

**JOINT FLEET MAINTENANCE MANUAL****VOLUME VII****CONTRACTED SHIP MAINTENANCE****LIST OF EFFECTIVE PAGES**

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**APPENDIX E**  
**PROCEDURES FOR THE PREPARATION AND USE OF**  
**WORK ITEM SPECIFICATIONS FOR SHIP REPAIR**

This appendix is provided and maintained by the Standard Specification for Ship Repair and Alteration Committee (SSRAC) in accordance with NAVSEAINST 9070.1 series. Due to its size and need for annual updating, it is not practical to enclose the contents of Appendix 4E in this manual. In this regard, revisions/updates will be issued as an enclosure to the report of annual SSRAC meetings. When the results of the annual meetings are finalized, the website will be updated. It typically takes about 90 days to process the changes and post the update.

Appendix 4E can be located on the SSRAC website, <http://www.navsea.navy.mil/CNRM/SERMC/SSRAC1/default.aspx>, or copies can be obtained by e-mail request to [ssrac@navy.mil](mailto:ssrac@navy.mil) or by phone to 904-270-5593.

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6.4.5 Berthing and Messing Funds. FLTCOMs provide berthing and messing funds using an Operating Budget Form, reference (q), to the Project Manager. In addition, NAVSEA may provide funds for this purpose through project directives. Commander, Fleet Forces Command and Commander, Pacific Fleet directives concerning the berthing and messing of crews undergoing scheduled availabilities should be reviewed.

6.4.6 Commercial Industrial Services Contracts. The Commercial Industrial Services Program, when utilized and funded, provides work or services to ships by use of Indefinite Delivery Indefinite Quantity Contracts, likewise there are also standalone Indefinite Delivery Indefinite Quality Contracts for selected service or productive capabilities awarded by a Fleet and Industrial Supply Center or the RMC Contracts Department. Orders are placed for repair of individual items for a predetermined price and performance period. The TYCOM authorizes the repairs to be included in these contracts. O&MN and O&MNR funding is provided to RMCs on OBs.

6.4.7 Environmental Compliance Oversight. This function is funded by FLTCOMS and NAVSEA (travel and training) and includes hazardous waste and shore environmental protection. This section is addressed further in Chapter 10 of this volume.

## 6.5 LEGISLATED RESPONSIBILITIES FOR CONTROL OF PUBLIC FUNDS.

6.5.1 Commanding Officer Responsibility. Reference (g) provides that the CO of an activity is solely responsible, per reference (e), for the administration of all authorizations of funds granted to the CO. The responsibility cannot be delegated in whole or in part within the Command. The CO will be held personally responsible for any act or an act of a subordinate within the activity that causes an over-commitment, over-obligation or over-expenditure of an authorization of funds. COs shall take all necessary action to establish accountability and enhance the administrative control of funds, including:

- a. Establish and maintain adequate fiscal controls to prevent the over-authorization, over-commitment, over-obligation or over-expenditure of funds made available to the activity.
- b. Issue an activity instruction providing for the authority, responsibility and procedures required in the administrative control of funds.
- c. Delegate funds administration authority to individuals at the appropriate level to ensure that the individuals are personally aware of the necessary detail to establish total accountability. Funds administrators shall be enabled to provide absolute technical input to funds control. Financial management remains the responsibility of the activity comptroller.
- d. Ensure that subordinates delegated the authority to act as funds administrators are authorized in writing, by name, clearly specifying the extent of the authority and the responsibility delegated.
- e. Ensure that designated funds administrators are familiar with the statutory responsibilities inherent in the administration of funds, including the provisions of the Administrative Control of Funds addressed in references (h) and (i). These individuals must also be knowledgeable of principles concerning the administration of the appropriations as contained in reference (i), Chapter 2, understand the administration of allotments and operating budgets as contained in reference (i), Chapter 3, reference (j) and the principles and procedures concerning the use of various requests for work and services contained in reference (k).

6.5.2 Comptroller. The activity's Comptroller has the responsibility for financial management and shall report directly to the CO of the Activity. Depending on the activity, the senior person in the finance office is normally the Comptroller or the Budget Officer. The Comptroller shall obtain guidance to resolve any questions on the interpretation of these laws.

- a. The Comptroller is the allocation holder who has three basic functions:

- (1) Budget Formulation including those actions performed in development, review, justification and presentation of the budget estimates.
  - (2) Execution encompassing budgetary actions required to effectively and efficiently accomplish the programs for which funds were requested, as authorized by appropriate authority.
  - (3) Managerial Accounting providing management with financial information necessary to support the preparation of budget estimates and facilitate the budget execution process. The process shall ensure all funds are administered in accordance with the law, administrative policies and regulations of higher authority.
- b. The Comptroller shall be responsible for recording commitment and obligation transactions in the designated accounting system (NEMAIS, STARS) chargeable to OBs, Project Directives or Work Requests, performing periodic reviews of un-liquidated obligations and unmatched disbursements, validating expenditures and advising the funds grantor of excess funds available for recapture.

6.5.3 Fund Administrators/Funds Managers. Individuals who are delegated authority in writing by the CO to authorize, commit, obligate and expend specific funds related to a specified authority and responsibility are agents of the Comptroller. These individuals provide technical input to financial management and can be held accountable and personally liable for over-commitment, over-obligation or over-expenditure of the funds administered.

- a. Any individual who is duly authorized by the CO as a Funds Administrator will familiarize themselves with the policies directives that are outlined in paragraph 6.3 of this chapter. In particular:
  - (1) Clearly understand the statutory responsibilities inherent in the administration of funds, including the provisions of the Administrative Control of Funds addressed in reference (h) and (i), Appendix A.
  - (2) Be informed of principles concerning the administration of the appropriations as contained in reference (i), Chapter 2.
  - (3) Understand the administration of allotments and operating budgets as contained in reference (i), Chapter 3, reference (j) and the principles and procedures concerning the use of various requests for work and services contained in reference (k).
- b. Funds Administrators will manage the funds, in whole or in part, as specified by the Comptroller and that have been allocated to individual projects in accordance with the delegated authority for the CO.
- c. Duly authorized individuals are required to request additional funds from the grantor of funds. Likewise, the individual will advise the grantor of funds when funds in excess of requirements are available for recapture.

6.6 RESPONSIBILITIES FOR SHIP MAINTENANCE FUNDING MANAGEMENT BUSINESS RULES. The goals of the Entitled Funding process are to reduce premiums paid for maintenance while at the same time improving the ability to respond to maintenance and operational requirements. The funding business rules for the Maintenance Team in managing the controls required to support all maintenance for a given ship are established in Volume VI, Chapter 31 of this manual.

6.6.1 Maintenance Team Funding Business Rules Responsibilities. The Maintenance Team identifies budget needs based on requirements in the Current Ship's Maintenance Project, Class Maintenance Plan, the Baseline Availability Work Package and historical data. The Maintenance Team identifies the total funding requirement to support the ship during the execution year, along with advance planning and funding requirements for availabilities to be executed in future years. It also establishes the allocation of the "controls" or "phasing" plan that the team will utilize to support the ship.

## VOLUME VII

## CHAPTER 11

## CONTRACT ADMINISTRATION QUALITY ASSURANCE PROGRAM

REFERENCES.

- (a) Federal Acquisition Regulation - Part 46 - Quality Assurance
- (b) NAVSEA S9086-VD-STM-010 - NSTM Chapter 631 V3 (Preservation of Ships In-Service - General)
- (c) NAVSEA MS 6310-081-015 - Submarine Preservation
- (d) MIL-STD-1330 - Standard Practice for Precision Cleaning and Testing of Shipboard Oxygen, Helium, Helium-Oxygen, Nitrogen and Hydrogen Systems
- (e) NAVSEAINST 9304.1 - Shipboard Electrical Cable and Cableway Inspection and Reporting Procedures
- (f) NAVSEA T9074-AS-GIB-010/271 - Requirements for Nondestructive Testing Methods
- (g) NAVSEA 0900-LP-001-7000 - Fabrication and Inspection of Brazed Piping Systems
- (h) NAVSEAINST 4355.7 - Nondestructive Test (NDT) Examiner Qualification and Requalification
- (i) NAVSEA 250-1500-1 - Welding Standard
- (j) NSTR-99 - Qualification Examination Requirements for Nondestructive Test Personnel
- (k) NAVSEA SI 009-04 - Quality Management System
- (l) NAVSEAINST 4700.17 - Preparation and Review of Trouble Reports
- (m) NAVSEAINST 9210.31 - Government Procurement Quality Source Inspection Actions for Shipyard Procedure of Material Under NAVSEA 08 Cognizance

LISTING OF APPENDICES.

- A Preservation Departures from Specifications Process Decision Tree
- B Corrective Action Request
- C Letter of Delegation (Example Only)

11.1 PURPOSE. This chapter establishes the basic provisions for the Regional Maintenance Center (RMC) repair Contract Administration Quality Assurance Program (CAQAP) for hardware and technical data. This chapter includes provisions for tailoring the implementation of these programs to the particular need, based on contractual requirements. There are seven elements of the CAQAP that are designed to provide a systematic program for ensuring contractor compliance with contract requirements. These elements, which are based on the deliverable product and contractual requirements, are Planning, Document Review/Procedure Review (PR), Procedures Evaluation (PE), Product Verification Inspection (PVI), Quality Audits, Corrective Action and Quality Data Evaluation (QDE). The RMC will develop, apply and maintain an effective program for performing Government Quality Assurance (QA) actions consistent with the CAQAP. The elements of the CAQAP will be described by operating procedures that provide RMC personnel with specific direction in applying these to the local contracting environment. This chapter also includes the QA oversight requirements set forth by reference (a). Data related to PE, PVI, Quality Audits, and Corrective Action elements should relate to each individual availability to support Contractor Performance Appraisal Reporting System.

11.1.1 Scope. This chapter establishes the CAQAP requirements for repair and overhaul contracts and applies to all nuclear and non-nuclear areas, except as otherwise indicated.

11.1.2 Applicability. This chapter is applicable to repair and overhaul contracts administered by RMC activities.

11.1.3 Quality Assurance Directives. Fleet instructions, directives and policy letters not included in this chapter containing mandatory QA requirements will be incorporated into each CAQAP. Naval Sea Systems Command (NAVSEA) instructions, directives and policy letters not included in this chapter containing mandatory QA requirements will be incorporated into each CAQAP as directed in writing by the Fleet.

11.1.4 NAVSEA Evaluations. NAVSEA will conduct product-oriented evaluations of contractors and associated RMC contract administration activities as considered necessary. The purpose of these evaluations is to determine contractor conformance to specification requirements and RMC contract administration conformance to QA functions and responsibilities.

## 11.2 PROGRAM DIRECTION AND CONTROL.

11.2.1 Contractor Responsibilities. The contractor carries out the obligations as set forth in the terms and conditions of the contract and in the applicable specifications. The contractor is responsible for controlling product quality, offering to the Government for acceptance only those supplies and services that conform to contract requirements and, when required, for maintaining and furnishing objective evidence of this conformance.

11.2.2 Government Responsibilities. Government will determine the type and extent of CAQAP actions required based upon the particular procurement. These actions will include as a minimum:

- a. Inspection of the product or process.
- b. Adequacy Reviews and Audits of the contractor's quality management system or of any other means employed by the contractor to control quality and to comply with contract requirements.
- c. Teaming with the contractor to establish and improve the quality management system and associated processes.
- d. Maintenance of Government records to include:
  - (1) The number of observations/inspections made and the number and type of nonconformities detected.
  - (2) Corrective Action Requests (CAR).
  - (3) **Records described in paragraph 11.2.4 of this chapter.**
- e. Final acceptance of product, when required.

11.2.2.1 Compliance. The Government determines if the contractor's performance of work complies with the requirements of the contract. The contractual documents must provide the authority to require the contractor to maintain a quality management system adequate for the work. The contractor must provide and maintain a quality management system acceptable to the Government "as specified in the contractual documents." To implement this, cognizant Government personnel will determine the effectiveness of the contractor's quality effort, as well as perform the product inspections necessary to ensure contractor's conformance to the specification.

11.2.2.2 Quality. Government personnel shall be responsible to ensure that the contractor resolves quality issues and improves quality processes. Government personnel shall not serve as a replacement for the contractor's own quality management system, nor shall Government personnel be used by the contractor as a progressive inspection device to determine end product acceptability.

11.2.2.3 Verification. If the product is repetitively not ready for inspection after Government services have been requested or items accepted by the contractor are found to be nonconforming during Government inspection, the Government representative will notify the contractor that contractual requirements have not been met. In addition, the Government representative shall discontinue verification actions and initiate corrective action identifying the specific nonconformities.

11.2.2.4 Evaluation. While evaluating the contractor's performance of work on a specific product, the Government representative shall require the contractor only meet those requirements set forth in the contractual documents. The Government representative will not require higher quality work than that set forth in the specifications. Doing so provides the contractor with grounds for requesting an increase in price to cover the higher costs of performance. The Government representative shall not accept lower quality work or work of a lesser scope than specified in the contractual documents. Work performed will only be accepted when the work conforms to the contractual documents and changes.

11.2.2.5 Preservation Oversight of Critical Coated Areas. The RMC is considered to be the third party inspector and shall be responsible for providing a qualified coating inspector in accordance with reference (b). The RMC third party qualified inspector is responsible for ensuring compliance with the requirements of references (b) and (c) before signing acceptance/witness for all Hold points, including (G) points in NAVSEA Standard Items during execution of the preservation process. The third party inspector may either perform the inspection or witness, by personal observation, a qualified contractor individual performing the required measurements. Hold points, including (G) points in NAVSEA Standard Items (or key checkpoints) which the third party inspector must sign, are at a minimum, those items identified in reference (b), table 631-11-1 indicated by note 2. The RMC shall also provide for the retention of required preservation records. Any out-of-specification condition found is to be mitigated in accordance with Appendix A of this chapter and in accordance with Volume V, Chapter 8 of this manual.

11.2.3 Specification Review. Planning Activities, Executing Activities and contractors prepare and issue work specifications. Executing Activities will review these work specifications for adequate quality requirements and inclusion of all technical requirements. Modifications or sequences that are written to the original work specifications will also be reviewed for adequate quality and technical requirements. Specification review will include, as a minimum:

- a. The location of (I), (V) and (G) points are consistent with the procedure referenced in Chapter 4, Appendix E of this volume.
- b. There is adequate, written description of the technical requirements.
- c. Accept or reject criteria for inspections and tests is clearly stated and includes appropriate tolerances.
- d. The use of references in work specifications should be avoided unless the material is too extensive to quote or paraphrase.
- e. An (I), (V) and (G) point is not invoked in the work specification before a paragraph which references a NAVSEA Standard Item which invokes the same (I), (V) and (G) points.

Government will establish and maintain a feedback and corrective action process that formally reports specification problems and nonconformities to the preparing Government and/or contractor activity.

11.2.4 Retention and Disposal of Inspection Records. Government records (i.e., inspections, qualifications/training, assessments, evaluations, audits, CARs, PVI and critical coat paint preservation) will be retained at the RMC for at least 3 years following the completion of work. After 3 years the records may be stored at a Federal Records Center in an auditable condition. Records stored at a Federal Records Center will be appropriately cataloged to allow prompt retrieval, if necessary.

### 11.3 PERSONNEL CAPABILITY REQUIREMENTS.

#### 11.3.1 Quality Assurance Manager/Department Head.

- a. Is responsible for determining needed personnel requirements, initiating action necessary to obtain the required personnel and providing training necessary to ensure the skills are available for the performance of QA functions.

- b. Will ensure that the required skills are available to determine acceptability of products produced and services rendered by the contractor. Training must be provided to ensure personnel have the skills, techniques and knowledge necessary to comply with the requirements of this chapter. QA training opportunities must be extended to all appropriate personnel engaged in performing quality related functions. A training plan/matrix will be established and maintained current.

### 11.3.2 Training.

- a. Personnel providing in-process oversight of the contractors shall complete introduction/overview training of CAQAP elements internally prepared by the QA Manager. Personnel performing contractor Quality Management System Audits shall receive both introduction/overview training of CAQAP elements internally prepared by the QA Manager and also introduction/overview of International Organization for Standardization (ISO) 9001 training as a minimum and may be internally prepared by an experienced auditor.
- b. Personnel performing quality audits of the contractor must satisfactorily complete ISO 9001 Internal Auditor training or equivalent (trained by a Lead Auditor) as a minimum. This training is optional if Lead Auditor training has been received.
- c. Personnel assigned as Lead Auditor/Audit Team Leader must satisfactorily complete ISO 9001 Lead Auditor training as a minimum.

11.3.2.1 Coating Inspection. Specialized training and certification in Coating Inspection is required for each individual performing verification of contractor coating processes on critical surfaces. Training, certification and recertification must be accomplished through a NAVSEA approved course (i.e., National Association of Corrosion Engineers Session 1, NAVSEA Basic Paint Inspector). Requirements for critical surfaces are defined in reference (b).

11.3.2.2 Oxygen Cleanliness. Specialized training and certification in Oxygen Cleanliness is required for each individual performing verification of contractor cleaning, assembly or packaging of certified oxygen clean systems and components. Training and certification must be administered by a NAVSEA approved Certified Oxygen Clean Instructor in accordance with reference (d). Recertification of personnel is required every three years.

11.3.2.3 Electrical Cableway. Personnel performing inspection or acceptance of electrical cableway work on Navy ships shall be trained and qualified to reference (e).

11.3.3 Nondestructive Test Personnel Requirements. Specialized training, experience and certification in the applicable Nondestructive Testing (NDT) method is required for each individual performing PR, PE, PVI, Process Quality Audits (PQA) and actual accomplishment of the NDT method. Unless otherwise specified herein, NDT personnel shall be qualified and certified in accordance with references (f) and (g), as applicable.

11.3.3.1 Training/Qualification. Training programs may be developed by the RMC or attained from Portsmouth Naval Shipyard (PNS), other Naval Activities, Navy technical schools, chapters of the American Society for Nondestructive Testing or from private industry. Work-time-experience required as a qualification prerequisite for NDT inspector candidates shall be obtained by actual hands-on experience and performance of PR, PE, PVI and PQAs of a contractor's inspection functions in the applicable NDT method under the guidance of a certified Level II (Inspector) or Level III (Examiner). Formal classroom training and qualification testing shall be in accordance with reference (f) or (g), as applicable. Work-time-experience may be considered sufficient when the inspector candidate's experience is such that the qualification requirements as defined in paragraph 11.3.3.2 of this chapter are met.

11.3.3.2 Qualification. NDT qualifications are:

- a. NDT LEVEL II (Inspector): An individual qualified to set up and calibrate equipment and to interpret and evaluate results with respect to applicable codes, standards and specifications. The Inspector shall be thoroughly familiar with the scope and limitations of the methods for which the individual is qualified, exercise assigned responsibility for on-the-job training and guidance of trainees and prepare written instructions, and document/report NDT results.
- b. NDT LEVEL III (Examiner): An Examiner will be capable of establishing techniques and procedures; interpreting codes, standards, specifications and procedures; and designing the particular test methods, techniques and procedures to be used. The Examiner will be responsible for the NDT operations for which qualified and to which assigned and will be capable of interpreting and evaluating results in terms of existing codes, standards and specifications. The Examiner will have sufficient practical background in applicable materials, fabrication and product technology to establish techniques and to assist in establishing acceptance criteria where none are otherwise available. The Examiner will have general familiarity with other appropriate NDT methods and will be qualified to train and examine Inspector personnel for certification.

**NOTE: RMC ACTIVITIES REQUESTING EXAMINER CERTIFICATION MUST PROVIDE EVIDENCE TO THE CERTIFYING ACTIVITY AS TO THE NEED TO FUNCTION AT THIS LEVEL AND THAT FACILITIES AND EQUIPMENT ARE AVAILABLE.**

11.3.3.3 Certification. RMC Inspectors shall be certified or recertified at their activity under a program administered by a reference (h) certified Examiner or by PNS. Reference (h) provides the reference (f) and (g) Test Examiner certification requirements for all government-employed civilian and military personnel who are attached to Naval activities. Inspector certification is restricted to the oversight of contractor performed NDT and not for product acceptance inspections. Product acceptance inspections shall be performed by inspection personnel qualified in accordance with the applicable fabrication document and is not within the scope of this chapter. PNS can certify Inspector and/or Examiner personnel in any or all of the following methods:

- a. Visual Test (VT) Inspection.
- b. Magnetic Particle Test (MT) Inspection.
- c. Liquid Penetrant Test (PT) Inspection.
- d. Radiographic Test (RT) Inspection (Structural, Castings and Piping).
- e. Ultrasonic Test (UT) Inspection.
- f. Welds, Thickness and Silver Braze; Inspector personnel may obtain individual certification.
- g. Special Purpose Lead; Inspector certification only.
- h. Eddy Current Test (ET) Inspection (Welds and Base Material).

11.3.3.4 Certification Maintenance. Examiners are to recertify at the intervals specified in reference (h). Inspectors will recertify and perform documented verification of use of the applicable NDT method at intervals specified in reference (f) and/or (g). The required periodic maintenance of certification for Inspectors may consist of actual performance of the applicable NDT method, or by performance of a documented PR, PE, PVI or by a PQA in the applicable NDT method.

11.3.3.5 Inspector Oversight. The oversight and oversight periodicity of inspection personnel shall be clearly described in the activity's Written Practice. If so employed, oversight shall be conducted through a NAVSEA NDT Examiner. Otherwise, oversight of inspection personnel shall be conducted through normal supervisory managed controls (e.g., supervisor performs deck oversight or by way of a supervisory managed peer review program) to

ensure inspection personnel remain proficient and active in the performance of contractor oversight duties. Inspectors failing to maintain proficiency shall be disqualified. Requalification shall be conducted as described herein. Records of inspector oversight shall be maintained.

11.3.3.6 Nuclear Nondestructive Testing Qualifications. RMC personnel performing Nuclear NDT Examiner duties are to be certified or recertified as specified in reference (h). Nuclear NDT Inspectors are to be certified or recertified by the RMC activity's Nuclear Examiner in accordance with references (i) and (j).

11.3.4 Ship's Force Quality Assurance Interface. Although the RMC is the Contract Administration Activity and the authority for acceptance of accomplished work in accordance with the contractual agreement, the ships Commanding Officer should be satisfied that the work performed on the ship is satisfactory. The Commanding Officer should normally assign members of the Ship's Force to inspect work performed on the ship. If a ship's inspector is dissatisfied with the quality of the contractor's work on an individual item, the ship's inspector will not attempt to require contractor personnel to redo or otherwise amend the work performed. Rather, the ship's inspector will relay the findings to the cognizant RMC representative who will then take appropriate action. Ship's Force inspectors should also participate in conferences held to determine progress of work and to discuss any problems with quality of the work or services provided to the ship. In addition, Ship's Force personnel may be provided training and/or assigned QA functions under the responsibility of the RMC Contract Administration Activity in accordance with a Memorandum of Understanding negotiated between the Commanding Officer of the ship and the Commanding Officer of the RMC Contract Administration Activity. (Aircraft Carriers only) For any space which is tracked by Corrosion Control Information Management System, accomplish a joint inspection with the Supervisor and the Commanding Officer's designated representative (i.e., Ship's Force personnel or a Type Commander National Association of Corrosion Engineers Inspector) upon completion, inspection and acceptance, by the contractor, of the work within each compartment. This joint inspection is essential for the integrity of the Corrosion Control Information Management System database and future availability preservation planning.

#### 11.4 SURVEYS AND CONFERENCES.

11.4.1 Bidders' Conference. A bidders' conference provides an opportunity for discussion of the contract quality requirements to ensure all bidders understand the extent and level of QA required.

11.4.2 Pre-Award Surveys. Prior to the award of a contract, the prospective contractor shall be evaluated for quality organization, practices, procedures and/or quality history to determine capability for the type of work for which the contractor is being considered. The Contracting Officer and the Quality Manager will determine the method of evaluation. In addition, the scope of the pre-award survey will include a discussion of the contractual QA requirements to confirm the contractor's understanding of these requirements and how the contractor intends to implement the requirements. The QA participant in the pre-award survey is a member of the overall survey team headed by the team coordinator. When possible, the survey will be a joint team effort. When this is not possible, QA actions will be coordinated with the team coordinator. The QA report and recommendations are considered by the Pre-Award Survey Review Board in making the ultimate recommendation to the Procuring Contracting Officer who considers the recommendation in award of the contract.

11.4.3 Post-Award Conference. When it is determined after contract award that the contractor does not or may not have a clear understanding of the scope of the contract, the technical requirements or the rights and obligations of the parties, the Administrative Contracting Officer must initiate post-award orientation action to clarify contract requirements and resolve misunderstandings. A conference of all RMC participants should be held before conferring with the contractor to ensure that the RMC position on all matters is established.

11.4.4 Arrival Conference. An Arrival Conference must be held to discuss the conduct of the repair availability and the interface between Ship's Force, contractor, other Government activities and RMC personnel and the responsibilities and interface of each in performing quality related functions.

#### 11.5 ELEMENTS OF THE CONTRACT ADMINISTRATION QUALITY ASSURANCE PROGRAM.

11.5.1 Planning. Planning the actions required to determine the contractor's compliance with the contract requirements will be systematic and consider the contractual requirements and relative importance of the product. This planning is to take into account all the factors involved in deciding how RMC personnel can most effectively and economically perform the CAQAP function. As a minimum, the planning for all products will include:

- a. Appropriate distribution of Government effort between inspection of products and evaluation of the contractor's quality management system.
- b. Provisions for review of the contract package including specifications and related documents to determine completeness, continuity and responsibilities for ensuring contractor's performance of technical and quality requirements.
- c. For each availability, the activities shall have a specific quality oversight plan based on QDE evaluation to identify high risk areas and provide direction for targeted PVI/PE/PQA.
- d. For non Chief of Naval Operations maintenance, activities shall have a general quality oversight plan based on QDE evaluation to identify high risk areas and provide direction for targeted PVI/PE/PQA.
- e. Provisions for PR and/or approval of contractor's written procedures and technical data to ensure adequacy and timely release of the procedures.
- f. Provisions for PE of the contractor's written procedures to ensure the contractor accomplishes the intended purpose of controlling product/process quality.
- g. Provisions for the development of detailed PVI checklists and for the actual inspection or verification of products to determine conformance to the requirements of the contract.
- h. Provisions for applying corrective action when a breakdown or other inadequacy is noted in the contractor's quality.
- i. Provisions for the collection, evaluation and use of quality data.
- j. Provisions for accomplishing quality audits.
- k. Provisions for review of the contractor's quality history.

11.5.2 Document Review. Document Review is the CAQAP element for verifying that the contractor's documented procedures and technical data comply with contractual requirements.

11.5.2.1 Procedure Review Criteria. When a contractual requirement exists for a contractor to develop written procedures, the RMC will identify those procedures necessary for review based on the degree of risk. Each identified procedure will be reviewed for conformance to the administrative and technical requirements contained in the contract. The RMC representative must review the contractor's procedures in a timely manner and not delay the contractor's contract performance. This review may be accomplished in increments, is not limited to newly developed procedures and includes subsequent revisions and changes. When the contractor does not develop required written procedures or fails to correct inadequate procedures previously reported to the contractor, the RMC shall initiate corrective action.

11.5.2.2 Technical Data Review Criteria. Data review and evaluation will be performed on all deliverable technical data. Review of technical data means the detailed examination or review with the application of engineering judgment by engineers or technicians to determine if the data content and format conform to contract requirements. The RMC may use any local means of selecting characteristics or attributes of this technical data.

11.5.2.3 Acceptance of the Contractor's Documented Quality Management System. The collection of documents describing the contractor's policy and methods of implementing the specific requirements of reference (k) constitutes the contractor's documented quality management system. The RMC will conduct an adequacy review and furnish the contractor written notice of the acceptability of the documented quality management system.

11.5.2.4 Approval of Procedures. Approval of the written quality procedures will be based on full compliance with the contract provisions. When these written procedures are contractually required the contractor will be notified promptly on approval/disapproval.

11.5.2.5 Documentation. Documentation will include the identification number and title of the document(s), revision date, date reviewed, acceptability or unacceptability, the printed name and signature of the individual who accomplished the review.

11.5.3 Procedure Evaluation. PE is the CAQAP element that verifies that the contractor is compliant with contractually required quality procedures and that procedures are accomplishing the intended purpose of controlling product/process quality.

11.5.3.1 Conduct of Procedure Evaluation. PEs should be conducted utilizing the QA plan, checklists or an attribute system. Flexibility for adjustments in the frequency of inspections will depend on nonconformity rates and problem areas that develop based on contractor quality history. PQAs may be used in lieu of PEs.

11.5.3.2 Documentation. Documentation for PE/PQA will include:

- a. Developed checklists/attribute system for PE/PQA.
- b. PE/PQA results will include observations and nonconformities.

11.5.4 Product Verification Inspection. PVI (surveillance) is the CAQAP element that verifies that the product being produced by the contractor conforms to contract requirements. PVI is accomplished by the cognizant RMC representative by in-process inspections in the form of physical examination, verification, testing, concurrent witnessing or monitoring of critical aspects of the repair or overhaul process. Provide results to the QA manager.

**NOTE WHEN GOVERNMENT (G) NOTIFICATION POINTS ARE NOT PERFORMED/WITNESSED, THE REASON WHY (E.G. CONFIDENCE IN THE CONTRACTOR'S INSPECTION, OVERTIME NOT AUTHORIZED, INADEQUATE MANPOWER, ETC.) SHALL BE DOCUMENTED IN THE COMMENTS SECTION OF THE (G) POINT LOG.**

11.5.4.1 Conduct of Product Verification Inspection. PVIs should be conducted utilizing the QA plan, checklists or an attribute system. These checklists or attribute lists shall include Government (G) notification points, critical inspection points and those areas that may be concealed from further inspection. Flexibility for adjustments in the frequency of inspections will depend on nonconformity rates and problem areas that develop based on contractor quality history.

11.5.4.2 Documentation. Documentation for PVI will include:

- a. The reason why Government (G) notification points were not performed/witnessed.
- b. PVI results including observations/inspections and nonconformities.

11.5.5 Quality Audits. Quality audit is the CAQAP element that examines and evaluates products, procedures/processes, services, systems and elements thereof.

11.5.5.1 External Audit. External audits such as “quality management system audit” (functional audit), “PQA” and “product quality audit” (horizontal or vertical audit) are conducted to determine the effectiveness of the contractors’ quality management system, analysis of the process and assessment of product conformance. The “quality management system audit” may be conducted as a single audit or may be a combination of several audits provided the entire quality management system is audited **every five years. Attributes for the accomplishment of the quality management system audit shall be derived based on contractor performance and do not necessarily encompass the entire ISO checklist but will target specific areas.** Process and product quality audits are encouraged for detailed root cause analysis. Process and product quality audits may be prompted by significant changes in the contractor's quality management system, processes or product quality.

11.5.5.2 Internal Audit. Internal audits shall be conducted to determine RMC contract oversight compliance by internal departments with quality related directives and operating procedures/processes. Internal audits shall be conducted on each of the seven CAQAP functional areas defined in paragraph 11.1 of this chapter including specification review and training matrix. The CAQAP audit may be conducted as a single audit or a combination of several audits provided the entire CAQAP program is audited at least once every 12 to 18 months at a minimum.

11.5.5.3 Audit Periodicity. Internal audits of RMC compliance with contract oversight quality related operating procedures shall be conducted every 12 to 18 months. **The quality management system audit may be conducted as a single audit or may be a combination of several audits every 12 to 18 months, provided the entire quality management system is audited every 5 years.**

11.5.5.4 Documentation. Documentation will include:

- a. Audit schedule, including the identification of the lead auditor/team leader.
- b. Audit reports including results/resolutions and follow-up actions.

11.5.6 Corrective Action. Corrective action is the CAQAP element that defines the methods for requesting the contractor to act to correct nonconformities. To achieve systematic assurance of compliance throughout all phases of the contractor's operation, the basic causes of nonconformities must be identified and the contractor must initiate prompt corrective action to correct assignable conditions that have resulted in generating nonconformities. The correction of the nonconformity alone does not satisfy this goal. Corrective action as described in this section employs the “closed loop” concept (i.e., appropriate measures must be taken to identify the cause and prevent the recurrence of nonconformities and the corrective and preventive measures must be accepted by the government). The contractor will be required not only to correct specific nonconformities but also to initiate preventive action to eliminate cause of nonconformities. RMC must determine the effectiveness of the contractor’s action and will also determine the necessity for tighter control until ensured that the contractor's corrective action is satisfactory. A percentage of progress calculations should be withheld on the affected work item until the contractor has taken satisfactory corrective action. In addition to the CAR, Appendix B, a Trouble Report shall also be prepared and distributed in accordance with reference (1) for all significant problems encountered in the construction, repair and maintenance of Naval ships. Significant problems are those that affect ship safety, cause significant damage to the ship or its equipment, delay ship deployment or incur substantial cost increase or involve severe personnel injury. Trouble Reports should also identify systemic problems and issues that constitute significant lessons learned for other activities.

11.5.6.1 Corrective Action Request. When corrective action by the contractor is required, one of the following methods will be requested:

- a. Minor Nonconformities (Method A)
  - (1) A minor nonconformity is a defect or flaw that will probably not impair the performance or life of a product or result in unsafe conditions for the user. Generally, a minor nonconformity is administrative in nature or can be corrected on the spot; at most, the contractor can be

reasonably expected to correct it within one day. Examples of minor nonconformities are non-docking related late reports, repeated housekeeping violations, potential safety discrepancies such as a hot work chit not posted on-site, minor repetitive administrative discrepancies with submittals of work specifications, Process Control Procedures, reports, etc., minor Objective Quality Evidence discrepancies and G-Points called out during normal working hours that are not ready for inspection at the designated time.

- (2) Minor nonconformities shall be presented to responsible contractor's personnel in writing for correction. Each minor nonconformity will be described in sufficient detail to allow the contractor to understand what contractual requirement is violated and to take appropriate corrective action. The RMC representative should not require contractor written response, however, the internal RMC process shall ensure that minor nonconformities are documented, corrected and date verified/cleared.

b. Major Nonconformities (Method B)

- (1) A major nonconformity is a nonconformance that judgment and experience indicate could impair the performance or life of a product or result in hazardous or unsafe conditions for the user. Examples of major nonconformities are late dry-dock related reports, repeated Method A nonconformities in the same area, safety discrepancies that pose an immediate threat or danger, serious injuries to personnel, damage to government property or ship's systems that impact the product or performance, contractor's actions that result in the issuance of a trouble report and technical authority violations such as unauthorized substitution of materials or unauthorized changes to ship's systems.
- (2) When major nonconformities are detected or a trend of recurring minor nonconformities are noted, a CAR will be initiated citing the specific contract, specification or contractor's procedural requirement and a description of the nonconformity, clearly indicating how the contract, specification or contractor's procedural requirement was violated. Additionally, the CAR shall include contract number/job order, ship, appropriate references, originator's signature, unique serial number, contractor's corrective action response and preventive action(s) taken to eliminate the causes of potential nonconformities in order to prevent their occurrence and the RMC representative's indication of acceptability and signature. Appendix C provides an example of a CAR form that may be used. The CAR should be forwarded to the appropriate level of the contractor's management for action. The actual time frame for completion of contractor corrective action may vary, however, prompt response to CARs is required. An interim reply may be acceptable, pending contractor's completion of corrective actions.

c. Systemic/Critical Nonconformities (Method C or Method D)

When the previous methods fail to obtain satisfactory results or when the severity of the situation warrants, a Method C letter shall be issued from the Quality Assurance Officer/Director/Manager or the appropriate department head notifying the contractor's appropriate level of management that a systemic or critical problem exists and immediate management action must be taken to comply with the provisions of the contract.

In addition, when a Method C letter fails to obtain satisfactory results or when the severity of the situation warrants, a Method D letter shall be issued by the Commanding Officer or the Contracting Officer notifying the contractor's top level of management that a systemic or critical problem exists and immediate management action must be taken to comply with the provisions of the contract. An electronic or hard copy of each Method C or D letter shall be furnished to the Contracting Officer.

11.5.6.2 Requesting Corrective Action. CARs will be used for requesting correction of quality-related nonconformities, elimination of the causes of the nonconformities and identification of preventive actions to eliminate the causes of potential nonconformities in order to prevent their occurrence. The CAR may also be used to request correction of non-quality related nonconformities (e.g., safety, environmental or management), elimination of the causes of the nonconformities and identification of preventive actions to eliminate the causes of potential nonconformities in order to prevent their occurrence provided the CARs can be readily segregated.

11.5.6.3 Documentation. Documentation of the corrective action element will include:

- a. Records of all Trouble Reports.
- b. Records of all CARs.
- c. Status of all CARs.

11.5.7 Quality Data Evaluation. QDE is the CAQAP element that provides for the collection, evaluation and use of contractor, RMC, NAVSEA Logistics Center and customer quality data. Operating procedures will be established to describe the system to be used for collecting, evaluating, maintaining and using the data. Quality data should include:

- a. Trouble Reports.
- b. Contractor Performance Assessment Report data.
- c. Critiques.
- d. PR, PE and PVI results.
- e. Audit results.
- f. CARs.

11.5.7.1 Data Evaluation. Evaluate the quality data individually or collectively at established periodic intervals for the purpose of:

- a. Adjusting the intensity of application of basic elements of the CAQAP.
- b. Providing a basis for acceptance or rejection of products or services.
- c. Determining effectiveness of contractor's quality management system.
- d. Providing a basis for recommending process improvement initiatives to the contractor.
- e. Providing a basis for decisions related to the reallocation of personnel.
- f. Producing a metric for contractor quality history.

11.5.7.2 Documentation. Documentation will include a Quarterly Report indicating contractor QDE results and forwarded to codes 100, 200, 300 and 400.

11.6 GOVERNMENT CONTRACT QUALITY ASSURANCE ACTIONS AT SOURCE.

11.6.1 General. The prime contractor is responsible for controlling the quality of materials, items and services provided by its subcontractors. Government Contract Quality Assurance (GCQA) on subcontracted supplies or services shall be performed only when required in the Government's interest. The primary purpose is to assist the RMC in determining if the prime contractor is ensuring the conformance of subcontracted supplies or services with contract requirements. GCQA at source, previously referred to as Government Source Inspection, does not relieve the prime contractor of any responsibilities of the contract and GCQA does not establish a contractual relationship between the Government and the subcontractor. Requests for GCQA shall be held to a minimum based on quality performance history.

11.6.2 Exception. This part does not apply to procurements under the technical responsibility of the Deputy Commander, Nuclear Power Directorate, NAVSEA 08. Reference (m) provides guidance for procurement of products under NAVSEA 08 cognizance.

11.6.3 Requesting Government Contract Quality Assurance at Source. RMCs will establish a process for invoking GCQA on subcontracted supplies and for preparation and issue of GCQA instructions to the Defense Contract Management Agency (DCMA) Contract Management Office. RMCs may elect to use prime contractor source inspection in lieu of those aspects normally requiring Government oversight provided the prime contractor performs each aspect of the inspection to be verified by the Government. When source inspection is used in lieu of GCQA the RMC shall have alternative evaluation methods (e.g., process evaluation, audits, QDE, etc.) to ensure conformance of subcontracted products or services with contractual requirements.

11.6.3.1 Government Contract Quality Assurance Criteria. Government inspection during contract performance is essential. Complex items have quality characteristics, not wholly visible in the end item, for which contractual conformance must be established progressively through precise measurements, tests and controls applied during purchasing, manufacturing, performance, assembly and functional operation either as an individual item or in conjunction with other items. GCQA is to be invoked based on the following criteria in reference (a):

- a. Mandatory GCQA actions imposed on the RMC that can be accomplished only at the subcontractor's location.
- b. Performance at any other place would require uneconomical disassembly, destructive testing or special required instruments, gauges or facilities available only at the subcontractor location.
- c. Performance at any other place would destroy or require the replacement of costly special packing and packaging.
- d. Considerable loss would result from the manufacture and shipment of unacceptable supplies or from the delay in making necessary corrections.
- e. Government inspection during contract performance is essential.
- f. The contract specifies that certain quality assurance functions, which can be performed only at the subcontractor's plant, are to be performed by the Government.
- g. A (G) POINT (see reference (k)) is invoked in purchase orders for inspections and tests to be performed which are outside a 50 mile radius of the contractor's plant nearest to place of performance of the contract.
- h. It is determined for other reasons to be in the Government's interest. Supplies or services for which a certificate, records, reports or similar evidence of quality must be at the subcontractor location.
- i. The item is to be shipped from the subcontractor's plant to the using activity and inspection at source is required.

11.6.3.2 Purchase Order Clause. When subcontract GCQA actions are determined to be necessary, the prime contractor will be requested to add the following Government notification and access clause to the purchase order:

"Government inspection is required prior to shipment from your plant. Upon receipt of this order, promptly notify and furnish a copy to the Government representative who normally services your plant so that appropriate planning for Government inspection can be accomplished. In the event the Government representative or office cannot be located, our purchasing agent shall be notified immediately."

11.6.3.3 Amending Subcontract After Release. When the decision to request GCQA actions at subcontract level is made after the subcontract is released, the contractor will be requested to amend the subcontract to include the appropriate requirement for GCQA action at source.

11.6.3.4 Letter of Delegation. When a condition stated in paragraph 11.6.3.1 of this chapter exists, a Letter of Delegation (LOD) (Appendix C of this chapter or similar) will be prepared. The RMC representative will define the necessary GCQA actions to be taken and the documentation to be provided by the Government representative at the subcontractor's plant. Defined actions should indicate specific quality characteristics, processes or procedures to be verified, tests to be witnessed, sampling plans to be used, or records, reports and certifications to be evaluated. All written statements, contract terms and conditions relating to GCQA actions at the subcontractor level shall be worded so as not to:

- a. Affect the contractual relationship between the prime contractor and the Government, or between the prime contractor and the subcontractor.
- b. Establish a contractual relationship between the Government and the subcontractor.
- c. Constitute a waiver of the Government's right to accept or reject the supplies or services.

11.6.3.5 Distribution of Letters of Delegation. The LOD, with copies of the purchase order, will be furnished to the cognizant Contract Management Office, as designated in the Federal Directory of Contract Administration Services (CAS) Components List, and to the Government representative at the subcontractor's facility. The Federal Directory of CAS Components List is available at <http://home.dcm.mil>, then click on CAS Directory. The Quality Assurance Representative (QAR) will acknowledge receipt of delegation, by returning a receipted copy of the "DCMA ACKNOWLEDGMENT", identified in Appendix C, which will be included in the Government LOD. Changes to the purchasing document will be processed similarly.

11.6.3.6 Letter of Delegation Follow-up System. Maintain a follow-up system to ensure that the LOD was received, that the DCMA component will perform the inspection as stated, notification of the completion of all GCQA actions have been completed and that copies of the DCMA records will be provided or a certificate will be furnished stating that records are on file. Direct communications between the RMC and the DCMA component is encouraged.

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## VOLUME VII

### CHAPTER 13

#### SHIPBOARD CONTRACTING STRATEGY AND UTILIZATION

13.1 PURPOSE. This chapter provides guidance on contracting for shipboard maintenance and modernization work.

13.2 SCOPE. This chapter applies to all activities conducting shipboard maintenance or modernization work in Continental United States (CONUS) and Hawaii. Shipboard maintenance and modernization work includes repairs, modernization, installations, alterations or engineering technical services if there is a potential for system/boundary entry, testing or impact on other ship operations; or if there is a requirement for coordination and integration of multiple contractors and government activities.

13.3 APPLICABILITY. This chapter does not apply to:

- a. The reactor or primary plant systems under the cognizance of NAVSEA 08.
- b. Fleet Ballistic Missile systems under the cognizance of Submarine Strategic Program.
- c. Space Systems under the National Security Space Acquisition Policy.
- d. Naval aircraft and avionics equipment.

13.4 OBJECTIVE. The objectives of the Comprehensive Contracting Strategy for shipboard maintenance and modernization are:

- a. Alignment of contracting actions amongst Navy requirements officials and contracting and technical warrants.
- b. Solicit contracts for shipboard work only via warranted Navy contracting officers, and ensure they include appropriate technical content.
- c. Improve maintenance contracting "situational awareness", thereby reducing unnecessary contract proliferation, redundant or niche contracts by identifying existing contracts that could service the need or identify national contracting strategies for similar services.
- d. Coordinate and vector proposed contracting to the proper authorities for procurement, administration, task order management and oversight.
- e. Ensure proper utilization and balance of Alteration Installation Team, Indefinite Delivery/Indefinite Quantity (IDIQ) and Multi-Ship/Multi-Option (MS/MO) contracts to ensure the Navy has procurement options and leverage in the maintenance and modernization market place.
- f. Proper execution oversight.

13.5 BACKGROUND. The Fleets, Deputy Assistant Secretary of the Navy (Ships), and Naval Sea Systems Command have embarked on a joint initiative to develop a Comprehensive Contracting Strategy for shipboard maintenance and modernization that compliments the Navy's use of MS/MO contract vehicles as the primary means for accomplishing shipboard work in the private sector. This strategy is an effort to reduce the amount of coordination required during work execution on the waterfront and to reduce the inefficient use of available contracting resources in procurement and administration. This strategy emphasizes the four principles outlined in the paragraphs below.

13.5.1 Optimal Use of Surface Ship Multi-Ship/Multi-Option Contracts. The first strategy is the optimal use of Surface Ship MS/MO contracts to accomplish as much maintenance and modernization work within their organic capability in order to gain learning curve efficiencies, facilitate predictable contractor loading, reduce premium prices paid and spread contractor overhead across a larger business volume.

13.5.2 Indefinite Delivery/Indefinite Quantity Contracts. The second strategy is the determination of the right types and numbers of IDIQ contracts required to supplement MS/MO contracts so that viable options are available if MS/MO contractors are unable to provide suitable coverage, encounter capacity constraints, cannot meet required schedule or exhibit unreasonably high costs.

13.5.3 Industrial Capabilities. The third strategy is the identification of industrial capabilities where the Navy will exclusively use IDIQ contracts to accomplish maintenance and modernization work beyond MS/MO capability and develop procurement strategies that most efficiently meet such needs.

13.5.4 Contracts Portfolio. The final strategy is the cataloguing of these contracts in a "Portfolio of Shipboard Production Contracts" managed at the local Regional Maintenance Center (RMC). The local RMC shall be the point of entry for servicing all shipboard maintenance and modernization production requirements, and shall match (whenever possible) requirements to an existing Portfolio Contract.

13.6 OVERVIEW. The elements of the Comprehensive Contracting Strategy for shipboard maintenance and modernization include:

- a. Breadth: any contracted shipboard work (maintenance, repair, modernization, or alteration) that requires system/boundary entry, testing or impact to routine shipboard system operations. Exceptions:
  - (1) Non-permanent change installations (Temporary Alteration, Engineering Development Model and prototype installation).
  - (2) Non-intrusive shipboard technical reviews (ship checks, design reviews, logistic reviews/audits, etc.).
- b. Contract types: MS/MO, Original Equipment Manufacturer, IDIQ/Commercial Industrial Services, Alteration Installation Team contracts, Performance Based Logistics repair contracts.
- c. Contract access: The "Portfolio of Shipboard Production Contracts" maintained at RMCs to serve all organizations performing shipboard work.
- d. Shipboard production work execution only with Portfolio Contracts.
- e. Portfolio content managed through the Contracts Governance Council Process.
- f. The Contract Governance Council (CGC) is the standing body that manages the Contracts Portfolio and provides maintenance and modernization procurement oversight for the Fleet Maintenance Board of Directors (FMBOD). The CGC works to continuously improve this process and the Contracts Portfolio.

### 13.7 RESPONSIBILITIES.

13.7.1 Fleet Maintenance Board of Directors. The Fleet Maintenance Board of Directors (FMBOD) shall:

- a. Charter the CGC and provide oversight to all processes associated with the Comprehensive Contracting Strategy for shipboard maintenance and modernization.
- b. Render final approval or disapproval for any contractual actions unresolved by the CGC.