understood.
3. In-family problems are in compliance with established requirements and processes for the end item or system.
4. Activities to return to the design requirement or performance specification by removal and replacement or rework using a standard repair or maintenance procedure approved by the design project.

Insight: Surveillance mode requiring the monitoring of customer-identified metrics and contracted milestones. Insight is a continuum that can range from low intensity, such as reviewing quarterly reports, to high intensity, such as performing surveys and reviews. Insight is a means to acquire knowledge and understanding of the contractor's actions by monitoring selected metrics and/or

milestones through watchful observation, documentation review, meeting attendance, reviews, tests, and compliance evaluations.

Out-of-Family: Out-of-family conditions involve one or more of the following:

1. Operation or performance outside the expected performance range for a given parameters or which has not previously been experienced.
2. Anomalies or nonconformances which affect:
 - 2.1 Configuration
 - 2.2 Certification
 - 2.3 Mission success
 - 2.4 Safety critical functions
 - 2.5 Weight in excess of two pounds (equivalent performances to orbit)
3. Adverse problem trends.
4. Anomalies or non-conformances that require design element analysis or assistance for resolution.
5. Unexplained anomalies or events.
6. Limit hardware life.
7. Restrict hardware or software use.
8. Affect hazard control.
9. Affect flight or ground operation procedures that are controlled by the government.
10. Change software or hardware configuration that are controlled by the government.
11. Allow use of hardware that does not meet performance specifications, exceeds certification limits, or surpasses time, age, or cycle life limits (waivers/ exceptions).
12. Affect critical hardware manufacture or repair processes.

Oversight: Surveillance mode that is in line with the contractor's processes. The government retains and exercises the right to concur or non-concur with the supplier's decisions. Non-concurrence must be resolved before the contractor can proceed. Oversight is a continuum that can range from low intensity, such as government concurrence in reviews (e.g., PDR, CDR), to high intensity oversight, in which the government has day-to-day involvement in the contractor's decision-making process (i.e., hardware inspections, anomaly resolution, launch go/no-go, etc.).

Penetration Levels:

Level 0 - No Penetration:

- Accept contractor performed tasks at face value (based on assessment that no penetration is required)

Level 1 - Low Penetration:

- Participate in reviews and Technical Interchange Meetings and assess only the data presented
- Perform periodic audits on pre-defined processes
- Chair board or serve as board member, or RID writer, at a formal review
- Participate in resolution and closure of issues

Level 2 - Intermediate Penetration:

- Same as low penetration with addition of:
 - Daily or weekly involvement to identify and resolve issues

Level 3 - In-depth Penetration:

- Same as intermediate penetration with addition of:
 - Methodical review of details

2.3 Surveillance Tools: The following is a description of the surveillance tools that may be utilized by the government. This list of tools is not exhaustive. If it becomes evident that additional tools are necessary and available, they may be added to the list. The descriptions are ranked from the least intrusive method to the most. It is anticipated that the type of surveillance method utilized will be based on relative risk of the technical area. For example, the more critical the area, the more intrusive the method of surveillance. However, the government can use any of these tools at any time for any of the technical areas.

2.3.1 Customer feedback is a reactive tool based on input from the customers with the primary purpose to provide performance feedback to the government. This tool may be used as an indicator to increase government surveillance through use of different surveillance tools. Customer feedback will generally not be the only tool used for critical processes and activities.

2.3.2 Management Information Systems (MIS) provide proactive insight into contractor performance through assessment of contractor or government generated data. The data and output of the MIS will be validated as necessary by the government to assure that it is factual and accurately reflects the contractor's performance.

2.3.3 Checklists are used to conduct surveys and perform audits to gather inputs to determine whether or not a service is being provided. Survey checklists are used to gather subjective inputs to determine whether or not a service was provided. Surveys collect personal judgments and may not necessarily reflect the quality of the service. Audit checklists are used to collect findings of fact related to contract requirements.

2.3.4 Metrics are performance indicators provided by the contractor or generated by the government. In most cases, the contractor will generate this data in order to manage their processes.

2.3.5 Sampling is a quantitative approach that involves statistically based random checks of the contractor's data or work performance. The purpose of these random checks is to validate that data is factual and that work performance meets requirements.

2.3.6 In-depth observation entails directly observing the contractor during performance of work. This tool may be used where work involves tasks which present high risk to program assets; however, use of the tool is not limited to such critical activities. This surveillance method does not represent a constraint to the contractor's authority to proceed. In-depth observation allows the government to have real-time insight into contractor performance.

2.3.7 Inspection is an in-line function in which the government reviews and approves a specific contractor product or service. Inspection indicates approval and acceptance of a contractor requirement by the government and may present a constraint to the contractor's authority to proceed. The government may choose to use this surveillance technique due to high risk to program assets and a need to assure that performance is demonstrated.

2.3.8 The CAPPS Web Portal (<http://portal.boeing.ksc.nasa.gov/>) will be used as the main source for the contract performance data, which includes contract data (i.e.; Data Requirements Deliverables (DRD), Quality Systems Documentation, Mission/Engineering

data and the CAPPS Performance Plan (CPP), etc). The CAPPS Performance Plan (CPP) is a strategic tool developed by the contractor to integrate their continuous improvement objectives, action plans and measurement techniques. The appropriate government personnel can access the web portal to review metric data, updated monthly, CPP projects status and other contract data.

2.4 Assessment: The government conducts continuous assessments of the contractor's performance. Performance assessments include the review of customer feedback and contractor performance data gathered utilizing the tools referenced in Section 2.3. The data is analyzed to determine the level of performance. The validity and accuracy of contractor provided data will be verified by the government either through surveillance of activities or through review of each data element. These assessments ensure receipt of the quantity and kinds of products and services required by the contract and will become inputs for the evaluation of contractor performance. The initial contractor proposed performance metrics (DR 51) will be the basis for a government and CAPPS contractor surveillance effort and will become the first official set of performance metrics. Performance metrics will be aligned with the objectives identified in Section 1.1 of this document. Performance/Award Fee metrics will be reviewed and modified as required through partnering. Partnering will continue throughout the life of the contract to ensure that Performance/Award Fee metrics remain valid and relevant to government priorities and contractor performance.

2.5 Evaluation: The COTR, in conjunction with the CO, is responsible for summarizing the contractor's performance utilizing the surveillance inputs to assess and report the level of contractor performance in meeting the CAPPS objectives. All data gathered as part of this surveillance process using the methods described will be considered in the Performance/Award Fee evaluation.

Appendix A

PERFORMANCE STANDARDS SUMMARY

The following summarizes examples of performance standards for specific SOW tasks. Not all efforts under this contract are included in the table. Lack of inclusion in the table in no way relieves the contractor of the obligation to perform all mission support elements and delineated tasks. The Performance Standards and method of surveillance below are dynamic and will change throughout the life of the contract.

The Category 1 performance metrics are the most important outcome-based metrics with the Category 2 metrics being leading indicator (also called “situational” or “raising the bar”) metrics. The Category 3 metrics are considered trend metrics. Category 2 and 3 metrics indicate that a situation could potentially affect the associated outcome-based Category 1 performance metrics.

Performance Goal	SOW Section	Minimum Acceptable Performance	Method of Surveillance	Relative Importance (CAT 1, 2, 3 or other)
Effective flight hardware processing	Section 4.0	No impacts to mission objectives, safety, mission success, or major program schedule milestones	Metrics	CAT 1
Ability to Meet Payload Delivery Milestones	Section 4.0	Meet 100% of Master Milestone Schedule dates without causing launch slips.	Metric	CAT 2
Effective WAD Closure	Section 4.0	Close 85% of WADs in less than that average cycle time of 15 days.	Metric	CAT 2
OMRS Closure at Scheduled Milestones	Section 4.0	Zero OMRS errors at schedule milestones.	Metric	CAT 2
Effective implementation of launch site services	Section 4.2	100% disposition of planned customer support requirements at commencement of launch countdown.	Metric	CAT 2
Information Systems Availability	Section 6.0	98% aggregate availability if CAPPS Information System Services No impacts to payload customer and ISSP, Shuttle Program objectives and schedule milestones.	Metric	CAT 2
Effective Logistics Operations	J-1, Section 7.1	Total logistics effectiveness rating greater than 2.0 on a total score of 4.0.	Metric	CAT 2
Scheduling Effectiveness (Total Delays)	Section 2.3 Section 4.0	85% of jobs scheduled in the Integrated Daily Schedule (IDS) are started within 30 minutes of their scheduled start time.	Metric	CAT 3

Performance Goal	SOW Section	Minimum Acceptable Performance	Method of Surveillance	Relative Importance (CAT 1, 2, 3 or other)
Effectiveness of Move and Lift Plan Integration and Execution	Section 2.3 Section 4.0	Meet 95% of schedule and implementation of the Move and Lift Plan.	Metric	CAT 2
Effective Re-flight hardware processing	Section 4.3	Improve cost performance by 5% for the average of the previous three missions without impact to mission objectives, safety, mission success or major program schedule milestones.	Metric	CAT 1
Re-flight Hardware Productivity Improvements	Section 4.3	Effectively manage MPLM core processing activities to demonstrate improvements for each successive mission..	Metric	CAT 2
Cost Reduction for Discrepancy Resolution	Section 4.3	Decrease costs associated with discrepancy resolution by 5% for each successive mission.	Metric	CAT 3
Effective S&MA Program	Section 3.0	Effective implementation of the Integrated Safety Health & Mission Assurance (ISH&MA) plan such that there are no occurrences of Type A or B Mishaps and no Quality escapes that affect scheduled Level 1 milestones or mission objectives.	Metric	CAT 1
Payload Processing Mishaps	Section 3.5.2	No Type A, B, or C mishaps.	Metric	CAT 2
Achievement of First Time Quality	Section 3.0	95% error-free flight hardware related work processes 90% error-free GSE related work processes	Metric, Observation	CAT 2
Risk Assessment Acceptance Rate	Section 3.0	100% acceptance rate for critical risk assessments and 95% for non-critical risk assessments.	Metric	CAT 2
Compliance with Safety Requirements	Section 3.0	No major safety problems and 95% success rate of no non-compliances identified by OSHA, NASA safety, other independent auditors, etc.	Metric	CAT 3
Close Call Summary	Section 3.0	No significant negative trends related to close calls.	Metric	CAT 3

Performance Goal	SOW Section	Minimum Acceptable Performance	Method of Surveillance	Relative Importance (CAT 1, 2, 3 or other)
Timely reporting and Corrective Action Planning	Section 2.1, 3.3	Report critical issues to the government within 4 hours of first discovery, unless otherwise required. Implementation of corrective actions to prevent recurrence and mission impacts within 48 hours unless waived by the government.	Metric)	CAT 1
Corrective Actions Implemented Per Plan	Section 2.1.1, 3.3.3	Complete approved corrective action plans per schedule	Metric	CAT 2
Readiness of Ground Systems to Support Payload Processing	Section 5.0	Ground systems are available to support payload processing and customer requirements with no impacts to mission objectives, safety, mission success, or major program schedule milestones.	Metrics	CAT 1
Certified Readiness of Payload Facilities and FS&E	Section 5.1, 5.2	All systems will be ready fourteen days before payload arrival, as documented by a completed Certificate of Facility Readiness.	Metric	CAT 2
Facility/FS&E Problems that Impact Milestones	5.1, 5.2	No facility/FS&E problems that impact mission or program milestones	Metric	CAT 2
Flight GSE Readiness	Section 5.1, 5.2	95% GSE support for all Master Milestone events as measured by readiness statements	Metric	CAT 2
Flight GSE Support	Section 5.1, 5.2	95% GSE support level for all Master Milestone events as measured by labor hours	Metric	CAT 2
Effective Facility and Equipment Maintenance and Reliability	Section 5.	95% completion ratio in accumulated total of all Level 1 (critical or safety-related) maintenance tasks within the performance period, with no impacts to mission objectives, safety, mission success, or major program schedule milestones	Metric	CAT 1

Performance Goal	SOW Section	Minimum Acceptable Performance	Method of Surveillance	Relative Importance (CAT 1, 2, 3 or other)
Facility and Equipment Preventive Maintenance	Section 5.4	All preventive maintenance tasks within the performance period do not impact mission objectives, safety, mission success, or major program schedule milestones	Metric	CAT 2
Effectiveness of sustaining existing ground systems and development of new capability and other significant events	Section 5.5	Ground systems projects and mission modifications are completed with no impacts to mission objectives, safety, mission success, or major Category 1 program schedule milestones.	Metric	CAT 1
Effectiveness of sustaining existing ground systems and development of new capability and other significant events	Section 5.5	Ground systems projects and mission modifications are completed with no impacts to mission objectives, safety, mission success, or major Category 1 and 2 program schedule milestones.	Metric	CAT 2
Facility Condition Assessment Completion Trend	DR	Complete DR-37 Facility Condition Assessments per plan (within 15 months of contract start)	Metric	CAT 3
Ability to Resolve Payload Customer Concerns	Section 2.1.2	100% of customers concerns including repeat concerns are addressed per approved plan	Metric	CAT 1
Customer satisfaction Rating Near Term	Section 2.1.2	Average customer satisfaction rating near-term (current award fee period) of 4-good or better for all summary level performance areas.	Metric	CAT 2
Customer Satisfaction Rating	Section 2.1.2	Average customer satisfaction rating of at least 3.5 on a 5.0 scale of all areas of the Payload Services Customer Survey database for overall customer satisfaction.	Metric	CAT 3
Socioeconomic Goals	DR	95% of cumulative small business goals met per award fee period	Metric	CAT 1
Contract Cost Performance	DR	Contract Cost Performance is less than or equal to the negotiated estimated cost of the contract annually, which may include the value of undefinitized change orders when appropriate	Metric	CAT 1

Performance Goal	SOW Section	Minimum Acceptable Performance	Method of Surveillance	Relative Importance (CAT 1, 2, 3 or other)
Performance Against ISS (WBS 20,21) Negotiated Estimated Cost of the Contract	DR	Contract Cost Performance in WBS 20 & 21 is less than or equal to the negotiated estimated cost of the contract annually, which may include the value of undefinitized change orders when appropriate	Metric	CAT 2
Performance Against Shuttle (WBS 30) Negotiated Estimated Cost of the Contract	DR	Contract Cost Performance in WBS 30 is less than or equal to the negotiated estimated cost of the contract annually, which may include the value of undefinitized change orders when appropriate	Metric	CAT 2
Performance Against Research (WBS 40) Negotiated Estimated Cost of the Contract	DR	Contract Cost Performance in WBS 40 is less than or equal to the negotiated estimated cost of the contract annually, which may include the value of undefinitized change orders when appropriate	Metric	CAT 2
Performance Against Other (WBS 50, 60, 70, 80) Negotiated Estimated Cost of the Contract	DR	Contract Cost Performance in WBS 50, 60, 70 & 80 is less than or equal to the negotiated estimated cost of the contract annually, which may include the value of undefinitized change orders when appropriate	Metric	CAT 2
Effectively Managing Headcount	DR	The actual annual contract headcount is less than or equal to the negotiated estimated annual equivalent headcount.	Metric	CAT 1
Energy Use Index for Energy Intensive Facilities	Section 5.0	Exceed the KSC Energy Reduction goal (1.2% per year) through FY 2005 and subsequent years by 1% per year through FY10	Metric	CAT 3
Meet or Exceed Pollution Control Goals	Section 5.0	Support Pollution Prevention Act of 1990 and KSC goal of of-site transfer of hazardous wastes for treatment and disposal	Metric	CAT 3