*"Systems Engineering for Mission Success"*

# Production Readiness Review

## Program Risk Assessment Checklist (14 August 2007 version)

| Name of the program being reviewed / date |
|---|
| |
| **Name / Code / Technical Specialty of reviewer** |
| |

**OVERVIEW:** Although the checklist can be printed and completed as a "hard copy", it is designed to be completed electronically as an Excel spreadsheet. When viewed electronically, the small number buttons in the upper left corner of the screen are used to select the level of indenture for the questions in the checklist. A left mouse click on a number button will expand or collapse the entire checklist to the desired level. A left click on the "+" or "-" symbols in the left margin of the spreadsheet will expand or collapse the level of indenture for that section. The buttons in Row 11 run specific macros. The buttons in Column A allow a user to designate and sort specific questions as "Special Interest" (i.e., High Priority, Flagged, Question). The colored buttons in Row 11, Column C allow the user to sort questions by Technical Discipline, to provide a Level 1 roll-up of the risk characters assigned, or to hide specific information. For example selecting the "Logistics" button results in the display of all Level 1 Logistics-related questions, and assigned information. All other questions will be hidden.

**COMPLETING THE CHECKLIST:**

1. In the upper right corner of the checklist, enter the name of the program being reviewed, the date(s) of the review, along with the name, code and technical specialty of the person(s) completing the checklist.
2. A "Risk Character" (i.e., R / Y / G / U / NA) should be assigned for each question by direct entry or left clicking in each box to activate the "drop down" menu. The assigned Risk Characters will automatically total and display in the Level 1 (and Level 2, as applicable) row(s). Selection of a summary tab (Excel "Sheet") at the bottom of the checklist will provide a summary of all questions assigned a particular risk character (e.g., selecting the RED tab will display all questions assigned a RED risk character).
3. Any question requiring further attention (Special Interest) should be similarly marked in Column A as "High Priority", "Flagged", or "Question" to facilitate follow-up.
4. Narrative, amplifying, and / or mitigation information should be entered in the "Comments Mitigation" box (Column J) at the right of each question.

**CAUTION:** *Entries, changes or deletions to risk characters or comments should only be made on the expanded checklist page;* **NOT** *on any of* **the summary pages.** *Any entries entered directly on the summary pages will disable linkage within the checklist.*

**SAVING THE CHECKLIST:** Save the completed checklist in a new file with a unique name such as "UAV FRR 8Feb07ajo".

**High Priority**
**Flagged**
**Question**

Show All | Level 1

Programmatic | PQM | EVM | Interoperability | Technology
Software | Risk | Logistics | Training | T&E | HSI
Hide TD | Unhide TD | Hide NA | Unhide NA

| | | | Risk Character | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | R = Red, Y = Yellow, G = Green, U = Unknown / Unavailable, NA = Not Applicable | | | | | | |
| **Special Interest** | **Technical Discipline** | | **Legend:** | **R** | **Y** | **G** | **U** | **NA** | **Item** | **Comments / Mitigation** |
| | Level 1, logistics, programmatic, PQM, risk, technology, software, T&E | **1. Engineering and Product Design** | | **0** | **0** | **0** | **0** | **0** | 1 | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | logistics, programmatic, PQM, risk, technology, software, T&E | **Technical Documentation, Systems Integration, and Coordination** | | | | | | | The criteria contained herein have been developed for use by team members during the on-site review to provide a basis for assuring an objective assessment of contractor readiness for production. They are not just “yes” or “no” questions to be the course of the on-site review. Subsequent to the pre-PRR meeting (when required) and prior to the on-site review, functional area leaders, with assistance of team members, should “fine tune” and tailor the list of criteria to the contractor’s development program. During the course of the PRR, team members should annotate the list of criteria for later use as an aid in preparing action items and the functional area evaluation. These are to be completed prior to departing the on-site location. |
| | logistics, PQM, PQM, software | a. Technical Documentation, Systems Integration, and Coordination | **0** | **0** | **0** | **0** | **0** | 1.a | |
| | logistics, software | (1) Are the contractor’s engineering drawings and documents complete for describing the equipment and the applicable software to be delivered under this program? | | | | | | 1.a(1) | |
| | logistics | (2) Are there provisions to assure that obsolete drawings are removed and discarded? | | | | | | 1.a(2) | |
| | logistics | (3) Are there procedures to assure that all engineering drawings are consistently prepared and that all revisions and Class I engineering changes are incorporated into the drawings? | | | | | | 1.a(3) | |
| | logistics | (4) Is there an effective system for managing standards such as drawings, engineering changes, and specifications? | | | | | | 1.a(4) | |
| | logistics | (5) Are incorporated changes identified on the contractor’s inspection records? | | | | | | 1.a(5) | |
| | logistics, PQM | (6) Are the engineering drawings and specifications complete and descriptive for production purposes? | | | | | | 1.a(6) | |
| | logistics, PQM | (7) Are critical characteristics identified for all critical safety items? | | | | | | 1.a(7) | |
| | logistics | (8) Are copies of drawings provided to the appropriate inventory control point? | | | | | | 1.a(8) | |
| | software | (9) Is the software documentation complete and have the appropriate data rights been secured? | | | | | | 1.a(9) | |
| | logistics, software, PQM | b. Status of System Integration | **0** | **0** | **0** | **0** | **0** | 1.b | |
| | logistics | (1) Are the functional responsibilities of all disciplines adequately documented in contracts, Memoranda of Agreements (MOA), and Interface Control Documents (ICD)? | | | | | | 1.b(1) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | logistics | (2) Have the interface responsibilities of the contractor and the government been described for all Government Furnished Equipment (GFE)? | | | | | | 1.b(2) | |
| | logistics, software, PQM | (3) Have the physical, functional, and performance characteristics for all parts and assemblies been described, and the product baseline established as a result of functional and physical configuration audits? | | | | | | 1.b(3) | |
| | logistics, software, PQM | (4) Have all problems encountered during System Development and Demonstration (SDD), production, and testing of the Engineering Development Model (EDM) been resolved and corrective action implemented? | | | | | | 1.b(4) | |
| | logistics, software, PQM | (5) Are procedures in place for the identification, reporting, analysis and corrective action for system integration problems? | | | | | | 1.b(5) | |
| | logistics, PQM | (6) Are procedures in place to assure that the complete system, including all parts and assemblies, conform to all required design specifications such as performance, reliability, cost, and life-cycle? | | | | | | 1.b(6) | |
| | logistics | (7) Do the documented procedures assure that the system meets system safety engineering objectives? | | | | | | 1.b(7) | |
| | logistics, software | (8) Is the contractor's system integration organization staffed with qualified personnel? | | | | | | 1.b(8) | |
| | logistics | (9) Have the designs of all parts and assemblies been included in a coordinated system integration effort? | | | | | | 1.b(9) | |
| | logistics, programmatic, PQM, risk, technology, software, T&E | c. Concurrent Engineering | 0 | 0 | 0 | 0 | 0 | 1.c | |
| | logistics | (1) Do the manufacturing and engineering organizations review engineering changes to determine work center performance? | | | | | | 1.c(1) | |
| | programmatic, logistics | (2) Does the contractor utilize a Computer Aided Design (CAD) system in development and transition from development to production? | | | | | | 1.c(2) | |
| | programmatic, logistics | (3) Does corporate policy define CAD as an integral part of an overall factory modernization program? | | | | | | 1.c(3) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | Item | Comments / Mitigation |
|---|---|---|---|---|
| | programmatic, logistics | (4) Is CAD integrated with Computer Aided Manufacturing (CAM) on a common database containing parts and materials information as well as design engineering information? | 1.c(4) | |
| | programmatic, logistics, PQM, technology | (5) Does the manufacturing organization meet with design engineers to discuss the latest developments in manufacturing technology? | 1.c(5) | |
| | T&E, software, logistics, programmatic | (6) Do the test activities (hardware and software) interface with all other functional disciplines? | 1.c(6) | |
| | T&E, logistics, software, PQM | (7) Is there coordination among design, test, and production organizations to assure compliance with cost, schedule and performance parameters? | 1.c(7) | |
| | logistics, PQM | (8) Are deficiency data sent to engineering and manufacturing by quality assurance to assure implementation of corrective action? | 1.c(8) | |
| | logistics | (9) Is there a system that provides for an adjustment for material on order in the event of order changes? | 1.c(9) | |
| | logistics, PQM | (10) Are design drawings and specifications reviewed for producibility by the manufacturing organization? | 1.c(10) | |
| | technology, risk | (11) Have there been trade studies conducted by the various functional disciplines in order to enhance the high-risk advanced technology components or systems? | 1.c(11) | |
| | PQM, risk | (12) Are procedures in place to identify potential production problems to management for analysis and corrective action? | 1.c(12) | |
| | logistics, PQM | (13) Are procedures in place to assure follow-up action on problems and corrective action? | 1.c(13) | |
| | logistics, programmatic, software | (14) Is there coordination of proposed engineering changes with all functional disciplines prior to approval? | 1.c(14) | |
| | logistics | (15) Are procedures in place to assure that the contractor has the dedicated resources including personnel, facilities, materials and tools to support this program? | 1.c(15) | |
| | programmatic, T&E, PQM, logistics, software, risk, | d. Engineering and Product Design — **0 0 0 0 0** | 1.d | |
| | T&E | (1) Have testability, maintainability, and supportability requirements been defined and adequately considered in the final design? | 1.d(1) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | | | | | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|
| | T&E | (2) Does Reliability and Maintainability (R&M) test data indicate all testing is complete and all objectives have been achieved? | | | | | 1.d(2) | |
| | logistics | (3) Do the reliability growth plot(s) for all major assemblies indicate good growth and achievement of specified performance requirements? | | | | | 1.d(3) | |
| | logistics, risk, software, PQM | (4) Does failure and yield data indicate that an operational failure reporting and corrective action system is in place that documents all failures and identifies that effective corrective actions have been implemented a timely manner? | | | | | 1.d(4) | |
| | logistics, PQM | (5) Is the incoming parts screening program effective in keeping defective parts out of the manufacturing cycle? | | | | | 1.d(5) | |
| | programmatic, logistics, PQM | (6) Does the manufacturing screening program use Environmental Stress Screening (ESS) e.g., thermal cycling and random vibration at all levels i.e., Module, Shop Replaceable Assembly (SRA), Weapon Replacement Assembly (WRA), and System to eliminate latent defects and workmanship problems from the equipment during the manufacturing process prior to final acceptance by the Government? | | | | | 1.d(6) | |
| | programmatic, logistics | (7) Where required, have provisions for Unique Identification (UID) of parts been incorporated? | | | | | 1.d(7) | |
| | T&E, logistics, software | e. Contractor Test Policy and Procedure Documentation | **0** | **0** | **0** | **0** | 1.e | |
| | T&E, software | (1) Do the contractor's test policies define the scheduling, test methods, resource utilization, and reporting procedures for each test relative to the design of this system? | | | | | 1.e(1) | |
| | T&E | (2) Has the contractor identified any planned tests where policies and procedures have not been documented? | | | | | 1.e(2) | |
| | T&E | (3) Are the contractor's testing policies and procedures for test methods updated as revisions and changes are approved? | | | | | 1.e(3) | |
| | T&E, software | (4) Do the contractor's policies and procedures assure that hardware and software test activities are coordinated with all other functional disciplines to assure compatibility of objectives? | | | | | 1.e(4) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | T&E | (5) Does the contractor's test policy identify all responsible groups and specific individuals necessary to implement a test and evaluation program for the system being reviewed? | | | | | | 1.e(5) | |
| | T&E, software | (6) Do corporate policies describe the authority and accountability of the organization responsible for the implementation of a controlled test program? | | | | | | 1.e(6) | |
| | T&E, logistics, software | (7) Are procedures in place for incorporating changes resulting from analysis of test results into the design requirements and processes? | | | | | | 1.e(7) | |
| | T&E | (8) Does the contractor address the excessive lead times required for the scheduling of Test and Evaluation (T&E) services? | | | | | | 1.e(8) | |
| | T&E | (9) Are procedures in place for monitoring the progress of test programs in order to eliminate redundant testing where possible? | | | | | | 1.e(9) | |
| | T&E, PQM | f. Validity and Reliability of Test Programs | 0 | 0 | 0 | 0 | 0 | 1.f | |
| | T&E | (1) Is the contractor's integrated test program structured around a philosophy of Test, Analyze, And Fix (TAAF) from component to complete system? | | | | | | 1.f(1) | |
| | software | (a) Is the contractor's integrated test program structured around an industry-accepted software corrective action program? | | | | | | 1.f(1)(a) | |
| | T&E, PQM | (2) Are tests conducted on critical safety items at subcontractor facilities witnessed by the prime contractor? | | | | | | 1.f(2) | |
| | T&E, software | (3) Has the test program been coordinated among all other functional groups? | | | | | | 1.f(3) | |
| | T&E | (4) Is the T&E program structured to provide reliable data relative to there operational requirements of this system? | | | | | | 1.f(4) | |
| | T&E, software | (5) Are the engineering development tests capable of attaining the desired design goals? | | | | | | 1.f(5) | |
| | T&E, logistics, software, PQM | g. Testing - Planned, Completed, and Analyzed | 0 | 0 | 0 | 0 | 0 | 1.g | |
| | T&E | (1) Has the testing to date shown a lack of capability that could lead to a restructuring of the test program? | | | | | | 1.g(1) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | Item | Comments / Mitigation |
|---|---|---|---|---|
| | T&E | (2) Does the contractor's test plan support the total test program by identifying other resources such as test articles, user support, test sites and ranges, targets, instrumentation, and support equipment? | 1.g(2) | |
| | T&E, software | (3) Are changes to test plans and procedures controlled and approved by management? | 1.g(3) | |
| | T&E | (4) Does the Nondestructive Test (NDT) Plan describe how materials and parts will be classified; how design requirements will be identified; how NDT methods will be selected; and how NDT specifications and procedures will be prepared and implemented? | 1.g(4) | |
| | T&E | (5) Does the NDT Plan address the handling of fatigue, fracture, and operationally critical components? | 1.g(5) | |
| | T&E | (6) Does the Nondestructive Inspection (NDI) Plan thoroughly describe how significant items will be selected; how critical flaw size and orientation will be established; how inspection intervals are determined; and how techniques are developed, validated and documented? | 1.g(6) | |
| | T&E, software | (7) Does the T&E program provide all of the physical testing, experimentation, and analyses performed during the Research and Development (R&D) of the system? | 1.g(7) | |
| | T&E | (8) Was development testing useful in solving problems necessary to achieve program objectives prior to production? | 1.g(8) | |
| | T&E | (9) Is the T&E program structured to development objectives, acquisition milestones and system operation? | 1.g(9) | |
| | T&E, logistics, software | (10) Is the logistic support T&E program phased in with the integrated hardware and software system test and evaluation plan? | 1.g(10) | |
| | T&E | (11) Does the T&E program meet the contract requirements for the system and components? | 1.g(11) | |
| | T&E, PQM | (12) Is qualification testing planned to support design limit / life testing during the system demonstration? | 1.g(12) | |
| | T&E | h. Contingency Test Alternatives **0 0 0 0 0** | 1.h | |
| | T&E | (1) Are specific contingency test plans available that describe schedules and resources for near term Development Test and Evaluation (DT&E) as well as Initial Operational Test and Evaluation (IOT&E)? | 1.h(1) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | T&E | (2) Are the test resources and schedule flexible to add additional tests if necessary? | | | | | | 1.h(2) | |
| | T&E | (3) Does the contractor's destructive testing plan provide for back-up test articles if necessary? | | | | | | 1.h(3) | |
| | T&E | (4) Are procedures in place for re-inspection and test of end items that fail initial inspection and test? | | | | | | 1.h(4) | |
| | logistics, PQM, technology | i. Material Properties Requirements | 0 | 0 | 0 | 0 | 0 | 1.i | |
| | logistics, PQM, technology | (1) Have all required material properties necessary to meet the design requirements been considered during the material selection process? | | | | | | 1.i(1) | |
| | logistics, PQM, technology | (2) Were design modifications considered where required material properties would indicate the need for high cost, limited quantity exotic materials? | | | | | | 1.i(2) | |
| | logistics, technology | (3) Were considerations given in the material selection process of corrosion caused by adjoining dissimilar materials? | | | | | | 1.i(3) | |
| | logistics, PQM, technology | (4) Were material properties considered to assure proper bonding where required? | | | | | | 1.i(4) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | Level 1, software, programmatic, PQM, logistics, T&E, technology, risk | **2. Materials and Purchased Parts** | **0** | **0** | **0** | **0** | **0** | 2 | |
| | programmatic, logistics, PQM | a. Contractor Make / Buy Decision | **0** | **0** | **0** | **0** | **0** | 2.a | |
| | programmatic, logistics, PQM | (1) What is the involvement of all appropriate functional areas such as engineering, manufacturing, quality assurance, procurement, contracts, and pricing in the make / buy decision? | | | | | | 2.a(1) | |
| | programmatic, logistics | (2) What is the Program Manager's role in make / buy decisions? | | | | | | 2.a(2) | |
| | programmatic, logistics, T&E, PQM | b. Contractor Make / Buy and Procedure Documentation | **0** | **0** | **0** | **0** | **0** | 2.b | |
| | programmatic, logistics, PQM | (1) How do the policies and procedures identify the use of corporate components, subsidiaries, and affiliates for the inter-company transfer of work? | | | | | | 2.b(1) | |
| | programmatic, logistics | (2) What evidence shows the make / buy program is in compliance with the Federal Acquisition Regulation (FAR)? | | | | | | 2.b(2) | |
| | programmatic, logistics | (3) What procedures govern items to be excluded from make / buy consideration? | | | | | | 2.b(3) | |
| | programmatic, logistics, PQM | (4) What procedures are used for revision of make / buy decisions based upon changes in engineering, manufacturing, or the availability of qualified subcontractors? | | | | | | 2.b(4) | |
| | programmatic, logistics, T&E, PQM | (5) What procedures govern make / buy decisions for test equipment and tooling? | | | | | | 2.b(5) | |
| | programmatic, logistics, PQM | c. Make / Buy Trade-Off Analyses and Decisions | **0** | **0** | **0** | **0** | **0** | 2.c | |
| | programmatic, logistics | (1) How has the make cost versus the buy cost affected the make / buy decision? | | | | | | 2.c(1) | |
| | programmatic, logistics | (2) How has plant capacity affected the make / buy decision? | | | | | | 2.c(2) | |
| | programmatic, logistics | (3) How has workload affected the make / buy decision? | | | | | | 2.c(3) | |
| | programmatic, logistics, PQM | (4) How has impact on production schedules affected the make / buy decision? | | | | | | 2.c(4) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | programmatic, logistics | (5) How has special tooling requirements affected the make / buy decision? | | | | | | 2.c(5) | |
| | programmatic, logistics | (6) How has technical experience affected the make / buy decision? | | | | | | 2.c(6) | |
| | programmatic, logistics | (7) How has the use of Government-owned facilities affected the make / buy decision? | | | | | | 2.c(7) | |
| | programmatic, logistics | (8) How has the availability of qualified subcontractors affected the make / buy decision? | | | | | | 2.c(8) | |
| | programmatic, logistics | (9) How are make / buy analyses traced to the Work Breakdown Structure (WBS) for all systems / subsystems / components to be produced? | | | | | | 2.c(9) | |
| | programmatic, logistics | (10) How have production lot sizes affected the economic value in the procurement process? | | | | | | 2.c(10) | |
| | programmatic, logistics, software | d. Contractor Procurement Organization | **0** | **0** | **0** | **0** | **0** | 2.d | |
| | programmatic, logistics | (1) How is the procurement organization staffed from pre-award selection through production, and what are the established lines of responsibilities and authority for subcontract's management personnel? | | | | | | 2.d(1) | |
| | programmatic, logistics, software | (2) How does the procurement organization interface with other functional areas such as program management, hardware and software engineering, manufacturing, and quality assurance for material and service acquisition including pre-award surveys? | | | | | | 2.d(2) | |
| | programmatic, logistics | (3) How are experienced personnel resources in the procurement organization going to administer this program? | | | | | | 2.d(3) | |
| | programmatic, logistics, PQM, technology, risk, software | e. Contractor Procurement Policy and Procedure Documentation | **0** | **0** | **0** | **0** | **0** | 2.e | |
| | programmatic, logistics | (1) What procedures ensure that procurement policies are current and understood by all personnel in acquisition management? | | | | | | 2.e(1) | |
| | programmatic, logistics, PQM | (2) How do internal audits identify acquisition system deficiencies and ensure prompt corrective actions? | | | | | | 2.e(2) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | | Item | Comments / Mitigation |
|---|---|---|---|---|---|
| | programmatic, logistics, technology, risk, software | (3) What are the procedures for the review of designs, drawings, and specifications of subcontracted items such as hardware, computer software, technical data, and identified high-risk subsystems? | | 2.e(3) | |
| | programmatic, logistics, software | (4) What is the source selection process for subcontractors providing software products, and were the contract software organization maturity requirements (i.e., Capability Maturity Model (CMM) or Capability Maturity Model Integration (CMMI) level 3) considered during source selection? | | 2.e(4) | |
| | programmatic, logistics, PQM | (5) Do all functional disciplines use and provide input to the vendor rating system and vendor case history? | | 2.e(5) | |
| | programmatic, logistics | (6) How do procedures provide for timely preparation, review, and approval of a complete data package and / or purchase requisition? | | 2.e(6) | |
| | programmatic, logistics, PQM | (7) How do the procurement instructions provide for the preparation, processing, and insurance of purchase orders? | | 2.e(7) | |
| | programmatic, logistics, PQM | (8) Do the contractor's purchasing procedures provide for source inspection requirements? | | 2.e(8) | |
| | programmatic, logistics, PQM | (9) How do procurement document procedures provide for flow down of contract requirements in the purchasing documents? | | 2.e(9) | |
| | programmatic, logistics | (10) What procedures provide for written justification of single / sole source procurement? | | 2.e(10) | |
| | programmatic, logistics | (11) Do procedures allow for the justification of subcontractor's selection based on technical or risk assessment when appropriate? | | 2.e(11) | |
| | programmatic, logistics | (12) Are there documented procedures for cost and price analysis? | | 2.e(12) | |
| | programmatic, logistics | (13) What procedures assure that procurement documents are reviewed and approved by appropriate personnel before award? | | 2.e(13) | |
| | programmatic, logistics | (14) Is there an effective policy providing for compliance with the Small Business / Labor Surplus Area / Minority Business Enterprises subcontracting clauses? | | 2.e(14) | |
| | programmatic, logistics | (15) What procedure is used for establishing alternate sources for critical production items? | | 2.e(15) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | programmatic, logistics | (16) Are there established instructions for procurement to include transportation requirements with economic routings that agree with shipment / delivery schedules? | | | | | | 2.e(16) | |
| | technology, programmatic, software | f. Trade-Off Analyses for Subcontractor Selection | 0 | 0 | 0 | 0 | 0 | 2.f | |
| | technology, programmatic, software | (1) How are factors such as technical compliance, price, contract terms and conditions, management experience, and plans / schedules considered in the evaluation of supplier's proposals? | | | | | | 2.f(1) | |
| | technology, programmatic, software | (2) What procedure assures that a bidder's technical capabilities are carefully evaluated for items that approach the "state-of-the-art" in contract award consideration? | | | | | | 2.f(2) | |
| | software | (a) Will there be a Standard CMMI Appraisal Method for Process Improvement (SCAMPI) to determine maturity of the software organization prior to award for subcontracts where software is being provided? | | | | | | 2.f(2)(a) | |
| | programmatic | (3) How is the vendor rating system or vendor case history used as criteria in the selection of suppliers? | | | | | | 2.f(3) | |
| | programmatic | (4) Is subcontractor selection based in part on information gathered during the pre-award survey? | | | | | | 2.f(4) | |
| | programmatic | (5) Are bidder's cost estimates audited and reconciled prior to being included in the evaluation of supplier's proposals? | | | | | | 2.f(5) | |
| | PQM, programmatic | g. Quality of Subcontracts | 0 | 0 | 0 | 0 | 0 | 2.g | |
| | PQM, programmatic | (1) Are the subcontractor's post-award reporting requirements are effective and compatible with the contract schedule and milestones? | | | | | | 2.g(1) | |
| | PQM, programmatic | (2) How is it assured that the subcontractor quality system is in compliance with the prime contract quality assurance program requirements? | | | | | | 2.g(2) | |
| | programmatic | (3) How are subcontracts prepared so they are legally binding and complete? | | | | | | 2.g(3) | |
| | PQM, programmatic | (4) How are subcontracts traceable to the prime contract and the contract WBS? | | | | | | 2.g(4) | |
| | PQM, programmatic | (5) Do subcontracts contain requirements for subcontractor participation in appropriate program reviews? | | | | | | 2.g(5) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | PQM, programmatic | h. Management System for Subcontractor Control | 0 | 0 | 0 | 0 | 0 | 2.h | |
| | programmatic | (1) How does the subcontractor system provides for control of cost reimbursement, time and material, and labor-hour subcontracts? | | | | | | 2.h(1) | |
| | programmatic | (2) Does the contractor assure that subcontractors maintain complete files of documents essential to performance? | | | | | | 2.h(2) | |
| | programmatic | (3) Is subcontractor performance verified before progress payments are allowed? | | | | | | 2.h(3) | |
| | programmatic | (4) Does the contractor require subcontractors to identify and record nonconformances, determine cause, implement corrective action, and provide notification of these actions to the customer? | | | | | | 2.h(4) | |
| | PQM, programmatic | (5) Does the contractor assure that a proper change control system is in place at subcontractor's facilities? | | | | | | 2.h(5) | |
| | PQM, programmatic | (6) What system is used for controlling the use of nonstandard parts? | | | | | | 2.h(6) | |
| | PQM, programmatic | (7) How are subcontractors required to maintain control of registered components and qualified products? | | | | | | 2.h(7) | |
| | PQM, programmatic | (8) How does the contractor verify subcontractor control of calibration, measuring and test equipment, and production tooling used as a media of inspection? | | | | | | 2.h(8) | |
| | PQM, programmatic | (9) Does the contractor exercise control over the acquisition of special tools and test equipment by subcontractors? | | | | | | 2.h(9) | |
| | programmatic, T&E, PQM | (10) How does the contractor verify and assure subcontractor compliance to the approved quality and engineering test programs? | | | | | | 2.h(10) | |
| | programmatic | (11) Does the contractor's system provide for obtaining prompt payment discounts from subcontractors? | | | | | | 2.h(11) | |
| | PQM, programmatic | (12) How effective is the contractor's system to assure product quality through adequate source information? | | | | | | 2.h(12) | |
| | programmatic | (13) Is special priority assistance processed through the contractor when requested by the subcontractor? | | | | | | 2.h(13) | |
| | programmatic | (14) Does the contractor assign resident subcontract managers as appropriate when required? | | | | | | 2.h(14) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | programmatic | (15) Does the contractor provide for field representatives to support subcontract on-site requirements where resident subcontract managers are not assigned? | | | | | | 2.h(15) | |
| | programmatic | (16) Are subcontractors required to establish and maintain a control system to provide cost and schedule data as required by the prime contractor? | | | | | | 2.h(16) | |
| | programmatic | (17) What system is used for tracking and managing Government and company owned facilities, tools or equipment furnished to subcontractors? | | | | | | 2.h(17) | |
| | programmatic | i. Contractor Material Management Documentation | **0** | **0** | **0** | **0** | **0** | 2.i | |
| | programmatic | (1) What is the contractor's inventory control system for assets to meet schedule? | | | | | | 2.i(1) | |
| | programmatic | (2) Is there a segregation of Government owned material from contractor owned material? | | | | | | 2.i(2) | |
| | programmatic | (3) What procedure is used for segregating material dedicated to this program from material intended for other programs? | | | | | | 2.i(3) | |
| | programmatic | (4) Does the contractor provide for the preservation and inspection of property in storage to assure protection and maintain critical environments? | | | | | | 2.i(4) | |
| | programmatic | (5) What assures physical inventories are conducted in accordance with contractual requirements? | | | | | | 2.i(5) | |
| | programmatic | (6) How is it assured that materials issued from stores do not exceed work-in-process requirements? | | | | | | 2.i(6) | |
| | programmatic | (7) What is the procedure for the transfer or disposal of property? | | | | | | 2.i(7) | |
| | programmatic | (8) Does the contractor maintain accurate scrap and salvage records? | | | | | | 2.i(8) | |
| | programmatic | (9) How does the contractor assure the safeguarding of Government property? | | | | | | 2.i(9) | |
| | programmatic | (10) Is the contractor able to account for the return of reusable containers? | | | | | | 2.i(10) | |
| | programmatic | (11) How does the contractor maintain control and protect precious metals? | | | | | | 2.i(11) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | | Item | Comments / Mitigation |
|---|---|---|---|---|---|
| | programmatic, risk | (12) Does the contractor maintain absolute control, including identification, handling, storage, and shipping of flammable or hazardous materials? | | 2.i(12) | |
| | programmatic | (13) What procedure is used for controlling sensitive or classified material? | | 2.i(13) | |
| | programmatic | (14) Are commercial freight bills reviewed to assure that proper charges are assessed? | | 2.i(14) | |
| | programmatic | (15) Does the contractor have a system that authorizes advance procurement of long lead-time materials? | | 2.i(15) | |
| | programmatic | (16) What is the system to assure that material handling for planned production correlates with planned workflow and schedules? | | 2.i(16) | |
| | programmatic | (17) What method identifies shortages and deficiencies and initiates prompt corrective action? | | 2.i(17) | |
| | programmatic | (18) What system identifies handling and transportation deficiencies and formulates corrective actions? | | 2.i(18) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | Level 1, T&E, risk, training, programmatic, PQM | **3. Industrial Resources** | 0 | 0 | 0 | 0 | 0 | 3 | |
| | programmatic, PQM, T&E | a. Policies and Procedures for Facilities and Equipment Selection | 0 | 0 | 0 | 0 | 0 | 3.a | |
| | programmatic | (1) What are the procedures for using labor standards when developing facilities and equipment requirements? | | | | | | 3.a(1) | |
| | programmatic | (2) What analyses have been conducted to determine facilities and equipment requirements? | | | | | | 3.a(2) | |
| | programmatic | (3) How does the facilities management system respond to the needs and priorities of this program? | | | | | | 3.a(3) | |
| | programmatic | (4) What facilities constraints are identified in program documentation and does the preferred system concept address these constraints? | | | | | | 3.a(4) | |
| | programmatic | (5) What safety, health, and environmental standards are considered in the analysis for facilities and equipment selection? | | | | | | 3.a(5) | |
| | programmatic | (6) How consistent is your facilities and equipment modernization plan with program requirements and how will the impact to current facilities be determined? | | | | | | 3.a(6) | |
| | programmatic, PQM, T&E | (7) How have facilities and equipment planning been coordinated with all other functions, such as production, tooling and test, manpower, and etc? | | | | | | 3.a(7) | |
| | programmatic | (8) Does the Product Support Plan (PSP) include analysis conducted to determine facility requirements? | | | | | | 3.a(8) | |
| | programmatic | (9) Have Military Construction (MILCON) requirements been identified in the Logistics Requirements and Funding Summary (LRFS)? | | | | | | 3.a(9) | |
| | programmatic | (10) Does the facilities requirements identification schedule support MILCON lead times? | | | | | | 3.a(10) | |
| | programmatic | (11) Is the a Facility Requirement Document (FRD) developed? | | | | | | 3.a(11) | |
| | programmatic | (12) Is there a schedule to conduct site surveys for all known facilities? | | | | | | 3.a(12) | |
| | programmatic | (13) Have integration issues been considered in the analysis of the preferred system concept? | | | | | | 3.a(13) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | programmatic | (14) Were security and classification considerations (i.e., storage and handling of classified material and equipment) part of the facilities and equipment selection? | | | | | | 3.a(14) | |
| | programmatic | b. Facilities and Equipment Utilization Planning | 0 | 0 | 0 | 0 | 0 | 3.b | |
| | programmatic | (1) What are the provisions for scheduled and unscheduled maintenance on facilities and equipment? | | | | | | 3.b(1) | |
| | programmatic | (2) How are major considerations of planned workloads, production rates, and workflow addressed in the facilities and equipment utilization plans? | | | | | | 3.b(2) | |
| | programmatic | (3) What are the alternative uses of the existing facilities and equipment, when they are not experiencing maximum usage? | | | | | | 3.b(3) | |
| | programmatic | (4) What considerations exist in the utilization plan for fire protection, waste disposal, fuel, and other facilities? | | | | | | 3.b(4) | |
| | programmatic | c. Facilities and Equipment Allocation | 0 | 0 | 0 | 0 | 0 | 3.c | |
| | programmatic | (1) Have all facilities and equipment to be used for the production of this program been identified? | | | | | | 3.c(1) | |
| | programmatic | (2) How have the facilities and equipment required for this program been factored into the program schedule? | | | | | | 3.c(2) | |
| | programmatic | (3) How will the facilities support transportation, storage, and handling of planned inventories? | | | | | | 3.c(3) | |
| | programmatic, PQM | d. Plant Layout Policy and Procedure | 0 | 0 | 0 | 0 | 0 | 3.d | |
| | programmatic, PQM | (1) What is the plant layout policy? | | | | | | 3.d(1) | |
| | programmatic, PQM | (2) How has the plant layout been coordinated with the various internal disciplines such as methods and processes, quality assurance, production control, manpower, facilities and equipment, security, and so forth? | | | | | | 3.d(2) | |
| | programmatic, PQM | e. Functional and Physical Arrangement Analyses and Decisions | 0 | 0 | 0 | 0 | 0 | 3.e | |
| | programmatic, PQM | (1) What constraining factors, such as floor loading and location of utilities, have been considered in plant layout? | | | | | | 3.e(1) | |
| | programmatic, PQM | (2) How are safety, health, physical security, and environmental standards used in plant layout analyses? | | | | | | 3.e(2) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | programmatic, PQM | (3) How has equipment maintenance been considered in plant layout analyses? | | | | | | 3.e(3) | |
| | programmatic, PQM | (4) Has consideration for walkways, working space, rest rooms and other personnel requirements been included in plant layout? | | | | | | 3.e(4) | |
| | programmatic, PQM | f. Plant Layout Design | 0 | 0 | 0 | 0 | 0 | 3.f | |
| | programmatic, PQM | (1) Where is the physical arrangement diagram that identifies and depicts dimensions of all functional areas to be used? | | | | | | 3.f(1) | |
| | programmatic, PQM | (2) Where is the plant layout, which shows the component and product flow including material receiving and storage? | | | | | | 3.f(2) | |
| | programmatic, PQM | (3) What is the contingency plan for adaptation to the plant layout for revised production rates? | | | | | | 3.f(3) | |
| | programmatic, PQM | (4) How can the plant layout can be adapted to accommodate change in the event of engineering or manufacturing revisions? | | | | | | 3.f(4) | |
| | programmatic, PQM | (5) What facilities and equipment modernization / expansion plans are considered in the plant layout plans? | | | | | | 3.f(5) | |
| | programmatic, T&E | g. Test Equipment and Tooling Policy and Procedure | 0 | 0 | 0 | 0 | 0 | 3.g | |
| | programmatic, T&E | (1) What are the procedures that provide for the analysis of tooling rework and repair data that enables the correction of tool design deficiencies? | | | | | | 3.g(1) | |
| | programmatic, T&E | (2) What are the procedures for maintaining test equipment and tool designs as engineering and manufacturing methods change? | | | | | | 3.g(2) | |
| | programmatic, T&E | (3) What procedures govern the storage, maintenance, repair and overhaul of test equipment and tooling? | | | | | | 3.g(3) | |
| | programmatic, T&E | (4) What procedure governs how test equipment and tooling are assigned to the work centers, and how is accountability maintained? | | | | | | 3.g(4) | |
| | programmatic, T&E | (5) What is the procedure that addresses Government ownership of test equipment and tooling? | | | | | | 3.g(5) | |
| | programmatic, T&E | (6) How do the procedures for test equipment and tooling design provide for coordination with all other disciplines such as methods / processes, quality assurance, production, plant layout, etc.? | | | | | | 3.g(6) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | programmatic, T&E | (7) What sort of master tooling system is in place to control the interchangeability of parts? | | | | | | 3.g(7) | |
| | programmatic, T&E | (8) Does the contractor employ CAD / CAM techniques to design and build tooling? | | | | | | 3.g(8) | |
| | programmatic, T&E | (9) What procedures that provide test compatibility between the prime and subcontractor ground support equipment? | | | | | | 3.g(9) | |
| | programmatic, T&E | (10) What are the requirements for the calibration, inspection, and test of test equipment and tooling according to specifications? | | | | | | 3.g(10) | |
| | programmatic, T&E | (11) What procedures assure test equipment and tooling meet specifications for production? | | | | | | 3.g(11) | |
| | programmatic, T&E, risk | h. Analyses of Requirements, Design and Procurement / Fabrication | **0** | **0** | **0** | **0** | **0** | 3.h | |
| | programmatic, T&E | (1) How are factors such as human engineering, safety and material considered in the design of test equipment and tooling? | | | | | | 3.h(1) | |
| | programmatic, T&E, risk | (2) Has tooling which is considered high risk been identified and, what plans have been made to reduce the risk? | | | | | | 3.h(2) | |
| | programmatic, T&E | (3) How are factors such as durability, reliability, and maintainability considered in the design of test equipment and tooling? | | | | | | 3.h(3) | |
| | programmatic, T&E | (4) Are cost estimates, including scrap value, used in the design of test equipment and tooling? | | | | | | 3.h(4) | |
| | programmatic, T&E | (5) What is the make / buy policy for test equipment and tooling? | | | | | | 3.h(5) | |
| | programmatic, T&E | i. Completeness of Design, Selection and Quality of Documentation | **0** | **0** | **0** | **0** | **0** | 3.i | |
| | programmatic, T&E | (1) What percentage of the required production test equipment and tooling is presently available? | | | | | | 3.i(1) | |
| | programmatic, T&E | (2) How have all test equipment and tooling requirements been designed to meet scheduled engineering development and production? | | | | | | 3.i(2) | |
| | programmatic, T&E | (3) Are the master tool drawings complete, and how are they maintained to serve as permanent records? | | | | | | 3.i(3) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | programmatic, T&E | (4) Do the master tool records contain all pertinent information such as function, fabrication method, designation and important features? | | | | | | 3.i(4) | |
| | programmatic, T&E | (5) Have requirements been determined for all test equipment that will be subcontracted or procured? | | | | | | 3.i(5) | |
| | programmatic, training | j. Contractor Manpower and Personnel Organization | 0 | 0 | 0 | 0 | 0 | 3.j | |
| | programmatic | (1) How does the manpower and personnel organization provides for lines of communication among the various functional organizations? | | | | | | 3.j(1) | |
| | programmatic, training | (2) What is the system that provides for training and updating the skills of the work force? | | | | | | 3.j(2) | |
| | programmatic | (3) Does the contractor conduct periodic analysis of manpower requirements based on changes to programs and / or budgeting? | | | | | | 3.j(3) | |
| | programmatic, training | (4) What is the personnel administration system that is responsible for the areas of employee benefits, medical, safety, training, labor relations, and wages? | | | | | | 3.j(4) | |
| | programmatic | (5) How does the personnel administration system provides for the application of fringe benefits, granting of salary increases and establishment of bonuses and incentives? | | | | | | 3.j(5) | |
| | programmatic | k. Contractor Manpower and Personnel Policy and Procedure Documentation | 0 | 0 | 0 | 0 | 0 | 3.k | |
| | programmatic | (1) What is the methodology that establishes the priority of work force assignments relative to the various production programs? | | | | | | 3.k(1) | |
| | programmatic | (2) What procedures describe the level and mix of labor classifications that are required? | | | | | | 3.k(2) | |
| | programmatic | (3) What procedures are in place for analyzing data such as turnover rates, complaints, grievances and absenteeism, and the implementation of methods to improve the work force efficiency? | | | | | | 3.k(3) | |
| | programmatic | (4) What are the policies and procedures relative to the evaluation of employee performance, and are they well documented and utilized? | | | | | | 3.k(4) | |
| | programmatic | (5) What metric provides for management review of productivity and performance for each work center? | | | | | | 3.k(5) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | programmatic | l. Contractor Labor Agreements | 0 | 0 | 0 | 0 | 0 | 3.l | |
| | programmatic | (1) What management-union agreements provide a ready source of qualified personnel in all phases of contract performances? | | | | | | 3.l(1) | |
| | programmatic | (2) What is the history of management-union relations and has it created a general agreement and harmony? | | | | | | 3.l(2) | |
| | programmatic, training | m. Work Force Composition | 0 | 0 | 0 | 0 | 0 | 3.m | |
| | programmatic | (1) How will the Manpower Procurement Plan support the production plan and delivery schedule during SDD and transition from SDD to production? | | | | | | 3.m(1) | |
| | programmatic, training | (2) What steps are taken to ensure that new employees are thoroughly indoctrinated and trained, and that they are qualified to work on this program? | | | | | | 3.m(2) | |
| | programmatic, training | (3) What is the lead-time schedule for the acquiring and training of personnel for this program? | | | | | | 3.m(3) | |
| | programmatic, training | (4) What safety training and special education have been provided to supervisors for this program? | | | | | | 3.m(4) | |
| | programmatic, training | (5) What program or procedure ensures that all employees receive safety briefings on the hazards of their tasks and environments? | | | | | | 3.m(5) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | Level 1, PQM, programmatic, software, T&E | **4. Quality Assurance** | **0** | **0** | **0** | **0** | **0** | 4 | |
| | programmatic, T&E, PQM, software | a. Quality Assurance Policy and Procedure Documentation | **0** | **0** | **0** | **0** | **0** | 4.a | |
| | PQM, programmatic | (1) What is the process for performing internal audits and initiating corrective actions? | | | | | | 4.a(1) | |
| | PQM, programmatic | (2) What plans and milestones identify additional quality assurance staffing requirements? | | | | | | 4.a(2) | |
| | PQM, programmatic | (3) How does the Quality Program Plan address the role of quality in the inspection and acceptance of software? | | | | | | 4.a(3) | |
| | T&E, PQM, programmatic | (4) Does the Quality Program Plan require the quality functional area to interface with other functional areas in the development of software, i.e. programming, engineering, and testing? | | | | | | 4.a(4) | |
| | programmatic, software, PQM | (5) Does the Quality Program Plan provide for the reporting of software discrepancies and implementation of corrective action? | | | | | | 4.a(5) | |
| | programmatic, software, PQM | (6) Are trend analyses conducted that show the percent of rework and repair to total man-hours for both the current and previous year? | | | | | | 4.a(6) | |
| | PQM, programmatic | (7) Have all Quality Assurance Program Plans been accepted in accordance with the contract or subcontracts? | | | | | | 4.a(7) | |
| | PQM, programmatic | (8) What is the quality organization's role in the preparation, classification, and distribution of waivers, deviations, and engineering changes? | | | | | | 4.a(8) | |
| | PQM, programmatic | (9) Is the quality program clearly defined as the objective and policy of top management? | | | | | | 4.a(9) | |
| | PQM, programmatic | (10) What is the quality organization's procedure for assuring that documented procedures and changes are issued to all concerned? | | | | | | 4.a(10) | |
| | programmatic, T&E, PQM | (11) What procedures ensure that work instructions comply with inspection and test requirements? | | | | | | 4.a(11) | |
| | PQM, programmatic | (12) What procedures ensure that improper work instructions are corrected? | | | | | | 4.a(12) | |
| | PQM, programmatic | (13) Are records kept by the quality organization available to the Government? | | | | | | 4.a(13) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | Item | Comments / Mitigation |
|---|---|---|---|---|
| | programmatic, software, PQM | (14) Do the inspection records include the number and type of defects, and indicate the quantities of acceptable and rejected items? | 4.a(14) | |
| | PQM, programmatic | (15) Are quality records analyzed and used as a basis for management action to correct product and system deficiencies? | 4.a(15) | |
| | PQM, programmatic | (16) What system is used for collecting and tracking of cost related to quality, and is this data available for Government review? | 4.a(16) | |
| | PQM, programmatic | (17) What process ensures that drawings, specifications, and instructions are available at inspection stations? | 4.a(17) | |
| | PQM, programmatic | (18) What procedure is utilized to remove and properly dispose of obsolete drawings from all locations? | 4.a(18) | |
| | PQM, programmatic | (19) What procedure ensures the accuracy of inspection media tooling prior to its use? | 4.a(19) | |
| | programmatic, T&E, PQM | (20) What is the process for inspection and calibration of tooling at regular intervals, and the identification / removal and / or correction of tooling that shows wear between inspection interval, and are calibration records properly maintained for inspection test equipment and tooling? | 4.a(20) | |
| | programmatic, T&E, PQM | (21) Is the measuring and test equipment labeled or coded to indicate the date of last calibration and date of next calibration? | 4.a(21) | |
| | programmatic, T&E, PQM | (22) Are there established controls for calibration of personally owned measuring instruments? | 4.a(22) | |
| | PQM, programmatic | (23) Is the calibration system included as a part of the Quality Program or inspection system? | 4.a(23) | |
| | PQM, programmatic | (24) What is the procedure for handling unusual or state-of-the-art measuring requirements that cannot be performed? | 4.a(24) | |
| | PQM, programmatic | (25) What is the process to clearly define the assignments, responsibility, and authority of the personnel on the Preliminary Review, Material Review, and Corrective Action Boards? | 4.a(25) | |
| | PQM, programmatic | (26) What are the procedures for reporting and determining cause of product damage, and the establishment of additional procedures and controls where required? | 4.a(26) | |
| | programmatic, T&E, PQM | b. Quality Assurance Organization and Personnel **0 0 0 0 0** | 4.b | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | | | | | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|
| | PQM, programmatic | (1) How does the quality program provide for lines of communication among all functional organizations? | | | | | 4.b(1) | |
| | PQM, programmatic | (2) What is the quality assurance manager's role and authority in the elimination of deficiencies and the establishment of corrective actions regardless of the functional element responsible? | | | | | 4.b(2) | |
| | programmatic, T&E, PQM | (3) Does the quality organization assure that inspection and test requirements contained in work instructions are in accordance with drawings, specifications, and the contract? | | | | | 4.b(3) | |
| | PQM, programmatic | (4) Are only qualified / certified personnel used for manufacturing, inspection and processes that require special skills? | | | | | 4.b(4) | |
| | PQM, programmatic | (5) Have staffing requirements for quality assurance personnel been considered for the transition from SDD to production? | | | | | 4.b(5) | |
| | programmatic, T&E, PQM, software | c. Completeness and Adequacy of Quality Assurance Planning | **0** | **0** | **0** | **0** | **0** | 4.c | |
| | PQM, programmatic | (1) What is the procedure that ensures that Engineering Change Proposals (ECPs) are routed through the quality organization? | | | | | 4.c(1) | |
| | PQM, programmatic | (2) What are the procedures used to govern the identification, storage, and control of Government-furnished material? | | | | | 4.c(2) | |
| | PQM, programmatic | (3) Who has the authority and responsibility for the accomplishment of quality program contract requirements? | | | | | 4.c(3) | |
| | PQM, programmatic | (4) Does the Quality Assurance Program Plan provide for the development of inspection and test planning during the earliest practical phase of the contract? | | | | | 4.c(4) | |
| | programmatic, T&E, PQM | (5) How is the quality assurance planning for inspection and testing compatible with manufacturing methods and processes? | | | | | 4.c(5) | |
| | PQM, programmatic | (6) How does the Quality Assurance Program Plan assures compliance with contract cost, schedule, and performance throughout production? | | | | | 4.c(6) | |
| | programmatic, software, PQM | (7) How does the Quality Assurance Program Plan provide for the early detection of deficiencies and timely corrective action? | | | | | 4.c(7) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | | | | | | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | PQM, programmatic | (8) What is quality assurance's involvement in the management of standards such as drawings, changes, and measuring equipment that are used to assure product quality? | | | | | | 4.c(8) | |
| | programmatic, T&E, PQM | (9) Are flow charts that define the various processes, inspections, and tests traceable to materials and equipment from receiving to final shipment? | | | | | | 4.c(9) | |
| | PQM, programmatic | d. Manufacturer and Supplier Quality Control | **0** | **0** | **0** | **0** | **0** | 4.d | |
| | PQM, programmatic | (1) What procedures assure the latest drawings and specifications are supplied to subcontractors? | | | | | | 4.d(1) | |
| | PQM, programmatic | (2) Were trend analyses conducted based on the number of Material Review Board (MRB) actions for a given period of time? | | | | | | 4.d(2) | |
| | PQM, programmatic | (3) Does the review of completed MRB actions indicate any misuse of procedures regarding disposition? | | | | | | 4.d(3) | |
| | PQM, programmatic | (4) What procedures provide for the review and follow-up of corrective action as a result of MRB activities? | | | | | | 4.d(4) | |
| | PQM, programmatic | (5) Does the contractor receive, record, and provide timely response with corrective actions for field complaints on all Government contracts? | | | | | | 4.d(5) | |
| | PQM, programmatic | (6) Do procedures exist that govern notification to suppliers of special requirements such as calibration, MRB authority, and waiver requirements? | | | | | | 4.d(6) | |
| | PQM, programmatic | (7) What is the vendor rating system for periodic reviews and actions for those who exceed the rating criteria? | | | | | | 4.d(7) | |
| | PQM, programmatic | (8) What documentation or procedures show the duties and responsibilities of source inspectors? | | | | | | 4.d(8) | |
| | PQM, programmatic | (9) How does the Quality Plan provides for the screening of electronic components? | | | | | | 4.d(9) | |
| | PQM, programmatic | (10) Are contractor developed sampling plans reviewed by the Government? | | | | | | 4.d(10) | |
| | PQM, programmatic | (11) Is there a bonded holding area for the segregation and storage of non-conforming material? | | | | | | 4.d(11) | |
| | PQM, programmatic | (12) What are the procedures for inspection of material received to provide objective evidence of supplier quality control? | | | | | | 4.d(12) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | | Item | Comments / Mitigation |
|---|---|---|---|---|---|
| | PQM, programmatic | (13) What procedures ensure that products and raw material conform to physical and chemical requirements? | | 4.d(13) | |
| | PQM, programmatic | (14) What are the procedures for monitoring special processes (e.g., soldering, heat treating, welding, plating, and etc.)? | | 4.d(14) | |
| | PQM, programmatic | (15) Does the contractor have a system that provides for the inspection and test of preservation, packaging, and marking methods? | | 4.d(15) | |
| | PQM, programmatic | (16) What is the system for controlling inspection stamps? | | 4.d(16) | |
| | PQM, programmatic | (17) What controls are in place to assure that only those units of product that meet contract requirements are submitted to the Government for acceptance? | | 4.d(17) | |
| | PQM | (18) Have all key characteristics been identified and estimates of capabilities indicate no manufacturing issues with meeting requirements? | | 4.d(18) | |
| | PQM | (19) Are all first article inspections and other process proofing activities completed? | | 4.d(19) | |
| | PQM | (20) Is a continuous improvement program in place? | | 4.d(20) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | Level 1, training, software, EVM, PQM, programmatic | **5. Program Management** | **0** | **0** | **0** | **0** | **0** | 5 | |
| | programmatic | a. Organization Planning | **0** | **0** | **0** | **0** | **0** | 5.a | |
| | programmatic | (1) Does adequate documentation exist that defines the program organization's lines of authority and responsibility for effective management from SDD through the production phase? | | | | | | 5.a(1) | |
| | programmatic | (2) Do procedures exist that define the degree of control the program manager has over budgeting, financial commitments, and allocation of resources within the company? | | | | | | 5.a(2) | |
| | programmatic | (3) Is there a formal documented system that provides for management control of the project office in assigning responsibility and authority for directing the contractual requirements for the project? | | | | | | 5.a(3) | |
| | programmatic | (4) Is there an effective management system that identifies program deficiencies and assures prompt corrective action? | | | | | | 5.a(4) | |
| | programmatic | b. Key Manpower Planning | **0** | **0** | **0** | **0** | **0** | 5.b | |
| | programmatic | (1) Are position descriptions available that aid in the selection of key program personnel assignments? | | | | | | 5.b(1) | |
| | programmatic | (2) Are organizational responsibilities effectively identified in order to minimize any duplication of effort? | | | | | | 5.b(2) | |
| | training, programmatic, PQM | c. Key Personnel Planning / Training | **0** | **0** | **0** | **0** | **0** | 5.c | |
| | training, programmatic, PQM | (1) Have key personnel assignments been planned to assure availability and experience for the transition from SDD to the production phase? | | | | | | 5.c(1) | |
| | training, programmatic, PQM | (2) Are assistants experienced, available, and qualified to move into position in the event of the loss of key personnel? | | | | | | 5.c(2) | |
| | programmatic, software | d. Contract Administration Policy and Procedure Documentation | **0** | **0** | **0** | **0** | **0** | 5.d | |
| | programmatic | (1) Are procedures in place that adequately identify and describe the authority and responsibility of contract administration? | | | | | | 5.d(1) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | programmatic | (2) Do procedures exist for auditing the management function of contract administration and assuring prompt resolution of problems arising from those audits? | | | | | | 5.d(2) | |
| | programmatic, software | (3) Is documentation available to provide for reliable estimating techniques for cost of computer software and software resources? | | | | | | 5.d(3) | |
| | programmatic | (4) Does the contractor comply with regulations regarding submittal of cost and pricing data and submitting a disclosure statement when there is a change to operating procedures? | | | | | | 5.d(4) | |
| | programmatic | (5) Does the contractor develop annual operating budgets? | | | | | | 5.d(5) | |
| | programmatic | (6) Does the contractor's system provide for the technical accuracy and tracking of data submitted to the Government which includes safeguarding, distribution, and storage? | | | | | | 5.d(6) | |
| | programmatic | (7) Is the contractor's documentation adequate to assure that subcontractor-submitted data conforms to contract requirements? | | | | | | 5.d(7) | |
| | programmatic | (8) Does the contractor's documentation provide for the contract administration review of all contractual documents to assure proper execution, payment, and timely submittal of financial reports? | | | | | | 5.d(8) | |
| | programmatic | e. Contractor Costing Documentation | **0** | **0** | **0** | **0** | **0** | 5.e | |
| | programmatic | (1) Does the contractor have documented procedures to assure that costing data including estimates, analyses, and methodologies are available to appropriate activities and management for use as a resource tool? | | | | | | 5.e(1) | |
| | programmatic | f. Costing Methodology / Trade-off Analyses | **0** | **0** | **0** | **0** | **0** | 5.f | |
| | programmatic | (1) Does the cost methodology documentation completely define the total production costs for each component, assembly, or appropriate activity for the system? | | | | | | 5.f(1) | |
| | programmatic | (2) Is the costing methodology traceable to the WBS? | | | | | | 5.f(2) | |
| | programmatic | (3) Are Cost Estimating Relationships (CERs) based on accepted techniques and historical data for costing methodologies? | | | | | | 5.f(3) | |
| | programmatic | (4) Do the contractor's procedures provide for revising the costing methodology and CERs based upon actual cost generated during SDD and production? | | | | | | 5.f(4) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | programmatic | (5) How is the costing methodology integrated into the Design-To-Cost program? | | | | | | 5.f(5) | |
| | programmatic | (6) Are subcontractor costing methodologies reviewed to assure they are up to date and consistent with the prime contractor's methodology? | | | | | | 5.f(6) | |
| | programmatic | g. Costing Personnel Qualifications | 0 | 0 | 0 | 0 | 0 | 5.g | |
| | programmatic | (1) Do the contractor's procedures specify the levels of training for budgeting and cost estimating employees? | | | | | | 5.g(1) | |
| | programmatic | (2) Are life-cycle costs included in the production cost organization procedures? | | | | | | 5.g(2) | |
| | programmatic | (3) Are costing personnel experienced to identify, monitor, and report significant deviations from stated cost goals? | | | | | | 5.g(3) | |
| | programmatic | (4) Is monitoring the cost relationship between the prime contractor, subcontractor, vendors, and Government an assigned responsibility of costing personnel? | | | | | | 5.g(4) | |
| | programmatic | h. Cost Trade-Off Analyses | 0 | 0 | 0 | 0 | 0 | 5.h | |
| | programmatic | (1) Are there adequate procedures implemented for the preparation of cost analyses and data to support the decision making process throughout design and production planning, such as make / buy, trade studies, material, methods and process selection, facilities / equipment procurement, manpower studies, and scheduling? | | | | | | 5.h(1) | |
| | programmatic | (2) Are there documented procedures to audit and adjust bidder's cost estimates to form a uniform base for subcontractor selection? | | | | | | 5.h(2) | |
| | programmatic | (3) Are procedures in place for performing independent cost estimates for subcontracted efforts where appropriate? | | | | | | 5.h(3) | |
| | programmatic | (4) Does the contractor's documentation provide for accurate and complete variance analyses, with appropriate action, and the reporting of these analyses to management? | | | | | | 5.h(4) | |
| | programmatic | (5) Is subcontractor cost data incorporated into the prime contractor cost accounting system? | | | | | | 5.h(5) | |
| | programmatic | (6) Is the system for tracking cost and schedule data, including applicable computer software, accurate and reliable for baseline control? | | | | | | 5.h(6) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | programmatic | (7) Is the cost accounting system compatible with the cost estimating system? | | | | | | 5.h(7) | |
| | programmatic | (8) Are procedures in place to assure that contractually required cost data is submitted to the proper Government agencies? | | | | | | 5.h(8) | |
| | programmatic, EVM | i. Management Control System Policies, Procedures, and Methods | 0 | 0 | 0 | 0 | 0 | 5.i | |
| | programmatic | (1) Does the Management Information System (MIS) identify deficiencies and provide data for analysis and initiation of corrective action? | | | | | | 5.i(1) | |
| | programmatic | (2) Does the MIS provide data to the proper management levels, and is the information provided used as a management tool? | | | | | | 5.i(2) | |
| | programmatic, EVM | (3) Does the financial management control system conform to the requirements of the Evaluation / Demonstration Review Checklist for Earned Value Management System (EVMS)? | | | | | | 5.i(3) | |
| | programmatic | (4) Is there a Memorandum of Understanding (MOU) with the Government concerning validation, maintenance, and updating of the management control system? | | | | | | 5.i(4) | |
| | programmatic | (5) Does the Government or prime contractor validate subcontractor's management control system as required? | | | | | | 5.i(5) | |
| | programmatic | (6) Does the contractor and subcontractor's MIS provide all required contractual data that is easily usable and traceable to the prime contract and contract WBS? | | | | | | 5.i(6) | |
| | programmatic | (7) Is the MIS for tracking cost and schedule data, including computer software, accurate / reliable? | | | | | | 5.i(7) | |
| | programmatic | (8) Does the MIS provide for accurate and complete variance analyses and for reporting to appropriate management levels for correction when necessary? | | | | | | 5.i(8) | |
| | programmatic | (9) Does the MIS provide for prompt recording of the effects of contract changes on budgets and schedules? | | | | | | 5.i(9) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | Level 1, logistics, PQM, programmatic, technology, interoperability, training, T&E, software, HSI | **6. Integrated Logistics Support (ILS)** | **0** | **0** | **0** | **0** | **0** | 6 | |
| | logistics, PQM | a. ILS Policies and Procedures Documentation | **0** | **0** | **0** | **0** | **0** | 6.a | |
| | logistics, PQM | (1) Are ILS Policies and Procedures documented and adequate to allow for successful management and planning during the Production and Deployment (P&D) phase of the program? | | | | | | 6.a(1) | |
| | logistics | (2) Does the program acquisition strategy include full life-cycle support planning and address actions to assure sustainment and continuous improvement of product affordability? | | | | | | 6.a(2) | |
| | logistics | (2) Who composes the Integrated Logistics Support Management Team (ILSMT), and how does the team working as a team focused on affordable readiness? | | | | | | 6.a(3) | |
| | logistics, interoperability | (3) Does Supportability Integrated Product Team (IPT) have representation? | | | | | | 6.a(4) | |
| | logistics, programmatic | (4) What procedures are used to assure that ILS cost data is available for review? | | | | | | 6.a(5) | |
| | logistics, programmatic | (5) Has an ILS life-cycle cost estimate been established, and are there procedures to assure compliance with this life-cycle cost? | | | | | | 6.a(6) | |
| | logistics, training | (6) Has the contractor implemented an ILS training program? | | | | | | 6.a(7) | |
| | logistics, programmatic | (7) Do procedures exist to provide for coordination of information between ILS and all other functional disciplines? | | | | | | 6.a(8) | |
| | logistics, technology | (8) Are proposed engineering changes coordinated with the ILS team prior to approval? | | | | | | 6.a(9) | |
| | logistics | (9) Has the contractor developed and updated an Integrated Support Plan (ISP) that sets forth the contractor's plan to accomplish projected acquisition logistics support efforts? | | | | | | 6.a(10) | |
| | logistics, PQM | (10) Has the Assistant Program Manager Logistics (APML) updated the Product Support Plan (PSP) to reflect requirements for P&D phase? | | | | | | 6.a(11) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | logistics | (11) Has the PSP been updated to reflect the maintenance and support concepts at both the system and major hardware configuration item levels? | | | | | | 6.a(12) | |
| | logistics | (12) Are ILS requirements contractually imposed on suppliers in purchase orders and subsidiary documents? | | | | | | 6.a(13) | |
| | logistics | (13) Do procedures exist to audit subcontractor's ILS cost estimates? | | | | | | 6.a(14) | |
| | logistics | (14) Are records of equipment deficiencies and contractor responses maintained at the contractor's facility? | | | | | | 6.a(15) | |
| | logistics, PQM | (15) Has a Failure Reporting, Analysis, and Corrective Action System (FRACAS) been initiated? | | | | | | 6.a(15) | |
| | logistics | b. Logistics Budgeting and Funding | **0** | **0** | **0** | **0** | **0** | 6.b | |
| | logistics | (1) Has the program office prepared and updated the Logistics Requirements and Funding Summary (LRFS) or equivalent document? | | | | | | 6.b(1) | |
| | logistics | (a) Is there adequate documentation to support the requirements identified in the LRFS? | | | | | | 6.b(1)(a) | |
| | logistics | (b) Do the funding requirements in the LRFS coincide with the support requirements in the PSP and other planning documents? | | | | | | 6.b(1)(b) | |
| | logistics | (c) Are the impacts of funding shortfalls understood and plans in place to mitigate risk? | | | | | | 6.b(1)(c) | |
| | logistics | (2) Has the LRFS been staffed and approved? | | | | | | 6.b(2) | |
| | logistics, programmatic | c. Supportability Analysis (SA) Activities | **0** | **0** | **0** | **0** | **0** | 6.c | |
| | logistics, programmatic | (1) Is the SA activity tailored to address the characteristics of the equipment and the phase of the program? | | | | | | 6.c(1) | |
| | logistics, programmatic | (a) What is the status of the SA effort regarding the contracted tasks and their respective deliverable reports? | | | | | | 6.c(1)(a) | |
| | logistics, programmatic | (b) Are the current SA deliverables in acceptable format, such as, Failure Modes, Effects, and Criticality Analysis (FMECA), Level of Repair Analysis (LORA) and Logistics Management Information (LMI) Summaries? | | | | | | 6.c(1)(b) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | | | | | | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | logistics, programmatic | (c) Have the results of FMECA been integrated with the SA program? | | | | | | 6.c(1)(c) | |
| | logistics, programmatic | (d) Has a listing of critical safety items been provided for future tracking? | | | | | | 6.c(1)(d) | |
| | logistics, programmatic | (e) How does the SA process provide for the integration of inputs from all functional disciplines for use in design-to-cost and product support improvements? | | | | | | 6.c(1)(e) | |
| | logistics, programmatic | (f) Has the contractor's SA efforts identified cost effective support alternatives for depot repairs; e.g., contractor depot vice organic depot and contractor recommended warranty approaches? | | | | | | 6.c(1)(f) | |
| | logistics, programmatic | (2) How has the ISP including the SA planning been generated, updated, submitted to and approved by the Government? | | | | | | 6.c(2) | |
| | logistics, programmatic | (3) Have the equipment operational scenario, deployment schedule, and maintenance concept been defined and documented? | | | | | | 6.c(3) | |
| | logistics, programmatic | (a) Does the SA database accurately reflect the interfaces with the related ILS element? | | | | | | 6.c(3)(a) | |
| | logistics, programmatic | (b) Are operational and maintenance tasks identified along with the associated support resources? | | | | | | 6.c(3)(b) | |
| | logistics, programmatic | (c) Has any supportability data evolved from the contractor's repair actions, and has that data been included in the SA efforts? | | | | | | 6.c(3)(c) | |
| | logistics, programmatic | (d) Has the contractor's SA impacted the design for supportability? | | | | | | 6.c(3)(d) | |
| | logistics, programmatic, technology, training, T&E, software | d. Supply Support Activities | **0** | **0** | **0** | **0** | **0** | 6.d | |
| | logistics, programmatic | (1) Has the performance of SA lead to the identification of spares requirement? | | | | | | 6.d(1) | |
| | logistics, programmatic, technology | (a) What specific provisioning technical documentation will be generated from the SA, and has the Government provisioning activity concurred with their proposed content? | | | | | | 6.d(1)(a) | |
| | logistics, programmatic, technology | (b) Is provisioning technical documentation being ordered in the SDD contract? | | | | | | 6.d(1)(b) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | | Item | Comments / Mitigation |
|---|---|---|---|---|---|
| | logistics, programmatic, technology, PQM | (c) Will Spares Acquisition Integrated with Production (SAIP) techniques be incorporated into the contract, and how will SAIP candidates be identified? | | 6.d(1)(c) | |
| | logistics, programmatic | (d) Has the Supply Support Management Plan (SSMP) been updated? | | 6.d(1)(d) | |
| | logistics, programmatic | (e) Are drawings required for future procurement? | | 6.d(1)(e) | |
| | logistics, programmatic | (f) Are accepted sparing analysis and modeling tools being utilized, and are the assumptions consistent with the supportability analysis and the prescribed maintenance concept? | | 6.d(1)(f) | |
| | logistics, programmatic | (g) Have Performance Based Logistics (PBL) concepts been incorporated as the preferred supply support strategy? | | 6.d(1)(g) | |
| | logistics, programmatic | (h) Are spares, provisioning technical documentation, interim contractor support, etc. reflected in the LRFS? | | 6.d(1)(h) | |
| | logistics, programmatic | (2) Will the process for selection of spares be based on operational scenario, deployment, and maintenance concept data? | | 6.d(2) | |
| | logistics, programmatic | (a) Are supply support procurement requirements based on current baseline and an approved maintenance plan? | | 6.d(2)(a) | |
| | logistics, programmatic | (b) Will Readiness-Based Sparing (RBS) be accomplished prior to procurement of spares determination for Material Support Date (MSD)? | | 6.d(2)(b) | |
| | logistics, programmatic | (c) How are the spares requirements being determined (e.g., demand based, readiness based, etc.), are assumptions realistic, and what models are being used? | | 6.d(2)(c) | |
| | logistics, programmatic | (d) Are initial sparing analysis and modeling assumptions consistent with the prescribed maintenance concept? | | 6.d(2)(d) | |
| | logistics, programmatic | (e) What considerations have been given to alternative logistics concepts for supply support, such as direct vendor delivery or PBL, to reduce the logistics response time and infrastructure? | | 6.d(2)(e) | |
| | logistics, programmatic | (f) Is the phased support plan developed, describing the transition from contactor to service support? | | 6.d(2)(f) | |
| | logistics, programmatic | (g) Have MSD and service support date been determined and the requirements for Interim Contractor Supply Support (if any) been identified? | | 6.d(2)(g) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | | Item | Comments / Mitigation |
|---|---|---|---|---|---|
| | logistics, programmatic | (h) Are agreements for Interim Contractor Supply Support (ICSS) in place and adequate to support the weapons system until MSD / service support date, and is funding reflected in the LRFS to support ICSS? | | 6.d(2)(h) | |
| | logistics, programmatic | (i) Will an analysis be accomplished to determine on-board supply support range and depth requirements for the interim support period? | | 6.d(2)(i) | |
| | logistics, programmatic | (j) What procedures are established to cover inventory control, and financial accountability, if a commercial designated overhaul point is being utilized? | | 6.d(2)(j) | |
| | logistics, programmatic | (3) Is identification of spares and procurement being accomplished to support the test program? | | 6.d(3) | |
| | logistics, programmatic | (4) Is predicted Mean Time Between Failure (MTBF) data is developed and evaluated leading to quantification of selected spares? | | 6.d(4) | |
| | logistics, programmatic | (a) Does the contractor's current R&M data reflect a positive approach to the selected spare recommendations? | | 6.d(4)(a) | |
| | logistics, programmatic | (5) If this is a multi-service program, has the Primary Inventory Control Agency (PICA) and Secondary Inventory Control Agency (SICA) been identified and their roles and responsibilities been defined and approved by cognizant authority, and has the contractor developed a working relationship with both the PICA and SICA and understands the particular needs of each service? | | 6.d(5) | |
| | logistics, programmatic | (6) Does the SSMP reflect transition to Government support? | | 6.d(6) | |
| | logistics, programmatic | (a) Are supply support funding requirements reflected in the LRFS? | | 6.d(6)(a) | |
| | logistics, programmatic | (7) Does the sequencing and timing of events in the supply support management plan logically support planned Initial Operating Capability (IOC) / MSD? | | 6.d(7) | |
| | logistics, programmatic, software | (8) What is the status of postproduction support planning? | | 6.d(8) | |
| | logistics, programmatic | (9) Is the facilities requirement development process integrated with the SA process? | | 6.d(9) | |
| | logistics, programmatic, training, T&E | (10) Has a supply support management plan been developed for training equipment, and support and test equipment? | | 6.d(10) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | Item | Comments / Mitigation |
|---|---|---|---|---|
| | logistics, programmatic | (11) Has provisioning and documentation accommodated intermediate, wholesale, and consumer supply support needs? | 6.d(11) | |
| | logistics, programmatic, technology | (12) Is the provisioning technical documentation being procured adequate to support end items that have parts subject to failure / replacement and require maintenance at any level? | 6.d(12) | |
| | logistics, programmatic | (13) Will the contract accommodate slippage in the MSD? | 6.d(13) | |
| | logistics, programmatic | e. Packaging, Handling, Storage, and Transportation (PHS&T) Activities — **0 0 0 0 0** | 6.e | |
| | logistics, programmatic | (1) Are PHS&T requirements being established to provide for safe and efficient packaging, handling, storage, movement, and protection of hardware items? | 6.e(1) | |
| | logistics, programmatic | (a) Have potential PHS&T related problems been identified, and are risk mitigation plans in place? | 6.e(1)(a) | |
| | logistics, programmatic | (b) How will electrostatic / electromagnetic sensitive items be handled? | 6.e(1)(b) | |
| | logistics, programmatic | (c) Does the contractor prescribe appropriate preservation, packaging, packing, and marking (including bar coding) requirements for the anticipated shipping, storage, and issue conditions? | 6.e(1)(c) | |
| | logistics, programmatic | (d) Have the PHS&T requirements for spares identified? | 6.e(1)(d) | |
| | logistics, programmatic | (2) Is the contractor required to provide PHS&T data? | 6.e(2) | |
| | logistics, programmatic | (3) Are all PHS&T requirements being identified via the SA process, and is there a plan for any new or modified PHS&T requirements in the contractor's ISP and program PSP? | 6.e(3) | |
| | logistics, programmatic | (4) Have PHS&T milestones been established for Statement of Work (SOW) inputs, new container design development, testing, and deliveries? | 6.e(4) | |
| | logistics, programmatic | (5) Were PHS&T issues identified during testing and early fielding adequately resolved? | 6.e(5) | |
| | logistics, programmatic | (6) Has the contractor accepted each services peculiar PHS&T requirements for a multi-service program? | 6.e(6) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | Item | Comments / Mitigation |
|---|---|---|---|---|
| | logistics, programmatic | (7) Has an activity been identified to develop Packaging Requirements Codes (PRCs) using contractor provided data? | 6.e(7) | |
| | logistics, programmatic | (8) Have Hazardous Material (HAZMAT) issues (if any) been adequately addressed in the PHS&T planning? | 6.e(8) | |
| | logistics, programmatic | (a) Are PHS&T plans adequate to meet statutory and regulatory requirements, if new hazardous materials are being introduced? | 6.e(8)(a) | |
| | logistics, programmatic | (9) Does LRFS identify PHS&T funding requirements? | 6.e(9) | |
| | logistics, programmatic | (10) Does the contractor address the contractor's responsibility for transportation functions? | 6.e(10) | |
| | logistics, programmatic | (11) Does the Test and Evaluation Master Plan (TEMP) include transportability-testing requirements? | 6.e(11) | |
| | logistics, T&E, programmatic, PQM, software, training | f. Support Equipment Activities **0 0 0 0 0** | 6.f | |
| | logistics, programmatic | (1) Is an analysis being completed of the maintenance concept, system reliability prediction, Built-In Test (BIT), and testability requirements to determine support equipment requirements? | 6.f(1) | |
| | logistics, programmatic | (a) What is the status of Support Equipment Requirements Document (SERD) generation for any new / Peculiar Support Equipment (PSE)? | 6.f(1)(a) | |
| | logistics, programmatic | (b) Have design changes been made that may impact the recommended support equipment approach and quantity levels? | 6.f(1)(b) | |
| | logistics, programmatic | (c) Has interim support for support equipment been planned and budgeted? | 6.f(1)(c) | |
| | logistics, programmatic | (d) Have requirements for spare and repair parts for support equipment been addressed in the PSP and LRFS? | 6.f(1)(d) | |
| | logistics, T&E, programmatic | (2) Has all of the support equipment been identified and a schedule of delivery provided to support test programs? | 6.f(2) | |
| | logistics, programmatic, T&E | (a) Are the critical testability issues identified in the TEMP (i.e., environmental conditions)? | 6.f(2)(a) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | | | | | | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | logistics, programmatic, T&E, software | (3) Were the factory test equipment Test Program Sets (TPSs), performance, and diagnostic test software prepared and approved for each system item requiring test equipment? | | | | | | 6.f(3) | |
| | logistics, programmatic, T&E | (a) Has the factory test equipment with TPSs been used to repair any items? | | | | | | 6.f(3)(a) | |
| | logistics, programmatic, T&E | (b) Does the contractor have procedures in place for continued support (maintenance / parts / etc.) for the factory test equipment? | | | | | | 6.f(3)(b) | |
| | logistics, programmatic, T&E | (c) Has TPS configuration management been addressed? | | | | | | 6.f(3)(c) | |
| | logistics, programmatic, T&E | (4) Are service unique test equipment requirements known and in compliance? | | | | | | 6.f(4) | |
| | logistics, programmatic, T&E | (a) Have requirements for platform specific support equipment been identified? | | | | | | 6.f(4)(a) | |
| | logistics, programmatic, T&E | (b) Does the PSP document the plan for the development and deployment of TPS, maintenance assistance modules, and test requirement documents? | | | | | | 6.f(4)(b) | |
| | logistics, programmatic | (c) Is there a clear process by which the SDD contractor will validate and demonstrate compliance with fault detection and isolation requirements? | | | | | | 6.f(4)(c) | |
| | logistics, T&E, programmatic, PQM | (5) Have factory test station workload / throughput analyses been considered in defining test equipment configuration and / or quantities? | | | | | | 6.f(5) | |
| | logistics, PQM | (a) Has depot repair workload / throughput requirements been analyzed in conjunction with production workload / throughput requirements? | | | | | | 6.f(5)(a) | |
| | logistics, T&E | (6) Does the LRFS reflect funds needed to acquire and support TPS, maintenance assistance modules, personal protection equipment, test requirements documents, and metrology / calibration services? | | | | | | 6.f(6) | |
| | logistics, T&E | (7) Has funding for future and out-year PSE acquisitions, modifications, and calibration been planned? | | | | | | 6.f(7) | |
| | logistics, T&E | (8) Has an activity been designated to provide life-cycle support for TPSs and logistics support for PSE? | | | | | | 6.f(8) | |
| | logistics, T&E, training | (10) Is there a plan to manage support equipment training? | | | | | | 6.f(9) | |
| | logistics, T&E, training, software | g. Maintenance Plan Activities | **0** | **0** | **0** | **0** | **0** | 6.g | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | | Item | Comments / Mitigation |
|---|---|---|---|---|---|
| | logistics, software | (1) Have maintenance trade cost studies been conducted that support the prescribed maintenance concept? | | 6.g(1) | |
| | logistics, software | (2) Does the PSP describe the program's approach to evolving the maintenance and support concepts into an approved maintenance plan? | | 6.g(2) | |
| | logistics | (3) Do the R&M thresholds used in establishing the maintenance concept support the system availability and performance requirements in the Capability Production Document (CPD)? | | 6.g(3) | |
| | logistics | (4) Has the initial maintenance concept been substantiated by repair level analysis and documented in the PSP? | | 6.g(4) | |
| | logistics | (5) Has the approved maintenance concept been updated to the configuration established at Critical Design Review (CDR)? | | 6.g(5) | |
| | logistics | (6) Has the maintenance plan been updated to reflect the results of systems engineering and supportability analysis conducted during the systems integration work effort? | | 6.g(6) | |
| | logistics, training | (7) Do the manpower document requirements agree with personnel and training requirements from the SA? | | 6.g(7) | |
| | logistics, software | (8) Has an in-service engineering agent been identified, and what technical assistance will be available from the contractor via the production contract? | | 6.g(8) | |
| | logistics, T&E | (9) Do test and evaluation activities conducted to-date identify any maintenance planning deficiencies, which have not been corrected? | | 6.g(9) | |
| | logistics | (10) What is the status of depot maintenance planning for depot source of repair, facilities / MILCON, workload analysis, etc.? | | 6.g(10) | |
| | logistics | (a) Have depot capability / capacity and resource requirements been made and documented? | | 6.g(10)(a) | |
| | logistics | (b) Have initial estimates of depot capability / capacity and resource requirements been made and documented? | | 6.g(10)(b) | |
| | logistics, software | (11) What is the status of post-production support planning? | | 6.g(11) | |
| | logistics, software | (12) Have funding requirements for interim support, transition planning, and establishment of organic capability been identified in the LRFS? | | 6.g(12) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | | | | | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|
| | logistics | (13) Are reliability centered maintenance analyses planned? | | | | | 6.g(13) | |
| | logistics | (14) Has the installation of new support equipment in maintenance (ship and shore), depot, and training facilities been staffed through the appropriate stakeholders? | | | | | 6.g(14) | |
| | logistics, technology | h. Technical Manuals / Source Data Activities | 0 | 0 | 0 | 0 | 6.h | |
| | logistics, technology | (1) Is technical data management planning documented? | | | | | 6.h(1) | |
| | logistics, technology | (2) Is SA documentation being completed to support the preparation of technical manuals and provisioning technical documentation (source data)? | | | | | 6.h(2) | |
| | logistics, technology | (3) Is development of technical manuals based on the SA and LORA? | | | | | 6.h(3) | |
| | logistics, technology | (4) Is the level of technical data being procured consistent with levels of repair prescribed in the maintenance concept? | | | | | 6.h(4) | |
| | logistics, technology | (5) Has the Technical Data Package (TDP) been reviewed for shipboard facilities and aircraft loading concerns? | | | | | 6.h(5) | |
| | logistics, technology | (6) The program has a definitive plan to obtain specific proposals (including costs and schedule) and contracts. | | | | | 6.h(6) | |
| | logistics, technology | (a) Is integration of contractor technical information systems and processes for engineering, manufacturing, and logistics support required? | | | | | 6.h(6)(a) | |
| | logistics, technology | (b) Does the plan authorize Government access to contractor databases? | | | | | 6.h(6)(b) | |
| | logistics, technology | (c) Is delivery of technical information in digital form using the Integrated Digital Environment (IDE) standards contained in DoD 5000 series required? | | | | | 6.h(6)(c) | |
| | logistics, technology | (7) Has an IDE transition plan been developed to identify how the contractor will transition the programs digital technical information to the Government? | | | | | 6.h(7) | |
| | logistics, technology | (a) Is technical data being acquired in digital electronic form enabling life-cycle support using digital operations? | | | | | 6.h(7)(a) | |
| | logistics, technology | (8) Does the development of technical manuals for each level of maintenance prescribed in the maintenance concept support the schedule delivery and stand-up of the sites? | | | | | 6.h(8) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | logistics, technology | (9) Does the schedule for technical manual verification and validation support the overall program schedule? | | | | | | 6.h(9) | |
| | logistics, technology | (10) Are appropriate data rights being procured? | | | | | | 6.h(10) | |
| | logistics, software, training | i. Computer Resources Support (CRS) Activities | 0 | 0 | 0 | 0 | 0 | 6.i | |
| | logistics, software | (1) What is the status of the software support planning activities, and is there a computer resource plan? | | | | | | 6.i(1) | |
| | logistics, software | (2) Are the software support equipment interfaces identified and compatibility addressed? | | | | | | 6.i(2) | |
| | logistics, software | (3) What are the plans for software maintenance? | | | | | | 6.i(3) | |
| | logistics, software | (4) Has a Software Support Activity (SSA) been identified and adequately funded in the LRFS? | | | | | | 6.i(4) | |
| | logistics, software, training | (5) Has the SSA manpower, personnel, training, and facility requirements been identified? | | | | | | 6.i(5) | |
| | logistics, software | (6) Have other Memorandum of Agreements (MOAs) been established between the SSA and the other activities involved in the development? | | | | | | 6.i(6) | |
| | logistics | j. Warranty Planning Activities | 0 | 0 | 0 | 0 | 0 | 6.j | |
| | logistics | (1) What is the status of the warranty planning activities? | | | | | | 6.j(1) | |
| | logistics | (2) Has the contractor selected the type(s) of warranties to be implemented and how they are to be administered? | | | | | | 6.j(2) | |
| | logistics, T&E, HSI, software | k. Design Interface Activities | 0 | 0 | 0 | 0 | 0 | 6.k | |
| | logistics | (1) Are Associate Contractor Agreements with platform and subsystem manufacturer's being utilized for transfer of supportability requirements between platforms, and subsystems? | | | | | | 6.k(1) | |
| | logistics | (2) Have trade studies been conducted to identify supportability risks, if new or emerging technologies are being considered? | | | | | | 6.k(2) | |
| | logistics, HSI, software | (3) Is there an active Interface Control Working Group (ICWG) which includes representation from all functional areas (e.g., Human Systems Integration, Human Factors Engineering)? | | | | | | 6.k(3) | |
| | logistics | (4) Have all design analysis been performed (e.g., Stress / Strength Analysis, Vibration Analysis, etc.)? | | | | | | 6.k(4) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | Item | Comments / Mitigation |
|---|---|---|---|---|
| | logistics | (5) Are Reliability, Availability, and Maintainability (RAM) performance parameters adequately specified in the system specification and the TEMP? | 6.k(5) | |
| | logistics, T&E | (6) What were the results of R&M testing to-date, and what corrective actions have been taken? | 6.k(6) | |
| | logistics, T&E | (7) Is there an active Test, Analyze, and Fix (TAAF) program to support reliability development? | 6.k(7) | |
| | logistics | (8) Does the PSP include Pre-Planned Product Improvement considerations and the potential impact of any known ECPs on production cost and schedule? | 6.k(8) | |
| | logistics, T&E, software | (9) Are Built-In-Test (BIT) and onboard diagnostics requirements adequately specified in the system specification and TEMP? | 6.k(9) | |
| | logistics | (10) Is there a mechanism established for logisticians, engineers, and cost analysts to exchange data pertaining to the elements of system design and formal methods in place to review and document system design changes for impact on logistics support and program life-cycle cost? | 6.k(10) | |
| | training | l. Manpower, Personnel and Training (MP&T) **0 0 0 0 0** | 6.l | |
| | training | (1) Has a training systems plan been approved? | 6.l(1) | |
| | training | (2) Is there a clear plan on how courses and related materials and devices will be developed for training at each required level of maintenance? | 6.l(2) | |
| | training | (3) Is there a plan for validating and verifying training materials? | 6.l(3) | |
| | training | (4) Have training device requirements been coordinated with the program manager? | 6.l(4) | |
| | training | (5) Does MP&T planning adequately sequence tasks and events to assure personnel are trained to operate and maintain the system during Initial Operational Test and Evaluation (IOT&E)? | 6.l(5) | |
| | training | (6) Are the MP&T requirements consistent with the SA and level of repair prescribed in the maintenance concept? | 6.l(6) | |
| | training | (7) Are training requirements reflected in the LRFS for course and materials development, factory training, training devices, and equipment? | 6.l(7) | |
| | training | (8) Is logistics support for training equipment, devices, etc. identified and budgeted? | 6.l(8) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | | Item | Comments / Mitigation |
|---|---|---|---|---|---|
| | training | (9) Are site surveys planned for training sites? | | 6.I(9) | |
| | training | (10) Are required simulators or similar training devices, and PSE training courses defined, developed, and procured? | | 6.I(10) | |
| | training | (11) Is there a strategy for the development and acquisition of necessary training equipment and devices? | | 6.I(11) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | Level 1, software, T&E, logistics, risk | **7. Software Management** | **0** | **0** | **0** | **0** | **0** | 7 | |
| | software | a. Software Program Management and Configuration Management | **0** | **0** | **0** | **0** | **0** | 7.a | |
| | software | (1) Are the contractor's plans constructed to control software development schedules, cost tracking, and configuration management, and is a test report /proof of correction required to close out identified deficiencies? | | | | | | 7.a(1) | |
| | software | (2) Are there procedures to assure that management information is transmitted throughout the software organization, and does the plan call for integrated information across all subcontracts as well as prime contractor developed software? | | | | | | 7.a(2) | |
| | software | (3) Does the software Management Information System (MIS) identify deficiencies and discrepancies and provide data for analysis and initiation of corrective action, and is a test report / proof of correction required to close out identified deficiencies? | | | | | | 7.a(3) | |
| | software | (4) Is all system computer software listed as configuration items, and how are other items identified and controlled? | | | | | | 7.a(4) | |
| | software | (5) How are deliverable and non-deliverable support software identified (provide lists of each), and how is proprietary software controlled? | | | | | | 7.a(5) | |
| | software | (6) What will determine the contractor / Government software contractual baseline after Government acceptances? | | | | | | 7.a(6) | |
| | software | (7) Are the requirements and design documents updated as a result of Class I and Class II ECP changes? | | | | | | 7.a(7) | |
| | software | b. Software Planning and Development | **0** | **0** | **0** | **0** | **0** | 7.b | |
| | software | (1) Have software development plans, coding standards, verification procedures, and quality assurance provisions been documented and are they being followed? | | | | | | 7.b(1) | |
| | software, risk | (2) Has software risk analysis been conducted and the areas of greatest risk been identified? | | | | | | 7.b(2) | |
| | software | (3) Have hardware / software problem areas been identified as a result of system analyses? | | | | | | 7.b(3) | |
| | software | (4) Have plans been developed for resolution of actual and potential problems? | | | | | | 7.b(4) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | | | | | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|
| | software | (5) Does the requirements documentation for the various systems accurately reflect the system and avionics specification requirements? | | | | | 7.b(5) | |
| | software | (6) Are there provisions for memory reserve, processor time and capability needs, and do they meet current requirements? | | | | | 7.b(6) | |
| | software | (7) Are there provisions for review of software loading to aircraft , what is the concept, how large is the load library, and does the load concept support production line requirements as well as integration facilities testing, ground aircraft testing, and flight testing? | | | | | 7.b(7) | |
| | software | (8) Are there procedures to control changes to the computer software requirement from production through service life-cycle support, and is the contractor set up to process various software problem and change request forms? | | | | | 7.b(8) | |
| | software | (9) Have software integration requirements been defined, are they stable, and will the contractor integrate and test software source code changes developed by other organizations and their support contractors? | | | | | 7.b(9) | |
| | software | (10) Will the contractor test Government off the Shelf (GOTS) / Commercial off the Shelf (COTS) products, and will the contractor provide data rights / licenses? | | | | | 7.b(10) | |
| | software | (11) Are procedures in effect for controlling parallel software development both for the contractors and subcontractors? | | | | | 7.b(11) | |
| | software | (12) Is there a metric which triggers a risk, and does exceedance of a certain amount of parallelism trigger generation of a system risk? | | | | | 7.b(12) | |
| | software, T&E | c. Validation and Testing | **0** | **0** | **0** | **0** | 7.c | |
| | software, T&E | (1) Has the determination been made of software related special tasks that must be performed by the contractor during the demonstration and validation phase? | | | | | 7.c(1) | |
| | software, T&E | (2) Are there procedures for handling hardware and / or software problems during the demonstration and validation phase? | | | | | 7.c(2) | |
| | software, T&E | (3) Has the date for the freeze of the system and program design been determined? | | | | | 7.c(3) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | Item | Comments / Mitigation |
|---|---|---|---|---|
| | software, T&E | (4) Is there documentation to show the degree of computer software testing that is to be performed? | 7.c(4) | |
| | software, T&E | (5) Do the test procedures specify a range of input data to assure the software system is tested over the range of conditions, which it might encounter? | 7.c(5) | |
| | software, T&E | (6) Are there provisions for interfacing and testing of computer software modules, both within a computer system and between computer systems? | 7.c(6) | |
| | software, T&E | (7) Does the contractor have plans to retain test documentation to permit repeatability of tests; and how long will the contractor retain this data; does the contractor use and maintain automated test script files, and does the contractor use and maintain path coverage testing tool files? | 7.c(7) | |
| | software, T&E | (8) Are there plans to verify the SDD with the Software Requirement Specification (SRS), and the code against the listing and SDD? | 7.c(8) | |
| | software, T&E | (9) Are there provisions in the contract for an Independent Verification and Validation (IV&V) effort? | 7.c(9) | |
| | software, T&E | (10) Is the contractor set up to provide technical on-site engineering support at the test and evaluation activities? | 7.c(10) | |
| | software, T&E, logistics, risk, | d. life-cycle Management **0 0 0 0 0** | 7.d | |
| | software, logistics | (1) What criteria is used to measure the milestones of the Software Management Plan (SMP)? | 7.d(1) | |
| | software, logistics | (2) Are there specified maintenance provisions for the period up until the service support date? | 7.d(2) | |
| | software, logistics, T&E | (3) Are there procedures for implementing support requirements and do they interface with the flight test program, logistics and maintenance planning, and user introduction plans? | 7.d(3) | |
| | software, logistics | (4) Has all software (operational and support) that is contractually deliverable been identified? | 7.d(4) | |
| | software, logistics | (5) What plans are in place to assure proper handling of future modifications to baseline software, and is the contractor set up to be an active participant on the various review boards? | 7.d(5) | |
| | software, logistics | (6) Are plans made to assure that computer software is compatible with operation / logistics concepts? | 7.d(6) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | | Item | Comments / Mitigation |
|---|---|---|---|---|---|
| | software, logistics, risk | (7) Does the contractor have a software Contingency / Disaster Recovery Plan in place? | | 7.d(7) | |
| | software, logistics, risk | (8) Are software back-ups made periodically and stored off-site in a secure / fire-proof vault? | | 7.d(8) | |
| | software, logistics, risk | (9) Does the contractor's security plans and procedures include Automatic Data Processing (ADP) security? | | 7.d(9) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | Level 1, training, PQM, risk, technology, programmatic, T&E, software | **8. Production Engineering and Planning** | **0** | **0** | **0** | **0** | **0** | 8 | |
| | PQM, T&E, training, risk, technology | a. Policy and Procedure Documentation for Production Planning and Scheduling | **0** | **0** | **0** | **0** | **0** | 8.a | |
| | PQM | (1) Does the corporate design policy include trade studies? | | | | | | 8.a(1) | |
| | PQM, risk | (2) Have any risks associated with new technologies that been identified through trade studies? | | | | | | 8.a(2) | |
| | PQM, technology | (3) What proven manufacturing processes are being used where possible with trade studies performed to justify the use of new technology? | | | | | | 8.a(3) | |
| | PQM | (4) Is the manufacturing plan being kept up to date? | | | | | | 8.a(4) | |
| | PQM | (5) What producibility analyses requirements have been established? | | | | | | 8.a(5) | |
| | PQM | (6) What are the manufacturing plans to provide for separate yield rates for low rate, ramp-up, and mature production? | | | | | | 8.a(6) | |
| | PQM | (7) Is a joint manufacturing / engineering support team available for solving problems on the factory floor, and how does the team work? | | | | | | 8.a(7) | |
| | PQM | (8) Is a fast reacting productivity center available for off-line correction of problems, how does it operate, and is there an alternative? | | | | | | 8.a(8) | |
| | PQM, T&E | (9) How do the plans, schedules, and work instructions provide for inspection / test / acceptance in accordance with quality assurance requirements? | | | | | | 8.a(9) | |
| | PQM, training | (10) What is the planning that determines manpower requirements, level of skill, training of personnel, and calculation of material and components necessary to support the production rate? | | | | | | 8.a(10) | |
| | PQM | (11) What is the planning that provides for scheduled and unscheduled maintenance on facilities, equipment, and tools? | | | | | | 8.a(11) | |
| | PQM | (12) What procedures analyze the impact of engineering changes on plans and schedules? | | | | | | 8.a(12) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | PQM | (13) What procedures ensure that plans and schedules are coordinated with appropriate activities prior to approval? | | | | | | 8.a(13) | |
| | PQM | (14) What procedures ensure that plans, schedules, and work instructions are updated to the latest approved changes? | | | | | | 8.a(14) | |
| | PQM | (15) What procedures identify critical / pacing items for schedule control? | | | | | | 8.a(15) | |
| | PQM | (16) What procedures coordinate plans and schedules with all other contractor programs for proper utilization of available resources? | | | | | | 8.a(16) | |
| | PQM | (17) What procedures provide cross-references to identify components between manufacturing and engineering documentation? | | | | | | 8.a(17) | |
| | PQM, training, technology | b. Production Organization and Personnel | **0** | **0** | **0** | **0** | **0** | 8.b | |
| | PQM | (1) Have clearly defined organizations been established with the necessary span of control and levels of authority for effective management? | | | | | | 8.b(1) | |
| | PQM | (2) Are project managers assigned to only one major project, and how much time is dedicated to this program? | | | | | | 8.b(2) | |
| | PQM | (3) What is the management concept that has been established, and what is the degree of collocation of key functional support personnel? | | | | | | 8.b(3) | |
| | PQM, training, technology | (4) Who is responsible for the recruitment, training, and retention of key technical personnel? | | | | | | 8.b(4) | |
| | PQM | (5) How are key personnel retained to problems at principal project milestones? | | | | | | 8.b(5) | |
| | PQM, training | (6) What are the training programs for new and current employees? | | | | | | 8.b(6) | |
| | PQM, training | (7) How are the current training programs satisfying employer and employee current and future needs? | | | | | | 8.b(7) | |
| | PQM, risk | c. Resource Allocation Planning | **0** | **0** | **0** | **0** | **0** | 8.c | |
| | PQM | (1) What contractor / Government-owned resources including facilities, tooling, and equipment that are available, planned, and dedicated for use on this program? | | | | | | 8.c(1) | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | | | | | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|
| | PQM, risk | (2) What are the contingency plans for resource allocation to this program in the event of termination of leasing agreements for equipment or facilities? | | | | | 8.c(2) | |
| | PQM | d. Completeness of Production Planning Tasks and Quality of Plans / Schedules | 0 | 0 | 0 | 0 | 0 | 8.d | |
| | PQM | (1) What is the process for breaking down the production process into discrete work packages? | | | | | 8.d(1) | |
| | PQM | (2) How detailed are the work packages that fully define the work to be accomplished? | | | | | 8.d(2) | |
| | PQM | (3) How are the work packages traceable to the contract WBS? | | | | | 8.d(3) | |
| | PQM | (4) How are the work packages properly sequenced to completely depict the production process? | | | | | 8.d(4) | |
| | PQM | (5) How are the work packages and sequence charts broken down into individual work instructions to that completely describe the operations to be performed? | | | | | 8.d(5) | |
| | PQM | (6) Are pertinent tools, equipment, facilities, parts, and material requirements, identification of assemblies, quantities, and routing information all parts of the work instructions? | | | | | 8.d(6) | |
| | PQM | (7) What is the master production schedule, and how does it relate to the master program schedule? | | | | | 8.d(7) | |
| | PQM | (8) What are the detailed schedules for fabrication, assembly, and installation, and how do they relate to the master production schedule? | | | | | 8.d(8) | |
| | PQM | (9) What are the schedules for the production / procurement of tools, test sets, assemblies, and GFE, and how are they maintained? | | | | | 8.d(9) | |
| | PQM | (10) How do the production / procurement schedules relate to the overall production operations schedules? | | | | | 8.d(10) | |
| | PQM | (11) Does the contractor utilize a CAM system in production, and does a corporate policy exist for phase-in of CAM and other factory modernization? | | | | | 8.d(11) | |
| | PQM | (12) Is the CAM integrated with CAD on a common database to provide design data to reduce tooling design and product design iterations? | | | | | 8.d(12) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | PQM | (13) Does a CAM common database exist that includes the entire plant operation? | | | | | | 8.d(13) | |
| | PQM | (14) What steps have been taken to reduce manual manufacturing operations? | | | | | | 8.d(14) | |
| | PQM | e. Contractor Production Control Policy and Procedure Documentation | 0 | 0 | 0 | 0 | 0 | 8.e | |
| | PQM | (1) What are the procedures that control and measure manufacturing progress against estimates and schedules? | | | | | | 8.e(1) | |
| | PQM | (2) What is the work progress tracking system used by management to identify deviations from the scheduled workflow? | | | | | | 8.e(2) | |
| | PQM | (3) What procedures assure that all required tools, materials, operating instructions and drawings are available prior to the release of work orders? | | | | | | 8.e(3) | |
| | PQM | (4) What are the procedures that provide for the priority fabrication of parts to offset assembly line shortages, and what is the alternative? | | | | | | 8.e(4) | |
| | PQM | (5) What procedure controls work center tools used in production? | | | | | | 8.e(5) | |
| | PQM | (6) Are there special procedures to control the build of spares, GSE, and modification kits? | | | | | | 8.e(6) | |
| | PQM | (7) How is the production control reporting system linked to the management information system? | | | | | | 8.e(7) | |
| | PQM | (8) Are producibility analyses conducted resulting in revisions to procedures from lessons learned during SDD fabrication and assembly? | | | | | | 8.e(8) | |
| | PQM | (9) What are the procedures for selection of manufacturing methods / processes, and how do they account for cost, schedule and performance? | | | | | | 8.e(9) | |
| | PQM | (10) What is the process for modification of methods / processes as a result of approved ECPs or changes in production activity? | | | | | | 8.e(10) | |
| | PQM | (11) How are the development of methods and processes coordinated with all other manufacturing disciplines? | | | | | | 8.e(11) | |
| | PQM | (12) What are the equipment and tooling layout, workflow, receiving, and routing for each work center? | | | | | | 8.e(12) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | PQM | (13) How are the layout diagrams traceable to production plans and schedules? | | | | | | 8.e(13) | |
| | PQM | (14) How do the work center supervisors and higher management use the layout diagrams to plan workloads? | | | | | | 8.e(14) | |
| | PQM, risk | f. Methods and Processes Selection Trade-Off Analysis | 0 | 0 | 0 | 0 | 0 | 8.f | |
| | PQM | (1) What are the new or special methods and processes that are considered "state-of-the-art", which have been identified for this program? | | | | | | 8.f(1) | |
| | PQM, risk | (2) What analysis justifies any production risk associated with any new or special methods or processes? | | | | | | 8.f(2) | |
| | PQM | (3) Has a thorough cost analysis been performed for other than industry standard methods and processes? | | | | | | 8.f(3) | |
| | PQM | (4) What independent prime contractor's analyses have been conducted for methods and processes used at subcontractor facilities, and what are the subcontractor controls? | | | | | | 8.f(4) | |
| | PQM | (5) What selected methods and processes are compatible with existing equipment and supplies, and what contingencies are being considered? | | | | | | 8.f(5) | |
| | PQM | (6) Does the documentation for methods and processes specify necessary environmental conditions (i.e., controlled temperature or clean room)? | | | | | | 8.f(6) | |
| | PQM | (7) What quality assurance provisions are included in the operations / process sheets / chart?. | | | | | | 8.f(7) | |
| | PQM | (8) What methods and processes documentation completely describes the manufacturing operation and identifies areas that are lacking? | | | | | | 8.f(8) | |
| | PQM | (9) Are the written operation / process sheets / charts written so that they are commensurate with the operator skill level? | | | | | | 8.f(9) | |
| | PQM | (10) Do the methods and procedures contain provisions for cleaning or elimination of foreign objects? | | | | | | 8.f(10) | |
| | PQM | (11) What methods and procedures provide for the calibration / adjustment of equipment where necessary? | | | | | | 8.f(11) | |
| | PQM, programmatic, software | g. Establishment and Maintenance of Configuration Baselines | 0 | 0 | 0 | 0 | 0 | 8.g | |

| Special Interest | Technical Discipline | Legend: R Y G U NA | | Item | Comments / Mitigation |
|---|---|---|---|---|---|
| | PQM, programmatic, software | (1) What critical elements of the WBS, which are designated as Critical Configuration Items, have been identified? | | 8.g(1) | |
| | PQM, programmatic, software | (2) Are all engineering changes requiring a change to the baseline being processed as formal ECPs? | | 8.g(2) | |
| | PQM, programmatic | (3) Is ILS considered in the engineering change review and approval proceedings? | | 8.g(3) | |
| | PQM, programmatic, software | (4) What is the procedure for coordinating proposed changes with all interested activities? | | 8.g(4) | |
| | PQM, programmatic, software | (5) What is the procedure for adequately reviewing proposed changes internally prior to submittal to the service? | | 8.g(5) | |
| | PQM, programmatic, software | (6) What documented procedures are adequate for the control of subcontractor proposed engineering changes? | | 8.g(6) | |
| | PQM, programmatic, software | (7) Has the contractor conducted functional and physical configuration audits for the purpose of establishing the item baseline and identifying all physical, functional and performance characteristics? | | 8.g(7) | |
| | PQM, programmatic, software | (8) Does the contractor's configuration accounting system document the exact configuration of each serial numbered component, assembly, or end item? | | 8.g(8) | |
| | PQM, programmatic | (9) What are the procedures that ensure the timely preparation and release of drawings and specifications necessary to incorporate approved changes into the production process? | | 8.g(9) | |

| Special Interest | Technical Discipline | Legend: | R | Y | G | U | NA | Item | Comments / Mitigation |
|---|---|---|---|---|---|---|---|---|---|
| | Level 1, software, programmatic, PQM, risk, technology | **9. Exit Criteria** | **0** | **0** | **0** | **0** | **0** | 9 | |
| | programmatic, PQM, risk, technology | a. The PRR is considered complete when all draft RFAs are signed off, and an acceptable level of risk is ascertained. The program manager will approve entering LRIP or FRP based upon acceptable PRR results and manageable program risk. | **0** | **0** | **0** | **0** | **0** | 9.a | |
| | programmatic, PQM, risk, technology, software | (1) Typical Exit Criteria include: | | | | | | 9.a(1) | |
| | programmatic, software | (a) Has the system product baseline been established and documented to enable hardware fabrication and software coding to proceed with proper configuration management? | | | | | | 9.a(1)(a) | |
| | programmatic, software | (b) Are adequate process and metrics in place for the program to succeed? | | | | | | 9.a(1)(b) | |
| | programmatic, risk | (c) Are the risks known and manageable? | | | | | | 9.a(1)(c) | |
| | programmatic, risk, technology | (d) Is the program schedule executable (technical/cost risks)? | | | | | | 9.a(1)(d) | |
| | programmatic | (e) Is the program properly staffed? | | | | | | 9.a(1)(e) | |
| | programmatic, PQM, software | (f) Is the detailed design producible within the production budget? | | | | | | 9.a(1)(f) | |
| | programmatic | (2) Were PRR issues captured in Requests for Action (RFAs) and properly adjudicated and assigned? | | | | | | 9.a(2) | |
| | programmatic | (3) Were all PRR RFAs properly completed (closed)? | | | | | | 9.a(3) | |
| | programmatic, PQM, software | (4) Was the proper technical authority represented at the review and is the program properly staffed to manage production and development? | | | | | | 9.a(4) | |
| | programmatic, PQM, software | (5) Can the system produced satisfy the CPD? | | | | | | 9.a(5) | |