

JOINT FLEET MAINTENANCE MANUAL
VOLUME VII
CONTRACTED SHIP MAINTENANCE
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VOLUME VII
CONTRACTED SHIP MAINTENANCE
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VOLUME VII
CONTRACTED SHIP MAINTENANCE
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VOLUME VII
FOREWORD
CONTRACTED SHIP MAINTENANCE

LISTING OF APPENDICES.

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| B | Glossary of Terms |

1.1 **PURPOSE.** This volume provides information relative to the procurement, oversight and execution of ship maintenance and modernization work performed in the private sector. It is promulgated in conjunction with the transfer of the Repair Supervisors of Shipbuilding (SUPSHIP) from Naval Sea Systems Command (NAVSEA) to Commander, **United States** Fleet Forces Command and Commander, Pacific Fleet cognizance within the Regional Maintenance Center organizations. SUPSHIP Operations Manual (0910-LP-012-7750 Rev 1) has served as the primary source for information contained in this manual.

1.2 **SCOPE.** This volume applies to all ships and shore activities under the cognizance of Commander, Atlantic Fleet (COMLANTFLT), Commander, Pacific Fleet (COMPACFLT), and Commander, Naval Reserve Forces (COMNAVRESFOR). Additionally, although new ship construction is the primary mission area for the remaining SUPSHIPS, this volume is also applicable to those SUPSHIPS that continue to have repair and modernization responsibilities for submarines and aircraft carriers. These SUPSHIPS should familiarize themselves with appropriate sections of this manual as it applies to the repair and modernization contracts that they procure and administer. This volume is not intended to be all encompassing, since the guidance for many elements of the maintenance programs and their execution are promulgated by higher operational, contracting and technical authority (e.g., Office of the Chief of Naval Operations Instructions, Naval Ships Technical Manuals, and Federal Acquisition Regulations (FAR)).

- a. This volume contains general topics, applicable to all ships and units under the cognizance of COMLANTFLT or COMPACFLT. In those cases where chapters are not applicable to certain Forces, an applicability statement has been used for clarification.
- b. Equipment under the cognizance of the Strategic Systems Project Office or Naval Sea Systems Command Nuclear Propulsion Directorate (NAVSEA 08) is maintained in accordance with Strategic Systems Project Office and NAVSEA 08 directives, respectively.
- c. In relation to contractual matters, where a policy or requirement is not established by FAR, Defense Federal Acquisition Regulation Supplement (DFARS), Navy and Marine Corps Acquisition Regulation Supplement (NMCARS), Naval Sea Systems Command Contracts Handbook (NCH), or other Navy or DoD directive, this manual contains the procedural requirements for compliance. Otherwise, the FAR, DFARS, NMCARS, NCH, and other Navy and DoD Directives take precedence over this manual. When a new or revised policy or requirement is promulgated by FAR, DFARS, NMCARS, NCH, or other Navy and DoD Directives that is not consistent with this manual, the new or revised policy and requirements will be followed. Material required to be submitted to higher authority by the NMCARS or NCH will be forwarded via the Regional Maintenance Center Contracts Department Head or Chief of the Contracting Office at SUPSHIP to NAVSEA 02.
- d. Appendices A and B of this chapter contain a list of acronyms and a glossary of terms used throughout all chapters of this volume.

1.3 **CHANGES AND CORRECTIONS.** Changes and corrections will be issued as required. Comments and suggestions for improving or changing this volume are invited. Address comments, recommendations and requested changes to Submarine Maintenance Engineering, Planning and Procurement Activity utilizing the change request form located in the front of this manual. If changes are submitted in electronic format, facsimile or e-mail, each change request shall contain the information required on the change request form.

1.4 REQUEST FOR COPIES OF THE MANUAL. Activities on distribution for the Joint Fleet Maintenance Manual (JFMM) that require additional copies, or activities wanting to be added to distribution, should submit a letter to their applicable Type Commander, identifying CD-ROM/paper requirements along with justification for the request. To the maximum extent possible, technical publication libraries at each activity will receive copies of the manual for that activity and coordinate local distribution and updates.

APPENDIX A
LIST OF ACRONYMS

2-Kilo	3-M Maintenance Action Form
3-M	Maintenance and Material Management
AAA	Authorized Accounting Agency
AAR	Advisory Audit Report
ABM	Acquisition and Business Management
ABR	Agreement for Boat Repair
ACO	Administrative Contracting Officer
ACWP	Actual Cost of Work Performed
AIT	Alteration Installation Team
ASN	Assistant Secretary of the Navy
ASR	Availability Status Report
BAC	Budgeted Availability Cost
BCWP	Budgeted Cost of Work Performed
BCWS	Budgeted Cost of Work Scheduled
BOA	Basic Ordering Agreement
BSR	Bid Specification Review
BVC	Best Value Contracting
CAM	Contract Audit Manual
CAO	Contract Administration Office
CAQAP	Contract Administration Quality Assurance Program
CAR	Corrective Action Request
CAS	Contract Administration Services
CAS	Cost Accounting Standards
CASREP	Casualty Report
CDA	Contract Disputes Act
CER	Cost Estimating Relationships
CFM	Contractor Furnished Material
CGC	Contracts Governance Council
CIRS	Contractor Inventory Redistribution System
CIS	Commercial Industrial Services
CMAV	Continuous Maintenance Availability
CMP	Class Maintenance Plan
CNO	Chief of Naval Operations
CNRMCC	Commander, Navy Regional Maintenance Center
CO	Commanding Officer
COAR	Customer Order Acceptance Record
COFD	Contracting Officer's Final Decision
COMLANTFLT	Commander, Atlantic Fleet
COMNAVRESFOR	Commander, Naval Reserve Forces
COMNAVSEA	Commander, Naval Sea Systems Command
COMPACFLT	Commander, Pacific Fleet
CONUS	Continental United States
COR	Contracting Officer's Representatives
CPARS	Contractors Performance Appraisal Reporting System

CPI	Cost Performance Index
CPM	Critical Path Method
CPMS	Contract Property Management System
DAWIA	Defense Acquisition Workforce Improvement Act
DCAA	Defense Contract Audit Agency
DCMA	Defense Contract Management Agency
DFARS	Defense Federal Acquisition Regulation Supplement
DL	Direct Labor
DoD	Department of Defense
EA	Executing Activity
EF	Early Finish
EP	Environmental Protection
EPA	Environmental Protection Agency
EPCP	Expanded Process Control Procedure
ES	Early Start
ESH	Environmental Safety and Health
ESR	Engineering Support Request
FAR	Federal Acquisition Regulation
FEO	Facilities Engineering Office
FFP	Firm Fixed Price
FISC	Fleet Industrial Support Center
FLTCOM	Fleet Commands
FMBOD	Fleet Maintenance Board of Directors
FMR	Field Modification Request
FMS	Foreign Military Sales
FP	Fixed Price
FPRA	Forward Price Rate Agreement
G&A	General and Administrative
GAO	General Accounting Office
GCQA	Government Contract Quality Assurance
GFI	Government Furnished Information
GFM	Government Furnished Material
GFP	Government Furnished Property
HAZMAT	Hazardous Material
HCA	Head of Contracting Activity
HW	Hazardous Waste
IDIQ	Indefinite Delivery, Indefinite Quantity
IFB	Invitation For Bid
ISO	International Organization for Standardization
JFMM	Joint Fleet Maintenance Manual
LF	Late Finish
LOA	Letter of Authority
LOA	Light-Off Assessment
LOD	Letter of Delegation

LS	Late Start
LWT	Local Work Template
MIL-SPEC	Military Specification
MIL-STD	Military Standard
MMBP	Maintenance and Modernization Business Plan
MOU	Memorandum of Understanding
MS/MO	Multi-Ship/Multi-Option
MSRA	Master Ship Repair Agreement
MT	Maintenance Team
NAICS	North American Industry Classification System
NAVAIRSYSCOM	Naval Air Systems Command
NAVCOMPT	Navy Comptroller
NAVFAC	Naval Facilities Engineering Command
NAVOSH	Navy Occupational Safety and Health
NAVSEA	Naval Sea Systems Command
NAVSEA 02	NAVSEA Contracts Directorate
NAVSEA 021	NAVSEA Contract Policy Office
NAVSEA 024	Fleet Support Contracts Division
NAVSEA 08	Naval Sea Systems Command Nuclear Propulsion Directorate
NAVSEASYSYSCOM	Naval Sea Systems Command
NAVSUPSYSCOM	Naval Supply Systems Command
NCH	NAVSEA Contracts Handbook
NDT	Nondestructive Testing
NMCARS	Navy and Marine Corps Acquisition Regulation Supplement
NMD	Navy Maintenance Database
NMP	Navy Modernization Process
NSA	Naval Supervisory Authority
NSI	NAVSEA Standard Item
NSSA	Norfolk Ship Support Activity
NSY	Naval Shipyard
O&MN	Operation and Maintenance, Navy
O&MNR	Operations and Maintenance, Naval Reserve
OB	Operating Budget
ODL	Other Direct Labor
ODLF	Other Direct Labor Factor
OF 336	Optional Form 336
OFPP	Office of Federal Procurement Policy
OH	Overhead
OSH	Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated Biphenyls
PCD	Production Completion Date
PCN	Project Control Number
PCO	Procuring Contracting Officer
PE	Procedures Evaluation
PEC	Predicted-End-Cost
PEO	Program Executive Office
PMS	Planned Maintenance System

PNS	Portsmouth Naval Shipyard
PQA	Process Quality Audit
PR	Procedure Review
PVI	Product Verification Inspection
PY	Planning Yard
QA	Quality Assurance
QAR	Quality Assurance Representative
QDE	Quality Data Evaluation
QMS	Quality Management System
QPL	Qualified Products Lists
RD&A	Research, Development & Acquisition
REA	Request for Equitable Adjustment
RFS	Readiness for Sea
RMC	Regional Maintenance Center
SARP	Ships' Alteration Repair Package
SC	Ship Change
SCN	Shipbuilding and Conversion, Navy
SF 30	Form SF 30, Amendment of Solicitation/Modification of Contract
SHIPALT	Ship Alteration
SHIPMAIN	Ship Maintenance
SI	Standard Items
SPAWARSYSCOM	Space and Naval Warfare Systems Command
SPD	Ship Project Directive
SPI	Schedule Performance Index
SSR	Ship's Selected Records
SSRAC	Standard Specification for Ship Repair and Alteration Committee
STARS	Standard Accounting and Reporting System
SUPSHIP	Supervisors of Shipbuilding, Conversion and Repair
SWLIN	Ship Work Line Item Numbers
SWT	Standard Work Template
SYSCOM	Systems Command
TAR	Technical Analysis Report
TIP	Test and Inspection Plan
TM	Technical Manuals
TMMP	Technical Manual Management Program
TOB	Technical Operating Budget
TYCOM	Type Commander
USFF	United States Fleet Forces
WPIC	Work Package Integration Conference

APPENDIX B
GLOSSARY OF TERMS

<u>TERM</u>	<u>DEFINITION</u>
Administrative Change	A unilateral contract change, in writing, that does not affect the substantive rights of the parties (e.g., a change in the paying office or the appropriation data).
Administrative Contracting Officer	A contracting officer who is administering contracts.
Approved Purchasing System	A contractor's purchasing system that has been reviewed and approved in accordance with FAR Part 44.
Attribute	A characteristic or property that is used to determine acceptability or unacceptability with respect to a given requirement.
Bilateral Modification	A contract modification that is signed by the contractor and the contracting officer.
Business Unit	Any segment of an organization or an entire business organization not divided into segments.
Certification	The procedure and action by a duly authorized body of determining, verifying and attesting in writing to the qualifications of personnel, processes, procedures or items in accordance with applicable requirements.
Change Order	A written order signed by a contracting officer. It directs the contractor to make a change that the Changes clause authorizes the contracting officer to order without the contractor's consent.
Characteristic	A physical, chemical, visual, functional or any other identifiable property that helps differentiate between items of a given sample or population. The difference may be either quantitative (by variables) or qualitative (by attributes).
Check Point (G)	A symbol inserted in a Work Item to establish a point in the sequence of accomplishment of work at which time the Government shall be notified to permit observation of a specific inspection or test by the Government.
Check Point (I)	A symbol inserted in a Work Item to establish a point in the sequence of accomplishment of work at which time the contractor shall inspect/verify and document the inspection or test. (I) Inspections require verification by a separate individual, other than the person who has accomplished the work, qualified as an inspector.
Claim	A written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment, or interpretation of contract terms or other relief arising under or related to a contract.
Consent to Subcontract	The contracting officer's written consent for the prime contractor to enter into a particular subcontract.

Contract Modification	Any written change in the terms of a contract.
Contracting Officer	A person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the contracting officer acting within the limits of their authority as delegated by the contracting officer.
Contractor	A business unit.
Contractor Acquired Property	Property acquired or otherwise provided by the contractor for performing a contract and to which the Government has/takes title.
Contractor Furnished Material	Material provided by the contractor to which the Government has acquired a lien or title solely because of partial, advance or progress payments.
Contractor Purchasing System Review	The complete evaluation of a contractor's purchasing of material and services, subcontracting and subcontract management from development of the requirement through completion of subcontract performance.
Corrective Action	An action taken to correct a specific nonconformance by repair, rework, replacement or a change in requirements and the elimination of the causes to prevent recurrence.
Corrective Action Request	Any request to the contractor for the correction of a non-conformance.
Cost Analysis	The review and evaluation of the separate cost elements and proposed profit of an offeror's or contractor's proposal, including cost and pricing data or information other than cost or pricing data. This requires the application of judgment to determine how well the proposed costs represent what the cost of the contract should be, assuming reasonable economy and efficiency.
Cost or Pricing Data	All facts that prudent buyers and sellers would reasonably expect to significantly affect price negotiations. This concerns data as of the date of price agreement or, if applicable, another date agreed upon between the parties that is as close as possible to the date of agreement on price. Cost or pricing data is information requiring certification in accordance with FAR 15.408.
Deviation	Written authorization granted prior to the manufacture of an item, to depart from a particular performance or design requirement of a specification, or referenced document, for a specific number of units or specific period of time.
Document	A medium and the information recorded on it that generally has permanence and can be read by a person or machine.

Effective Date	<p>Effective date has one of the following meanings, based on the circumstances in which it is used:</p> <ol style="list-style-type: none"> (1) For a solicitation amendment, change order or administrative change, the effective date will be the issue date of the amendment, change order or administrative change. (2) For a supplemental agreement, the effective date will be the date agreed upon by the contracting parties. (3) For a modification issued as a confirming notice of termination for the convenience of the Government, the effective date of the confirming notice will be the same as the effective date of the initial notice. (4) For a modification converting a termination for default to a termination for the convenience of the Government, the effective date will be the same as the effective date of the termination for default. (5) For a modification confirming the termination contracting officer's previous letter determination of the amount due in settlement of a contract termination for convenience, the effective date will be the same as the effective date of the previous letter determination.
Estimating System	<p>A contractor's policies, procedures and practices for generating cost estimates which forecast costs based on currently available information. An estimating system includes the organizational structure; established lines of authority, duties and responsibilities; internal controls and managerial reviews; flow of work, coordination and communication; and estimating methods, techniques, accumulation of historical costs and analyses used to generate costs estimates and other data included in proposals.</p>
Government Furnished Property	<p>Property which the Government has possession of and provides to a contractor or directly acquires to provide to the contractor, including related data and information requested or furnished to the contractor that is reasonably required for the intended use of the property.</p>
Growth Work	<p>Any additional work that is identified after contract award or finalization that is related to a work item included in the contract award or finalization. Growth does not include pre-priced options or reservations that were specifically identified in the solicitation or defined package.</p>
Indirect Appeal	<p>Assertion by the subcontractor of the prime contractor's right to appeal or the prosecution of an appeal by the prime contractor on the subcontractor's behalf.</p>
Inspection	<p>The act of measuring, examining, testing, gauging or otherwise comparing of supplies or services with requirements to determine conformity.</p>
Inspection Record	<p>Recorded data concerning inspection results.</p>
International Organization for Standardization (ISO)	<p>A worldwide federation of national standards bodies.</p>
Lead Auditor/Team Leader	<p>A person who is qualified to perform and designated to lead/manage a quality audit team.</p>

Major Nonconformity (Method B)	A nonconformance that judgment and experience indicate could impair the performance or life of the product and/or result in hazardous or unsafe conditions for the user.
Minor Nonconformity (Method A)	A nonconformance or flaw that will probably not impair the performance or life of a product, nor result in unsafe conditions for the user (previously referred to as Method A corrective action).
NAVSEA Standard Item (NSI)	Those items written to describe procedures and general requirements for the Item performance of work to be accomplished under the job order. The Standard Specification for Ship Repair and Alteration Committee approves NSIs. NSI numbers are assigned in a 009-XX series.
New Work	Any additional work identified after contract award or finalization that is not related to a work item that was included in the original contract award or finalization.
Nonconformance	A departure of a quality characteristic from its intended level or state that occurs with a severity sufficient to cause an associated product or service not to meet a specification requirement.
Objective Quality Evidence (OQE)	Any statement of fact, either quantitative or qualitative, pertaining to quality of a product or service based on observations, measurements or tests that can be verified.
Observation	An action that occurs when one attribute is verified to one unit of product.
Preventive Action	An action taken to eliminate the causes of a potential nonconformity, or other undesirable situation, to prevent occurrence.
Process	A set of interrelated resources and activities that transform inputs into outputs with the aim of adding value.
Process Quality Audit	An analysis of elements of a process and appraisal of completeness, correctness of conditions and probable effectiveness.
Product Quality Audit	A quantitative assessment of conformance to required product characteristics.
Products	The results of activities or services; a generic term that denotes goods and/or services.
Quality	The composite of all features and characteristics of a product or service that bear on its ability to satisfy given needs.
Quality Assurance	A planned and systematic pattern of all actions necessary to provide adequate (QA) confidence that the product or service conforms to established technical requirements.
Quality Audit	A systematic and independent examination to determine whether quality activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives.
Quality Management System	The organizational structure, responsibilities, procedures, processes and resources for implementing quality management.

Quality Management System Audit	A functional audit where a documented activity is performed to verify, by examination and evaluation of System objective evidence, that applicable elements of the quality management system are suitable and have been developed, documented and effectively implemented in accordance with specified requirements.
Record	A document that contains objective evidence that shows activities performed or results achieved.
Significant Estimating System Deficiency	A shortcoming in the estimating system which is likely to consistently result in proposal estimates for either total cost or a major cost element which are not an acceptable basis for negotiation of fair and reasonable prices.
Specification	The document that prescribes the requirements with which the product or service has to conform.
Subcontract	Any contract as defined in FAR Subpart 2.101 and entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract. A subcontract includes but is not limited to purchase orders and changes and modifications to purchase orders.
Subcontractor	Any supplier, distributor, vendor or firm that furnishes supplies or services to or for a prime contractor or another subcontractor.
Supplemental Agreement	A contract modification that is accomplished by the mutual action of the parties.
Systemic/Critical Nonconformance (Method C or Method D)	A nonconformance related to system or critical failures that require a high level of management action.
Termination Contracting Officer	A contracting officer who is settling terminated contracts. A single contracting officer may be responsible for duties in any or all of these areas.
Testing	A means of determining the capability of an item to meet specified requirements by subjecting the item to a set of physical, chemical, environmental or operational actions and conditions.
Unilateral Modification	A contract modification that is signed only by the contracting officer.
(V)	A symbol inserted in a Work Item to establish a point in the sequence of accomplishment of work at which time the contractor shall inspect/verify and document the inspection or test. (V) inspections require verification by the trade supervisor, inspector or qualified tradesperson.
Verification	The process of confirming by examination and provision of objective evidence that specified requirements have been fulfilled.
Waiver	A written authorization to use or release a quantity of material, components or stores already manufactured but not conforming to the specified requirements.
Work	a. Any action that actually or potentially changes (including disassembly for the purposes of inspection or repair) the approved configuration of any part, component or ship's system.

Work (Cont'd)

- b. Any action that removes or affects the ship's ability to operate ship's systems or components in accordance with ship's systems/operating manuals or reactor plant manuals.
- c. Any testing or inspections required to establish, maintain or reestablish certification.
- d. Any design, engineering, planning or configuration management functions that involve the final review and/or approval of technical information.

Examples of work include the following:

- 1. Action which disassembles or removes any part, component or ship's system.
- 2. Action specified in a Technical Work Document.
- 3. Any action that removes or affects the ship's ability to operate ship's systems or components in accordance with ship's systems manuals, operating manuals or reactor plant manuals, excluding tagout in accordance with the Tagout Users Manual, including but not limited to:
 - (a) Component or system tests.
 - (b) Intrusive inspections (such as breaking the plane of electrical panels requiring electrical safety).
 - (c) Valve line ups that alter the normal system line up not governed by operating procedures.
 - (d) Removing valve hand wheels, disconnecting of reach rods.

Work Items

Work Items are work specifications that are prepared to accomplish repair or alteration work in ship repair. These items must be locally reviewed for applicability, quality and technical requirements and tailored to suit the specific work requirements.

VOLUME VII

CHAPTER 1

CONTRACTED SHIP REPAIR FUNCTIONS, TASKS AND STANDARDS OF CONDUCT

REFERENCES.

- (a) FAR Part 14 - Sealed Bidding
- (b) FAR Part 15 - Contracting by Negotiation
- (c) FAR 42.201 - Contract Administration Responsibilities
- (d) FAR 42.302 - Contract Administration Functions
- (e) FAR 42.2 - Contract Administration Services
- (f) FAR 42.3 - Contract Administration Office Functions
- (g) 5 CFR 2635 - Standards of Ethical Conduct for Employees of the Executive Branch
- (h) DoD Directive 5500.7 - Standards of Conduct
- (i) U.S. Navy Regulations Article 1115
- (j) SECNAVINST 5430.92 - Assignment of Responsibilities to Counteract Fraud, Waste and Related Improprieties within the Department of the Navy
- (k) OPNAVINST 4700.7 - Maintenance Policy for U.S. Naval Ships
- (l) NAVSEA SL720-AA-MAN-030 - Navy Modernization **Process** Management and Operations Manual (**NMP-MOM**)
- (m) DoD Directive 5000.1 - The Defense Acquisition System
- (n) SECNAVINST 5400.15 - Department of the Navy Research, Development and Acquisition, and Associated Life Cycle Management Responsibilities
- (o) OPNAVINST 4780.6 - Policy for Administering Service Craft and Boats in the Navy
- (p) FAR 203
- (q) NAVSEAINST 5730.1 - Legislative and Congressional Matters
- (r) NAVSEAINST 7500.1 - Audits of NAVSEA by External Audit Organizations

1.1 CONTRACTED SHIP REPAIR FUNCTIONS AND TASKS OVERVIEW. This chapter provides an overview of the **Regional Maintenance Center (RMC)** functions, responsibilities, standards of conduct and organizational relationships.

1.2 CONTRACTED SHIP REPAIR FUNCTIONS AND TASKS.

1.2.1 Functions. This section outlines RMC responsibilities for ship repair and modernization work that is contracted to the private sector for accomplishment. These may include:

- a. Performing functions of Procuring Contracting Officer (PCO) and Administrative Contracting Officer.
- b. Developing specifications necessary to solicit contract proposals and bids for assigned PCO functions and Naval Sea Systems Command (NAVSEA) procurements.
- c. Providing planning and estimating, workload forecasting and oversight for planned and unplanned availabilities.
- d. Conducting engineering, technical and design oversight, evaluation and surveillance.
- e. Performing engineering and design services in support of waterfront (emergent) technical issues.
- f. Budgeting, administering and accounting for funds.
- g. Providing management coordination and oversight of contracts to ensure requisite quality, schedule attendance and cost propriety.
- h. Monitoring and evaluating integrated logistics support and procurement of Government Furnished Material.

1.2.1.1 Mission Tasks. Other mission tasks include the following:

- a. Providing guidance to area Commanders and RMCs.

- b. Ensuring a comprehensive security program.
- c. Performing mobilization logistics planning.
- d. Training Navy reserve units for mobilization requirements.
- e. Administering facilities contracts covering Government-owned materials in private shipyards as assigned.
- f. Administering real property and Navy facility leases as assigned.
- g. Administering Government-owned drydocks leased to private shipyards as assigned.
- h. Performing berthing and messing program administration during contract execution.
- i. Executing civilian personnel services as assigned.
- j. Performing planning responsibilities.
- k. Performing Ship Availability Planning and Engineering Center Planning Activity responsibilities as assigned.
- l. Providing Contracting Officer's Representative support.
- m. Developing standard specifications.
- n. Performing annual inspection on Navy ship memorials as assigned.
- o. Provide oversight of demilitarization and stripping of ships programmed for disposal or for sale to private concerns.

1.2.2 Procurement and Contract Administrative Functions of the Regional Maintenance Center.

- a. The RMC performs the functions of the PCO for purposes of placement of job orders under the Master Agreement for Repair and Alteration of Vessels, Master Ship Repair Agreement or the Agreement for Boat Repair as described in Chapter 3 of this Volume by sealed bidding, by negotiation, reference (a) or reference (b). The RMC also exercises the options under Multi-Ship/Multi-Option contracts and other contracts as assigned.
- b. The RMC is responsible for performing all of the contract administration services listed in references (c) and (d) to the extent applicable to Master Ship Repair Agreement job orders, Multi-Ship/Multi-Option contracts and to other contracts assigned at commercial shipyards under RMC cognizance.
- c. With respect to the administration of contracts other than shipbuilding, conversion and repair, the RMC will perform contract administration functions listed in references (e) and (f) when requested by the PCO. When resources are not available to perform such functions, the RMC will advise the activity awarding the contract which functions cannot be performed and why.

1.2.3 Relationship with Contractors.

- a. In official transactions with contractors, the RMC Contracting Officer is the direct representative of the U.S. Government and Commander, Naval Sea Systems Command as Head of Contracting Agency. Therefore, contractors will address any correspondence on such matters directly to the RMC Contracting Officer who, if deemed advisable, may discuss it with or refer it to NAVSEA for resolution. When making referrals to NAVSEA, the RMC will include definitive recommendations for action. NAVSEA, after resolving referrals, should keep the RMC informed of the proposed resolution prior to initiating discussions with or instructions to the contractor.
- b. The RMC shall ensure that contractors are not given access to Navy files, even when requested under the Freedom of Information Act, unless approved by counsel. Neither should contractors be furnished copies of correspondence or included as an addressee on correspondence pertaining to a claim, controversial subject matter or any subject matter on which it may become necessary for the command to issue instructions or render decisions.

- c. RMC personnel shall exercise good judgment when originating constructive changes. This refers to any communication, other than a change order or formal contract modification, received by a contractor from a representative of the Government, or as an act of omission of the Government, that has the effect of requiring a contractor to perform work different from or in addition to that which the contract prescribes. When RMC correspondence is sent to a contractor that will have a significant impact on operations, progress payments, responsibility, etc., it shall be signed by a contracting officer or an authorized representative, and a receipt shall be obtained for mail or hand-carried delivery.
- d. Contractual direction can be given only in writing by the PCO or Administrative Contracting Officer.

1.2.4 Standards of Conduct.

- a. Congress has passed numerous ethics laws such as reference (g). The Executive branch has promulgated Government-wide regulations addressing the standards of ethical conduct expected of Government employees, both military and civilian. Reference (h) promulgates more stringent guidelines and regulations that are specifically imposed on personnel who represent the Government in business dealings with representatives of industry and occupy positions of trust and responsibility that require them to observe the highest ethical standards. Practices that may be acceptable in the private business world are not necessarily acceptable for naval personnel. Acceptance of favors, gratuities or entertainment may be a source of embarrassment to the Department of the Navy and to the naval personnel involved. These favors may affect the objective judgment of the recipient and may impair public confidence in the integrity of business relations between the Department and industry.
- b. No person shall place himself or herself in a position in which conflict of interests might arise or might justifiably be suspected. Such a conflict might entail gratuities, entertainment of any kind or any other action that could influence or be reasonably interpreted as influencing the strict impartiality that must prevail in all business relationships involving the public interest. Favors, gratuities or entertainment bestowed upon members of the immediate household of naval personnel shall be considered in the same light as those bestowed upon Navy personnel.
- c. All personnel shall exercise special diligence to prevent fraud, collusion, larceny, embezzlement or other improper conduct within the area of their responsibilities and shall report immediately to the RMC any instance of fraud or other improper conduct they observe or suspect.
- d. The RMC Commanding Officer, by means of a local instruction, shall provide each of his personnel with the policy and procedures promulgated by the Department of Defense (DoD), Secretary of the Navy, and NAVSEA with respect to standards of conduct, and shall establish a plan of action that institutes measures to minimize the possibility of improper conduct.

1.2.5 Fraudulent Violations or Irregularities.

- a. References (i) and (j) require Navy personnel, both military and civilian, who have any reason to suspect or have knowledge of any fraud in connection with Government procurement, to report it immediately to proper authority. Since many RMC personnel are in close contact with contractors, RMC Commanding Officers shall ensure all personnel are familiar with these directives and understand that violations may be cause for appropriate disciplinary action that may include fines, imprisonment.
- b. RMCs shall develop and execute a plan to minimize the potential for misconduct. In formulating the plan, the following shall be considered:
 - (1) Increasing visits to Government personnel at remote contractors' sites through unscheduled inspections of specific operations by military or civilian supervisors.
 - (2) Reducing tour length of Government personnel at remote sites.
 - (3) Requiring that preparation of a specification and inspection/acceptance of work under that specification be performed by different individuals.
 - (4) Auditing work authorized on-site for actual completion.
 - (5) Auditing accepted work for conformance to specifications.

- (6) Auditing Government property administrator's decision on scrap, repairable items and mandatory returnable items.
- (7) Auditing scrap materials sold to the contractors by Government property administrators to insure that it is scrap.
- (8) Being alert for signs of affluence not commensurate with economic status of Government employees.
- (9) Providing for the personal attention of the RMC and first line supervision in order to indicate a command requirement for absolute adherence to the Standards of Conduct.
- (10) Being observant for possible falsification of inspection records.

1.3 ORGANIZATIONAL RELATIONSHIPS FOR VESSEL MODERNIZATION, OVERHAUL, REPAIR AND MAINTENANCE CONTRACTING.

1.3.1 General. The following sections discuss the basic responsibilities of Navy and other activities as they affect the operations and functions of the contracting process and the relative position of the RMC in this organization.

1.3.2 Chief of Naval Operations.

- a. The Chief of Naval Operations (CNO) is responsible to the Secretary of the Navy for the readiness, use and logistics support of all U.S. Naval Forces. As the military chief of the Navy, the CNO is the principal advisor to the Secretary of the Navy and the executive branch of the Government on naval military matters. The CNO formulates detailed strategic plans to carry out the missions assigned to the Navy. These strategic plans generate broad logistics requirements that are assigned to the several Systems Commands (SYSCOM) and offices for further implementation. In this manner, the CNO justifies and supports requests to Congress for the necessary funds to carry out specific ship modernization, repair and maintenance programs. Acting in staff capacity in the office of CNO, the Ships Characteristics Improvement Panel, which supports the Resources and Requirements Review Board, determines the characteristics of the ships which the Navy's military missions demand. These characteristics are subsequently translated into requirements that are then assigned to NAVSEA for action. After assignment to NAVSEA, proposed changes to operational requirements (military characteristics) through conversion or modernization must be approved by the CNO.
- b. The CNO ship maintenance and repair policy is provided in reference (k). Policies and procedures for maintenance of ships and modernization are established in reference (l), Volumes I and II. Further information on the **Navy Modernization Process (NMP)** is contained in Volume VI, Chapters 3 and 36 of this manual. In establishing Navy policy for Fleet maintenance and modernization and budgeting and scheduling for ship repair and modernization availabilities, the CNO is assisted by an operating staff in the Office of Naval Operations. The Office of Naval Operations staff includes specific ship type and logistics support sponsors who consolidate budget submissions from the Fleet and assist in the overall development and administration of the Navy's maintenance and modernization budget. The platform sponsors are major participants in the development of the **NMP**. In the case of repair and modernization, the CNO has retained approval authority for:
 - (1) Establishing modernization and repair availability schedules and major changes to those schedules.
 - (2) Determining military characteristics of ships and of alterations that affect these military characteristics.

1.3.3 Systems Commands.

- a. To provide support for the operating Fleet, the Navy has established five SYSCOMs with specific support responsibilities. These SYSCOMs are:
 - (1) Naval Sea Systems Command (NAVSEASYSCOM or NAVSEA).
 - (2) Naval Air Systems Command (NAVAIRSYSCOM).
 - (3) Space and Naval Warfare Systems Command (SPAWARSYSCOM).

- (4) Naval Supply Systems Command (NAVSUPSYSCOM).
- (5) Naval Facilities Engineering Command (NAVFAC).
- b. The Navy SYSCOMs establish technical requirements and meet logistics, maintenance and support requirements of Fleet Commanders in the area of new construction and ship maintenance. In addition, these SYSCOMs provide technical requirements for maintenance and conduct analyses to determine the proper balance between design improvement and logistics support to achieve the required operational availability.

1.3.4 Naval Sea Systems Command.

- a. For procurement purposes, Commander, Naval Sea Systems Command (COMNAVSEA) is Head of Contracting Agency with delegated authority in the Federal Acquisition Regulation to enter into and administer contracts for materials and services for which the Commander is responsible. COMNAVSEA, in turn, has delegated this authority to the Deputy Commander for Contracts (NAVSEA 02). Delegation of authority to the RMC Contracts Department Head is addressed in the NAVSEA Contracts Handbook and in subsequent chapters of this volume. Only COMNAVSEA and individuals designated by NAVSEA 02 who are duly authorized and acting within the limits of their written delegated authority can commit the Government to any contractual action.
- b. Specific NAVSEA mission functions include the provision of material support to the Navy and Marine Corps for ships and craft, shipboard weapons systems and components, ammunition, guided missiles, mines, torpedoes and all other surface and underwater ordnance expendables. Material support encompasses the complete life cycle from research and design through sustained technical direction and acquisition in support of Fleet readiness. These responsibilities include ships, submarines and other sea platforms, except service craft assigned to the NAVFAC and ships administratively assigned to the Military Sealift Command.
- c. As the agent of the CNO, NAVSEA maintains the **Navy Data Environment** and develops documentation for all authorized alterations. NAVSEA also authorizes and funds all program alterations not authorized and funded by the cognizant Type Commander (TYCOM). The maintenance, repair and modernization of ships, submarines, craft and boats assigned to the operating forces may be carried out by assignment of work to Naval Shipyards (NSY) or by procurement of services and material from private industry through the RMCs or **Supervisors of Shipbuilding, Conversion and Repair, USN (SUPSHIP)**.
- d. Under the CNO, NAVSEASYSCOM's basic mission as related to ship modernization, repair and maintenance is to provide acquisition, engineering, logistic and material support for the Navy. As the technical and engineering authority for ships of the Navy, NAVSEA, in support of the designated Program Executive Office (PEO), is responsible for the life cycle management of Navy ships, submarines, craft and boats, including the following:
 - (1) Developing Maintenance Plans for each ship class.
 - (2) Supporting Fleet Maintenance Officers in scheduling ships for availabilities.
 - (3) Managing alteration development and executing the **NMP**.
 - (4) Providing acquisition, engineering and technical authority, Occupational Safety and Health, environmental support, and Contract Administration Quality Assurance Program assistance to the Fleet Maintenance Officers and RMCs.
 - (5) Operation of the NSYs, SUPSHIP, and RMC Contracting Offices.
- e. NAVSEA provides direct support to the PEOs who report directly to Assistant Secretary of the Navy (Research, Development and Acquisition) (ASN (RD&A)).
- f. Developing, validating and maintaining Organizational, Intermediate and Depot-level maintenance requirements and tasks in the Planned Maintenance System.

1.3.5 Program Executive Office Program Offices. The Navy Acquisition Executive Responsibilities assigned to the ASN (RD&A) are contained in references (m) and (n) and include supervision of the SYSCOM Commanders (NAVSEA) and PEOs relative to Research, Development and Acquisition matters. In most cases, PEOs function in matrix type organizational structures with reporting responsibilities to both ASN (RD&A) and the Commanders of the respective SYSCOMs. The PEOs are tasked with acquisition and life cycle management of their assigned programs. Within the PEO organizational structure are the Program Management Offices that report directly to the PEO. Within each program office, an individual manager is assigned as the Ship Program Manager and is responsible for a specific ship class. The Ship Program Managers provide centralized management for assigned ship classes. This assignment may be for ship conversion, modernization, repair or life cycle maintenance.

1.3.6 Logistics, Maintenance and Industrial Operations Directorate (SEA 04). The consolidation of the Fleet Logistics Support Directorate (SEA 04) and the Regional Maintenance and Industrial Operations Directorate (SEA 07) as well as several functions of other NAVSEA Directorates into the Logistics, Maintenance and Industrial Operations Directorate (SEA 04), was designed to strengthen and improve important headquarters functions. The organization is constituted to closely support the requirements and functions of the Deputy Chief of Naval Operations (Logistics) (N4) and Fleet Maintenance Officers as customers. The Directorate will develop policy and infrastructure associated with ship maintenance, logistics support, environmental and safety programs and related efforts.

1.3.7 The Atlantic and Pacific Fleets. The Commander, **United States** Fleet Forces Command and the Commander, Pacific Fleet are responsible for the readiness condition of their assigned ships. The Commanders must balance the competing needs of the operational Fleets with the need for maintenance and modernization of the Fleet. Ships and craft under their cognizance comprise the largest portion of the repair and overhaul workload. Fleet Commanders, through their respective Fleet Maintenance Officers, are responsible for the budgeting, scheduling and execution of CNO-scheduled ship maintenance and modernization availabilities plus emergent maintenance requirements. Fleet Commanders and COMNAVSEA are actively developing new ship maintenance procedures and processes, and initiatives that are being integrated into this manual that support the concept of Continuous Maintenance. The Fleet Commanders determine ship deployment schedules and, within guidelines published by the CNO, approve changes in scheduled maintenance availability dates for their assigned ships. Through the respective TYCOMs, the Fleet Commanders provide funding for advance planning and execution of scheduled ship maintenance availabilities. In the area of new construction, Fleet activities provide input to the development of ship characteristics and become involved in final trials, delivery, Post Shakedown Availabilities and guarantee periods of newly delivered ships.

1.3.8 Type Commanders.

- a. TYCOMs and RMCs are responsible for budgeting to support modernization, repair and maintenance availabilities and for the material readiness and training of their assigned ships. Under guidelines established by the CNO and Fleet Commanders, the TYCOMs and RMC manage funds for advance planning for repairs and some selected alterations, and execution of the availabilities. Within guidelines established by the CNO and Fleet Commanders, the TYCOMs in concert with the numbered Fleet Commanders (Commander, Second Fleet, Commander, Third Fleet, etc.) schedule ships for deployment and other operational assignments. In this regard, the TYCOM is one of the most important activities involved in scheduling ship repair planning activities that directly involve the ship or the ship's crew.
- b. TYCOMs provide advanced planning funding to the respective ships Maintenance Team for availability planning. After the availability work package has been identified and documented, the TYCOM provides funding for accomplishment of repairs and some of the alterations. The **Ashore Ships** Maintenance Manager, working with their respective Maintenance Team, is responsible for management of all TYCOM advance planning and works closely with the contract administrative team to execute the terms and conditions of contracts for their assigned ship(s). The CNO has delegated authority to RMC COs to assign unscheduled availabilities for ships under their cognizance. In support of new construction, TYCOMs have a primary mission to provide input to the development of ship characteristics and become involved in trials, delivery and guarantee periods of newly delivered ships as outlined in Volume I of this manual.

1.3.9 Naval Shipyards. The NSYs are operated by Commander, Naval Sea Systems Command and report directly to NAVSEA 04 for business and technical matters. The NSYs are strategic industrial assets with mobilization responsibilities. They maintain core ship conversion, modernization and repair industrial capabilities to support our national strategies for forward force projection. The core capabilities include extensive nuclear and non-nuclear ship engineering disciplines, nuclear and non-nuclear repair and productive capabilities.

1.3.10 U.S. Ship Repair Facility, Yokosuka, Japan. This U.S. Navy managed repair facility is manned by U.S. military and civilian personnel along with Japanese employees. It has the same basic industrial capabilities as those of our industrial naval shipyards except that there are no nuclear maintenance capabilities.

1.3.11 User Commands or Activities (Users). In accordance with reference (o), the CNO assigns service craft and boats to Users. These craft and boats are maintained and overhauled from funds granted by Support Commanders to their subordinate activities that are the Users. Service craft and boats under the cognizance of the Users comprise a portion of the RMC repair and overhaul workload. For example, Naval Station Port Operations are assigned service craft that support home ported or visiting ships.

1.3.12 Naval Inactive Ship Maintenance Facilities. The RMC may be required to support the inactivation of ships scheduled for retention at Inactive Ship Maintenance Facilities. The work involved is the effort that is beyond the capability of Ship's Force and includes such tasks as hull blanking, gas freeing of tanks, hydro-blasting Collection, Holding and Transfer systems and towing preparations. The TYCOM normally authorizes the work and NAVSEA funds such work. In some cases, inactive ships may be reactivated for delivery to foreign Governments through the Foreign Military Sales Program. This work is normally authorized and funded by NAVSEA or higher authority.

1.3.13 Naval Reserve Force Vessels. Ships assigned for training Naval Reserve Force personnel comprise a portion of the RMC workload. The TYCOM who has cognizance over these ships authorizes and funds the repair and overhaul work.

1.3.14 Defense Finance and Accounting Service Offices. Accounting and disbursing operations in the continental United States and Hawaii are consolidated at designated Defense Finance and Accounting Service Centers and Operating Locations. All contracts, agreements and orders citing Navy appropriations and funds paid by Defense Finance and Accounting Service disbursing offices will show the appropriate paying office.

1.3.15 Defense Contract Audit Agency.

- a. Contract auditing is a function of Defense Contract Audit Agency (DCAA). The DCAA has subordinate field offices including district/regional, branch, procurement liaison, contractor residency and contract audit coordination offices. The DCAA office performs these basic functions:
 - (1) Advising on the allowance of costs under cost-reimbursement-type contracts.
 - (2) Providing, as a minimum, quarterly advisory audit reports to assist in pricing actions under all types of contracts.
 - (3) Validates the contractor's finances and accounting system that is used by the RMC's Contracts Department to establish forward pricing rates.
 - (4) Performs financial capability audits when requested by the Contracting Office.
 - (5) Conduct floor audits to validate personnel assignments to work sites.
- b. DCAA auditors render assistance in connection with payments, termination settlement proposals, adjudication of claims and pricing of certain negotiated changes. The DCAA plays an important role in the award and administration of contracts; however, this role is that of an advisor to the RMC Contracts Department Head, with RMC retaining responsibility for subsequent contractual actions. The RMC has full responsibility for contract administration and shall make final decisions regarding advice provided by DCAA. Any departure from DCAA recommendations must be fully justified.

1.3.16 Defense Contract Management Agency Components.

- a. Within an assigned area, a DoD Contract Administration Service component is responsible for the field administration of all contracts placed by DoD activities. Reference (p) identifies all Defense Contract Management Agency and other agency components engaged in the performance of contract administration services, together with their geographic or plant cognizance assignments, and the services they perform. The directory can be accessed electronically via the World Wide Web.
- b. The RMC may be required to perform certain contract administration functions, such as performance of quality assurance, source inspection, etc., at a subcontractor's plant under the cognizance of another Defense Contract Management Agency component. These services are requested in accordance with reference (e).
- c. In vessel acquisition procurements, the Defense Contract Management Agency Component usually is responsible for:
 - (1) Administering DoD contracts for components to be provided as Government Furnished Material to vessel acquisition contractors.
 - (2) Performing source inspection, progressing and expediting actions in connection with Government Furnished Material services and technical data.
 - (3) Acting as disposal officer in the sale of terminal inventories.

1.3.17 General Accounting Office. The General Accounting Office (GAO), although not a part of the Navy, is involved with Navy fiscal and contract matters. The GAO is entirely separate from the executive branch of the Government and acts as the agent of Congress in investigating all matters relating to Government procurement. Representatives of GAO make periodic visits to maintenance related activities. All communications to GAO on matters involving contracts will be processed in accordance with references (q) and (r).

1.3.18 Naval Reactors Representatives. A representative of the U.S. Department of Energy, entitled "Naval Reactors Representative", is assigned to each shipyard performing naval nuclear propulsion plant work. The Naval Reactors Representative reports to the Director, Division of Naval Reactors and Department of Energy. The representative performs an independent review and surveillance of all shipyard work relating to naval nuclear propulsion matters. The representative has free access to all elements of the shipyard and the RMC office that deals directly or indirectly with naval nuclear propulsion. The representative's review and surveillance does not detract from, change or diminish the existing responsibility of any shipyard or RMC officials. The Naval Reactors Representative is provided suitable and sufficient office space in the shipyard and other administrative support to carry out assigned functions.

1.3.19 Foreign Governments. RMCs may interact with foreign Governments, when requested by the CNO or NAVSEA, to procure commercial repair work to:

- a. Recondition and otherwise repair Navy ships that are to be, or have been, transferred to foreign Governments.
- b. Effect emergency voyage repairs or other services for vessels of foreign Governments, when approved by CNO.

1.3.20 Private Companies - Demilitarizing and Stripping. The RMC may be required to arrange for the demilitarization and stripping of ships that are programmed for disposal or for sale to private concerns. In the case of ships programmed for disposal, these functions, when not performed by the activity having cognizance of the vessel, are carried out by the responsible RMC. When the ships are sold to private concerns, the work will be performed by the purchasing contractor as a condition of sale. In these cases, the RMC will be requested to provide surveillance over the work to ensure its proper performance. Of particular concern is the compliance with Environmental Protection Agency rules and regulations where there is potential for environmental impacts resulting from work associated with disposal action.

VOLUME VII
CHAPTER 2
CONTRACTS AND CONTRACT ADMINISTRATION

REFERENCES.

- (a) NMCARS 5201 - Federal Acquisition Regulations System
- (b) FAR Part 1.3 - Agency Acquisition Regulations
- (c) FAR Part 1.4 - Deviations
- (d) DFARS 201.4 - Deviations From the FAR
- (e) ONRINST 5400.1 - Obtaining Waivers Under Office of Naval Research Designation as a Reinvention Laboratory
- (f) 31 U.S. Code 1535 - Agency Agreements
- (g) FAR Part 2.1 - Definitions
- (h) FAR Part 9 - Contractor Qualifications
- (i) FAR Part 16 - Types of Contracts
- (j) FAR Part 14 - Sealed Bidding
- (k) FAR Part 15 - Contracting by Negotiation
- (l) FAR Part 1.6 - Career Development, Contracting Authority and Responsibilities
- (m) NAVSEAINST 4200.17 - Contracting Officer's Representative
- (n) FAR Part 42 - Contract Administration and Audit Services
- (o) NMCARS 5242 - Contract Administration and Audit Services
- (p) NAVSEA Contracts Handbook (NCH)
- (q) DoD Directive 5000.1 - The Defense Acquisition System
- (r) DFARS 219 - Small Business Programs
- (s) NMCARS 5219 - Small Business Programs
- (t) SECNAVINST 4380.8 - Implementation of the Department of the Navy Small and Disadvantaged Business Utilization (SADBU) Program
- (u) FAR Part 49 - Termination of Contracts
- (v) FAR Part 43 - Contract Modifications
- (w) NAVSEAINST 9210.4 - Changes, Repair and Maintenance to Nuclear Powered Ships
- (x) NMCARS 5233 - Protests, Disputes and Appeals
- (y) DFARS 252 - Solicitation Provisions and Contract Clauses
- (z) DFARS 222 - Application of Labor Laws to Government Acquisitions
- (aa) FAR Part 44 - Subcontracting Policies and Procedures
- (ab) FAR Part 52 - Solicitation Provisions and Contract Clauses
- (ac) NMCARS 5219.7 - The Small Business Subcontracting Program
- (ad) 10 U.S. Code 2306 - Kinds of Contracts
- (ae) 41 U.S. Code 254 - Contract Requirements

LISTING OF APPENDICES.

- A Memorandum of Understanding Between NAVSEA and NAVSUP of August 2004
- B Basic Acquisition Process

2.1 **PURPOSE.** This chapter provides an overview of contracts and contract administration as it applies to Navy ship repair and modernization work. It is specifically intended to provide an understanding of these processes to non-contracting personnel and should not be used as a reference for contractual actions undertaken by Procuring or Administrative Contracting Officers (ACO).

2.2 **OVERVIEW OF THE FEDERAL ACQUISITION PROCESS.**2.2.1 **Procurement from Private or Government Sources.**

- a. Once it is determined that an agency is authorized to undertake certain activities, it must then be determined what the appropriate way for the agency to accomplish its particular objectives is. The authority of the agency to use contractual agreements with private sources in carrying out authorized

programs is generally assumed in the absence of express statutory prohibitions or limitations. In some instances it may be more efficient and economical for an agency to use its own employees or requisition its needs from another agency in a position to supply those needs.

- b. Executive agencies have traditionally enjoyed broad discretion to achieve their objectives using Government employees or by contract with the private sector. Because of concerns that Government competition with private enterprise is inappropriate, the executive branch has an express policy that the Government should rely on the private sector to the greatest extent possible.

2.2.2 Contracting Techniques. Executive agencies generally have wide latitude in selecting the methods for awarding contracts, as well as the terms and conditions to be included. The contracting parties must be aware of the large number of statutes and regulations giving specific guidance on the techniques to be followed in entering into most Government contracts. Contracting Officers are expected to adhere to such statutes and regulations and, in most instances, the validity of contracts can be affected if they are not followed.

2.2.3 General Procurement Statutes. Congress has enacted two principal statutes establishing procedures for awarding Government contracts. The two statutes are the Armed Services Procurement Act of 1947 and the Federal Property and Administrative Services Act of 1949. These two Acts have governed the federal procurement process. They were revised by the Competition in Contracting Act of 1984, the Small Business and Federal Procurement Competition Enhancement Act of 1984, the Defense Procurement Reform Act of 1984, among other Acts. The Armed Services Procurement Act applied to purchases of the Army, Navy, Marine Corps, Air Force, Coast Guard and the National Aeronautics and Space Administration. The Federal Property and Administrative Services Act applied to purchases of the General Services Administration and other executive agencies except those covered by the Armed Services Procurement Act.

2.2.4 Procurement Regulations.

- a. Regulations issued by the various executive agencies contain detailed guidance as to both procedures for award and terms and conditions of contracts. The Federal Acquisition Regulations (FAR) replaced the Federal Procurement Regulation, the Defense Acquisition Regulation and the National Aeronautics and Space Administration Procurement Regulation. The chief goal of the FAR is to bring greater simplification and uniformity to the complex body of federal procurement regulations.
- b. While the policy concerning Government contracts is formulated and implemented largely within the executive agencies that enter into these contracts, such activity is also directly affected by pronouncements issued by the President and the Office of Federal Procurement Policy (OFPP). The President issues executive orders that authorize and require the use of clauses implementing various social and economic programs. As the paramount regulations in the executive branch, these orders must be complied with by the executive agencies. The Office of Management and Budget periodically issues circulars that embody executive policy and may be directed to regulating contracting activities. As regulations emanating from the Office of the President, Office of Management and Budget circulars have a status in the hierarchy of executive regulations above the procurement regulations promulgated by the agencies. The OFPP was created for the purpose of providing overall direction to federal procurement policy. The OFPP has the responsibility for formulating and implementing a uniform federal procurement system that consists of a single FAR and agency regulations limited to those necessary to implement or supplement the FAR. In addition, it granted the Administrator of the OFPP, with the concurrence of the Director of Office of Management and Budget, the authority to "issue policy directives for the purpose of promoting the development and implementation of the uniform procurement system."
- c. The procurement regulations and directives of major interest to contractual and technical personnel of the field office are briefly described below. Specific regulations, directives and other procurement publications are also referenced throughout the text.

2.2.4.1 Federal Acquisition Regulation. The FAR is the primary regulation for use by all Federal Executive agencies in their acquisition of supplies and services. The FAR precludes agency acquisition regulations that unnecessarily repeat, paraphrase or otherwise restate the FAR and limits agency acquisition regulations to those necessary to implement FAR policies and procedures within an agency. The FAR provides for coordination, simplicity and uniformity in the Federal acquisition process. The FAR can be electronically accessed at <https://www.acquisition.gov/far/>.

2.2.4.2 Department of Defense Federal Acquisition Regulation Supplement. The Defense Federal Acquisition Regulation Supplement (DFARS) is issued by the Secretary of Defense and establishes uniform policies and procedures that implement and supplement the FAR for Department of Defense (DoD). The DFARS contains guidance and direction to DoD personnel as to which provisions, clauses, cost principles and cost accounting standards are authorized for DoD contracts and what other procedures and actions must be followed in awarding and administering DoD contracts. The DFARS contains material that implements the FAR, as well as supplementary material that is unique to the DoD. This supplement is not a stand-alone document and must be read in conjunction with the FAR. The DFARS can be electronically accessed at <http://www.acq.osd.mil/dpap/dars/>.

2.2.4.3 Navy Marine Corp Acquisition Regulation Supplement. The Navy Marine Corp Acquisition Regulation Supplement (NMCARS) implements and supplements the FAR and the DFARS and establishes uniform policies and procedures for the acquisition of supplies and services for the Department of the Navy. The NMCARS is not a stand-alone document and must be read in conjunction with the FAR and DFARS. The NMCARS can be electronically accessed at <https://acquisition.navy.mil/rda/home/policyandguidance/nmcars>.

2.2.4.4 NAVSEA Contracts Handbook. The NAVSEA Contracts Handbook (NCH) is the Naval Sea Systems Command (NAVSEA) supplement to the FAR, DFARS, NMCARS and other acquisition policy and procedures for contracts, other transactions, cooperative agreements and grants. The NCH is not a stand-alone document. The NCH is authorized by reference (a). The NCH applies to NAVSEA Headquarters, Program Executive Officers and NAVSEA field organizations and representatives including the Regional Maintenance Center (RMC) Contracts Department Head and warranted Contracting Officers, for which Commander, Naval Sea Systems Command (COMNAVSEA) is the Head of Contracting Activity (HCA). In the event of a conflict, the FAR, DFARS or NMCARS shall take precedence over the NCH. Additionally, the NCH takes precedence over the guidance provided in this manual on contractual matters. The NAVSEA Contract Policy Office (NAVSEA 021) maintains the NCH and issues changes as required. Requests for deviations from the NCH must be submitted to NAVSEA 02B via NAVSEA 021.

2.2.4.5 Other Navy Publications. Although the NMCARS is the basic procurement publication issued at the Navy departmental level, procedures are further refined in directives, instructions, notices and other publications issued by direction of the Secretary of the Navy. Distribution of these publications may differ from the distribution of the NMCARS because of security considerations and other reasons. Accordingly, they are generally not made available to organizations outside the Government.

2.2.4.6 Command Publications. Subject to the provisions of references (b) and (c), procuring activities may issue procurement and related directives, instructions and other publications to implement and supplement FAR, NMCARS and other departmental publications. Each Command issues directives, instructions, notices and other publications that are necessary for the efficient performance of procurement operations.

2.2.4.7 Joint Fleet Maintenance Manual Relationship to Other Directives.

- a. This volume is issued in accordance with Memorandum of Understanding (MOU) between Commander, **United States** Fleet Forces Command, Commander, Pacific Fleet, Commander, Fleet and Industrial Supply Centers, Commander, Naval Supply Systems Command and COMNAVSEA. Additionally, reference (a) permits procuring activities to issue directives, instructions and other publications to supplement the FAR, DFARS, NMCARS, NCH and other Navy instructions.
- b. To the extent that a policy or a procedure is not addressed by the FAR, DFARS, NMCARS, NCH or other Navy and DoD Instructions, this manual provides the NAVSEA, **United States** Fleet Forces Command and Pacific Fleet policy and procedures concerning the contracting processes that are to be used by individual RMCs and Supervisors of Shipbuilding for procurement or administration of contracts for the conversion, modernization, repair and maintenance of ships, submarines, boats and craft, that are assigned to the respective RMC or Supervisor of Shipbuilding as the Naval Supervisory Authority (NSA). Where a policy or requirement is not established by FAR, DFARS, NMCARS, NCH or other Navy and DoD directives, this manual contains the procedural requirements for compliance. Otherwise, the FAR, DFARS, NMCARS, NCH and other Navy and DoD Directives take precedence over this manual. When a new or revised policy or requirement is promulgated by FAR, DFARS, NMCARS, NCH or other Navy and DoD Directives that are not consistent with this manual, the new or

revised policy and requirements shall be followed. Material required to be submitted to higher authority by the NMCARS or NCH shall be forwarded via the RMC Contracts Department Head or Chief of the Contracting Office at Supervisor of Shipbuilding to NAVSEA 02.

- c. Appendix A definitized the alignment of contracting responsibility among their subordinate commands.

2.2.4.8 Field Instructions and Notices. Each RMC is authorized to issue instructions and notices pertaining to contracting procedures that govern the internal operations of the office. Instructions may be issued to establish or explain organization, policy and procedures affecting more than one department of the RMC office and may remain in effect up to seven years. Notices may be issued to provide information of temporary interest and application to more than one department of the office. Each notice shall state its period of effectiveness up to a period of one year.

2.2.4.9 Waiver of Regulations and Directives. Reference (d) identifies policy for submitting requests for deviation from the FAR and reference (e) identifies policy for implementation of the Waiver and Reinvention Laboratory Programs within NAVSEA. Fleet personnel are encouraged to identify any regulation, directive, policy or procedure that can be modified, waived or eliminated in improving or streamlining business operations.

2.2.4.10 Impact of Statutes and Regulations. Regulations are issued by many offices in the agencies of the executive branch. There is frequently a substantial question as to their legal effect. When a board or court rules that a regulation is legally binding on either a contractor or the Government, that regulation is characterized as having the "force and effect of law". In such cases, the regulation is treated in the same manner as a statute. Generally, regulations shall have the force and effect of law if they are promulgated pursuant to specific statutory authority or formulated to implement a fundamental procurement policy and are appropriately published. RMCs should obtain the assistance of legal counsel in all such matters.

2.3 BUDGET/APPROPRIATIONS/ALLOCATION PROCESS. In order for any contract with the Government to be enforceable it must comply with certain legal requirements that apply to all Federal Government contracts.

2.3.1 Constitutional Authority. The Federal Government must be authorized by the Constitution to engage in the activity that is the subject of a contract.

2.3.2 Statutory Authorization. Before a contract can be entered into, there must be statutory authorization for the work being performed. Most agencies have a continuing grant of general authority to work in designated areas as a part of their basic mission. The Constitution also provides that "No money shall be drawn from the Treasury, but in consequence of appropriations made by law". Using this constitutional authority, Congress has prohibited the executive branch from entering into contracts prior to the appropriation of funds or in greater amounts than contained in appropriations.

2.3.3 Budget Authority.

- a. Budget authority may be provided either in the form of an appropriation act or by a grant of contract authority. Contract authority is permitted by the last phrase of reference (f) and shall usually be found in specific language in statutes authorizing programs and permitting the contracts prior to the passage of an appropriation act. Most contracting actions of the Federal Government are not based on contract authority and absence of appropriation legislation shall result in the contract not being enforceable against the Government. Leases made for periods longer than that covered by appropriated funds, and contracts made for amounts greater than appropriations, are not binding on the Government.
- b. In some cases, the executive agencies enter into agreements with contractors in advance of or in excess of appropriations, making the Government's obligation contingent on the passage of an appropriation. Since such agreements are not binding obligations of the Government until the passage of the appropriation, they do not violate the restrictions of reference (e).

2.3.4 Authorization of Appropriations.

- a. Prior to the passage of an appropriation act, funds for agency programs are usually "authorized" by special "authorization acts," which annually fund programs with dollar limitations. By the process of authorization legislation, the congressional committees with legislative jurisdiction over the agency conduct their initial review of the scope of agency programs and decide on the amount of funds that should be provided. This assures that these committees shall retain their prerogatives of control over the programs under their jurisdictions, and limits the appropriations committees to providing funds up to but not exceeding the authorized amounts. Since the authorization process is a working rule of

Congress, it would seem that an appropriation, even without the required authorization, would provide the necessary authority to enter into contracts. The courts have held, however, that an appropriation is not valid if there has been no authorization legislation because Congress may not legislate through appropriations laws. Authorization may also be in the form of provisions in the general legislation of the agency authorizing expenditures up to specified limits for designated programs.

- b. The legislative committees also retain control of this area in cases where “contract authority” is contained in the statute authorizing the undertaking of a program. In such cases, there is no process for review of the matter by the appropriations committees, yet the agency is authorized to enter into contracts. Of course, subsequent appropriations are necessary before the contractor can be paid, but it is assumed that such appropriations shall be forthcoming without contest.

2.4 **CONTRACTS.** A contract is an agreement between two or more parties that is enforceable by law. It may be agreed to either orally or in writing either as bilateral (two promises) or unilateral (promise for an act or forbearance of an act). Reference (g) contains a specific definition of a contract.

2.4.1 **Types of Contracts.** The Government enters into many types of contracts. Reference (f) lists the factors to consider when making a determination of what contract type best suits the specific procurement. In addition, Appendix A definitizes the contract authority for each activity’s subordinate commands. Reference (f) authorizes the use of various basic types of contracts (e.g., fixed-price, cost-reimbursement, etc.). Of these, the following are most commonly used by NAVSEA and RMCs for repair and modernization work:

- a. Firm Fixed Price (FFP).
- b. Fixed Price Incentive.
- c. Cost Plus Incentive Fee.
- d. Cost Plus Award Fee.
- e. Cost Plus Fixed Fee.
- f. Indefinite Delivery Type Contracts.
- g. Federal Acquisition Regulations also authorizes the use of any combination of the approved contract types. A fixed-price-award-fee contract may also be used when appropriate.

2.4.2 **Contract Selection.** The Government’s cost of an acquisition can be influenced substantially by the type of contract selected and the manner in which the contract is administered. Contract type and administrative practices can substantially influence quality and delivery. For the contractor, the improper use of contract types can result in financial setbacks or excessive profit.

2.4.2.1 **Fixed Price Contracts.** Fixed Price (FP) contracts usually stipulate a firm price. Under some circumstances, it may leave portions of the price open and provide for a later adjustment. The degree of risk assumed by the contractor shifts from the contractor to the Government when any variation of the FP type contract is used other than the FFP. In an FFP contract, the contractor bears the entire risk of both cost and performance. In the FP contract with economic price adjustment, the contractor bears all cost risks except that portion which is covered by the adjustment provisions. A Fixed Price Incentive contract provides for adjusting profit and establishing the final contract price by a formula based on the relationship of final negotiated total cost to total target cost, with the contractor bearing any costs in excess of ceiling price.

2.4.2.1.1 **Administration.** Market conditions cause contractors to submit bids well under what the work can reasonably be expected to cost in order to be the successful bidder. This “buy in” situation causes the winning contractor to aggressively seek every opportunity for contract growth and claims, and often at significantly higher cost than would normally be expected. The pre-award survey, reference (h), should screen out bids from contractors that are not responsible, meaning the contractor does not possess the managerial, financial and technical or facilities capabilities and capacities to comply with the terms and conditions of the contract. Non-responsive contractors are those that do not respond to the Invitation For Bid (IFB) in a timely manner or address the specific items of the contract in their bids. Contractors who do not have the capabilities required should not be awarded FFP contracts.

2.4.2.2 Cost Reimbursement Type Contracts.

- a. Cost reimbursement contracts, discussed in reference (i) are used when the estimate of costs is as reasonable as the circumstances permit, but because of the magnitude of uncertainties involved in the procurement, the risk is too great to expect a contractor to accept a FP arrangement of any type. In the Cost Plus Fixed Fee type, the Government agrees to pay all allowable costs that are incurred under the contract, plus a fixed-dollar amount of fee. A Cost Plus Incentive Fee type contract provides for an initially negotiated fee to be adjusted later by a formula based on the relationship of total allowable costs to total target costs. Under the Cost Plus Award Fee, the allowable costs are paid plus a fee. The fee typically consists of two parts, a fixed amount that does not vary with performance, and an award amount. The award amount is based upon a subjective evaluation of contractor performance by the Government, judged in light of criteria set forth in the contract. The criteria and rating plan should be tailored to the specific procurement in order to provide the most positive way to motivate a contractor toward improved performance.
- b. In a cost reimbursement type contract actual cost, plus fee, equals price.

2.4.3 Time and Materials Contract. This contracting method provides for payment to the contractor of direct labor hours at specified fixed hourly rates that include wages, overhead, general and administrative expenses and profit and materials at cost. A labor-hour contract is a variation of the time and material contract, differing only in that materials are not supplied by the contractor.

2.4.4 Indefinite-Delivery Indefinite-Quantity Contracts. These contracts are used when there is a recurring demand for an item and the timing and extent of demand cannot be determined at the time of award. The contract establishes all terms and conditions except those to be included in orders issued there under.

2.4.5 Letter Contracts. Letter contracts are used to authorize urgent work when work must be started immediately and negotiating a definitive contract is not possible in sufficient time to meet the requirement.

2.4.6 Basic Agreements. Basic agreements are umbrella-type arrangements to affect time savings for recurring requirements. While they are not contracts, they establish ground rules for the required and applicable clauses that shall be incorporated in contracts at future dates. The Master Ship Repair Agreement and Agreement for Boat Repair are examples of agreements and are discussed in Chapter 4 of this volume.

2.4.7 Basic Ordering Agreements. Basic Ordering Agreements (BOA) resemble the basic agreement. They go further by including a description of the supplies and services to be ordered and provide methods for pricing, issuing and determining future orders under the basic ordering agreement.

2.4.7.1 Description. A BOA is a written instrument of understanding, negotiated between an agency, contracting activity or contracting office and a contractor, that contains terms and clauses applying to future contracts between the parties during its term, a specific description of supplies or services to be provided, and methods for pricing, issuing and delivering future orders under the BOA. A BOA is not a contract.

2.4.7.2 Background. BOAs may be used to accomplish procurement for research and development, studies, services and shipbuilding post shakedown availabilities and hardware. Formal current internal instructions or procedures on effective field management control are required in conjunction with the responsibilities and authority delegated to the assigned RMC. Reference (i) provides additional information on BOAs.

2.4.8 Other Contracting Methods.

- a. Multi-Agency Contract means a task-order or delivery-order contract established by one agency for use by Government agencies to obtain supplies and services, consistent with the Economy Act. Contracts for information technology services are often procured as multi-agency contracts.
- b. Multi-Ship/Multi-Option (MS/MO) contracts enhance the Procuring Contracting Officer's (PCO) flexibility by allowing the PCO to package several ship repair availabilities spanning several fiscal years into one procurement package. The cost-type contract awards the initial availability with options to execute the remaining availabilities, provided the contractor's cost and performance are satisfactory. MS/MO contracts are routinely procured as cost-type contracts, although they could be procured as FP contracts.

- c. Best Value Contracting. Best Value Contracting (BVC) is a DoD endorsed procurement method that presents an alternative to the traditional low-bid method of contracting. It is to be used for all procurements with an estimated value exceeding \$500,000. It is a competitive contracting process requiring projects to be awarded to the contractor offering the best combination of price and qualifications instead of just the lowest bid. It is an approach for awarding contracts that, when properly designed and administered, rewards high-performance contractors who have trained, skilled workers and other essential qualifications for performing high quality projects in a safe, timely and cost-efficient manner.
 - (1) BVC is used in relation to Request for Proposal procedures, but it may also be referred to by other terms in the commercial business environment, such as “competitive sealed proposal contracting,” or “negotiated contracting.” Because the award decision is not based on price or price-related factors alone, BVC is never accomplished under Sealed Bidding (IFB) procedures.
 - (2) Under the BVC process, bidding is typically open to qualified contractors who submit detailed information on their past performance and qualifications in response to the Request for Proposal process. If designed properly, the BVC system should require mandatory pre-listing when a subcontractor’s level of effort is expected to exceed a specific dollar threshold as set by the PCO.
- d. Required information, and past performance, can include areas that have the potential to impact the success of a project. They typically include the past performance, technical expertise and management team of the general or prime contractor and subcontractors. Key craft labor issues should also include:
 - (1) Skill training/apprenticeship.
 - (2) Project staffing/labor sources.
 - (3) Safety initiatives.
 - (4) Law compliance.
- e. In reviewing this information and researching past projects (Contractor Performance Appraisal Reporting System, etc.) the Government Contracting Officer shall employ various types of procurement evaluation and selection procedures to assist in identifying the contractor or contracting team that offers the best combination of price and qualifications.
- f. The past performance of a contractor, or proposed contracting teams, are usually rated or scored by a team of Government contracting and technical personnel, working for the PCO and using pre-established evaluation criteria. The designated evaluation team reviews submittals provided by contractor/subcontractor teams and evaluate performance data and other relevant information from prior projects and submits their recommendations to the PCO with substantiating data to support their analysis.
- g. The PCO analyzes the inputs and recommendation in relation to the terms and conditions of the contract and its scope to make the final decision as to the contractor or contracting team that has offered the best value for the Government.

2.4.9 Five (5) Elements of a Contract. Whatever form the contract takes following the solicitation, it shall contain the following five elements:

- a. Offer.
- b. Acceptance.
- c. Consideration.
- d. Legal and possible objective.
- e. Competent parties.

2.4.9.1 The Offer. An offer is nothing more than a promise, conditioned either upon performance of an act by the offer or upon a return promise by the offer, to perform this act. In order for the offer to be valid, the expression must be intended as an offer, it must be complete in all its essential terms, it must be communicated (in the manner intended) to the offeree and it must be clear and without ambiguities. If after the contract is formed, it is found to be imprecise or ambiguous in some minor detail so that reasonable persons could differ as to its meaning, the “Rule of Ambiguities” comes into play and the contract shall be reformed at the expense of the party who drafted the contract.

2.4.9.2 The Acceptance. Acceptance is an expression of consent to the proposed contract. In order for the acceptance to be effective, i.e., to create a valid contract, it must be:

- a. Clear and unequivocal.
- b. Timely (i.e., it must occur before the offer is revoked).
- c. In the same terms as the offer (to avoid the problem of counteroffers). If the acceptance conditions change or alter any of the terms of the offer, a counteroffer results. Once a counteroffer is made, the original offer is terminated, and the offer then has the power of accepting or rejecting the counteroffer. As it relates to Government contracts, the acceptance becomes effective on dispatch to the offer as long as it is properly addressed.

2.4.9.3 Consideration. Consideration is the price bargained for, and paid, for a promise. It may consist of an act, a forbearance of an act or a return promise. To be valid, consideration must be legally sufficient, that is, the consideration must have value in the eyes of the law. The courts shall not check into the adequacy or fairness of the consideration.

2.4.9.4 The Legal and Possible Objective. The purpose of a contract (what it is the offer or is trying to accomplish) must be a legal and possible objective. If the objective is illegal, the contract is unenforceable. Likewise, impossibility can excuse performance under the contract.

2.4.9.5 Competent Parties. Both parties to a contract must have legal capacity to enter into the contract. In the Government, this must be a duly authorized and properly warranted Contracting Officer who has the legal authority to obligate the Government, using authorized funds to comply with the agreed upon terms and conditions of the contract. Private companies are required to designate in writing the names of the individuals who are authorized to represent the contractor in contract matters and to obligate the company in writing to a promise to meet the agreed upon terms and conditions of the contract.

2.5 OVERVIEW OF CONTRACTING PROCEDURES. The two methods the Government uses to enter into its contracts are sealed bidding and negotiation.

2.5.1 Sealed Bidding. Sealed bidding, described in reference (j), was established by statute as the preferred procurement method. Sealed bidding relies wholly upon competition to obtain fair and reasonable prices for services and materials.

2.5.1.1 The Purposes of Sealed Bidding. The two main purposes of sealed bidding is: to realize the price and other benefits derived from full, free competition and to give all interested and qualified sources an equal opportunity to compete for the contract. The Comptroller General states the following: “The courts and accounting offices of the Government have frequently and consistently held that Section 3709, Revised Statutes, was designed to give all persons equal right to compete for Government business, to secure for the Government the benefits which flow from competition, to prevent unjust favoritism by representatives of the Government in making purchases for public account, and to prevent collusion and fraud in procuring supplies or letting contracts.”

2.5.1.2 Success of Sealed Bidding. Achieving these goals depends entirely upon the existence of real competition among bidders and upon the integrity of the system throughout its operation. Each bidder must be put on an equal basis and given the same opportunity to develop and submit the best bid initially. Sealed bidding procedures are prescribed in detail in reference (j) and cannot be deviated from. Regardless of the strict conformity to procedure, the use of sealed bidding is not intended to prohibit flexibility nor eliminate good judgment.

2.5.1.3 Responsibilities of the Planning and Procuring Activities.

2.5.1.3.1 Requiring/Planning Activity. The activity that plans or requires the goods or services to be procured must prepare the initial request for technical support that clearly identifies the specifics of the requirement. In addition, it must provide all applicable specifications, plans or drawings. If nothing better is available, the activity shall provide a purchase description that adequately specifies to the warranted buying or procuring office all the essential features of the item or service to be procured.

2.5.1.3.2 The Procuring Activity.

- a. The PCO is responsible for ensuring the specifications in the offer are sufficiently descriptive to provide for maximum competition. This solicitation package is issued via an IFB. Contract law provides that, "If the specifications are not sufficiently descriptive so as to provide for full and open competition, then the offer is invalid and no award may be made."
- b. The PCO is charged with the responsibility to challenge any delivery or performance schedule that appears unrealistic. The time of delivery or performance is an essential element for inclusion in a contract and must be clearly set forth in the IFB. Delivery and performance schedules that are unreasonably tight or difficult to attain are unfavorable to full competition, inconsistent with small business policies and may result in higher contract prices. All personnel must be alert to question any requirement that does not make sense or appears to involve unnecessary or excessive costs for any reason.
- c. The PCO determines whether the purchase is susceptible to sealed bidding. A purchase is susceptible to sealed bidding if all four of the following conditions are present.
 - (1) Time permits the solicitation, submission and evaluation of sealed bids.
 - (2) The award shall be made on the basis of price and other price-related factors.
 - (3) It is not necessary to conduct discussions with the responding offerors about their bids.
 - (4) There is a reasonable expectation of receiving more than one sealed bid.
- d. The PCO ensures that the information is transferred from the purchase description to the schedule of an IFB that shall be issued in such terms that the requirements are completely defined; determines that the terms included in the schedule of the IFB fully and completely describe the needs of the Government without ambiguity; determines that the offer is responsive; determines that the company that submits the offer is a responsible entity; determines which bid actually offers the Government the lowest price; and as the legally authorized agent of the Government, awards a contract to the contractor who fulfills all of the essential provisions of the IFB and whose price is found to be fair and reasonable.

2.5.1.4 Invitation for Bid Summary.

- a. Even this brief outline of sealed bidding procedures shows that it is a substantial and complex process involving considerable administrative expense. All these steps must be taken in every purchase accomplished by sealed bidding. Although this discussion has necessarily been quite general, each step of the process can be broken down into a myriad of further considerations and problems. An intricate system attempts to secure the best result for the Government by the use of widespread competition. Great emphasis must be placed on maintaining the integrity of the system to the end that the prospective bidders must know the rules in advance and must be ensured of fair and equal treatment.
- b. These procurement rules have been established by the Comptroller General to protect the interests of both the bidder and the Government. Frequently, project officers and operational personnel view the process as too restrictive and would like to circumvent some of these rules. The problem is not one of changing the rules, but rather of ensuring the use of this method of procurement is appropriate for the given circumstances.

2.5.2 Contracting by Negotiation. Congress has recognized sealed bidding cannot satisfy all procurement requirements and has authorized procurement by means of negotiation in accordance with reference (k). A contract awarded by means other than sealed bid is a negotiated contract. Negotiation has an inherent flexibility that is almost completely absent from sealed bidding. Negotiated contracts can be made with or without competition, and contractors that submit an offer may or may not be aware of the presence or absence of competition when

establishing their prices. The flexibility of the negotiation provides the means of achieving a fair and reasonable pricing basis without reliance upon competitive pressure alone. Negotiated contracts are solicited through Requests for Proposals.

2.5.3 Basic Acquisition Process. Appendix B provides a simplified diagram of the major steps frequently required in the acquisition process.

2.5.4 Clearance. The purpose of a business clearance is to demonstrate that the proposed acquisition conforms to good business practice, law or regulation and to justify by written evidence that the cost and price established are fair and reasonable. In addition, a business clearance serves as the historical record of the business cost and pricing aspects of an acquisition and contains all required approvals by higher authority.

2.6 WRITING CONTRACTS.

2.6.1 Uniform Contract Format. With the implementation of the FAR, all Federal Government contracts have a Uniform Contract Format as to section headings used. This contract format consists of listed parts and sections that are found in reference (j) for sealed bids and reference (k) for negotiated procurements.

2.6.2 Standard Procurement System. DoD has mandated the Standard Procurement System shall be the standard used by all services and individuals involved in the preparation of a contract. The Standard Procurement System is an automated contract writing system that standardizes procurement processes across the DoD within the Acquisition Domain. Standard Procurement System capabilities are:

- a. Provide an enterprise-wide automated contract writing system for the DoD from receipt of requirements to contract closeout.
- b. Used in a mobile, forward-deployed version (Battle Ready Contingency Contracting System) in support of contingency missions worldwide.

2.6.3 Procurement Deficiencies. Among the items which obscure the intent of a contract are:

- a. Inadequate item descriptions, inaccurate, illogical and confusing specifications and incomplete and sometimes ambiguous requirements.
- b. Unclear pricing aspects.
- c. Special clauses with ambiguous or incomplete terms.
- d. Related clauses and requirements in several different sections of the contract.
- e. Inconsistent treatment of general provisions with regard to their preprinted forms and the applicability of clauses incorporated by reference.

2.7 CONTRACTING OFFICER AUTHORITY AND RESPONSIBILITIES.

- a. The Federal Government conducts activities through employees with varying degrees of authority and responsibility. For contract administration purposes, this work is accomplished through Contracting Officers assisted by the Project Manager.
- b. It is difficult to determine the exact authority of Government employees when they and contractor personnel are in frequent contact. This difficulty is compounded by the fact that the rules that govern the extent of Government employee's authority are complicated and scattered throughout various statutes, regulations, instructions and legal principles. Problems frequently arise regarding which employees have the authority to bind the Government and what limitations, if any, have been placed on the employee's authority. The most common problems involve situations where the Government refuses payment of claims because the contractor dealt with an unauthorized agent, or where the Government seeks to revoke or countermand action taken by its employees or agents.

2.7.1 Authorized Officials.

- a. Persons who have met the prerequisites and formal training requirements mandated by the Defense Acquisition Workforce Improvement Act and who possess the actual authority to contractually bind the Government are generally referred to as "Contracting Officers".

- (1) “Contracting Officer” is defined as a person with the authority to enter into, administer and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.
 - (2) “Administrative Contracting Officer (ACO)” refers to a Contracting Officer who is administering contracts.
 - (3) “Termination Contracting Officer” refers to a Contracting Officer who is settling terminated contracts. A single Contracting Officer may be responsible for duties in any or all of these areas.
- b. Reference (1) requires that Contracting Officers below the level of a HCA shall be nominated, selected and appointed by use of a Certificate of Appointment. Such appointment must state any limitation on the scope of authority to be exercised, other than limitations contained in applicable laws or regulations. Agencies sometimes impose limitations on the authority of their Contracting Officers by prescribing procedures that must be followed in order for the Contracting Officer’s action to be binding on the Government.

2.7.2 Typical Contracting Officer’s Representative Responsibilities. Personnel performing other functions (e.g., auditors, lawyers, engineers, shipbuilding specialist/production controllers and other technical personnel) are frequently designated as Contracting Officer’s Representatives (COR). These personnel assist Contracting Officers by providing advice and frequently deal directly with contractors, but normally are not vested with contracting authority. CORs must have met training requirements and selection criteria established by higher authority in accordance with reference (m) and have a letter of appointment from the Chief of the Contracting Office entered into the contract files. Individuals authorized to be a COR have a much narrower scope of authority than the person specifically designated as a Contracting Officer. Procurement regulations usually contain express limitations on the delegation of authority to CORs. A common limitation is that CORs are not authorized to sign formal contract documents on behalf of the designated Contracting Officer. Further, CORs are not authorized to make any contractual commitments or otherwise obligate the Government, or authorize any changes that affect the contract’s price, terms or conditions.

2.7.3 Typical Contracting Officer’s Representative Duties. CORs are responsible for the technical aspects of the contract. This may include reviewing (and frequently preparing) the contract work statement, delivery requirements and specifications, clarifying technical requirements, preparing independent estimates, providing technical liaison with the contractor and monitoring contractor performance. In performing these functions, a COR must:

- a. Ensure that the contract does not become a personal service contract.
- b. Ensure that constructive changes are avoided.
- c. Control, formalize and issue technical direction.
- d. Ensure necessary file documentation.
- e. Monitor contractor performance regarding cost, quality and delivery.
- f. Communicate with the Contracting Officer.
- g. Ensure that the work being required is within the scope of the Statement of Work for the terms and conditions of the contract.
- h. Certify contractor’s invoices.
- i. Provide reports associated with the task order.
- j. Maintain the Significant Events log.
- k. Provide a past performance information survey at completion of contract evaluation.

2.7.3.1 Actual Authority Required.

- a. One of the concerns regarding CORs is that contractors may not understand the process necessary to create an “authorized representative”. It is the ACO’s responsibility to clearly articulate the authority of individuals participating in the Contract Administration Process. NAVSEA requires that proper training be completed prior to formally designating employees as CORs. There are other Government representatives who interface directly with contractors in the normal course of their duties but who are not designated as having any formal status (e.g., where technical evaluation, testing, quality control, inspections, etc., are performed by individuals other than those specifically designated as CORs).
- b. Government personnel must avoid all acts that could lead the contractor to conclude that a “constructive change” has been given even though the individual has no contractual authority to do so. The ACO must clearly state to the contractor’s representatives that no Government personnel and specifically the COR, personnel in the Waterfront Operations Department and Ship’s Force are authorized in any form to supervise the Contractor’s personnel in the performance of the terms and conditions of the contract. This action is essential because in certain cases of contractor claims the courts and boards tend to look more at the actual functions that such personnel perform than at their formal status. When they are given contract-related functions as part of their official duties, they may well be treated by the courts as authorized representatives with “implied authority” even though they are not authorized to act in a formal capacity to obligate the Government in accordance with their action.
- c. Recognizing the importance of effective Government control over the conduct of its agent, the boards and courts have frequently stated the rule that the Government is not bound by the unauthorized acts of its agents even though they are acting with “apparent authority”.
- d. It is important to recognize that the actual authority rule does not apply to contractors (i.e., contractors are governed by the usual rules of apparent authority). This means that a contractor shall normally be bound by acts of its employees with apparent authority, even though these employees may lack actual authority.

2.7.4 Implied Authority. While “apparent authority” shall not be sufficient to hold the Government bound by the acts of its agents, the boards and courts have frequently granted contractors relief on the basis of “implied authority” when such authority is considered to be an integral part of the duties assigned to a Government employee. Most of the litigated cases involving implied authority arise where Government technical personnel, lacking authority to order changes, issue interpretations or give instructions which induce the contractor to perform work beyond actual contract requirements. In such cases, the boards and courts frequently hold the Government to a “constructive change” when it is found that the Government has acted to change the contract without actually going through the “Changes” clause formalities.

2.7.5 Contractually Related Functions. Successful contract performance depends heavily on the Contracting Officer and COR relationship. This relationship should be a harmonious and close partnership, where the expertise of each is best utilized, consistent with their inherent responsibilities. The authority, responsibility and duties of the COR shall be clearly defined by the Contracting Officer, understood by the COR and discussed in detail with the contractor. The duties of assigned COR are to be included in the contract where feasible but as a minimum are to be reduced to writing by the Contracting Officer, with the original provided to the COR and a copy to the contractor and contract files. Since the COR functions not just as an official representative of the Government but also as the “eyes and ears” of the Contracting Officer he/she is required to interface directly with the Contracting Officer.

2.8 CONTRACT ADMINISTRATION.

2.8.1 Regional Maintenance Centers. RMCs are responsible for performing contract administration functions listed in references (n), (o) and (p). This responsibility extends to all Federal contracts awarded to contractors for whom the RMC is the designated Contract Administration Services (CAS) Activity, as designated in the Federal Directory of CAS Components.

2.8.2 Assignment of Contract Administration. An RMC performing CASs under a plant cognizance assignment may require performance of quality assurance, source inspection, etc., at a subcontractor’s plant which is under the cognizance of another Federal CAS component. In such a case, the RMC is to request the responsible CAS component to perform the CAS as prescribed within reference (n).

2.8.3 Contract Manager Representatives. RMC's point of contact for general contract matters is the Fleet Support Contracts Division (NAVSEA 024) of NAVSEA Contracts Directorate (NAVSEA 02). Other Divisions of NAVSEA 02 are also available to provide assistance. They generally deal with specific programs such as NAVSEA 022 (Shipbuilding Contracts Division), NAVSEA 025 (Surface Systems Contracts Division) and NAVSEA 026 (Undersea Systems Contract Division), etc.

2.8.4 Correspondence and Visits. Refer to reference (n) for contract administration correspondence, pertinent correspondence conducted between the Contract Administration Office (CAO) and the contractor and visits to contractor's facilities.

2.8.5 Contracting Officer Warrants. NAVSEA (SEA 02) issues all Contracting Officer warrants to RMC Contracting Officers, including Corporate ACO warrants and leasing warrants, in accordance with the provisions of reference (l).

2.8.6 Involvement. Involvement, previously called engagement, is defined as aggressive contract administration based on an in-depth knowledge of the contractor's operations, especially any weaknesses in areas such as policies, procedures and performance. Reference (q) incorporates new laws and policies, improving in the area of teamwork, with the goal of creating an acquisition system that capitalizes on the strengths of each and every participant. To implement involvement for ship repair work, RMCs shall take the actions described in this section when appropriate. The complexity and duration of the work shall significantly influence the extent to which these functions should be performed.

2.8.7 Special Requirements in Schedules. When the work effort is extensive or availability dates short and the work complex, PCOs may require in the solicitation that the prospective contractor submit data on the proposed manning of the ship work, by trades, and the subcontractors to be used during the contract. The docking date and date(s) for accomplishing certain test(s) may be included in the specifications, if considered necessary because of significant known or suspected work. Contract completion dates have been missed due to inadequate scheduling of tests that did not permit time to correct deficiencies or because planning for the test schedule was inadequate.

2.8.8 Communications with Fleet Representatives. RMCs should provide the Type Commanders any estimated impact on availability completion dates due to approval of new work items. Such approvals should be received early in the availability to minimize cost and impact to the schedule. Periodic meetings of RMC personnel with the ship's Commanding Officer and department heads shall be held in accordance with Volume II, Part I, Chapters 3 and 4 of this manual. The ship is the customer and the Commanding Officer often knows when work is not progressing properly or the quality of work is unsatisfactory. During these meetings, the Availability Project Manager shall brief Ship's Force on the status of all work-by-work items and on corrective measures being taken by the contractor to advance the work or redo unsatisfactory work.

2.8.9 Communications and Familiarity with Contractors.

- a. Essential information is generally provided by the contractor while briefing RMC personnel on work status and problem areas. During scheduled progress meetings, the RMC should obtain or generate a list of Government actions or inactions that the contractor claims are delaying the work (e.g., delays in receipt of Government Furnished Material or in Government authorization to proceed with new or changed work). To the extent the contractor identifies any Government action or inaction which he claims is delaying work, the RMC representative shall advise the contractor to comply with the contract's notification of change requirements, advise the ACO and document the significant event.
- b. Appropriate RMC personnel, especially the senior designated RMC representative at the work site, shall become familiar with the contractor's Work Breakdown Structure generally used for both cost control and scheduling. The designated RMC representative should know how the contractor uses the system and what reports the system generates. Many shipyards prepare a percent for completion report and generate a report of Work Breakdown Structure items that have missed the completion date. Access to such reports should provide the RMC with the data needed to require timely corrective action by the contractor to meet the job order completion date. Information on work status, which the RMC is generally required to maintain for progressing purposes, is also provided through use of the bar charts. A missed milestone for a controlling work item should alert the RMC that corrective action might be needed.

2.8.10 Government Furnished Property. RMCs are primarily concerned with two types of Government Furnished Property (GFP): Government Furnished Material, which includes all types of tangible items (e.g., equipment, repair parts, consumables, etc.), and Government Furnished Information (GFI), which includes tangible and electronic forms of Government data, such items as plans, blueprints, test memos and technical manuals. GFP is addressed in detail in Chapters 7 and 10 of this volume.

2.8.11 Use of Change Orders and Avoiding Constructive Change Orders. RMCs shall establish procedures to minimize the need for change orders, particularly in the case of FFP contracts. RMCs should always avoid creating constructive change orders. A constructive change order is an informal change to the contract resulting from Government actions or inactions that require the contractor to perform work beyond that which is required by the contract. These constructive changes can result in unauthorized commitment of Government funds, claims or litigation against the Government. RMCs shall provide guidance to Ship's Force and other Government personnel to preclude intentional or unintentional creation of a constructive change order.

2.8.12 Avoidance of Delays. RMCs shall establish procedures to require the designated Availability Project Manager to provide timely information to the responsible project officer. When the RMC representative at the work site judges that work progress is unsatisfactory, that test schedules are improper because they do not permit sufficient time to correct deficiencies, that open-and-inspect items are not being accomplished promptly, that the contractor is manning the job improperly, or that the procurement and receipt of contractor-procured material is delayed, the RMC representative should advise the contractor and document the significant event. Pertinent data should be communicated to the contractor and confirmed in writing through the Contracting Officer. If the contractor insists that progress, performance and scheduling are in order, the Availability Project Manager should consult the ACO for appropriate contractual action. If it appears that contract performance may be slowed because of delay in a Government approval required by the work item or because of delay in issuing a required change to the job order or other omission by the Government, the RMC representative at the work site should request that the cognizant RMC department either expedite the required approval for the change or correct the omission.

2.8.13 Improper or Unsatisfactory Work. When work performance is determined to be improper or unsatisfactory, the contractor shall be so advised. Before advising the contractor, the RMC representative at the work site shall review the work item to ensure that no defect in the specifications contributed to or caused the deficiency. The RMC shall not include improper or unsatisfactory work in the base for computing progress payments. When a contractor disagrees with an RMC determination that corrective action is necessary, the RMC representative at the worksite shall try to resolve the issue with the contractor to mutual satisfaction. If this is unsuccessful, the RMC representative shall consult with the ACO. The ACO shall review the RMC/contractor disagreement and direct the contractor to take appropriate corrective action, as required. See Chapter 11 of this volume for additional information concerning corrective action documentation.

2.8.14 Records. Throughout contract performance, the RMC representative at the work site shall maintain written records of deficiencies in work progress and accomplishment. These records shall be used for such purposes as the determination of liquidated damages and evaluation of claims. The records shall also serve as the factual account for briefing higher authority if required. Written records must reflect on the deficiencies and the steps the RMC has taken to obtain corrective action including all actions the contractor takes. These records serve as input to significant events files. The use of the records for responsibility determinations is of particular importance. Government policy requires contracts be awarded to responsible contractors (i.e., contractors which can perform if awarded the contract). The RMC shall maintain sufficient written records of past contractor performance to permit an informed determination of responsibility or non-responsibility to ensure an adverse determination of responsibility is not overturned by higher authority or the Small Business Administration. These records shall be used to evaluate a contractor's proposal where past performance is an evaluation factor.

2.9 SOCIOECONOMIC PROGRAMS. The Small Business, Veteran-Owned Small Business, Service-Disabled Veteran-Owned Small Business, Historically Underutilized Business Zone Small Business, Small Disadvantaged Business and Women-Owned Small Business programs are founded in law and cover both prime contracting and subcontracting, for which annual goals are assigned to NAVSEA by the Office of the Secretary of the Navy. Command goals are based upon the share or percentage of total obligated dollars. As HCA for RMC contracting, the Commander, NAVSEA, is responsible for achievement of program goals and implementation.

2.9.1 Deputy for Small Business. Commanding Officers shall appoint a full-time or part-time Deputy for Small Business, who shall report directly to the appointing official on Small Business Program matters. The appointment should reference the pertinent responsibilities in references (r) and (s). The appointment shall be in accordance with reference (t). Individuals appointed shall possess business acumen, knowledge of contracting policies and procedures, and the training and background essential to accomplish the objectives of the Small Business Program.

2.9.2 Subcontracting Program Administration. Reference (r), sections 705-2 and 705-4, contain the responsibilities of the Contracting Officer. These responsibilities include determining the need for a subcontracting plan and reviewing the subcontracting plan. Reference (r), section 706(a)(i) contains the responsibilities of the ACO. These responsibilities include reviewing, evaluating, and approving master subcontracting plans.

2.10 PROCESSING CONTRACTUAL ACTIONS.

2.10.1 Policies. This section discusses policy concerning the processing of the more common contractual actions.

2.10.1.1 Forward Price Rate Agreement. A Forward Price Rate Agreement (FPRA) is a written agreement negotiated between a contractor and the Government to make certain rates available during a specified period for contractual actions. Such rates represent reasonable projections of specific costs that are not easily estimated for, identified with or generated by a specific contract, contract end item or task. These projections may include rates for labor, indirect costs, material obsolescence and usage, spare parts provisioning and material handling. Negotiation of FPRAs may be requested by the Contracting Officer, the contractor or initiated by the ACO. In determining the need for an FPRA, the ACO should evaluate whether the benefits from the agreement are worth the effort of establishing and monitoring it. FPRAs should only be negotiated with contractors having a significant volume of Government contract proposals. The responsible RMC shall determine whether to establish an FPRA. Indirect costs commonly defined as overhead are defined and described in reference (u) including treatment and application of indirect costs to contracts.

2.10.1.2 Pricing of Deleted Work. Deletions should be based on the reasonable value of the change at the time the work would have been performed. The deletion values should not be based on itemized estimates provided by the contractor at the time of contract award. The deletion value should include all costs reasonably associated with the deleted work, including profit.

2.10.1.3 Awarding Job Orders. The Government uses the sealed bidding and negotiation methods of contracting in awarding contracts, including job orders. These methods of contracting are covered in detail in references (j) and (k).

2.10.1.4 Objective of Procurement Process and Contract Pricing. The objective of the procurement process is to acquire supplies and services of the desired quality in a timely manner at "fair and reasonable" prices. The objective of contract pricing is to establish and administer an arrangement that poses a fair and reasonable price for delivery of a product or service.

2.10.1.5 Pricing Responsibility. The Contracting Officer is responsible for exercising proper judgment and is solely responsible for the final pricing decision. Although the Contracting Officer is responsible for the final pricing decision, the Contracting Officer is not expected to perform all functions leading to the contractual document's execution. Although the recommendations and counsel of contributing specialists, including auditors, are advisory only, the Contracting Officer should include comments in the price negotiation memorandum when significant auditor or other specialists' recommendations are not adopted.

2.10.1.6 Adjudications on the Basis of Estimates. NAVSEA policy requires changes to be adjudicated on the basis of estimates. Adjudications shall not be deliberately delayed to allow the determination of actual incurred costs from which to adjudicate.

2.11 PROPOSAL ANALYSIS.

2.11.1 Cost Analysis. The purpose of proposal analysis is to ensure that the final agreed-to price is fair and reasonable. Proposals are evaluated using price analysis or cost analysis. Price analysis, which evaluates the bottom line pricing, is the preferred method when the action is below the cost or pricing data threshold (\$700,000) and when information is available on which to base price analysis. Cost analysis, which evaluates each cost element of a proposal, is used when proposals exceed \$700,000, when no basis for price analysis exists or when deemed appropriate by the Contracting Officer. Exercising sole responsibility for the final pricing decision, the Contracting

Officer shall coordinate a team of experts in such fields as logistics, finance, law and contract audit, quality control, engineering, technical and pricing to provide assistance and advice in proposal analysis, including participation in negotiations with the contractor.

2.11.2 Field Pricing Support. Field pricing support is a review and evaluation of the contractor's or subcontractor's proposal by any or all field pricing support personnel. When cost or pricing data are required, contracting offices shall request a field pricing report (which may include an audit review by the cognizant contract audit agency) before negotiating any contract or modification.

2.11.3 Cost Realism Analysis. Even when adequate price competition exists, cost realism analysis may be appropriate, especially for cost-reimbursement contracts, and to ensure a reasonable expectation that proposed costs are consistent with the technical proposal. Cost realism analysis should also be used when the solicitation contains new requirements that may not be fully understood by competing contractors, when there are quality concerns, or when past experience has indicated that contractors have proposed costs which have resulted in quality or service shortfalls.

2.11.4 Subcontract Pricing Considerations. The Contracting Officer is responsible for the determination of price reasonableness for the prime contract. To make this determination, an analysis is required of all relevant facts and data, including required subcontractor cost or pricing data, results of the prime or higher tier subcontractor's analyses of subcontractor proposals, the field pricing support, if any, and historical pricing data. Even if a contractor or higher tier subcontractor has an approved purchasing system or performs an analysis of subcontractor cost or pricing data, the Contracting Officer or field pricing support team still has the responsibility of analyzing the prime contractor's submission, including the subcontractor cost or pricing data. The prime contractor or higher tier subcontractor is responsible, however, for conducting appropriate price and cost analysis before awarding a subcontract.

2.11.5 Requests for Procurement Requiring Information on Purchased Materials. Purchased materials are raw materials, purchased parts, components or end items to be delivered under a contract which are not fabricated or produced by the contractor. Timely submission of information is required by negotiators or other contracting personnel who can properly evaluate the purchased materials portion of price quotations. This information is necessary particularly when competition is lacking or is inadequate to control the prices initially proposed. The prime categories requiring treatment are new contracts where a sole source or competition is limited, re-pricing of re-determinable and incentive contracts and equitable adjustments under the Changes clause (and other clauses having similar provisions for such adjustments).

2.11.6 Price Analysis. Price analysis is the process of examining and evaluating a proposed price without evaluating its separate cost elements and proposed profit. Price is cost plus any fee or profit applicable to the contract type. The Contracting Officer is responsible for selecting and using whatever price analysis techniques shall ensure a fair and reasonable price. Price analysis shall generally be used in lieu of cost analysis, regardless of the dollar amount for contracts, where the conditions of reference (k) are met (e.g., prices are based on adequate price competition).

2.11.7 Use of Independent Estimates. Independent estimates are preferred for pricing sole source contracts and contract modifications less than the cost and pricing data threshold of \$700,000. An independent estimate forms the basis for pricing. Such estimates should be made without reference to the supporting or back-up cost or pricing data the contractor has, nor shall such data be requested when price analysis is to be employed. When cost or pricing data is submitted or identified, a cost analysis shall be performed on the data.

2.12 WORK SCOPE.

2.12.1 Reaching Work Scope Understandings. It is unusual for an RMC to have to reach a work scope understanding with the contractor for a contract itself. Such understandings are usually reached in pre-bid/negotiation conferences or other discussions. Therefore, work scope understandings are addressed in the context of contract changes. Before a contractor can prepare an estimate of the cost of a change, it first must determine the work scope of the change. There should be an understanding between the contractor and the negotiating team on the work scope before the change is adjudicated. If there is no common basis of understanding the requirements of the change, there cannot be a common basis for adjudication. Reaching an early understanding of work scope prevents later conflicts and permits the negotiating team to limit the evaluation of the contractor's proposal to the estimated cost of performance. For un-priced modifications, a work scope understanding should be reached with the contractor before issuing the un-priced modifications. Work scope understandings shall be reached before

completion of the technical analysis. These understandings may be accomplished by any reasonable means including work scope conferences. The difficulty in reaching work scope understandings and the need and timing for holding work scope conferences is directly related to the clarity and accuracy of the applicable specifications. When the specifications are clear and accurate, a work scope conference may not be needed, especially if the contractor's proposal raises no serious technical questions.

- a. A work scope conference shall be required if the specifications are not clear and accurate or if the contractor's proposal raises serious technical questions. If the specifications are not clear, the conference should be held before proposal submission. If the specifications raise serious technical questions, the conference should be held after receipt of the proposal. When there are serious disagreements about the work scope, a work scope conference should be held, preferably before receiving the proposal. The ACO shall establish local procedures for reaching work scope understandings with the contractor including the use of work scope conferences.
- b. When a work scope understanding is reached before proposal submission, the proposal for pricing the change is to be submitted in accordance with the understanding. The contractor's proposal shall be submitted based on the work scope understanding reached. The technical analyst reviewing the work scope description prepared by the contractor or attending the work scope conference should conduct, if possible, the technical evaluation of the proposal when it is received.

2.12.2 Work Scope Conferences. The extent of participation by the Government and contractor representatives at work scope conferences shall be determined based on type and complexity of work, issues for resolution and gross dollar value. Participants should be limited to necessary personnel. A work scope understanding reached by a meeting between only the technical analyst and contractor's counterpart is generally better for the participants. The negotiator, legal counsel, ACO, auditor, engineers and other specialists should also be included when there is a legitimate need for them.

2.12.3 Work Scope Data. Work scopings shall include, but not be limited to, the following data:

- a. Description of the work required by the contract before the change, work that is deleted by the change and work deleted by the change that already has been completed. The description is to include a list of components, equipment and other identifiable property.
- b. The status of manufacture, procurement or installation of such property is to be indicated. Personnel shall furnish separate descriptions for design work and production work. Raw materials, purchase parts, components and other identifiable hardware that the change makes expendable, and which the contractor shall or shall not retain, are to be listed for later disposition.

2.13 TECHNICAL ANALYSIS REPORTS.

2.13.1 General. A Technical Analysis Report (TAR) shall be prepared in accordance with Volume VI, Chapter 31 of this manual. The TAR shall contain a statement of the extent to which the analyst recognized that any cost or pricing data submitted or made available by the contractor was inaccurate, non-current or incomplete.

- a. When the statement advises that there was defective data, the analyst shall clearly delineate how the evaluation was conducted and the effect of deficient data on man-hours or material dollars in the proposal and the analysis.
- b. The TAR shall clearly delineate the data not relied on during the evaluation.
- c. The TAR shall reflect the technical analyst's professional judgment of the reasonableness of the man-hours and material estimates in the contractor's proposal, the data accompanying the proposal and the back-up data used by the contractor in preparing the proposal when a technical cost analysis is performed.
- d. The TAR shall specifically address material which has been made excess or obsolete by a change and whether the Government has been given a credit or was charged for the material. The Government property administrator must be advised when title to Contractor Acquired Property is to remain in the Government at the end of the contract.

- (1) If the technical analyst concludes the contractor's proposed labor hours and material is reasonable, the TAR must state the basis for the conclusion, e.g., historical data or actual return cost data. If, in the professional opinion of the technical analyst, the contractor's labor or material estimate is too high or too low in any area, the report must indicate the exact area of the proposal or back-up data in which the differences appear. The report also must indicate the rationale of the technical analyst and the contractor.
- (2) The TAR shall reference the local instructions and procedures followed in the evaluation instead of spelling out the steps in detail. When local instructions and procedures are not followed, the TAR shall detail the steps taken in the evaluation and the rationale for not following the local instructions and procedures. The technical analyst shall sign the TAR, which shall be approved in accordance with local procedures. When independent estimates are made, the independent estimate shall serve the purpose of a TAR. Technical analysts should in particular keep in mind that they should provide the negotiator with data that can be used in negotiations.

2.13.2 Local Instructions and Procedures.

- a. RMCs shall establish local instructions and procedures to cover the steps to take in conducting technical evaluations of various types of proposals and the preparation of TARs to submit under various circumstances. Such instructions and procedures shall:
 - (1) Ensure practices among the technical analysts shall be uniform.
 - (2) Ensure only essential steps and information shall be included.
 - (3) Require formats for preparation of the TAR be standardized and simplified to the maximum extent possible.
- b. Local instructions and procedures shall stress that for small gross value proposals and changes which are not complex the procedural steps are to be followed with the expenditure of minimum effort and the use of spot-check techniques, where appropriate. Procedures shall provide for notification of the Government property administrator when material has been made excess or obsolete by a change and the Government is charged for the material.

2.14 AUDIT EVALUATION OF CHANGE PROPOSALS AND SUBMISSION OF ADVISORY AUDIT REPORTS.

2.14.1 Audit Evaluation. This section is closely related to field pricing support described in paragraph 2.11.2 of this chapter. The key difference is that where field-pricing support envisions involving two or more Contracting Officers for a contractual action, audit evaluation envisions only one Contracting Officer (i.e., the ACO at the RMC responsible for the contractual action). Field pricing support primarily addresses the award of contracts and major modifications, while audit evaluation primarily addresses the more routine contractual modifications processed by RMCs.

2.14.2 Contractual Audit Reports. RMCs are not precluded from requesting audits regarding contractual modifications for less than the dollar thresholds of those pertaining to certified cost or pricing data where deemed necessary by the Contracting Officer. The audit evaluation to be performed by the auditor shall be in accordance with the directives under which the auditor operates, the procedural arrangements made between the ACO and the head of the audit office, the contents of the TAR and the special considerations identified in the request for audit evaluation and submission of the Advisory Audit Report (AAR).

2.14.3 Advisory Audit Reports. On completion of the audit evaluation, the auditor shall prepare the AAR in accordance with the directives under which the auditor operates and the procedural arrangements made with the ACO and submit the report to the negotiator. The AAR shall incorporate the finding of the TAR, when provided, and address any additional items requested by the ACO or ACO representative. The ACO or ACO representative may request that a discussion of the audit findings be held prior to the release of the formal audit report.

2.15 CONTRACT MODIFICATIONS.

2.15.1 Introduction. This section covers the more pertinent regulatory requirements regarding contract modifications contained in the FAR, DFARS and NMCARS.

2.15.2 Restrictions. Reference (l) contains extensive coverage of the various types of contract modifications. The requirements apply to both new construction and repair and overhaul contracts, where appropriate, unless otherwise indicated.

- a. Only Contracting Officers acting within the scope of their authority are empowered to execute contract modifications on behalf of the Government. Other Government personnel shall not:
 - (1) Execute contract modifications.
 - (2) Act in such a manner as to cause the contractor to believe that they have authority to bind the Government.
 - (3) Direct or encourage the contractor to perform work that should be the subject of a contract modification.
- b. Contract modifications, including changes that could be issued unilaterally, shall be priced before their execution if this can be done without adversely affecting the interest of the Government. If a significant cost increase could result from a contract modification and time does not permit negotiation of a price, at least a maximum price shall be negotiated unless impractical.

2.15.3 Types of Contract Modifications. There are two types of contract modifications: bilateral and unilateral.

- a. A bilateral modification (supplemental agreement) is a contract modification that is signed by the contractor and the Contracting Officer. Bilateral modifications are used to:
 - (1) Make negotiated equitable adjustments resulting from the issuance of a change order.
 - (2) Definitize letter contracts.
 - (3) Reflect other agreements of the parties modifying the terms of contracts.
- b. A unilateral modification is a contract modification that is signed only by the Contracting Officer. Unilateral modifications are used to:
 - (1) Make administrative changes.
 - (2) Issue change orders.
 - (3) Make changes authorized by clauses other than a changes clause (e.g., Property clause, Options clause, Suspension of Work clause, etc.).
 - (4) Issue termination notices.

2.15.4 Order of Preference for Contract Modifications. The order of preference for contract modifications is:

- a. Fully adjudicated supplemental agreement.
- b. Maximum/minimum priced supplemental agreement.
- c. Un-priced, time-adjudicated; supplemental agreement, time only.
- d. Change order.

2.15.5 Notification of Contract Changes.

- a. When a contractor determines the Government has affected or may affect a change in the contract that has not been identified as such in writing and signed by the Contracting Officer, it is necessary that the contractor notify the Government in writing as soon as possible. This shall permit the Government to evaluate the alleged change and perform the following:
 - (1) Confirm that it is a change, direct the mode of further performance and plan for its funding.
 - (2) Countermand the alleged change.
 - (3) Notify the contractor that no change is considered to have occurred.
- b. The clause at reference (v):
 - (1) Incorporates the policy expressed above.

- (2) Requires the contractor to notify the Government promptly of any Government conduct that the contractor considers a change to the contract.
- (3) Specifies the responsibilities of the contractor and the Government with respect to such notifications.

2.15.6 Funding. The Contracting Officer shall not execute a contract modification that causes or shall cause an increase in funds without having first obtained a certification of funds availability. The certification shall be based on the negotiated price, except that modifications executed before agreement on price may be based on the best available estimate of cost. The exception is for modifications to contracts that:

- a. Are conditioned on availability of funds.
- b. Contain a limitation of cost or funds clause.

2.15.7 Notification of Substantial Impact on Employment. The Secretary of Defense is required to notify the Secretary of Labor if a modification of a major defense contract (over \$5,000,000) or subcontract (over \$500,000) shall have a substantial impact on employment. This requires the contractor notify the Contracting Officer when a contract modification shall have a substantial impact on employment.

2.15.8 Identification of Foreign Military Sales Contract Modifications. Each Foreign Military Sales (FMS) modification must be identified by clearly stamping or otherwise indicating "FMS Requirement" on the face of the modification. It also must specify within the modification each FMS case identifier code by line or sub line item number, e.g., FMS Case Identifier GY-D-DCA.

2.15.9 Change Orders. Government contracts contain a "Changes" clause that permits the Contracting Officer to make unilateral changes, in designated areas, within the general scope of the contract. These are accomplished by issuing written change orders on Form SF 30, Amendment of Solicitation/Modification of Contract (SF 30), unless otherwise provided. The contractor must continue performance of the contract as changed, except that in cost-reimbursement or incrementally funded contracts the contractor is not obligated to continue performance or to incur costs beyond the limits established in the "Limitation of Cost or Limitation of Funds" clause. The Contracting Officer may issue a change order by electronic message under unusual or urgent circumstances, provided that:

- a. Copies of the message are furnished promptly to the same addressees that received the basic contract.
- b. Immediate action is taken to confirm the change by issuance of an SF 30.
- c. The message contains similar information to that required by the SF 30 (except that the estimated change in price is not to be indicated), including in the body of the message the statement, "Signed by (Name), Contracting Officer".
- d. The Contracting Officer manually signs the original copy of the message.

2.15.9.1 Authority to Issue Change Orders. Change orders are to be issued by the Contracting Officer except when authority is delegated to an ACO. This authority has been delegated by COMNAVSEA to RMC Contracting Officers.

2.15.9.2 Change Order Accounting Procedures. Contractors' accounting systems are seldom designed to separate the costs of performing changed work. Therefore, before prospective contractors submit offers, the Contracting Officer should advise the contractors of the possible need to revise their accounting procedures to comply with the cost segregation requirements of the Change Order Accounting clause in reference (v). The following categories of direct costs can be made separate and accountable under the terms of the "Change Order Accounting" clause:

- a. Nonrecurring costs (e.g., engineering costs and costs of obsolete or re-performed work).
- b. Costs of added distinct work caused by the change order (e.g., new subcontract work, new prototypes or new retrofit or back-fit kits).
- c. Costs of recurring work (e.g., labor and material costs).

2.15.10 Change Order Documentation. When changes are not forward-priced, they require two documents: the change order, and a supplemental agreement reflecting the resulting equitable adjustment in contract terms. If an equitable adjustment in the contract price or delivery terms or both can be agreed upon in advance, only a supplemental agreement need be issued. However, administrative changes and changes issued according to a clause

giving the Government a unilateral right to make a change (e.g., an “Option” clause) initially require only one document. In situations where an un-priced or undefinitized change is issued, the change must generally be sufficiently definitive so that the contractor is obligated to total performance within a stated period of time for a maximum not-to-exceed price that the Government can be charged under the change order. Exceeding this price is not an item subject to negotiation with the Government. The maximum not-to-exceed price shall bear a reasonable relationship to the work to be performed. All such un-priced or undefinitized changes are to contain definitization schedules that provide for definitization by the earlier of two periods. The first is the end of a 180-day period beginning on the date of issuance of the change. (This period may be extended, as required, but may not exceed the 180-day period beginning on the date the contractor submits a qualifying proposal.) The second is the date on which the amount of funds expended under the change order is equal to more than 50 percent of the maximum not-to-exceed price.

2.15.11 Definitization. Contracting Officers shall negotiate equitable adjustments resulting from change orders in the shortest practical time. ACOs negotiating equitable adjustments are to obtain the Contracting Officer’s concurrence before adjusting the contract delivery schedule.

2.15.12 Complete and Final Equitable Adjustments. To avoid controversies that may result from a supplemental agreement containing an equitable adjustment as the result of a change order, the Contracting Officer shall:

- a. Ensure that all elements of the equitable adjustment have been presented and resolved.
- b. Include in the supplemental agreement, a release similar to the following:

“CONTRACTOR’S STATEMENT OF RELEASE”

“In consideration of the modification(s) agreed to herein as complete equitable adjustments for the contractor’s _____ (describe) _____ proposal(s) for adjustment, the contractor hereby releases the Government from any and all liability under this contract for further equitable adjustments attributable to such facts or circumstances giving rise to the proposal(s) for adjustment (except for) _____.”

2.15.13 Consideration as Command Key Indicator. HCAs are to consider the backlog and age of undefinitized change orders as a command key indicator, placing routine management emphasis on undefinitized change orders.

2.15.14 Forms.

- a. Except for the options stated in reference (w) section (a)(2), the SF 30, Amendment of Solicitation/Modification of Contract, shall be used for the following:
 - (1) Any amendment to a solicitation.
 - (2) Change orders issued under the “Changes” clause of the contract.
 - (3) Any other unilateral contract modification issued under a contract clause authorizing such modification without the consent of the contractor.
 - (4) Administrative changes such as the correction of typographical mistakes, changes in the paying office and changes in accounting and appropriation data.
 - (5) Supplemental agreements.
 - (6) Removals, reinstatement or addition of funds to a contract.
- b. The SF 30 may be used for modifications that change the price of contracts for the acquisition of petroleum as a result of economic price adjustment, termination notices and purchase order modifications as specified in reference (w) section (a)(2). If it is anticipated that a change shall result in a price change, the estimated amount of the price change shall not be shown on copies of the SF 30 furnished to the contractor. The Optional Form 336 (OF 336), Continuation Sheet or a blank sheet of paper, may be used as a continuation sheet for a contract modification.

2.16 CLAIMS POLICY.

2.16.1 Definitions and Approval Levels. A claim is defined in reference (x). A written demand or written assertion by the contractor seeking the payment of money exceeding \$100,000 is not a claim under the Contract Disputes Act (CDA) of 1978 until certified as required by the Act and reference (x). The contractor must request a Contracting Officer's decision under the CDA of 1978. All claims, regardless of amounts, shall be reported to NAVSEA 024 by the RMC Contracting Officer. Claims received in the field shall be handled by the RMC. This includes reviewing the claims for sufficient processing, unless the specific circumstances of a claim dictate that NAVSEA Headquarters shall handle these matters. NAVSEA 024 shall notify the RMC in such cases. If all data necessary to adequately support the requested compensation is included in the contractor's submission, a contract modification should be executed so that payment can be made. Any submission from a contractor requesting payment beyond the obligations covered in the contract, which does not request a Contracting Officer's decision under the Disputes Act and contains the claim certification (if applicable), is considered a claim.

2.16.2 Claims Prevention. NAVSEA's policy is to try to resolve all contractual issues by mutual agreement at the Contracting Officer's level without litigation. In appropriate circumstances, the Contracting Officer should consider the use of informal discussions between parties or individuals who have not participated substantially in the matter in dispute to aid in objectively resolving the differences. Any issue that remains unresolved between the contractor and the Navy represents a potential claim. To minimize the potential for claims, Navy personnel are expected to be aware of problem areas and to keep adequate records of events, particularly significant events. Matters having potential problems raised with or by the contractor must be fully documented and brought to the attention of the responsible Contracting Officer for prompt resolution. Issues leading to claims are often based on assessments made, opinions expressed or other actions or inactions by Navy personnel that caused the contractor to perform additional work. Lack of schedule adherence or cost control by the contractor may lead the contractor to seek recovery of consequent losses through a claim. Identification of significant actions regarding contractor management and performance must be documented, including actions pertaining to manning, facilities, methods and procedures. Proper analysis of data may lead to the identification and mitigation or avoidance of potential trouble areas. In an effort to prevent claims, the RMC Commanding Officers shall:

- a. Ensure the participation of all departments in the identification and elimination of potential claims items throughout the procurement process.
- b. Avoid, to the maximum practicable extent, all Government actions or inactions that impede contractor performance, particularly those that impede efforts to improve productivity. Contractors should be encouraged to report any such Government conduct.
- c. Monitor contractor performance and ensure that sufficient data is developed during contractor performance to enable prompt and accurate analysis of any claim. Use this same documented data to identify actual and potential problems and to defend against claims, overruns and other problems.
- d. Strive to improve the ability to analyze and develop positions on contractor proposals that include delay and disruption, particularly those involving an allegation concerning cumulative effects. This requirement is closely related to the requirements above regarding monitoring of contractor performance.
- e. Conduct claims avoidance presentations periodically to ensure that CAO personnel are instructed in claims avoidance procedures. Emphasis should be placed on increasing the effectiveness of the local claims avoidance program.
- f. Assess contractor responsibility, through pre-award surveys and records of past performance under Government contracts, to ensure that award is made only to those companies that are capable of meeting the contract requirements.
- g. Maintain lines of communication with PCOs to ensure that the lessons learned while administering current contracts can be used to benefit the Navy when planning and drafting future contract actions.
- h. Promptly review all new contracts assigned for administration and identify all clauses, provisions, specifications and any other contract requirements that are new to the CAO or have the potential for causing a claim if not properly administered. CAO personnel shall be properly briefed. These requirements also apply to job orders and modifications, where appropriate.

- i. Adhere to requirements for properly documenting significant contract events.

2.16.3 Processing Claims and Requests for Equitable Adjustment. Contracting Officers must be familiar with the CDA of 1978 which establishes procedures and requirements for asserting and resolving claims by or against contractors arising under or relating to a contract subject to the Act. The Act provides for payment of interest on contractor claims, for the certification of contractor claims in excess of \$100,000, and for a civil penalty for contractor claims that are fraudulent or based on misrepresentation of fact. For claims exceeding \$100,000 the Act requires the Contracting Officer's Final Decision (COFD) within 60 days or notification to the contractor of the time within which the COFD shall be issued. A direct appeal to the Armed Services Board of Contract Appeals is allowed if there is an undue delay in issuance of the COFD, under such circumstances, the FAR considers such actions to be deemed denial of the contractor's claim.

- a. Fleet Support Contracts Division (SEA 024) shall have overall responsibility for NAVSEA claims settlement as specified below:
 - (1) Provide direction and assistance to field activities relative to claims and Requests for Equitable Adjustment (REA), as requested.
 - (2) Assign claims for processing.
 - (3) Process particular claims and REAs that are deemed to be of a precedent-setting nature, as determined by Headquarters.
 - (4) Provide technical support to field claims and REA teams, as requested.
 - (5) Compile and report status and statistics relative to claims and REAs which are either active, settled or under appeal.
 - (6) Review and approve all field-originated COFDs under disputes which are valued by the contractor at \$1 million or over. Review and revision shall be done in conjunction with NAVSEA 00L for evaluation of entitlement, accuracy and completeness. Following Headquarters' review and approval, the COFD shall be returned to the ACO for execution and delivery to the contractor.
 - (7) Budget for, control and allocate the required resources for Headquarter's claims management efforts, including computer services and litigation support contracts.
 - (8) Support field efforts to secure funding for claim settlement.
- b. RMC Contracting Officers shall report all claims, regardless of amount, and REA claims of \$250,000 and over to NAVSEA 024 and forward copies of all claims and reported REAs within one week of receipt. NAVSEA shall report any claims in excess of \$1 million to Assistant Secretary of the Navy (Research, Development and Acquisition) within one week after receipt. The cognizant RMC shall be responsible for establishing a claim analysis team and for assigning to the team a Contracting Officer or negotiator to act as the Claims Team Manager, an engineer to be the Claims Team Engineer, and additional personnel (Legal, Defense Contract Audit Agency Auditor or Project Officer) as necessary for effective claim processing. The claim analysis team should be physically separate from the rest of the RMC operation and shall not include personnel involved in the claim allegations.
- c. REAs and claims often involve complex legal, factual and financial issues. These issues normally require extensive fact-finding and analyses. A system of checks and balances is needed to determine entitlement, if any, and any expenditure of Government funds. In REA and claim submissions, contractors often fail to differentiate between factual and judgmental assertions or fail to support all assertions with specific evidence; such submissions only serve to delay the process and frustrate the contractor and the Government. Rejection and return of the REA or claim is required should the documentation and support remain deficient. Before the claim can be evaluated and payment made for any Government-responsible costs, the contractor must provide data that illustrates that all claimed costs are accurate and the Government is responsible for the claimed costs.

- d. Preliminary review of the claim shall be made to determine acceptability and regulatory compliance. On REAs and claims with allegations proposing an impact of delay, disruption (local and cumulative), congestion, and acceleration and in cases involving specific constructive changes, the following or similar documentation (to the extent applicable and practicable) needs to be included in the claim or REA to enable Government evaluation and to avoid the rejection and return of the submission to the contractor as unsupported:
- (1) The assertions must be supported by specific evidence (including applicable historical evidence such as bid and planned costs supported by shop-level production data from contractor's books and records). In general, the Government shall not acknowledge damages based on a reason-value or total cost concept. The contractor must establish a causal link or connection between the alleged Government-responsible act and the increased costs. Opinions, conclusions or judgmental assertions not supported by such evidence or by a sound and reasonable rationale are without probative value and are unacceptable.
 - (2) Claimant's documentation or charts of production manning for all trades and all projects throughout the period of performance, proposed and actual, should be available.
 - (3) A copy of the claimant's master schedule originally developed to support work items/packages and start and finish milestones must be included. Documentation supporting all updates and the interrelationship of schedule slippage with REA or claim items, sequence, data, etc. should also accompany a claim or REA.
 - (4) Claimant's shop manning requirements for all trades through period (proposed and actual) of performance must be provided.
 - (5) Contractors must provide basic bid data broken down into prime contractor hours by item with prime contractor responsibility, prime contractor material by item number, identification of material source and price bid, and the subcontracted portion of the basic bid, by item, with copies of subcontractor contracts definitizing the tasks to be performed by the subcontractors and the material to be supplied by the subcontractor as part of the basic bid. The total of all items must equal the bid price, or an explanation must be provided.
 - (6) Contractor must provide its planned or budgeted man hours after contract award for each item by trade and define whether the hours were performed by the prime contractor or subcontractor at a regular or premium time.
 - (7) Claimant's actual man-hours expended for each work item by trade excluding modifications as performed by the prime contractor and subcontractors must also be included. Documentation needs to support the prime contractor's actual material costs for the basic job order and subcontractor costs and if the subcontractor has made a demand on the prime contractor. Hours should be broken down by straight time and premium time hours.
 - (8) A listing of all contract modifications by work item with the man hours proposed, budgeted, agreed to and actually expended by modification must be provided.
 - (9) A breakdown of the entire claimant's overtime expended by work item or modification by trade, weekly through the contract performance period must be provided.
 - (10) Copies of all individual purchase orders, invoices and receipts for payment of all subcontracts and material in support of REAs or claims must be provided.
 - (11) A written description by sequence, providing a logical, auditable trail, of the interrelationship between the as bid, as planned, and the actual as accrued schedule by work item distinguishing item labor hour details by trade and the event causing the delay or disruption must be provided.
 - (12) A copy of all RMC written work authorizations ("authorized work chits") against any disputed effort included in the claim must be provided.

- e. There is no privity of contract between the Government and subcontractors. Subcontractors' claims exist between the prime contractor and the subcontractor. The Government is not in a position to consider subcontractor claims that are simply passed through the prime contractor to the Government by a letter of transmittal. The prime contractor must provide the Court of Appeals certification required and submit the claim on behalf of the subcontractor in order for the Government to evaluate the claims.
- f. All REAs or claims involving subcontractors shall establish the prime contractor's damage, payment for damage or commitment to pay damage. Prime contractor's claims that show no commitment to pay the subcontractor do not constitute damage. The prime contractor must evaluate the subcontractor's claim, obtain objective evidence and demonstrate that cause and effect were beyond the control of the prime contractor's prudent management business practices. The prime contractor must definitize what positive management actions were taken to minimize the prime contractor's exposure. A "Reason-Value" concept shall not be accepted by the Government for subcontractor submittals. Prime contractors are to be cautioned to analyze subcontractor allegations thoroughly under prime contractor certification. When a contractor submits a claim exceeding \$100,000, the CDA requires the contractor to make certain representations above the claim in the form of a certification. The claim certification must be in accordance with reference (x).
- g. Certification is necessary before a Contracting Officer can consider the claim, analyze it and issue a final decision. The contractor should properly certify the claim prior to submission to the Contracting Officer. When a contractor must certify the claim, supporting data and the amount of the contractor's entitlement must also be certified. To submit a proper certification, the person who signs the certification must have authority to bind the contractor with respect to the claim. An individual SF 1411, Contract Pricing Proposal cover sheet, must be submitted for each element of the contractor's REA or claim at the time of submission, for any material revision of the REA or claim, and prior to the execution of a settlement agreement on each element.
- h. According to the provisions of the CDA, the Contracting Officer shall issue a decision on any submitted claim of \$100,000 or less within 60 days from the receipt of a written request for a decision from the contractor. For claims of more than \$100,000, the Contracting Officer shall, within 60 days, either issue a decision or notify the contractor of the time when a decision shall be issued. The time established shall be "reasonable", based on such factors as the size and complexity of the claim, and the adequacy of the information in support of the claim provided by the contractor.

2.17 MAINTENANCE CENTERS.

2.17.1 Regional Maintenance Center Procedures and Reports. For processing constructive changes, local instructions and procedures shall be prepared and issued to ensure that the regulatory requirements are met. Copies of the local instructions and procedures, and all revisions thereto, shall be submitted to NAVSEA 024. The following shall be considered when preparing local instructions and procedures:

- a. The occurrence of a constructive change is to be treated as a serious action similar to a violation of the administrative control of funds.
- b. RMC personnel involved in planning and Quality Assurance of contracted work should be thoroughly briefed on the requirements of this chapter, with emphasis on the limitation of their authority to direct the contractor to perform work.
- c. A follow-up procedure shall be established to ensure timely replies for RMC correspondence to NAVSEA, contractors and other organizations when such correspondence requires action by them, and when delays could result in a constructive change if correspondence is not promptly answered.
- d. Reports shall be submitted by the head of a department to the RMC Commanding Officer when personnel of the department are responsible for a constructive change. The penalties to be recommended in the report should be similar to those that would be imposed for a violation of the administrative control of funds. The report shall contain a complete explanation of the circumstances that led to the constructive change, the status of the vessels for which the constructive change is applicable, and an estimate of cost for the change.

- e. A report shall be submitted to NAVSEA 04X when NAVSEA Headquarters personnel are responsible for a constructive change. This requirement would apply, among others, to constructive changes incurred as the result of actions of audit or review teams other than RMC teams.
- f. The Contracts Officer and legal counsel, when assigned to the RMC, shall concur with controversial correspondence to the contractor not signed by a Contracting Officer. RMC personnel are not required to report failure of visiting personnel to send standard visit request letters prior to the visit, but shall be responsible for the preparation of reports delineating the status of any unresolved problems, agreements made and dates requested from the contractor.
- g. Constructive changes shall be resolved as soon as is practical. In no case is a constructive change to be held for resolution as part of an overall claim under the contract or for resolution as part of final settlement, unless approved by NAVSEA. If the RMC considers that delayed resolution would be in the best interest of the Government, the prior concurrence of NAVSEA 024 shall be obtained.

2.17.2 Operational Deficiencies. Local procedures for the processing of deficiency reports to identify operational deficiencies shall be developed and agreed to by all parties involved (i.e., the RMC, PCO and contractor). The definition of operational deficiency shall be developed by the RMC and Ship's Force. Items noted during inspection that require alterations to ship design (potential constructive changes) will be prescreened by the RMC prior to transmittal to the contractor. All involved personnel shall be briefed on local procedures that govern the processing of deficiency reports. The procedures shall provide for coordination with the inspections of the RMC's Quality Assurance personnel.

2.17.3 Regional Maintenance Center Authority to Formalize Identified Constructive Changes.

- a. Except for contracts containing reference (v), the RMC may recognize an identified constructive change and prepare and approve a covering Supplemental Agreement or Field Modification Request (FMR) only when all of the following prerequisites have been met:
 - (1) The constructive change is the responsibility of a person in the RMC office.
 - (2) Reporting procedures have been complied with by the appropriate head of the department.
 - (3) Funds for reservation purposes are available in RMC in the amount of the estimated cost of the change.
 - (4) The work is actually beyond the contract requirements and resulted in a benefit to the Government, and the contractor didn't perform work voluntarily.
- b. It must be work that would have been authorized by a contract change if proper procedures had been followed. For repair work, Supplemental Agreements may be approved by the ACO. For new construction related contracts (e.g., Post Shakedown Availabilities), only the person designated in writing may approve the change and the issuance of an FMR.
- c. If the contract contains reference (v), the contractor is required to notify the Contracting Officer of the issuance of the constructive change and, other than in a situation described in the clause, is not to proceed with the change unless and until the Contracting Officer has responded to such notice in accordance with the clause. The authority to approve and issue an FMR in such a situation is the same as for Engineering Change Proposals. In addition, any prerequisite listed above applies to determinations under this section.

2.17.4 Processing Identified Constructive Changes. When a constructive change has been identified, it shall be processed in the format and in accordance with the procedures required for Engineering Change Proposals, unless such procedures hinder the requisite expeditious processing of the constructive changes or conflict with the stated time requirements of specific contract clauses for response to such changes.

2.18 CONTRACT CLAIMS.

2.18.1 Claims Program. RMCs shall establish a claims program. NAVSEA 02 may be contacted for assistance in accomplishing this. A claims program should not be confused with claims avoidance. Claims avoidance, although extremely important, is just one aspect of a claims program. The purpose of a claims program is to:

- a. Determine the basis for claims.

- b. Generate, analyze and store data related to the claim.
- c. Analyze the merits of claims through the preparation of TARs.
- d. Resolve claims.

2.18.2 Common Basis for Claims. The basis for claims can be broadly categorized into breaches of contract, insufficient compensation for formal change, late or defective GFP or GFI and constructive changes.

2.18.2.1 Breach of Contract. A breach of contract is defined as an unexcused nonperformance of a contract occurring when one party to a contract fails to perform wholly or in part, gives notice beforehand that he will not perform the contract when the time for performance arrives (anticipatory breach) or makes performance impossible for himself or for other party.

- a. A breach of contract gives the injured party the right to collect damages. Additionally, the party harmed by the breach may sometimes be excused from performing that party's part of the contract.
- b. Damages are an award to compensate an injured party for the harm suffered because of the breach of contract. Damages for breach of contract are awarded to place the injured party in a position as good as it would have been in had the contract not been broken. Damages are not awarded to punish the party who has breached the contract. Therefore, if the innocent party is not ultimately harmed by the breach, the innocent party can collect only "nominal damages" (e.g., the costs of the legal action). In general, the courts attempt to fulfill the injured party's reasonable expectancy of profit or benefit from the contract.

2.18.2.2 Insufficient Compensation for Formal Change. Claims for insufficient formal change compensation may arise when contractors believe adjudicated contract modifications for formal changes have been insufficiently compensated or when an agreement with the Government on the equitable adjustments for non-adjudicated formal changes has not been reached. In the first case, contractors normally assert Government responsibility for additional impact costs such as disruption beyond that recognized in contract modifications covering formal changes. Contractors usually allege unforeseen costs and circumstances associated with implementing a particular change or cumulative effects of formal and informal changes and attack any caveats or attempt to overcome any claim release language included in the modifications. In the second case, contractors simply assert the Government's offer for equitable adjustment is inadequate.

2.18.2.3 Late or Defective Government Furnished Property and Information. When a contract obligates the Government to provide GFP and information to a contractor, the Government must provide it by the date specified, or if no date is specified, whenever the contractor reasonably requires it. Failure to do so may entitle the contractor to an equitable adjustment. The GFP or GFI must be suitable for its intended use or purpose when the contractor receives it, unless the contract provides otherwise, or the contractor may similarly be entitled to an equitable adjustment. Late or defective furnished Government property and information ranks second only to constructive change orders as the most frequent basis for claims.

2.18.2.4 Constructive Change Orders. A constructive change order is generally recognized as an unwritten change to the contract as a result of Government actions or inactions, which the contractor did not perform voluntarily, and has the effect of requiring the contractor to perform work different from, or in addition to, that prescribed by the terms of the contract. The constructive change order doctrine is a judicially developed doctrine, the purpose of which is to achieve equity. A constructive change is generally held to have occurred when some course of conduct by the Government is treated as the equivalent of a formal change order issued pursuant to the "Changes" clause of the contract; and so the designation "constructive change order".

2.18.3 Receipt of Proposals for Changes. For change orders, the proposal is generally received after execution and issuance of the change order. For repair contracts, this receipt of the proposal is generally 10 days; for new construction contracts, receipt of the proposal is generally 45 days after receipt of the change order. However, these periods may vary or be extended by the Contracting Officer. For supplemental agreements, the time of receipt of the complete proposal shall vary with the type of supplemental agreement. For example, complete proposals for fully priced supplemental agreements are received before issuing the modification, and less than a complete proposal may be received for other supplemental agreements. Less than a complete proposal, or no proposal, may be received before issuing a change order.

2.18.4 Contract Misinterpretation. The most common and earliest type of constructive change order occurs where the contractor and the Government disagree on the work necessary to meet contract requirements. In this situation, either the contractor proposed to perform the contract in a certain manner and the Contracting Officer insists a more expensive method is required, or the parties disagree on whether completed work complies with contract requirements. Contractors generally perform in accordance with the Government's interpretation to avoid the risk of default but frequently submit a claim later. The basic rule of constructive change in this area has been summarized by the Armed Services Board of Contract Appeals as:

“Where as a result of the Government's misinterpretation of contract provisions a contractor is required to perform more or different work, or to higher standards, not called for under its terms, the contractor is entitled to an equitable adjustment pursuant to the Changes Article, including extensions of time.”

2.18.4.1 Defective Specifications. A second major category of constructive change order occurs when the Government provides defective specifications and the contractor incurs additional expense attempting to perform. The Government's breach of the implied warranty of specifications information is claimed to have occurred when the contractor is required to perform work beyond that originally contemplated by the Government's design specifications.

2.18.4.2 Failure to Disclose Vital Information. Nondisclosure is a change to the contract where the contractor undertakes to perform the contract without knowledge of vital information that affects performance. In order to be liable, the Government must be aware the contractor had no such knowledge, the specifications misled the contractor and did not put the contractor on notice to make inquiry and the Government failed to provide the information.

2.18.4.3 Constructive Acceleration. Excusable delays give the contractor entitlement to schedule extensions. Constructive acceleration occurs when the Government refuses to recognize a new contract schedule extension based upon excusable delay and demands that the contractor complete performance in advance of the original schedule or complete performance within the original schedule. Acceleration can occur even in the case of non-excusable delay if the Government directs the contractor to accelerate. The Government does have the right to terminate for default in the event of non-excusable delay. The contractor's acceleration efforts need not be successful. A reasonable attempt to meet the completion date is sufficient for recovery should acceleration be found. In some instances, a contractor may accelerate on the contractor's own initiative to assure completion within the contract schedule or even ahead of schedule. The costs of such acceleration are, of course, not recoverable from the Government.

2.18.4.4 Failure to Cooperate/Hindrance of Performance. A category of constructive changes is the failure of the Government to cooperate with the contractor or to administer the contract in such a manner that hinders, delays or increases the cost of performance. These obligations can be expressed or implied. The Government may actively interfere with the contractor, making performance more costly or difficult. If the Government's interference is justified, there is no Government liability. If the Government's action is wrongful, the Government will be held to have breached its implied duty not to hinder or interfere with the contractor's performance. When some Government action is essential for the contractor to perform, the Government will be held liable if the Government wrongfully fails or refuses to take the action. In such cases, the Government is said to have breached its implied duty to cooperate. These implied duties are a part of every Government contract.

2.18.5 Data. Generating, analyzing and storing of data can determine the success of resolving a claim by negotiation or litigation, especially the latter. These actions are necessary to ensure effective involvement by RMCs to monitor contractors' performance adequately, regardless of whether claims are submitted.

2.18.5.1 Significant Events. One of the best approaches to ensure the generation of necessary data to analyze and resolve claims is requiring all relevant data on significant events be promptly generated. A significant event is anything that occurs pertaining to a contract, other than formal contract modifications, having a material impact on cost, quality or delivery. Normally, a separate file should be established for each significant event. An individual should be assigned to ensure that a file is established and all relevant future data is generated and properly filed. A cross-reference on the location of documents that are impracticable to include in the file should be included. Significant events can be caused by either the Government or contractors and include the following:

- a. Ship delivery schedule changes or problems.
- b. Drawings, designs and specifications that are ambiguous, defective or impossible to perform.

- c. Differences in interpretation of contract provisions.
- d. Delay and disruption of contractor effort.
- e. Changes in method of sequence of work.
- f. Late or defective Government-furnished material, property or information.
- g. Rejections, rework, waivers and deviations.
- h. Planned versus actual performance milestones.
- i. Delays in Government actions such as processing engineering change proposals, consent to subcontracts and review of technical data.
- j. Contractor error and noncompliance with contract terms.
- k. Any other Government or contractor actions or inactions which have the effect of requiring the contractor to perform work different from the work prescribed by the original terms of the contract.

2.18.6 Significant Events Data. Data that should be generated for each significant event should include as a minimum:

- a. The nature and pertinent circumstances of the event.
- b. The date of the event and the identification of Government and contractor personnel involved, including the name and function of the respective individuals.
- c. Identification of any relevant documents involved.
- d. The substance of any oral communications related to the event.
- e. A statement concerning the possible consequences or effects of the event described upon the contract cost, schedule or technical performance, including manner or sequence of performance.

2.19 RESOLUTION OF DISPUTES. NAVSEA policy is that a dispute between a contractor and NAVSEA should be resolved by the assigned CAO. NAVSEA does not serve as a higher level of appeal for contractors in the event of disagreements between the contractor and the CAO.

2.19.1 Appeals. When a contractor's appeal of a Contracting Officer's decision is received by the ACO, the appeal shall be forwarded immediately to NAVSEA 00L and NAVSEA 024 with a copy to the Litigation Office, Contract Appeals Division of the Office of the General Counsel of the Navy. On notification of an appeal, the ACO shall compile all documentation and files applicable to the matter appealed.

2.19.2 Negotiations with Appeal Pending. While the Navy is not precluded from seeking further agreement with the contractor after an appeal is filed, all such attempts are to be in accordance with Regulatory Requirements.

2.19.3 Third Party Lawsuits. If a third party enters a suit against a contractor who holds a cost-reimbursement or other type of contract under which the judgment of litigation fees might be reimbursable, the ACO should immediately inform NAVSEA counsel and the PCO, forwarding copies of the summons and complaint.

2.20 CONTRACT TERMINATIONS. Reference (y) grants Contracting Officer the authority to suspend or terminate contracts when it is in the Government's interest. Terminations may be either a Termination for Convenience or a Termination for Default depending on the nature of the termination. A contract may be terminated for convenience for any reason that the Contracting Officer determines would be in the best interest of the Government. Terminations for Default are also performed when it is in the Government's best interest, but the reason for the termination is based on the contractor's actual or anticipated failure to perform contractual obligations.

2.20.1 Extent of Termination. Terminations can be either partial or complete. A partial termination means the termination of a part, but not all, of the work that has not been completed and accepted under the contract. A complete termination means the termination of all of the work that has not been completed and accepted under the contract.

2.20.2 Effect of Termination. Terminations are very serious matters. Depending on factors such as the dollar amount of the contract, the contractor's financial condition and the availability of other work to the contractor, a termination can severely impact a contractor's financial condition or even drive the contractor into bankruptcy and out of business. The contractor is not the only one hurt, however, as the contractor must terminate any subcontractors under the contract. Further, the contractor must lay off employees unless the contractor has other work to assign to employees working on the terminated contract. Such circumstances frequently result in political involvement.

2.20.3 Termination Contracting Officer. After the Contracting Officer has issued a notice of termination, a Termination Contracting Officer shall be assigned to handle the termination actions. Refer to reference (u) for the details of these actions, required notifications, and procedures for negotiating settlements with the contractor.

- a. Fortunately, termination of ship repair and modernization contracts is a rare occurrence. It has been necessary to terminate a ship repair contract for convenience of the Government in order to meet unplanned operational commitments. Because of the need to support impending operations, availabilities for these ships may be cancelled or completion dates were greatly accelerated. Contracts can be terminated completely for availabilities that have not begun or can be partially terminated for those availabilities where planned work has to be stopped in order to meet the revised completion date.
- b. It should be noted that in the case of MS/MO contracts, it is not necessary to terminate the entire contract in order to cancel work on a single availability. In this situation, it is usually a matter of not invoking the option for that availability, or if work has already begun, canceling any remaining work.

2.21 OVERTIME AND MULTI-SHIFT WORK.

2.21.1 Labor. Reference (z) prescribes contracting policy and procedures for implementing pertinent labor laws and contract clauses. References (aa) and (p) also address the application of labor laws to Government acquisitions. Significant terms, as utilized in this section, are defined in reference (z) and include:

- a. "Normal work week" generally means a work week of 40 hours. Outside the United States, its possessions and Puerto Rico, a work week longer than 40 hours is to be considered normal if the work week does not exceed the norm for the area, as determined by local custom, tradition or law and if the hours worked in excess of 40 in the work week are not compensated at a premium rate of pay.
- b. "Overtime" is time worked by a contractor's employee in excess of the employee's normal work week.
- c. "Overtime premium" means the difference between the contractor's regular rate of pay to an employee for the shift involved and the higher rate paid for overtime; it does not include a shift premium.
- d. "Shift premium" is the difference between the contractor's regular rate of pay to an employee and the higher rate paid for extra-pay shift work.

2.21.2 Overtime. Contractors shall perform all contracts so far as practicable without using overtime, particularly as a regular employment practice, except when lower overall costs to the Government will result or when it is necessary to meet urgent program needs. Any approved overtime, extra-pay shifts and multi-shifts should be scheduled to achieve these objectives.

2.21.3 Procedures. Solicitations shall not specify delivery or performance schedules that may require overtime at Government expense. In negotiating contracts, Contracting Officers should, consistent with the Government's needs, attempt to ascertain the extent that offers are based on the payment of overtime and shift premiums, and negotiate contract prices or estimated costs without these premiums or obtain the requirement from other sources.

2.21.3.1 Pre-Award Considerations. Regardless of contract type, when cost or pricing data has been submitted, the parties have an opportunity to negotiate the contractor's planned use of overtime. The price or estimated cost agreed to should include appropriate amounts for overtime only when it is required. If cost or pricing data has not been submitted (e.g., when sealed bidding has been used or where competitive negotiation is used, adequate price competition is expected, and the evaluation is to be based solely on price and price related factors), the Government generally does not know, nor does it need to know, what amount of overtime the contractor has planned to use. When it becomes apparent during negotiation of a cost-reimbursement contract, the amount of which is expected to be over \$100,000, that overtime will be required in contract performance, the Contracting Officer shall secure from the contractor a request for all overtime to be used during the life of the contract so the overtime can be estimated with reasonable certainty. The contractor's request is to contain the information required by reference (ab). Based

on this and other information, NAVSEA and the NSA will consider the justification for the overtime. Necessary determinations regarding premium payments to be included in the contract price shall be made. These determinations are provided to the contractor and to the RMC to administer the contract. The previous requirement does not apply to a cost-reimbursement contract for the operation of vessels or a cost-plus-incentive-fee contract that will provide a swing from the target fee of at least plus or minus 3 percent with a contractor's share of at least 10 percent being contemplated.

2.21.3.2 Fixed-Price Contracts. DoD overtime and multi-shift premium regulations have been established to limit the amount of premium overtime and shift compensation that the Government may allow or consider in pricing. Overtime or shift premiums may not be authorized at Government expense when the contractor is already obligated to meet the required delivery dates without the right to additional compensation. Thus, a contractor performing under a fixed-price contract generally is not entitled, under the overtime regulations, to obtain any compensation for overtime or shift pay in addition to the original contract price. Changes under NAVSEA fixed-price contracts are not subject to FAR requirements for overtime approval. The responsible RMC has authority to approve overtime work with adjudication of such changes.

2.21.3.3 Cost-Reimbursable and Letter Contracts. Cost-reimbursable and letter contracts require Government approval of contractor overtime and multi-shift premium payments. This contractual control is necessary since the premium payments are subject to audit and reimbursement. The contract provisions may require that all overtime and multi-shift premiums be approved by the Contracting Officer or the duly authorized representative. The terms of individual contracts shall be examined to ascertain exact requirements and the applicability of the requirements to overtime and multi-shift premium work by subcontractors. When forwarding any contractor request for overtime or multi-shift premium approvals to NAVSEA, the NSA shall ensure that all information necessary to make a determination is included, comment on the accuracy of the facts in the contractor's request and advise whether or not the request should be approved. The responsible Defense Contract Audit Agency office shall be requested to provide advice to the RMC with respect to the contractor's request.

- a. NAVSEA may authorize the ACO to make determinations and approve overtime under reference (v). When such authority is granted, the NSA is to submit a monthly report of overtime.
- b. For changes under cost-reimbursement contracts requiring overtime, the amount of overtime is limited to the ceiling established by NAVSEA for the contract. Any increase in ceiling required due to the change must be authorized by NAVSEA.
- c. For repair and overhaul contracts, the responsible RMC accomplishes the NAVSEA functions described above, unless NAVSEA 02 has retained responsibility for these functions.

2.21.4 Approval of Overtime.

- a. The Contracting Officer shall review the contractor's request for overtime. Approval of the overtime may be granted by an agency approving official after determining in writing that overtime is necessary to:
 - (1) Meet essential delivery or performance schedules.
 - (2) Eliminate foreseeable extended production bottlenecks that cannot be eliminated in any other way.
- b. Refer to references (z), (ac) and (p) for additional information regarding approvals.

2.22 SUBCONTRACTS.

2.22.1 Subcontracting.

- a. This section prescribes policies and procedures for consent to subcontract and for review, evaluation and approval of contractor's purchasing systems. Subcontracting policies and procedures addressed herein are based upon references (ad), (ae) and (p). Subcontract consent for repair and overhaul contracts under evolving maintenance strategies require an increased effort by the Contract Administration staff due to:
 - (1) Even though over 50% of the dollars associated with repair and overhaul contracts are for labor, in many cases the emerging contract strategies have significantly increased the level of subcontracting by the prime contractor.

- (2) Many repair and overhaul contracts are MS/MO or multiple award contracts wherein the subcontractors' are often parties to the Basic Agreements and Terms and Condition established in the original solicitation. For Headquarters procured MS/MO contracts, the prime contractor is required to subcontract at least 40 percent of the work to small business.
- b. Contractors generally attempt to award at least the major subcontracts shortly after receiving award of the prime contract. For this reason the NSA should expect and be prepared to provide prompt service in order to avoid delaying the contractor.
- c. Subcontract consent is not the sole responsibility of the Contracts Department. Other departments within the NSA should be involved to ensure that all pertinent aspects for which they are responsible are adequately covered in subcontracts. All departments involved in subcontract consent shall develop and use checklists to assist in their reviews.

2.22.2 Consent Requirements. If the contractor has an approved purchasing system, consent is required for subcontracts specifically identified by the Contracting Officer in the subcontracts clause of the contract. The Contracting Officer may require consent to subcontract if the Contracting Officer has determined that an individual consent action is required to protect the Government adequately because of the subcontract type, complexity or value, or because the subcontract needs special surveillance. These can be subcontracts for critical systems, subsystems, components or services. Subcontracts may be identified by subcontract number or by class of items (e.g., subcontracts for engines on a prime contract for airframes).

- a. If the contractor does not have an approved purchasing system, consent to subcontract is required for cost-reimbursement, time-and-materials, labor-hour or letter contracts, and also for un-priced actions (including un-priced modifications and un-priced delivery orders) under fixed-price contracts that exceed the simplified acquisition threshold, for:
 - (1) Cost-reimbursement, time-and-materials or labor-hour subcontracts.
 - (2) DoD, fixed-price subcontracts that exceed the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.
- b. The Contracting Officer's written authorization for the contractor to purchase from Government sources constitutes consent.
- c. Refer to the specific contract clauses actually included in each contract to ascertain specific subcontract consent requirements.

2.22.3 Additional Regional Maintenance Center Consent Procedures. The RMC shall prepare a local instruction that delineates the field activity organizational responsibilities for conducting required subcontract consent reviews.

- a. ACOs shall give the contractor's request for consent equal review, whether the ACO has consent authority or must endorse the request(s), to the PCO. The ACO endorsements to the PCO shall contain all necessary information and recommendations for PCO action.
- b. The Subcontract clauses permit the ACO to ratify a subcontract that has been placed by the contractor even though prior consent was required. ACOs shall not ratify subcontracts as a routine procedure in lieu of granting consent prior to their placement. Ratification should be the exception to the rule and should be granted only on a case-by-case basis. If it appears that the ultimate cost to the Government may have been increased by the placement of the subcontract without consent, the ACO shall consult with counsel about placing the contractor on notice that the Government shall not be liable for such an increase. If it appears that a change in the contractor's procedures is required to preclude further placement of subcontracts prior to consent, the ACO shall direct the contractor to take corrective action.

APPENDIX A

MEMORANDUM OF UNDERSTANDING BETWEEN NAVSEA AND NAVSUP OF AUGUST 2004



DEPARTMENT OF THE NAVY
 COMMANDER U.S. FLEET FORCES COMMAND
 1562 NITSCHER AVE STE 250
 NORFOLK VA 23551-2487
 COMMANDER U.S. PACIFIC FLEET
 250 MAKALAPA DRIVE
 PEARL HARBOR HI 96860-3131
 COMMANDER, FLEET AND INDUSTRIAL SUPPLY CENTERS
 957 NORTH HARBOR DRIVE, SUITE 1
 SAN DIEGO CA 92132-0661

IN REPLY REFER TO

CFFC
 4000
 Ser N43/031
 27 Aug 04

COMPACFLT
 4000
 Ser N43/4830
 27 Aug 04

COMPISCS
 4000
 Ser 00/08
 18 Aug 04

MEMORANDUM OF UNDERSTANDING
 AMONG

COMMANDER, U.S. FLEET FORCES COMMAND (N43)
COMMANDER, U.S. PACIFIC FLEET (N43)
COMMANDER, FLEET AND INDUSTRIAL SUPPLY CENTERS
DEPUTY COMMANDER FOR CONTRACTS, NAVAL SEA SYSTEMS COMMAND
AND
DEPUTY COMMANDER, CONTRACTS, NAVAL SUPPLY SYSTEMS COMMAND

Subj: MEMORANDUM OF UNDERSTANDING

1. PURPOSE: The purpose of this Memorandum of Understanding (MOU) is to definitize implementation of the Commander, Naval Sea Systems Command (COMNAVSEA) and Commander, Naval Supply Systems Command (COMNAVSUP) MOU signed 25 June 2002; for afloat Fleet assets. The MOU required local offices to develop a plan to align contracting responsibility in the most efficient manner. This MOU covers the management of boat, service-craft, ship and all other classes of water-borne vessels that come under the program management of the Naval Sea Systems Command and affiliated Program Executive Offices (PEOs).

2. BACKGROUND: NAVSEA and NAVSUP have developed expertise in various areas of contracted Fleet support. NAVSEA and NAVSUP have partnered to align contracting responsibility within organic shipyards. This MOU aligns Fleet contracting functional responsibility in order to capitalize on the expertise of each organization's skills, to reduce redundancies and overall cost to the Navy, while ensuring conformance with NAVSEA's responsibility for ship contracting and technical authority.

Repairs and alterations aboard ship require: schedule coordination of the contracted and organic workforce; direction and compliance of the technical authority; and processes to ensure quality assurance of services performed. The Regional Maintenance Center (RMC), merging Supervisor of Shipbuilding

Subj: MEMORANDUM OF UNDERSTANDING

(SUPSHIP), and Fleet maintenance activities, is responsible for repairs and alteration of ships and is the principal on-site manager for efficient and effective work, resolution of technical issues and assurance of the delivery of required quality. The complexity of ship repair and maintenance necessitates adherence to the policy that private sector repair contracting requirements identified are contracted for and administered by the RMCs.

3. SCOPE: The scope of this MOU is contracting and execution of commercial ship repair and modernization requirements for all Navy vessels during planned and emergent availabilities.

4. DELINEATION OF CONTRACTING RESPONSIBILITIES:

Headquarters Contracting Authority (HCA) exists in both NAVSEA and NAVSUP for material and services that support ship repair and maintenance. Since HCA may be delegated to a field contracting office, and since functional consolidations are taking place among NAVSEA, NAVSUP, and Fleet activities, appropriate alignment of contracting functions is needed to support the consolidated waterfront effort. The following bullets delineate organizational responsibilities for ship maintenance and modernization contract support.

- RMC serves as the PCO and/or ACO for execution of all shipboard repairs and modernization accomplished by the private sector.
- FISC contracts for government furnished material and engineering/technical services using consolidated contracts with technical requirements established by cognizant technical authority. RMC serves as the ACO for all orders for government furnished material and shipboard services issued by the RMC under contracts awarded by FISC.
- RMC serves as the ACO for private shipyards within the respective regions.
- FISC contracts for habitability and assigns ACO responsibility to the RMC.

Subj: MEMORANDUM OF UNDERSTANDING

- All orders for regional services against the consolidated FISC contracts are originated by an RMC ordering officer formally designated in the contract.
- Regional services provided by FISC contracts under orders issued by the RMC will be accepted by a COR who is formally assigned by the RMC designated ACO.
- If a consolidated FISC contract supporting necessary regional services exists, respective RMCs should utilize that contract. If a consolidated contract does not exist, the RMCs should coordinate with the local FISC to determine the optimal approach to contracting for those services.
- NAVSUP will continue to manage the component depot overhaul programs for non-consumable supply items where a carcass turn-in is involved.
- Contract support for organic shipyards and IMFs will be accomplished in accordance with existing FISC/Shipyard and/or SUPSHIP/Shipyard agreements.
- Ship repair efforts other than in CONUS and Hawaii will continue to be contracted for by the supporting FISC/NRCC under the technical cognizance and quality assurance of the numbered Fleet Commander's maintenance organization.

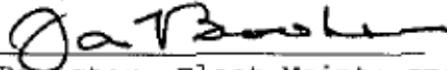
Questions regarding performance of the contract function will be resolved at the regional level. In the event a resolution cannot be effected at the regional level, the issue shall be raised to NAVSEA 02 and NAVSUP 02 to coordinate resolution.

5. PARTIES TO THE MOU: FFC N43, PACFLT N43, COMFISCS, NAVSEA 02, and NAVSUP 02 are the parties to this Memorandum of Understanding. The MOU is established to strengthen the professional cooperation among their subordinate contracting activities, reduce overlap of contracting responsibility, and achieve contracting efficiencies.

6. EFFECTIVE DATE: This MOU is effective upon the date signed by all parties and shall remain in effect until changed by mutual agreement of the parties.

Subj: MEMORANDUM OF UNDERSTANDING

7. APPROVING OFFICIALS:



Director, Fleet Maintenance,
U.S. Fleet Forces Command



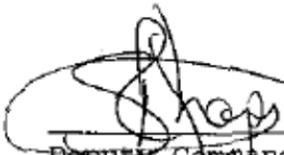
Deputy Chief of Staff for
Fleet Maintenance,
U.S. Pacific Fleet



Commander,
Fleet and Industrial Supply
Centers



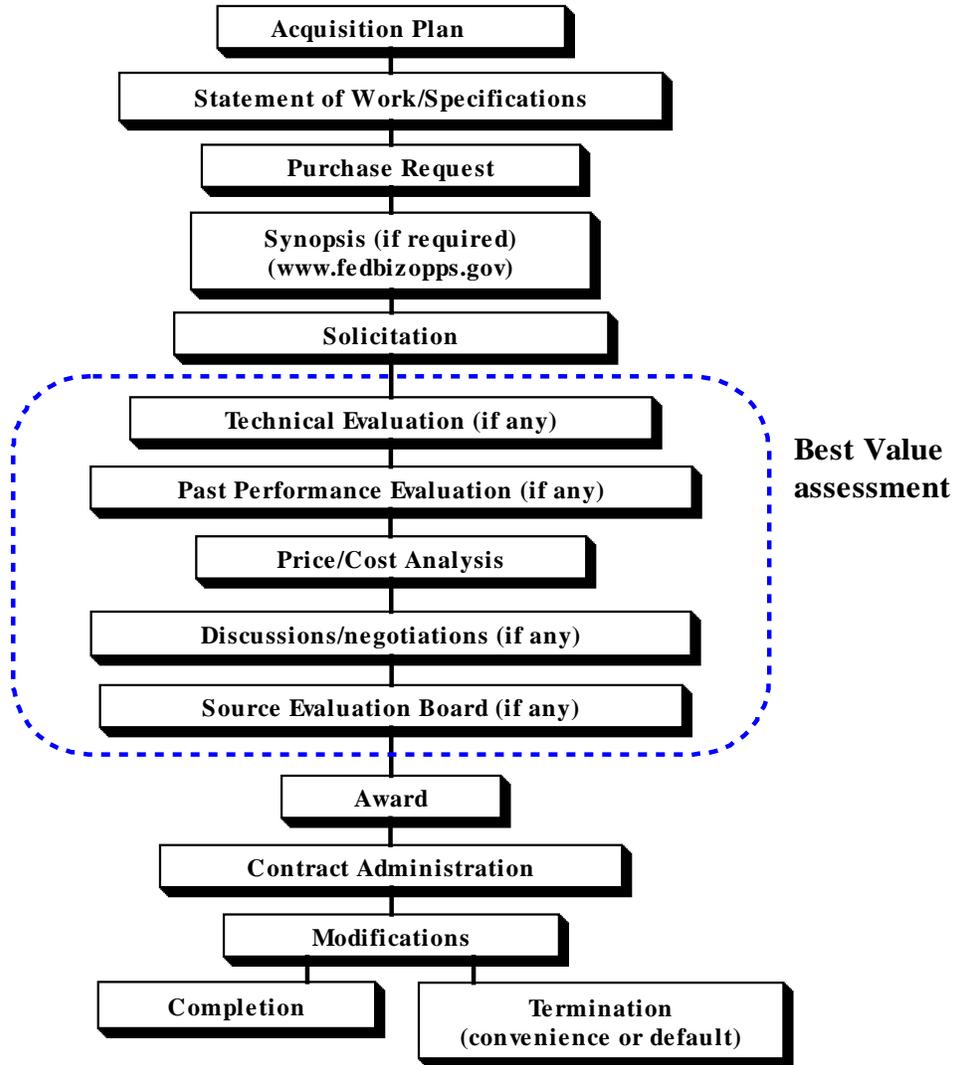
Deputy Commander for Contracts
Naval Sea Systems Command



Deputy Commander for
Contracting Management
Naval Supply Systems Command

APPENDIX B

BASIC ACQUISITION PROCESS



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VOLUME VII

CHAPTER 3

PRIMARY CONTRACTING STRATEGIES - MASTER AGREEMENT FOR REPAIR AND ALTERATION OF VESSELS AND MULTI-SHIP/MULTI-OPTION

REFERENCES.

- (a) DFARS Part 217 - Special Contracting Methods
- (b) NAVSEAINST 4280.2 - Master Agreement for Repair and Alteration of Vessels, Master Ship Repair Agreement (MSRA) and Agreement for Boat Repair (ABR)
- (c) NAVSEA Contracts Handbook (NCH) - Master Agreement for Repair and Alteration of Vessels
- (d) DFARS 217-7104 - Clauses
- (e) The North American Industry Classification System (NAICS)
- (f) DFARS 217.71 - Master Agreement for Repair and Alteration of Vessels
- (g) FAR 9.1 - Responsible Prospective Contractors
- (h) FAR 6.302-2 - Unusual and Compelling Urgency
- (i) DFARS 206.302-2 - Unusual and Compelling Urgency

LISTING OF APPENDICES.

- A Master Ship Repair Agreement
- B Agreement for Boat Repair

3.1 PURPOSE. The purpose of this chapter is to describe the two primary contracting methods generally employed by the Navy for the procurement of ship repair and modernization work in the private sector.

- a. Procurement of individual contracts for each ship repair availability through the use of firm fixed-price contracts awarded under a Master Agreement for Repair and Alteration of Vessels. These agreements exist as either a Master Ship Repair Agreement (MSRA), Appendix A, or an Agreement for Boat Repair (ABR), Appendix B.
- b. Procurement of a single contract for multiple availabilities on multiple ships through the use of cost reimbursable contracts. These Multi-Ship/Multi-Option (MS/MO) contracts are usually procured to support several ships of the same class within a specific port.

3.2 POLICY.

3.2.1 Policy Sources. Basic policy is established by references (a) and (b). Reference (a) addresses only the MSRA, while reference (b) addresses both the MSRA and the ABR. Reference (c) provides additional policy established by Naval Sea Systems Command (NAVSEA) 02.

3.2.2 Defense Federal Acquisition Regulation Supplement 217.7102 Policy.

- a. The MSRA shall be entered into with all prospective contractors, located within the United States, that request ship repair work and possess the organization and facilities to perform such work satisfactorily. Issuance of the MSRA does not indicate approval of the contractor's facilities for any particular acquisition. Activities may also use the MSRA in selected work with prospective contractors located outside the United States, its possessions or Puerto Rico.
- b. The Government may issue job orders referencing or by attaching the MSRA for repairs, alterations or additions to vessels belonging to foreign governments, however, there are specific directives that should be referred to concerning repairs to foreign vessels. When repairs and alterations to foreign government vessels are to be acquired under the MSRA, the contracting officer will comply with the Federal Acquisition Regulation (FAR) and Defense Federal Acquisition Regulation Supplement (DFARS), addressing foreign military sales regulations, or other governing provisions of law. The solicitation and job order will identify the vessel and the foreign government.

3.3 AGREEMENTS.

3.3.1 Master Agreement for Repair and Alteration of Vessels. The Master Agreement for Repair and Alteration of Vessels, in accordance with reference (a), provides the authority for the Navy and other agencies to utilize special contracting methods for the repair and alteration of vessels. The authority and prerequisites related to obtaining special agreements are identified in reference (a), Sub-part 217.71. It is a written agreement, negotiated between a contracting activity and a contractor containing contract clauses, terms and conditions applying to future contracts for repairs, alterations and/or additions to vessels. The agreement contemplates separate future contracts that will incorporate, by reference or attachment, the required and applicable clauses agreed upon in the master agreement. It is not a contract.

3.3.2 Job Order. A “job order” is a fixed price contract incorporating, by reference or attachment, a Master Agreement for Repair and Alteration of Vessels. It may include clauses pertaining to subjects not covered by the master agreement, but applicable to the job order being awarded. It applies to a specific acquisition and sets forth the scope of work, price, delivery date and other appropriate terms that apply to the particular job order.

3.3.3 Clauses. Appendices A and B are identical in form and content except for the cover sheet and preface. Each must be approved by NAVSEA 02. Appendices A and B are agreements, not contracts, and contain no specifications or statement of work. These two agreements are primarily a compilation of required clauses which are peculiar to ship repair and modernization work and certain general terms and conditions under which the Navy or any other Department of Defense agency can issue firm-fixed-price job orders for efforts involving repairs, alterations or additions. The clauses which are to be included in each agreement are listed in reference (d). Only firm fixed-price job orders may be awarded in conjunction with these agreements, and the associated job orders may only be issued to contractors who hold a current NAVSEA approved “Agreement”. The job order applies to a specific acquisition and describes the scope of work, price, delivery date and additional matters peculiar to the requirements of the specific acquisition. The job order incorporates the clauses from the applicable agreement as well as all the other contract clauses and terms and conditions which are appropriate for the specific contract effort by reference or appendage. The Deputy Commander for Contracts, NAVSEA 02, has issued and maintains a standard solicitation package that is mandatory for use by the NAVSEA Designated Certifying Official and by the Contracting Officer at the Regional Maintenance Centers (RMC) when processing an application for the agreements. Contracting Officers shall ensure that the applicants’ responses to the standard solicitation package are prepared in accordance with NAVSEA 02 direction.

3.4 ELIGIBILITY REQUIREMENTS FOR MASTER SHIP REPAIR AGREEMENT AND AGREEMENT FOR BOAT REPAIR PROGRAM.

3.4.1 Major Requirements for a Master Ship Repair Agreement Certification.

- a. The most significant eligibility requirements set forth in reference (b) are that a Contractor must:
 - (1) Be capable of accomplishing a Selected Restricted Availability on a FFG 7 class ship or larger.
 - (2) Have the capability to perform at least 55% of a Selected Restricted Availability on a FFG 7 class ship using their own facilities and their own workforce.
 - (3) Possess or have access to a pier with the requisite support and technical services available. (There is no requirement for a dry dock.)
- b. While it is not a specific requirement for obtaining an MSRA, the contractor must be capable of providing a “Remote Site Work Performance Plan” to the Contracting Officer prior to issue of the job order that permits the start of the work performance period.

3.4.2 Master Ship Repair Agreement Requirements. The complexity of ship repair and the conditions under which work is performed require that NAVSEA contract only with ship repair companies that are fully capable of conducting most aspects of shipboard work. The compact arrangement of machinery and systems aboard ship, the sophistication of systems installed in Navy ships and the Navy’s absolute requirement for reliable operation create a unique repair environment that demands special experience and capability.

- a. A thorough understanding of these effects and the ability to manage shipboard work as an integrated package are absolutely essential. Naval ships are designed and built with a high degree of interaction among components and systems. Repairs or modifications to a single system or component may have widespread effects on the operation of many other systems or components that are physically remote from the one being repaired.
- b. The ability to co-ordinate a wide variety of concurrent tasks among numerous people with a wide mix of skills. These tasks may include:
 - (1) Advance planning and scheduling.
 - (2) Engineering.
 - (3) Subcontractor management.
 - (4) Material identification and procurement.
 - (5) Material/Integrated Logistics Support management.
 - (6) Manpower scheduling.
 - (7) Work site preparation.
 - (8) Ripping out and removal of interferences.
 - (9) Handling, removal and disposal of hazardous materials or wastes.
 - (10) Removal, disassembly, repair and reassembly.
 - (11) Reinstallation and test.
 - (12) Restoration and test of interferences.
 - (13) Work site restoration.
 - (14) Quality assurance.
 - (15) Integrated system testing.
 - (16) Correction of documentation.
- c. Timeliness and quality control are of utmost importance in ship repair so that a ship may return to and remain in a mission-ready state until the next scheduled maintenance.
- d. Limits on Navy resources affect the ability of RMCs to coordinate the work of multiple contractors during an availability on the same ship. If the work is subdivided among several contractors, the Navy must either perform this coordinating role or schedule the work sequentially, which may increase the overall time required for repairs. Time and quality considerations require that prime contractors who are capable of managing the whole job be given full responsibility, which includes managing subcontracted work.

3.4.3 Additional Requirements. MSRA contractors are required to be capable of utilizing their own facilities and work force to perform 55 percent of a Selected Restricted Availability work package on a ship of FFG-7 Class size or larger when the ship is located at a contractors' own or leased facilities or at government provided piers or drydock. Further, the MSRA contractor must be capable of subcontracting for those elements beyond their managerial, technical or physical capability or capacity. MSRA contractors must also manage and assume full responsibility for the integrated scheduling, cost and quality of subcontractor performance.

- a. The MSRA contractor must be a company recognized as engaged in ship repair work. The MSRA contractor must possess an organization capable of the full scope of planning, engineering, quality control, shipboard/off-ship production, ship and crew security and component/system testing and trials.
- b. A competent contractors' organization shall include the established organizational elements as set forth below. These characteristics will be evaluated during the application process to determine a firm's eligibility for an MSRA and periodically after the Agreement is in place:

- (1) Administration/Management Control.
- (2) Financial Control (evaluated by the Defense Contract Audit Agency).
- (3) Production Control.
- (4) Production Technical Support.
- (5) Material/Procurement Control.
- (6) Subcontractor Control.
- (7) Quality Control/Test and Trials.
- (8) Safety.
- (9) Security in compliance with Force Protection Mandates.
- (10) Hazardous Material/Waste Control.
- (11) Facilities. Although facility requirements may vary with the work authorized for a specific ship, the MSRA holder must be a ship repair company that possesses or has available the following facilities:
 - (a) Pier, with services in place in the immediate homeport area which a FFG-7 Class size ship can access and at which it can be berthed.
 - (b) Structural Shop.
 - (c) Machine Shop.
 - (d) Pipe Shop.
 - (e) Electrical/Electronics Shop.
 - (f) Carpentry Shop.
 - (g) Rigging Equipment.

- c. Further, ship repair firms are evaluated on their ability to accomplish several kinds of work. These include: shipfitting types of work; sheet metal work; welding; pipefitting; machinist/mechanical (shop and marine); electrical; electronics; woodworking and rigging.

3.4.4 Remote Site Work Performance Plan. To enable an MSRA holder to be awarded a job order to work at a site other than the home location, the MSRA holder must submit a remote site performance plan acceptable to the responsible RMC Contracting Officer located in that remote site. The plan must address management of the effort, production control, hazardous waste and material control, technical support, material procurement and control, subcontracting, safety/security and quality control. The plan must also include a hazardous waste generator number issued to the MSRA holder for that specific remote site.

3.4.5 Agreement for Boat Repair Requirements.

- a. To qualify for an ABR, a contractor must be primarily engaged in ship and/or boat/craft repair.
- b. Reference (e) lists codes “for use in the classification of establishments by type of activity. Each establishment is assigned an industry code on the basis of its primary activity”.
- c. Prospective ABR contractors must provide sufficient documentation to the responsible RMC to indicate that they meet the general criteria of one of the following applicable reference (e) codes. (Documentation can include the contractor’s listing, including one of the below listed Standard Industrial Classification codes, in the latest editions of Standard and Poor’s Register of Corporations, Dunn and Bradstreet Reference Book or any similar publication.)

3.4.6 336611 Ship Building and Repairing. This code involves establishments primarily engaged in building and repairing ships, barges and lighters, whether self-propelled or towed by other craft. This industry also includes the conversion and alteration of ships and the manufacture of offshore oil and gas well drilling and production platforms

(whether self-propelled or not). Establishments primarily engaged in fabricating structural assemblies or components for ships, or subcontractors engaged in ship painting, joinery, carpentry work and electrical wiring installation, etc., are classified in other industries.

3.4.7 336612 Boat Building and Repairing. This code involves establishments primarily engaged in building and repairing boats.

- a. In addition to meeting the general criteria of either reference (e) codes, an ABR contractor must possess the same basic characteristics listed for MSRAs, but to a lesser degree. Reference (b) clearly delineates these characteristics.
- b. Since ABR firms have the potential to perform a diverse scope of repair work, from boat and/or craft overhauls to selected topside repairs to major vessels, ABR firms will also be evaluated on their ability to accomplish the following: shipfitting type work, sheet metal work, welding, pipefitting, machinist/mechanical (shop and marine), electrical, electronics, woodworking and rigging.
- c. ABR Contractors are required to have a "Remote Site Performance Plan" if they intend to work at a site other than their home location.

3.5 RESPONSIBILITIES APPLICABLE TO THE MASTER SHIP REPAIR AGREEMENT AND/OR AGREEMENT FOR BOAT REPAIR PROGRAM.

3.5.1 Contractors. Contractors that do not hold an MSRA or ABR, but have the managerial, technical and facilities capabilities and capacities to conduct ship or boat repairs may make application to NAVSEA through the responsible RMC. The basic application package consists of two standard forms:

- a. Facilities Available for the Construction or Repair of Ships, SF 17.
- b. Solicitation Mailing List Application, SF 129.

3.5.2 Contracting Officers at Regional Maintenance Centers.

- a. Ensure that all private shipyards, in their respective area of cognizance, that are applying for an MSRA/ABR understand the requirements of reference (b).
- b. For all new applicants, contact the responsible Defense Contract Audit Agency. Request that a formal financial capability evaluation be conducted which at a minimum should provide an evaluation of the firm's accounting system, its ability to segregate costs, determine current and acid test ratios, credit availability and whether accounts payable are aging.
- c. After verifying that the application is complete and obtaining the Defense Contract Audit Agency Audit, forward the application for an MSRA or ABR to NAVSEA 04Z, with a copy to **Norfolk Ship Support Activity**, Code 400.
 - (1) Inform the contractor by means of a separate letter that the application has been sent to NAVSEA.
 - (2) Upon request from the NAVSEA Designated Certifying Official, provide team members in support of MSRA/ABR certification and recertification surveys.
- d. Recommend to NAVSEA 04Z and 024 that an existing Agreement be cancelled based on the events noted in paragraph 3.6.1 of this chapter.

3.5.2.1 Norfolk Ship Support Activity (Code 400).

- a. As the NAVSEA Designated Certifying Official, plan, schedule, coordinate and conduct MSRA/ABR certification and recertification surveys, with NAVSEA 04Z concurrence, and liaison with the RMC to obtain survey team members.
- b. Notify the RMC of pending survey schedules so they may provide adequate notice to contractors of the site survey date.
- c. Document the site survey findings, develop the survey team recommendation, draft the formal survey report and forward it to NAVSEA 04Z.

- d. Maintain the necessary documentation and backup data to support survey team recommendations in the event of contractor debriefings, media inquiries or Congressional correspondence.

3.5.2.2 NAVSEA Director, SUPSHIP Management Group (NAVSEA 04Z).

- a. Review all MSRA and ABR survey results to ensure consistent application of the eligibility criteria, provide a recommendation and forward the package to NAVSEA 024.
- b. If the recommendation is to cancel an existing MSRA/ABR, obtain NAVSEA 04 concurrence prior to forwarding the package to NAVSEA 024 and 02 for concurrence and forwarding to NAVSEA 00 for approval.
- c. Conduct debriefings with MSRA/ABR applicants on survey results and respond to media and congressional inquiries on MSRA/ABR program non-contractual issues.
- d. Act as the point of contact and liaison with other agencies such as the Maritime Administration, Military Sealift Command, United States Coast Guard and the Army for MSRA and ABR contractual issues.

3.5.2.3 NAVSEA Fleet Support Contracts Division (NAVSEA 024).

- a. Review all MSRA and ABR applications and the recommendations forwarded by NAVSEA 04Z.
- b. If the recommendation from 04Z is to cancel an existing MSRA/ABR, obtain NAVSEA 02 concurrence prior to forwarding the package to NAVSEA 00 for approval.
- c. As NAVSEA Contracting Officer, issue all MSRAs and/or ABRs that have been jointly approved by NAVSEA 04Z, and issue correspondence on recertifications and denials.
- d. Act as the point of contact and liaison with other agencies such as Maritime Administration, Military Sealift Command, the Coast Guard and the Army for MSRA and ABR contractual issues.
- e. Provide NAVSEA 04Z and the Contracting Officer at the responsible RMC with copies of the correspondence from NAVSEA 02 to the Contractor.

3.6 PROCEDURES FOR MASTER SHIP REPAIR AGREEMENT AND AGREEMENT FOR BOAT REPAIR.

3.6.1 Period of Agreement.

- a. In accordance with reference (f) either party to the Agreement will have the right to cancel the Agreement without affecting the rights and liabilities under any job order in existence at the time of cancellation by giving 30 days written notice. The contractor will perform and complete all work covered by any job order and any modifications entered into prior to the effective date of cancellation. The Agreement will remain in force until canceled by either party. NAVSEA policy requires that the RMC Contracting Officer consider recommending to NAVSEA 04Z and NAVSEA 024 that an Agreement be cancelled for any of the following reasons or events:
 - (1) Bankruptcy.
 - (2) Change of firm's name, management or owner.
 - (3) Default under a job order.
 - (4) Inclusion in List of Parties Excluded from Federal Procurement and Non-Procurement Programs compiled by the General Services Administration.
 - (5) Removal or sale of facilities.
 - (6) Merger.
 - (7) No longer meeting the standards for award of the agreement.

- b. If NAVSEA cancels an Agreement, NAVSEA 02 will issue notification of cancellation upon approval by NAVSEA 00. Likewise, if a contractor cancels an Agreement, NAVSEA will acknowledge the cancellation by letter. (Originals will be sent directly to the Contractor.) NAVSEA 024 will provide copies of letters to the cognizant RMC and NAVSEA 04Z. The RMC will make additional distribution to notify all other interested parties.

3.6.2 Solicitations for Job Orders Outside of Existing Contracts. In accordance with reference (f), when a requirement arises that is determined to be beyond the intended scope of an existing MS/MO or similar contract, and the requirement is determined to be for the type of work covered by the MSRA/ABR within the United States, bids, proposals or quotes will be solicited by the RMC Contracting Officer from prospective contractors who have previously executed an MSRA or ABR. If time permits, solicitations can be issued to prospective contractors who have a pending application for an MSRA or ABR, who potentially possess the necessary qualifications to perform the work, and who has requested to participate in the solicitation process.

- a. The RMC Contracting Officer will ensure that solicitations are prepared in the Uniform Contract Format and that they comply with reference (c), Sections 14 and 15, and the NAVSEA Standard Solicitation package, as applicable. When the Government invites a contractor to submit a bid or proposal for the repair, conversion, alteration of, or addition to a vessel, the RMC Contracting Officer will include in the solicitation the nature of the work, the date the vessel will be available to the contractor and the date the work is to be completed. The notice will state when bulk ammunition is aboard the vessel.
- b. Where practical, the contractor will be given an opportunity to inspect the items of work to be accomplished on the vessel. The contractor will submit a bid, proposal or quotation as requested by the RMC Contracting Officer for the performance of the work described in the solicitation.

3.6.3 Pre-Award Survey for Job Orders and Determination of Eligibility. The Contracting Officer at the RMC will apply the standards set forth in reference (g) for making the determination of responsibility. A pre-award survey of the contractors' operations including any analysis of the contractors' proposed subcontractors, may be directed before making a responsibility determination. A pre-award survey should be used if there is a concern with the adequacy and suitability of facilities, contractors' management, financial capability and Quality Assurance system, including safety standards, fire protection, hazardous materials and waste control, adequacy of facilities for the health, comfort and welfare of the crew and sufficient plant protection to safeguard the vessel and government property plus other issues at the discretion of the Contracting Officer. To be determined responsible, a prospective contractor must possess the following capabilities under reference (g):

- a. Adequate financial resources to perform the contract, or the ability to obtain contracts.
- b. Ability to comply with required or proposed delivery or performance schedule, taking into consideration all existing commercial and governmental business commitments.
- c. Satisfactory performance record. A prospective contractor shall not be determined responsible or non-responsible solely on the basis of a lack of relevant performance history, except as provided in reference (g).
- d. Satisfactory record of integrity and business ethics.
- e. Necessary organization, experience, accounting and operational controls, and technical skills or the ability to obtain them (including, as appropriate, such elements as production control procedures, property control systems, quality assurance measures and safety programs applicable to production of materials or performance of services by prospective contractor or subcontractor).
- f. Necessary production, construction, and technical equipment and facilities or the ability to obtain them.
- g. Other qualifications and eligibility to receive an award under applicable laws and regulations.

3.6.4 Award of a Job Order. Per reference (f) Job Orders are to be awarded in accordance with reference (g) Subpart 14.4 or 15.5. After the receipt and evaluation of bids or proposals and selection of the contractor, the price for the work and other pertinent data will be set forth in a job order. This job order is subject to the provisions of the MSRA/ABR. When the acquisition solicitation process has been made under sealed bid procedures, issuance/award of a job order may be accomplished by a warranted contracting officer's signature. When discussions have been held on a negotiated procurement, the job order must be signed by the contractor and returned to the contracting

officer for signature prior to award. NAVSEA 02 has determined that all of its purchase activities will use the Uniform Contract Format. When using sealed bidding procedures, RMCs will use Form SF 33, Solicitation, Offer and Award as an award sheet for job orders issued under the MSRA and ABR. Electronic copies of SF 33, along with instructions for completing these forms, are available at the FAR and DFARS web sites.

3.6.5 Emergency Work. As outlined by section 6.302-2 of reference (c), the RMC Contracting Officer may issue a written order for work to a contractor who has previously executed an MSRA without inviting bids or proposals when a vessel, its cargo or stores would be endangered by delay in performing necessary repair work or when military necessity requires immediate work on a vessel. As soon as practical after the issue of such an order, the parties are required by the MSRA to negotiate a price for the work. When agreement is reached upon a price, the responsible contracting officer will issue a job order pricing the work.

- a. When emergency work or voyage repairs are necessary and fully justified by the Type Commander, reference (h) exception allows a waiver from the requirements of full and open competition "because of unusual and compelling urgency". Reference (i) states that the urgency exception may be cited for essential equipment or repair needed at once to comply with orders for a ship when such equipment or repair is required to meet the operational commitment/deployment message of the ship.
- b. The procuring activity must prepare a Justification and Approval. The standard format is reference (c) section 53.6-1, Justification and Approval to Approve Other than Full and Open Competition and it can be tailored to local requirements. The requiring activity must certify the requirement and provide data, estimated cost or other rationale on the extent and nature of the harm to the Government if the number of sources is limited due to urgency. The Justification and Approval may be written and approved after contract award when preparation and approval prior to award would unreasonably delay the acquisition. For contract actions over \$1 million to be performed under the urgency exception, authorization to proceed will be obtained from NAVSEA 00, Head of Contracting Activity, through NAVSEA 02.

3.6.6 Modification of Master Agreements. Each Master Agreement will be reviewed per reference (f) at least annually before the anniversary of its effective date and will be revised to incorporate all changes made necessary by the revision of the FAR or DFARS. Statutory or other mandatory changes may require review and revision earlier than one year. The agreement, however, may be modified only by mutual agreement of the parties. The Government has the right to cancel the agreement on 30 days written notice when the parties fail to agree on a modification to the Agreement, which is required by statute, Executive Order, FAR or DFARS. A modification to a Master Agreement will not affect any job order issued before the effective date of the modification.

3.6.7 Resolving Inconsistencies Between Master Agreements and Job Orders. The rights and obligations of the parties to a Master Agreement will be subject to and governed by the provisions of the Master Agreement, the provisions of job orders issued under the Agreement and the drawings, designs, plans and specifications. To the extent of any inconsistency between the Agreement and a job order, including any drawings, designs, plans and specifications, the provisions of the Agreement will govern.

3.6.8 Transfer of Master Agreements. Master agreements are not transferable when a repair yard is sold or undergoes a transfer of title regardless of whether a name change occurs or not. When such a sale or change of title takes place, the Master Agreement may be canceled. If the new owner desires a Master Agreement, the new owner may make application to NAVSEA 04 via the RMC in their geographic region. Previous qualifications of a repair yard for a Master Agreement do not always indicate that the shipyard will be qualified under the new ownership, since different financial and management considerations may be present.

3.7 MULTI-SHIP/MULTI-OPTION CONTRACTS.

3.7.1 Multi-Ship/Multi-Option Contract. This specific cost reimbursable contract strategy is addressed in a stand-alone discussion primarily because it is a component of the evolving Fleet Maintenance Strategy and is the contractual instrument that has been approved by higher authority to meet the long-range maintenance and modernization requirements and Force surge requirements to response to Request for Procurement objectives. The goal of the MS/MO contract is to provide a maintenance alternative and readily available qualified resources from the Maritime Industrial Base that can be rapidly activated to respond to Fleet surge requirements in addition to supporting scheduled availabilities and continuous maintenance objectives. The MS/MO Contractor and approved subcontractors are key "team players" in improving depot level work scheduling, maintaining qualified production

skills while focusing on production efficiency through proper work loading. The MS/MO Contract is coupled with the **End to End Maintenance and Modernization Process** for sustaining the level of readiness of the Force as directed by Commander, **United States** Fleet Forces Command and the Commander, Pacific Fleet.

3.7.2 Requirement. Surge maintenance requirements and the Fleet Response Plan required re-evaluation of the Fleet maintenance and modernization strategy to meet National Strategy Tasking. Evaluation of the multiple options available to obtain the services of the Nations ship repair base led to the decision that a Navy and Contractor “teaming arrangement” to meet fleet readiness goals should have significant benefits for all parties in addition to contributing to the benefits that are derived from the learning curve process while reducing the overall cost for maintaining the Force. To achieve these goals, MS/MO Contracts are being awarded.

3.7.3 General Contract Structure. The MS/MO Contract is typically awarded as a Cost Reimbursable, Incentive Fee (or similar) Contract, as the preferred most responsive contractual document that can be used to achieve the Fleet Response Plan surge requirements (it can also be a fixed price contract). The MS/MO Contract consists of a pre-selected grouping of ships by class that is awarded, using the best value basis, to a single contractor for a base year with several year options. Additionally the contract contains Contract Line Item Numbers for numerous scheduled availabilities plus Continuous Maintenance and Emergent Maintenance on several different ships. The contract is used to obtain as a minimum: the Contractors advice on depot level work item scheduling to maximize efficiency to reduce cost, provide ship specific technical expertise, perform work item planning support, provide production support services including material management and assist in effectively work loading depot level maintenance trade skills. The MS/MO Contractor, with qualifications in line with those required of a MSRA holder, teams with each ship’s Maintenance Team (MT) to provide long-term support and commitments to meet Fleet Maintenance and Modernization Strategic Plans.

3.7.4 Pre-Availability Planning. The advanced planning processes in Volume II, Part II and Volume VI, Chapter 31 of this manual detail the planning requirements in preparation for repairs and modernization when the work is to be performed using the resources available through the private sector industrial base for Chief of Naval Operations scheduled availabilities plus Continuous Maintenance Availabilities. Through the MS/MO Contract the government engages the contractor to plan the work, write detailed specifications and proposals and takes advantage of the best available and appropriate level of repair capabilities. The Contractor also establishes relationships with proven vendors on a long-term basis to assist in reducing costs because the contract requires that 40 percent of the work must go to subcontractors. The Contractor prepares specifications for the work candidates that are brokered for inclusion in the work item package. The ship’s MT validates the Contractor prepared work item specification packages in relation to the Technical Analysis Report that is prepared for each work item (developed by RMC Technical Analyst) that is developed in response to the contractor’s proposal(s). The terms and conditions as agreed upon in the MT authorized work package and the scheduled performance period are solidly defined by the warranted RMC Contracting Officer who authorizes the Contractor to proceed with the repair and modernization work as approved and outlined in each work item specification.

3.7.5 Availability Oversight. After defining the work package between the government and the MS/MO Contractor, the Project Manager and Contracting Officer are charged with the responsibility and authority associated with their positions to perform Contract Administration with their assigned Availability Management Team. Project Management Team representation and responsibilities are as outlined in Chapter 7 of this Volume.

3.7.6 Growth and New Work. It is the responsibility of the MT, using the Maintenance and Modernization Business Plan as the guide, to authorize the Contracting Officer to commit funds for any growth and/or new work.

- a. Growth Work is defined as any additional work that is identified after contract award or **definitization** that is related to a work item included in the contract award or **definitization**. Growth does not include pre-priced options or reservations that were specifically identified in the solicitation or defined package.
- b. New Work is defined as any additional work identified after contract award or **definitization** that is not related to a work item that was included in the original contract award or **definitization**.

3.7.6.1 Growth or New Work Proposals. The MT will evaluate the Technical Analysis Report prepared by the Technical Analyst for each work item submitted by the contractor. The Technical Analysis Report examines and evaluates the contractor’s proposal to determine the reasonableness of the contractor’s estimates and overall proposal. The Analyst examines all aspects of the proposal including labor, material and subcontractor or teaming members’ pricing.

3.7.6.2 Business Case Analysis. A cost/benefit-based evaluation may be performed by the MT to determine if growth and new work should be accomplished in an ongoing availability as required by Volume VI Chapter 31 of this manual. The Business Case Analysis performed by the MT is not a specific, formatted process but rather a deliberate, thoughtful decision process used whenever growth and new work is identified. This thought process should weigh the additional costs (premiums) against operational requirements. In some cases, it may be advantageous to complete the growth or new work during the availability; in other cases, it may make more sense to defer the work to a follow-on Continuous Maintenance period. The MT should consider all premiums associated with adding the work to the availability including the effect on the contractors' workload and the premium associated with the late addition of work.

3.7.6.3 Maintenance Figure of Merit. In addition the MT will utilize the Maintenance Figure of Merit to validate that new work most critical to mission accomplishment receives priority when allocating maintenance resources. Maintenance Figure of Merit does not apply to modernization items.

3.7.6.4 Option Items. In some cases the added work may have been covered by an option item that was included in the contract as a stand-alone work specification with a defined work scope that is not to be accomplished unless specifically invoked. Option items are used when there is uncertainty at the time of availability package lock as to whether or not specific, defined work is required. Requirements for use of option items are the same as those for Firm Fixed Price Contracts as defined in Volume VI Chapter 31 paragraph 31.5.3 of this manual.

APPENDIX A

MASTER SHIP REPAIR AGREEMENT

This AGREEMENT is entered into this ____ day of _____ by the UNITED STATES OF AMERICA, hereinafter called the "Government," represented by the Contracting Officer, Naval Sea Systems Command, Washington Navy Yard, DC 20376 and _____, a corporation organized and existing under the laws of the State of _____, (the "Contractor").

The purpose of an MSRA is to provide a contracting vehicle for the issuance of job orders for the repair and overhaul of ships. The specific qualification requirements governing MSRAs are contained in the latest version of NAVSEAINST 4280.2. This Master Agreement does not indicate approval of the contractor's organization and facility for any particular acquisition and is not an affirmative determination of responsibility under FAR Subpart 9.1 for any particular acquisition.

The clauses in this Agreement will be incorporated, by reference or attachment, in job orders issued under this Agreement to affect repairs, alterations and/or additions to vessels.

By giving 30 days written notice, either party to this Agreement has the right to cancel it without affecting the rights and liabilities under any job order existing at the time of cancellation. The contractor will perform, under the terms of this Agreement, all work covered by any job order awarded before the effective date of the cancellation.

This Agreement may be modified only by mutual agreement of the parties. A modification of this Agreement will not affect any job order in existence at the time of modification, unless the parties agree otherwise.

The rights and obligations of the parties to this Agreement are set forth in this Agreement and the clauses of any job orders issued under this Agreement. In the event there is an inconsistency between this Agreement and any job order, the provisions of this Agreement will govern.

This Agreement will remain in effect until canceled by either party.

THE UNITED STATES OF AMERICA

by _____

(NAVSEA Contracting Officer)

(Contractor)

by _____

(Authorized Individual)

(Title)

The RMC Contracting Officer will insert the following required clauses in all job orders awarded under this Agreement:

- (1) 252.217-7003 Changes
- (2) 252.217-7004 Job Orders and Compensation
- (3) 252.217-7005 Inspection and Manner of Doing Work
- (4) 252.217-7006 Title
- (5) 252.217-7007 Payments
- (6) 252.217-7008 Bonds
- (7) 252.217-7009 Default
- (8) 252.217-7010 Performance
- (9) 252.217-7011 Access to Vessel
- (10) 252.217-7012 Liability and Insurance
- (11) 252.217-7013 Guarantees
- (12) 252.217-7014 Discharge of Liens
- (13) 252.217-7015 Safety and Health
- (14) 252.217-7016 Plant Protection, as applicable. (Use this clause in job orders where performance is to occur at the contractor's facility.)

The RMC Contracting Officer will insert in all job orders any other clauses on subjects not covered by this Agreement, but applicable to the job order to be awarded.

This Agreement is applicable to job orders awarded by either the Naval Sea Systems Command or the Military Sealift Command.

Each job order awarded under this Agreement will specify the Contract Administration Office.

APPENDIX B

AGREEMENT FOR BOAT REPAIR

This AGREEMENT is entered into this ____ day of _____ by the UNITED STATES OF AMERICA, hereinafter called the "Government," represented by the Contracting Officer, Naval Sea Systems Command, Washington Navy Yard, DC 20376 and _____, a corporation organized and existing under the laws of the State of _____, (the "Contractor").

The purpose of an Agreement for Boat Repair (ABR) is to provide a contracting vehicle for the issuance of job orders for boat/craft overhaul/repair work, and/or selective component, and/or selective ship repair work. The specific qualification requirements governing ABRs are contained in the latest version of NAVSEAINST 4280.2. This Agreement for Boat Repair does not indicate approval of the contractor's organization and facility for any particular acquisition and is not an affirmative determination of responsibility under FAR Subpart 9.1 for any particular acquisition.

The clauses in this Agreement will be incorporated, by reference or attachment, in job orders issued under this Agreement to affect repairs, alterations and/or additions to vessels.

By giving 30 days written notice, either party to this Agreement has the right to cancel it without affecting the rights and liabilities under any job order existing at the time of cancellation. The contractor will perform, under the terms of this Agreement, all work covered by any job order awarded before the effective date of the cancellation.

This Agreement may be modified only by mutual agreement of the parties. A modification of this Agreement will not affect any job order in existence at the time of modification, unless the parties agree otherwise.

The rights and obligations of the parties to this Agreement are set forth in this Agreement and the clauses of any job orders issued under this Agreement. In the event there is an inconsistency between this Agreement and any job order, the provisions of this Agreement will govern.

This Agreement will remain in effect until canceled by either party.

THE UNITED STATES OF AMERICA

by _____

(NAVSEA Contracting Officer)

(Contractor)

by _____

(Authorized Individual)

(Title)

The RMC Contracting Officer will insert the following required clauses in all job orders awarded under this Agreement:

- (1) 252.217-7003 Changes
- (2) 252.217-7004 Job Orders and Compensation
- (3) 252.217-7005 Inspection and Manner of Doing Work
- (4) 252.217-7006 Title
- (5) 252.217-7007 Payments
- (6) 252.217-7008 Bonds
- (7) 252.217-7009 Default
- (8) 252.217-7010 Performance
- (9) 252.217-7011 Access to Vessel
- (10) 252.217-7012 Liability and Insurance
- (11) 252.217-7013 Guarantees
- (12) 252.217-7014 Discharge of Liens
- (13) 252.217-7015 Safety and Health
- (14) 252.217-7016 Plant Protection, as applicable (Use this clause in job orders where performance is to occur at the contractor's facility.)

The RMC Contracting Officer will insert in all job orders any other clauses on subjects not covered by this Agreement, but applicable to the job order to be awarded.

This Agreement is applicable to job orders awarded by either the Naval Sea Systems Command or the Military Sealift Command.

Each job order awarded under this Agreement will specify the Contract Administration Office.

VOLUME VII
CHAPTER 4
CONTRACT SPECIFICATION DEVELOPMENT

REFERENCES.

- (a) FAR 14.201-1 - Uniform Contract Format
- (b) FAR 14.204-1 - Records of Invitations for Bids and Records of Bids
- (c) DFARS 217.71 - Master Agreement for Repair and Alteration of Vessels
- (d) DFARS 211 - Describing Agency Needs
- (e) FAR 11.104 - Use of Brand Name or Equal Purchase Descriptions
- (f) NAVSEAINST 9070.1 - Standard Specification for Ship Repair and Alteration Committee
- (g) NAVSEAINST 5400.108 - Policy for Quality Management of Work on Non-Nuclear Surface Ship Critical Systems
- (h) NAVSEAINST 4710.9 - Requirements for Turnover of Planning Products and Specification Package
- (i) FAR 45.303 - Providing Material
- (j) NAVSEA S9086-7G-STM-010 - NSTM Chapter 997 (Docking Instructions and Routine Work in Dry Dock)
- (k) NAVSUPPUB 437 - Material - Required Delivery Date Processing
- (l) OPNAVINST 4614.1 - Uniform Material Movement and Issue Priority System
- (m) OPNAVINST 4780.6 - Policy for Administering Service Craft and Boats in the U.S. Navy

LISTING OF APPENDICES.

- A Specification Review Check List
- B Specification Review Summary Sheet
- C Summary Cost Estimates
- D Work Specification Transmittal
- E Procedures for the Preparation and Use of Work Item Specifications for Ship Repair
- F Work Package Integration Conference Agenda and Check List

4.1 PREPARATION OF SPECIFICATIONS AND ESTIMATES OF COST.

4.1.1 Purpose. This chapter provides a general discussion and specific guidance for the preparation of specifications that are developed for specific work items or ship alterations brokered for accomplishment by the private sector. The specification shall be integrated into a solicitation work package that upon contract award forms the basis for supervising and administering the agreed upon terms and conditions of the contract.

4.1.2 Scope. Contracts with commercial shipyards follow the Uniform Contract Format as specified in references (a) and (b). The Navy uses a variety of contract types, as stated in Chapter 2 of this volume, to obtain the required services, products, material and Integrated Logistic Support for the repair and modernization of surface **force, aircraft carrier** and submarines. The substance of these contracts depends upon clear, well defined specifications developed for each specific repair work item or alteration included in the work package accompanying each solicitation or job order presented to the contractor for use in preparing an offer. A job order is the contractual vehicle that is used under the Master Ship Repair Agreement or Agreement for Boat Repair as addressed in Chapter 3 of this Volume. The Master Agreement for Repair and Alteration of Vessels as authorized by reference (c) applies. If naval standards are required for proper accomplishment of the work by the contractor, the specifications prepared by the work item planner must invoke these requirements.

- a. The **Navy** Modernization Program is discussed in Volume VI, Chapters 3 and 36 of this manual. The end product of the processes must fully support the development of well defined technical specifications, associated guidance, identification of Long Lead Time Material, installation drawings, etc., that are prerequisites for developing an effective specification.
- b. The validation of work items identified in the Current Ships Maintenance Program and the associated planning processes addressed in this manual are critical to the work item planner tasked with the responsibility for development of each individual specification.

- c. To facilitate the development of work items and modernization packages in support of contracted ship maintenance, long-range planning and action milestones are required. Typical availability planning milestones for Chief of Naval Operations (CNO) availabilities for Submarines, Surface Force and Aircraft Carriers can be found in Volume II of this manual.

4.1.3 Design Versus Performance Specifications. Well-written specifications are a prerequisite to successful repair and modernization work. The two major benefits resulting from well-written specifications are reduction in costs and higher standards of workmanship. Unlike job orders prepared for use at Naval Ship Yards, specifications used by commercial shipyards must not only describe the work to be accomplished, but must clearly outline the contractual obligations and responsibilities of the repair contractor. It is particularly important that specifications be clear, concise, complete and definitive since unclear specifications not only cause technical questions and difficulties but also result in higher prices and scheduling problems. The Government assumes the risk of contractor performance when the specifications it furnishes are not suitable for their intended purpose. Specification adequacy arises only when the Government furnishes a specification, which only provides for the accomplishment of end results.

- a. A design specification details the manner or method of contractor performance. The implied warranty of specification usually includes precise measurements, tolerances, required processes and finished product tests. The contractor is bound to follow all of the Government's directions in a design specification. If the contractor follows these directions and is unsuccessful, the Government has assumed the risk, and as a result the Government has breached the implied warranty of specification adequacy.
- b. A performance specification provides for the operational requirements and only dictates end results. The contractor assumes the risk of choosing its method of achieving the end results in a performance specification. If the contractor fails to achieve the end results in a performance specification, and the specification is neither impossible nor commercially impracticable, the Government has not breached the implied warranty of specification adequacy.
- c. Many Government specifications are a combination of design and performance specifications. Accordingly, it must be determined which requirement has caused the problem, if any, and then that requirement must be analyzed using the above rules. It is recommended to confer with responsible contract personnel and legal counsel when addressing problems associated with alleged implied warranty of specification adequacy.
- d. Determining if a specification is performance-based is difficult. Specifications in which the vast majority of requirements are performance-based and contain a design definition appropriate for the particular phase of the effort should be considered compliant with Department of Defense (DoD) policy.
- e. Specifications are composed of a set of requirements statements. Requirement statements contain the word "shall". Any statement that is not mandatory should be reviewed only from the standpoint of clarifying to the requirement definition. The review of specifications consists of locating the requirements ("shall") statements and assessing whether those statements are performance-based.
- f. Performance-based requirements statements should bring about a solution at a very high level, whereas detail requirements statements should constrain the solution at a very low level (most often only a single or preferred option for resolution). Determining whether a requirement statement brings about a solution at a "high" or "low" level is judgmental.

4.1.4 Regulatory Requirements for Specifications. Important considerations for the specification writer are derived from the Federal Acquisition Regulations (FAR) and the Defense Federal Acquisition Regulation Supplements. The FAR defines a specification as a description of the technical requirements for materials, products or services that includes the criteria for determining whether these requirements are met.

- a. The FAR further requires that specifications state only the Government's actual minimum needs and be designed to promote full and open competition. The FAR has the force of law and must be followed. Therefore, anyone preparing specifications must necessarily understand certain regulatory requirements. Reference (d) contains the regulations that govern specifications, standards and other purchase descriptions. These regulations should be read carefully and understood by any specification writer.

- b. To achieve the contract objectives of obtaining satisfactory performance and full and open competition, certain basic standards in drafting specifications must be observed. They must be drafted in a clear, well-defined manner. Less than clear provisions may limit full and open competition in the acquisition process by preventing those making offers from competing on a “common” or equal basis. This occurs when those making offers interpret the specifications and arrive at different reasonable conclusions about what kind of performance they will be required to render. The result is that they submit offers reflecting different kinds of performance. In sealed bid acquisitions, bidding on an equal basis has generally been considered to require bidding documents that are so clear and precise that all bidders are offering essentially the same product or service. The outcome is that bids can be compared and selection for award made solely on the basis of price and other price-related factors. In negotiated acquisitions, which sometimes involve a balancing of technical merit and price, those making offers may submit markedly different technical proposals to meet the Government’s needs. Competition on an equal basis generally means that specifications must be sufficiently clear and complete to afford all potential bidders an equal basis to understand the Government’s basic requirements.

4.1.5 Restrictive and “Brand Name or Equal” Specifications. Specifications also must be written in an “unrestricted” manner. Specifications are “restrictive” if they include requirements that limit competition and are not necessary to ensure satisfaction of the Government’s basic needs. This kind of restrictiveness of competition may favor one contractor over another and it may also prevent the Government from getting the kind of performance which can best satisfy its needs at the most reasonable price. Where the contractor supplies ship repair materials or equipment, the work item planner should not specify the products of individual manufacturers. Instead, the work item planner should describe the technical specifications which the material or equipment must meet to obtain satisfactory performance. This will ensure free and open competition among suppliers and subcontractors and, ultimately, will result in lower costs for the Navy. If it is difficult or impossible to give suitable specifications for materials or equipment, the work item planner may stipulate that the contractor supply a specific manufacturer’s model “or equal” and state the salient characteristics that make it “equal” pursuant to reference (e).

4.2 WORK PACKAGE DEVELOPMENT.

4.2.1 Work Packages for Non-Multi-Ship/Multi-Option Contracts. In writing work item specifications, the Executing Activity (EA) planner(s) may frequently include requirements from multiple Ship Work Line Item Numbers (SWLIN) in a single work item. Conversely, work requirements of a single SWLIN may be included in multiple work items; however, the most common and most desirable practice is to prepare a single work item to include all work requirements of a single SWLIN. During review, the specification must be checked to ensure that each SWLIN work requirement authorized for shipyard accomplishment is contained in the Specification Package. Appendices A through D provide formats that should be used by the planner when writing specifications and assembling solicitation/work packages for projects that are not covered by the Multi-Ship/Multi-Option Contract. Work items normally specify only what the contractor is to do rather than how to perform the work. There may be instances when adherence by the contractor to a specific manner of accomplishing the work will be required because of a requirement in a Navy document or manual. The procedures must be clearly defined for the performance of the work. Specifications must be written in a logical sequence of work operations (i.e., remove, disassemble, inspect, report, repair, reassemble, shop test, reinstall and ship test). Each specification shall clearly define the work requirements and be as self-contained as possible to enable the contractor to understand the requirements without having to research referenced data. Specifications must never upgrade equipment and installations to exceed the existing configuration of the ship. Furthermore, material requirements will be equal, as a minimum, to the original installation and service requirements. Appendix E provides guidance for work item planners charged with development of ship repair and modernization specifications.

4.2.2 Work Packages for Multi-Ship/Multi-Option Contracts. Work Package Preparation is discussed in Volume II, Part II, Chapter 2 of this manual.

4.2.3 Naval Sea Systems Command Standard Specification Program.

- a. Under reference (f), the Standard Specification for Ship Repair and Alteration Committee (SSRAC) is responsible for the generation, revision and control of Naval Sea Systems Command (NAVSEA) Standard Items (SI) commencing with SI -009-01 and Standard Work Templates. The SSRAC meets annually to review and approve changes to NAVSEA Standard Items, Standard Work Templates, and procedures for preparation and use of work templates. Specification improvement recommendations are welcomed and shall be provided to the SSRAC.

- b. Work items shall be written consistently so that identical work activities and requirements are specified at the same time they are included in a contract specification. Consistent language throughout a contract makes it easier to understand. Through continuous use, the phrases used take on a special meaning and gain acceptance within the industry. The SSRAC develops and publishes Standard Phraseology yearly. Specification writers should become familiar with the material in Appendix E. It shall be consulted frequently to ensure Standard Phrases are used properly. Like Standard Items, Standard Phrases are published by fiscal year designation. Specification packages shall be prepared using the standards when they are issued by the SSRAC chairman regardless.

4.2.4 Standardization Usage. Once a work item specification has been prepared, as is the case with the Master Specification Catalog, to address a specific set of SWLIN requirements, it shall be used whenever the same requirements are authorized for accomplishment on another ship of the class. In most cases, an original work item has the greatest chance of resulting in a contract change. The fundamental thrust of the NAVSEA standardization program is that tried and proven contract requirements are generally superior. Standardization and consistent usage of approved standards tends to strengthen the quality of specification packages over time by improving the ship repair industry acceptance of the standards used.

4.2.5 Expanded Process Control Procedures (EPCP) for Surface Force Ships Critical Systems. Contractor work accomplished during Depot (D) level or post delivery work executed inside a CNO, Continuous Maintenance Availability or Continuous Maintenance maintenance period on Critical Systems will require the use of an EPCP as specified in reference (g).

- a. For systems outlined in reference (g), an EPCP will be developed by the Prime Contractor and approved by the local Regional Maintenance Center (RMC) Engineering Department, unless a previously approved EPCP is used.
- b. EPCP will provide the tasking to be performed and the sequence in which it will be accomplished (similar to a Controlled Work Package).
- c. Navy Objective Quality Evidence will be utilized by the contractor to document steps accomplished during the work process. Navy Objective Quality Evidence may be found in Volume V of this manual.

4.3 SPECIFICATIONS.

4.3.1 Preparation of Specification Work Items. All specification work items must conform to the same basic format and will comply with the requirements and policies established by reference (f) and amplified by Appendix E. These documents establish the organization and responsibilities for development, revision and control of standard specifications. Specification work items are written to convey the Government's requirements to the contractor. They are extremely important for several other reasons. The specifications are the heart of the contract and serve as the basis for the formation of offers by the shipyards, the baseline for the evaluation of offers and, after award, the means for binding the contractor to required performance. In judging acceptable performance, the Government is bound by the contents of the specifications when testing or inspecting the contractor's work results. The specifications serve as the basis for determining whether desired work is a change to the contract or is already required.

4.3.2 The Specification Package. The specification package may consist of applicable NAVSEA Standard Items, Standard Work Templates and unique templates, as discussed in Chapter 2 of this Volume, that are contained in the Master Specification Catalog, resident in the Navy Maintenance Database (NMD) in the Planning Module. These Items and Templates are written to standardize the requirements across the Maritime Industry to specify action that is required by the contractor to accomplish the intent of the work authorized for shipyard accomplishment. The requirements for planning products and the specification package are identified in reference (h). This directive provides detailed guidelines on turning over work package products from the Planning Activity to the Procuring Contracting Officer (PCO) for solicitation and from the PCO to the Administrative Contracting Officer after contract award.

4.3.3 Master Specification Catalog. Master Specification Catalog is discussed in Volume II, Part II, Chapter 2 of this manual. Planning Activities/Executing Activities Planning who are responsible for the preparation of work item solicitation packages shall use the Master Specification Catalog databases to the maximum extent possible when

planning assigned work using NMD and **other** Maintenance Automated Information System. Additionally, they shall also provide input to the Master Specification Catalog gatekeepers for improvement of the existing catalog or to propose new candidates for the catalog.

4.4 PREPARATION.

4.4.1 Steps in Preparing a Work Item Specification. Unless clearly unnecessary, the steps to follow in preparing a specification are:

- a. Determining the Government's requirements and a preliminary understanding of what the contractor must do in order to satisfy these requirements.
- b. Research, data gathering and analysis.
- c. Preparation of a detailed outline.
- d. Preparation of the initial draft.
- e. Review and editing by the writer.
- f. Team review and modification.

4.4.2 Determining Requirements and Understanding What the Contractor Must Do. The specification writer must begin with obtaining a clear and full understanding of the Government's requirements **through the use of on-site ship checks, validation of the work candidate against the system/equipment operating conditions and discussions with the point of contact or those familiar with the work request.** Failure to do so will at best result in less than the Government wanted and at worst a useless product. Once a clear and full understanding of the Government's requirements is obtained, the specification writer shall determine what the contractor must do to satisfy the requirements. In some instances this determination will only be a preliminary one, as the performance of subsequent steps will frequently result in changes to the original determination.

4.4.3 Research, Data Gathering and Analysis. Part of the first step frequently involves research and data gathering. In some instances, it may be necessary to essentially reverse the order of performance. The specification writer can best make that determination based on all attendant facts and circumstances. The specification writer should avoid believing that everything one needs to know to write a proper specification is readily available.

- a. In general, the best place to start in research and analysis is to determine if the Government has previously accomplished the same or similar work. This can be accomplished by coordinating with appropriate project and contracting officers and by checking with other activity planners. The Master Specification Catalog Maintenance Office maintains the database of master specifications for D-Level maintenance and **another** maintenance Automated Information System contains data for I-Level maintenance. Once previous work items are identified, a copy of the specification(s) should be obtained along with information regarding problems that may have arisen pertaining to the specification. Where sufficient information does not exist, the specification writer should not be hesitant to contact other agencies for information. For example, DoD may provide useful information pertaining to aerial photography. The Army Corps of Engineers or the Environmental Protection Agency may provide information on such subjects as disposal of hazardous waste.
- b. Previously used specifications, regardless of their source, shall never be used without reviewing for current applicability. Regulations, processes and procedures frequently change. In addition, Government requirements sometimes change, capabilities between contractors are widely variable and the unedited use of previously used specifications may cause the recurrence of mistakes or deficiencies in the specification.
- c. There are many other potential sources of information (e.g., textbooks, commercial associations, Federal and military specifications and standards, manufacturers' catalogs, periodicals, microfilm files and society publications such as American Society for Testing and Materials and the American National Standards Institute).
- d. Federal specifications should be selectively applied and tailored to their application. ("Selective application" is the process of reviewing specifications, standards and related documents to ensure that only those that have application to a particular acquisition are included or tailored in the solicitation.) A number of existing specifications may be included in the contract specification.

- e. "Tailoring" is the process by which individual sections, paragraphs or sentences of the selected specifications, standards and related documents are reviewed and modified so that each one selected states only the Government's minimum requirements.
- f. The American Bureau of Shipping Rules and U.S. Coast Guard Regulations provide specific direction. American Bureau of Shipping and NAVSEA have an active program to develop Naval Vessel Rules that will have future application.

4.4.4 Availability of References. Contractors are required to obtain, from sources designated as repositories, copies of standard Navy drawings, referenced specifications and standards. Other required references are provided by the planning activity/PCO with the solicitation package or are made available for examination at a designated location. Required references not made a part of the solicitation package are turned over to the successful contractor at award. The work item planner ensures the requirements specified for each work item adhere to prescribed technical standards of work. These technical standards are included in publications such as:

- a. Naval Ships' Technical Manuals cover general operating and maintenance instructions on shipboard systems, equipment and material under the cognizance of NAVSEA.
- b. Military and Federal specifications provide uniform standards and specified tests for materials, products, or services used by the military services. Specific data on particular designs of equipment set forth in equipment Technical Manuals (TM), manufacturer's instruction books and manufacturer's drawings.
- c. Specific data for particular ship system applications set forth in the Ships Information Books, General Information Booklets, Piping Systems Instructions Book, etc., as appropriate to a particular ship and item.
- d. Specific details on electronics installations, maintenance standards and procedures as set forth in the Electronics Installation and Maintenance Book.
- e. The Planned Maintenance Subsystem supplied to the ship for scheduled preventive maintenance.
- f. NAVSEA and other Systems Commands directives applicable to specific processes, procedures or standards.
- g. Master Specification Catalog containing D-level work item templates for multiple ship classes planned in NMD.
- h. Locally prepared drawings, sketches, design instructions and similar data.
- i. The General Specifications for Overhaul of Surface Ships.
- j. The General Specifications for Ships of the U.S. Navy.
- k. Deep Diving General Overhaul Specifications.
- l. American Bureau of Shipping Rules.

4.4.5 Preparation of a Detailed Outline. After completion of the first two steps, it may be helpful to arrange the data selected for use into an organized format that identifies the key areas to be covered. This step may not be necessary for easier specification preparation efforts but will be very useful for more complex efforts. A detailed outline approach is recommended. To prepare the outline, the data accumulated in the preceding steps should be further analyzed, organized and presented in chronological order and desired format. The outline should consist of the key words and skeleton phrases of the proposed specification. The outline is sufficiently detailed, contains all key aspects and be organized properly to be as useful as possible. Once complete, the outline serves as a "road map" for the specification writer. It allows the writer to expand and fill in necessary details without being overly concerned about the organization of the specification. Such an approach will make the task of writing the actual specification less difficult and enhance the quality of the specification.

4.4.6 Preparation of the Initial Draft. Once the detailed outline is complete (if determined necessary), the initial draft of the specification should be written. The difficulty of this step will depend primarily on how well the preceding three steps have been performed. If they were adequately performed, the preparation of the initial draft should not be overly difficult. The experience and other pertinent qualifications of the writer will also determine the

difficulty of the effort. The draft should closely parallel the outline unless deficiencies are discovered. By using the outline, the writer should be able to write quickly and not ponder over those aspects already considered in the outline.

4.4.7 Material Requirements. The contractor shall furnish material required for the performance of any contract unless provided as GFM. Any other material required for performance is Contractor Furnished Material. In contracts it is Government policy, in accordance with reference (i), for contractors to supply all labor and material required for performance of the terms and conditions of the contract. One exception is the Government has the right to provide material as GFM whenever it is determined to be in the best interest of the Government. Long Lead Time Material should be provided as GFM. This material is defined as that which is not commercially or otherwise available to the contractor in time to support the performance schedule. The following material should be considered GFM:

- a. Parts unique to or obtainable only through the Government.
- b. Standardization material (System Procured Material/Contractor Procured Material for Alterations) (for configuration consistency).
- c. LLT Material (including any material not available in time to support production).
- d. Parts requiring provisioning of technical documentation (new components not supported in the Navy supply system).
- e. Stocked material: In long supply (supplies far in excess of demand), expiring shelf life (material in stock will expire if not used) or Class Maintenance Plan (CMP) programmed material (pre-positioned for special CMP programs).
- f. Whenever it is in the best interest of the Government.

4.4.7.1 Qualified Products Lists. It is required that some materials of a specialized nature be procured only from suppliers who have been found qualified to produce or install these materials to Navy standards. Contractors so qualified are identified on Qualified Products Lists (QPL). The QPLs contain lists of all items for which qualified suppliers are required, arranged by military specification number, and indicate the qualified suppliers for each item. In preparing descriptions for work items which will require use of materials shown on a QPL, the planner should specify that the contractor will obtain these materials from a supplier on the QPL and should provide a list of the qualified suppliers from whom the contractor may obtain these materials.

4.4.7.2 Turnaround Items. Work items may require the contractor to remove certain items of equipment and ship them to specific Government activities for necessary repairs. These "turnaround" procedures are frequently desirable in the case of highly technical equipment such as gun sights and gyroscopes. They shall be used, however, only when specific activities have been designated to repair or service such equipment. They shall not be used when equipment is to be shipped to subcontractors selected by the prime contractor for the performance of specialized work. The work items may require that the contractor provide the services of a manufacturer's field representative to supervise and instruct contractor personnel in the performance of repair work on specific equipment produced by that manufacturer.

4.4.8 Tests, Inspections and Performance Criteria. Inspection and test requirements in work items shall be equal to the level of criticality of the work to be performed and shall be included in all specifications in accordance with the information provided in and the guidance for Appendix E Specifications. The work item planner shall be thoroughly familiar with the requirements outlined in Volumes IV and V of this manual that specifically address the minimum tests and inspections that are to be accomplished in association with various types of availabilities.

- a. After specifying acceptable performance requirements, equally acceptable performance criteria, if different, must be stated. The criteria must be definitive and, above all, reasonable. The work item should contain simple performance criteria that can be used to prove the contractor's compliance with the specifications. The criteria should be precisely stated to satisfy the minimum needs of the Government for the work. Vague, nebulous or indefinite criteria shall be avoided. The performance criteria shall be based on applicable reference documentation. Performance standards are prescribed for many ship repair requirements in various publications and drawings and these standards should be used

in performance criteria. Cleanliness standards, machined surface standards, non-destructive testing standards and numerous other standards unique to trade groups, processes or materials shall be used wherever possible.

- b. When a well-established standard cannot be identified for use in specifying performance criteria, a simple test can be created to prove the contractor's work. In devising such tests, tolerances may be all that are required. A minimum, a maximum or a range of tolerances may be sufficient to prove performance. Simple tests can be performed such as hydrostatic tests, weight tests, pressure tests or pull tests. In more difficult situations, it may be necessary to require an engineered test to prove satisfactory performance.
- c. When tests are required for equipment after repair, such tests shall be fully described and set forth in the work items. Work items may specify certain tests are to be conducted during normal working hours. For a critical test and inspection, it may be necessary to ensure that the RMC quality assurance representative or a cognizant government representative be available to simultaneously witness the event normally called out as a Government required "G" inspection or observation check point. Where tests will be elaborate or complex, the work item planner may obtain test memoranda from the appropriated RMC or naval shipyard design engineers that describe the tests conducted. The planner then incorporates these memoranda in the appropriate work item.
- d. If appropriate Technical Authority requires dock trials or sea trials, the trials will be specified in the job order. The specifications will include requirements for such trials if they are considered necessary and authorized by the Type Commander (TYCOM) or NAVSEA. For sea trials, the ship is normally operated by the Ship's Force and the contractor provides a specified number of personnel by trade to be aboard the ship during the trial. RMC should provide the ship with the list of personnel who will be aboard. Reference (j) contains further information on dock trials and sea trials. The requirement for trials specifies a scheduled number of days before the completion of work. Normally, the sea trials are scheduled from 4 to 7 days before the job order completion date to allow for adequate adjustment and correction of defects found during the trial. For similar reasons, the dock trial should be scheduled from 2 to 3 days before the sea trial.

4.4.9 Split Repair Responsibility. To avoid doubts about responsibility for completed work and to minimize physical interference and safety hazards, ship's personnel should not work on any unit or system on which the contractor is also working. Work items, to the maximum extent possible, shall not be written to require the performance of work by both the Government Personnel or Government obtained Third Party Contracts/Vendors and the executing contractor on the same unit or system.

4.5 SPECIFICATION REVIEW.

4.5.1 Review and Editing by the Writer. After the initial draft of the specification is complete, the writer will need to review and edit it. Organization, content and material covered, format and sequence or chronology will need review. Poor grammar and punctuation, ambiguities, gaps or omissions, wordiness and clerical errors should be corrected. A work item specification check list and review summary sheet are provided in Appendices A and B to assist reviewers in making a systematic and thorough evaluation of a work specification package. The check list contains a listing of each element of the work item heading and each paragraph of the work item. Under each listing, a description of applicable requirements from the regulations is provided with a block to check for each element. This check list is a consolidated listing of things to look for during the review. Work specification reviews can now be performed online via the [Online](http://www.spear.navy.mil) Specification Review process that utilizes www.spear.navy.mil.

Questions useful to the specification writer in determining the adequacy of the efforts are:

- a. Does the specification clearly tell the contractor what is required?
- b. Is only information necessary to assist the contractor in understanding what is required included (e.g., have the "nice to have" items been eliminated from the "essential" items)?
- c. Will the Government and contractor be able to achieve reasonable pricing?
- d. Will the contractor's tasks, when accomplished, produce results consistent with contract objectives?
- e. When appropriate, does the specification clearly tell the contractor how to perform?

- f. Can the Government representative who accepts the required supplies or services tell whether the contractor has complied with contract requirements (e.g., are standards for measuring performance clearly stated)?
- g. Is the specification sufficiently detailed to permit the Government and the contractor to identify manpower resources, special facilities, equipment, subcontracts and similar requirements?
- h. Is information differentiated so that background information, suggested procedures, etc. are clearly distinguishable from contractor responsibilities? (Statements that do not directly contribute to an understanding of requirements should normally be avoided since they may create ambiguities, confusion and greater costs.)
- i. Are reference documents (e.g., specifications, standards and exhibits) properly shown and cited? Are they pertinent to the task(s)? Do they fully apply or only partially?
- j. Are milestone completion or delivery dates appropriately established? If “elapsed” time is used, is it clear concerning calendar days or workdays?
- k. Are proper quantities shown?
- l. Have data requirements (e.g., technical, financial and progress reports) been properly identified for such things as frequency, content, format and place of submission?

4.5.2 Review and Editing by Someone Other Than the Writer. Once the writer has completed the preceding step, it is a good practice to have someone else who has the necessary technical qualifications or editing skills, review, edit and critique the draft specification. The technical review and editing functions may be performed by different individuals.

4.5.3 Team Review and Modification. The last step is team review and modification. In many cases this will be performed by the Ship’s Maintenance Team and other government representatives as appropriate. The completed draft may be routed for review by contracting, legal and other personnel, as appropriate, and depending in part on the complexity or government’s and contractor’s liability or risk associated with the contractor’s performance in complying with the specification. Contracting and legal personnel often identify language or other aspects of the specification they know from prior experience will cause problems. The technical content must not be adversely affected by recommended changes to the specification. The process of team review and modification may be required a number of times before all recommendations and comments are adequately resolved. Once all necessary modifications to the specification are made, it is finished and ready for insertion into the solicitation work package and for the PCO’s action.

4.6 OTHER FUNCTIONS OF THE WORK ITEM PLANNER. In addition to writing work items and preparing cost estimates for them, the planner is responsible for starting other actions for successful performance of proposed modernization and repair work.

- a. The work item planner must determine the drawings and technical instructions (e.g., manufacturers’ TMs) which will be required for preparation of the work items and for the contractor’s guidance in accomplishing the required work. The planner must initiate requisitions for these publications sufficiently far in advance of the specifications’ cut-off date to permit their use.
- b. The work item planner is responsible for determining the ship repair materials and the GFM provided as alteration materials, if any, which the Government will provide the contractor. The purpose is to initiate requisition actions for these materials sufficiently far in advance of the overhaul period to allow for their timely receipt by the contractor.
- c. After award, a work item planner (or other cognizant RMC personnel) may have to secure for the contractor certain items of GFM which, because of changes to the job order, were not set forth in the original specifications. In addition, certain items that were available from commercial channels at the time the job order specifications were prepared may not be available when the contractor actually attempts to procure them. In such cases, the material may be obtained from Navy supply channels. However, it is preferable that the contractor procures the material from the Navy on a cash sale basis rather than the RMC provide it to the contractor as GFM. In a cash sale, the contractor maintains

complete responsibility for procuring the items from the appropriate Navy supply activity. The RMCs' only function is to certify that the material is not, in fact, available to the contractor through commercial sources and that it is required for accomplishing the job order.

- d. To obtain material from the Navy Supply System, the contractor is required to submit a request to the RMC procurement personnel for requisitioning the material in accordance with reference (k). Detailed instructions for the assignment of a priority to a requisition are in reference (l).

4.7 PLANNING REVIEW. After completion by work item planners, the work items and cost estimates are assembled and reviewed by the Technical Analysis Report Analyst. The work items should be subjected to a close "technical and contract review" to ensure that:

- a. Coverage of work conforms to that authorized for the availability or project.
- b. All technical aspects of the work are itemized and conform to requirements established by NAVSEA technical instructions and other publications.
- c. All necessary drawings and instructions are referenced.
- d. Identical work (such as cleaning and painting in identical areas) is not set forth in two or more work items.
- e. Work items are definitive, clear and explicit, and conform to quality assurance requirements.
- f. Work items meet the requirements of Appendix E.
- g. The Government will provide the proper documentation to support the contractor's preparation of the proposal. The PCO will designate the method and number of drawings and specifications for distribution. Ensure that the Ship's Force and Maintenance Team is provided with a set of specifications and references as soon as possible and in no case later than the date the solicitation is issued.
- h. The planning coordinator may summarize the budget estimates for the required work on a form similar to that in Appendix C. Appendix D is used to transmit the completed work specifications when the package is prepared by a planning activity that is other than the PCO or the RMC. The Planning Department transmits the proposed package to the RMC Contract Department. Appendix F provides the Work Package Integration Conference Agenda and Checklist. This conference may be performed as the Work Package Integration Review for Multi-Ship/Multi-Option Contracts.

4.8 NON-SCHEDULED AVAILABILITIES. One of the RMC's most important functions is to provide a process for performance of emergency work on Navy ships or work which cannot be delayed until the ship's next scheduled availability. This work may be accomplished during any of the availabilities listed in Volume II, Part I, Chapters 3 and 4 of this manual.

4.8.1 Special Planning Procedures. While some non-scheduled availabilities can be handled the same way as scheduled availabilities, others present severe planning problems for RMC personnel. For example, the Maintenance Team and work item planner will frequently not have an opportunity to make a planning inspection of the work on the ship but will have to prepare work items or estimated costs solely on the basis of the ship's work requests or from descriptions of the work contained in dispatches from the ship. Where it is not possible to perform an inspection of the work item, the port engineer may find it necessary to telephone the RMC technical codes and describe the work to be set forth in the work items in order to minimize planning time. At this time, the planner should also begin priority procurements, if required, for GFM and drawings. In addition, the planner should check to see if the job or similar work descriptions already exist in the technical library. Unscheduled maintenance requirements mandate the establishment of special procedures. Frequently, the first notice of a non-scheduled availability will come in the form of a telephone call from the cognizant TYCOM or Operational Commander. If time is short, the available members of the ship's Maintenance Team together with the RMC representatives and planner should obtain the following information during this call:

- a. As complete a description as possible of the nature of the difficulties.
- b. Present location of the ship.
- c. Nature and urgency of the ship's current operating commitments.

- d. Whether the ship is disabled or can move to the repair yard under its own power.
- e. Whether “hot work” (such as welding or burning) will be required, and whether this will require off-loading of fuel or ammunition (if off-loading is required, it should be accomplished before entering the contractor’s yard).
- f. Whether the ship has suffered underwater damage which will require dry-docking and, if so, if other routine dry-dock work can be done (such as the renewal of zincs, bottom cleaning and painting, sea chest/sea valve repair and repairs to underwater sound equipment).

4.8.2 Other Non-Scheduled Work. RMCs may from time to time receive work requests from ships under the management control of miscellaneous user activities. Examples include service craft and boats (under the cognizance of a USER command) and inactive ships in Inactive Ship Maintenance Facilities (under the cognizance of the Inactive Ship Maintenance Facilities Officer-in-Charge). The information provided would be similar to that described above.

- a. In accordance with reference (m), RMCs may be requested to provide technical assistance and advice for the preparation of work lists, overhaul schedules and cost estimates for service craft and boats. If the RMC personnel are available for the task, every effort shall be made to fulfill such requests.
- b. Preparation of clear, comprehensive and accurate work requests by the user activity is a prerequisite to successful overhaul and repair. On the basis of these work requests, the RMC planner shall prepare the work items for the work to be performed, estimate the costs and time required for the work and determine and order the necessary plans and material which the Government will furnish to the contractor. While the planner, whenever possible, will inspect the work to be accomplished, inadequate work requests will make it impossible to perform advance-planning functions such as obtaining necessary drawings and TMs. Adequate work requests are particularly important when, because of operating commitments, it is necessary to delay the planning inspection beyond the desired time or to omit it completely.

4.9 REGIONAL MAINTENANCE CENTER ACTIONS UPON RECEIPT OF WORK REQUESTS. Upon receipt of a work request from another government agency, the RMC Planning Officer or the individual designated by the Planning Officer, as the potential project coordinator, will distribute copies to individual planners who have previously been assigned cognizance over repair work in specific trade categories (e.g., hull, machinery, etc.) for the specific ship. The work item planner should initiate action at this time to obtain required drawings and other technical information necessary for the preparation of work item specifications or for inclusion in the work package that will be issued in the job order. In many cases it will not be feasible to do this until after the planning inspection when the planner determines the drawings or technical information that will be required based on inspection of the equipment.

- a. When the scope of work can be anticipated with reasonable accuracy before the planning inspection, the planner may be able to utilize the Master Specification Catalog to prepare the specification and initiate advance requisitions for GFM required for the work. As in the case of drawings and technical information, however, it will often be difficult to make a final determination in this respect until after the planning inspection.
- b. The planner shall review previously prepared work items to ascertain if any work item is similar to the work requested. If the unit has previously been through an availability, a review of the work items accomplished during that availability could be of assistance in determining the extent of work which may be required to repair a system or a piece of equipment. This is especially true if a piece of equipment must be opened or a system tested by the contractor to ascertain the extent of the repairs. As a result of this review of prior work, “open and inspect” or “test and report” work items can be minimized.

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APPENDIX A
SPECIFICATION REVIEW CHECK LIST

A. SHIP:

B. CUSTOMER ORDER ACCEPTANCE RECORD (COAR):

C. ITEM NO:

D. PROJECT CONTROL NUMBER (PCN):

E. CMP:

F. PLANNER:

G. SCOPE:

1. Title:
2. Location of Work:
3. Identification:
4. Security Classification of Equipment, Spaces and Documents:
 - a. Spaces:
 - b. Equipment:
 - c. Documents:

H. REFERENCES:

I. REQUIREMENTS:

J. NOTES:

K. GOVERNMENT FURNISHED MATERIAL (GFM):

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INSTRUCTIONS FOR APPENDIX A

- A. SHIP:** Enter the ships name and hull number.
- B. COAR:** Enter the Customer Order Acceptance Record (Funding Code and Availability No.) as assigned by the RMC.
- C. ITEM NO:** Enter the Prime SWLIN and Three-Digit Serial No. as assigned by the RMC.
- D. PROJECT CONTROL NUMBER (PCN):** Enter the SWLIN and Item Numbers Addressed in Work Item. Verify and record that SWLIN items listed under PCN are covered in the work item and that nothing more is added in excess of the requirements authorized.
- E. CMP:** Enter the CMP Item Number (omit if not applicable).
- F. PLANNER:** Enter the last name of the specification writer of work item as assigned by the RMC.
- G. SCOPE:**
1. **Title:** Enter the brief work scope description in plain language. Check to ensure the scope is correct and consistent with the Maintenance and Material Management (3-M) Maintenance Action Form (2-Kilo). Ensure the objective is accurate and logical; for example, inspect, repair or replace.
 2. **Location of Work:** Enter the compartment name, number, frame, location description or “throughout the ship” where applicable (omit when not applicable). Ensure that the location is a logical expression in context with the requirements paragraph.
 3. **Identification:**
 - a. Enter the equipment or component name, identification numbers (Allowance Parts List, Equipment Identification Code/Component Identification) and quantities to be worked on (omit when not applicable).
 - b. Verify by comparison with the Ship Systems Configuration Index.
 - c. Ensure that the identification provided is logical in context with the requirements in the requirements paragraph. An error here can have great impact on the requirements.
 - d. Verify quantities agree with 2-Kilo requirements.
 4. **Security Classification of Equipment, Spaces and Documents:** Identify if any Equipment, Space or Document is classified and subject to the applicable provisions of the Industrial Security Manual, DoD 5220.22M (0526-LP-522-0060) (omit when not applicable).
 - a. Spaces: Identify spaces where access to classified work is required and level of classification required. (omit when not applicable).
 - b. Equipment: Identify any classified equipment and level of classification required. (omit when not applicable).
 - c. Documents: Identify any classified documents and level of classification required. (omit when not applicable).
- H. REFERENCES:** (All references to paragraphs refer to the Work Item Specifications for Ship Repair (Appendix E Specifications)).
- a. “Standard Items” shall be listed first if referenced in the item.
 - b. References required for performance must be listed.
 - c. Documents listed must be addressed in paragraph 3.
 - d. References used must be applicable for the ship’s configuration.
 - e. References shall address only applicable portions.

- f. General Specifications for Overhaul is a primary technical data source. It should not be referenced but paraphrased in requirements.
- g. References shall be listed in order of appearance in paragraph 3.
- h. Standard Items always appear first in paragraph 2.1 when Category II Standard Items are invoked in the work item.
- i. References are listed in lower case letters.
- j. If there are no references, the word "None" shall appear after "1".
- k. References should not begin an unlisted chain of sub-tier references.
- l. References shall not use restricted (proprietary) data.
- m. References shall identify the required version/revision or none at all if the version/revision in effect at the time of issue of the solicitation is applicable for the requirements.
- n. Listed references must be available.
- o. Listed references must be essential.
- p. If a reference on a reference is required for performance, it must be listed in paragraph 2.
- q. If references are classified, the classification is shown parenthetically following the title (i.e., (C) for Confidential or (S) for Secret).
- r. Military Specifications (MIL-SPECS) are not listed in paragraph 2 but are included in paragraph 3 when applicable.
- s. Basic Government specifications, standards or Navy Standard Plans are listed without prefix zeros or suffix letters or numbers.
- t. Non-standard drawings are listed by number, revision and title as on the drawing.
- u. References shall be limited to applicable technical data including: Standard Items, Drawings, TMs, Military Standards (MIL-STD) and Test Memos.
- v. Instructions/Notices/Letters/etc. shall not be used as references.

I. REQUIREMENTS:

- a. The requirements shall contain a detailed description of work and material required to meet the minimum needs of the Government.
- b. Requirements shall be specified as performance specifications containing the criteria to determine satisfactory performance or accept delivery.
- c. Design specifications shall not contain accept/reject or performance criteria unless directly related to the design.
- d. The requirements shall provide or reference all information needed by the contractor to understand what he is required to do and to price the cost of performance.
- e. The requirements shall include all descriptions of reports or other data required.
- f. All applicable Cat II SI shall be invoked using the standard phraseology in Appendix E.
- g. Abbreviations and acronyms shall be spelled out and followed with the abbreviation or acronym in parentheses the first time used in a work item.
- h. Interferences in systems identified in SI 009-23 shall be specifically identified in the requirements paragraph.
- i. It is not necessary to require compliance with public law/regulations.
- j. The requirements sentence structure should be in verb-noun format (imperative mood).
- k. The requirements shall describe work only as authorized in the 2-Kilo.

- l. Work requirements shall be written in logical sequence (chronological order) with one idea per paragraph and one thought per subparagraph.
- m. No more than four levels of subparagraphs are allowed in specifications; for example, four levels of indentation are represented by the subparagraph 3.1.1.1.
- n. Requirements can be broken down by trade or component, but chronology shall be maintained within trade or component requirements.
- o. The requirements language shall be simple, clear and concise.
- p. The accept/reject criteria for each performance requirement are clear and definite.
- q. Mandatory parts (GFM and Contractor Furnished Material) to be replaced shall be identified in the requiring paragraph as follows: TOTAL QUANTITY REQUIRED, NAME OF PART, and PIECE NO. ON 2, *FIGURE DRAWING NO., and PART NO. * (DELETE "figure" and/or "drawing" as applicable).
- r. Miscellaneous materials (e.g., fasteners, gaskets, seals, etc.) shall be listed as needed in the requirements text, giving the specifications (Military/Federal/etc.) required.
- s. G Points must be inserted where needed for the Government to verify in-process performance attributes (i.e., (G) Hydrostatic Test).
- t. Use of process control procedures shall be required where tests and inspections are not suitable for product conformance determinations.
- u. Specifications cannot require directed "sole source" subcontracts or products (i.e., technical representatives, vendors, name brands, unless justified and authorized).
- v. A name brand "or equal" product can be specified if the salient characteristics of the "or equal" provision are included in the requirements.
- w. All references shall be invoked in the requirements. Using the words "in accordance with 2.x" directs strict compliance with the reference. Using the words "using 2.x for guidance" means that the reference is for information only and not for strict compliance. The latter should be used sparingly and not as a "catch all" phrase.
- x. If references are not fully applicable, the applicable portions should be specifically identified in the requirements paragraph.

J. NOTES:

- a. Notes are used to provide essential explanations or information. They should never contain work requirements or any kind of contractor requirements.
- b. 2-KILO Notes identifying work items as a special category of work should be included in the specification work item notes, i.e., "This is a Level of Effort Item."

K. GOVERNMENT FURNISHED MATERIAL (GFM):

- a. If material is to be provided as GFM, it must be listed in this paragraph.
- b. If there is no GFM to be provided, enter the word "None" in this paragraph.
- c. GFM should be specified in the following format: TOTAL QUANTITY PROVIDED, NAME OF PART, PIECE NO., REFERENCE NUMBER, NATIONAL STOCK NO. and PARAGRAPH NUMBER.
- d. Verify that the GFM is identified in the paragraph number listed.

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APPENDIX B
SPECIFICATION REVIEW SUMMARY SHEET

The review summary sheet has four columns. Column 1 is for recording the work item number. Column 2 is for recording the corresponding “prime” SWLIN and items under that SWLIN, which are covered in the work items. The first five digits of the work item will be the same as the SWLIN number for the prime SWLIN covered by the work item. The work item may also include other requirements from other SWLINS. These additional SWLINS and related items covered in the work item are recorded in Column 3. Column 4 is for recording review remarks.

Since work items and Ships’ Alteration Repair Package (SARP) requirements are sorted in SWLIN order, the review should for the most part be a parallel process. To ensure that the review systematically covers all work item requirements and all SARP requirements, use the following procedures:

1. Record the first work item number in Column 1 and the corresponding SWLIN and items under the SWLIN, which is covered in the work item in Column 2. The PCN in the heading of the work item should identify all SWLINS and related items covered in the work item. If additional SWLINS and items are listed under the PCN, record those SWLINS and item numbers in Column 3. Review the work item to ensure that all SARP requirements noted as “covered” are, in fact, covered in the work item. Note deficiencies in Column 4, “Remarks.” Also record in Column 4 any requirements in the work item not authorized in any of the SWLINS and items noted in Columns 2 and 3. Additional remarks should be recorded in Column 4 to reflect other work item deficiencies. The specification review check list should be used as a guide.
2. If the work item covers all items under the prime SWLIN, then go on to the next work item to continue the review. If the prime SWLIN contains additional items not covered by the work item, record them under that SWLIN on the next line of the review summary sheet. Limit the number of items on each line to three or four items unless all on a single line are clearly related and will be covered in the same work item. The objective in recording the items on the next line down is to leave space in Column 1 to record the work item number. At this point in the review, simply record the items not covered on the next line or lines as needed. This will record all items that are not covered under the prime SWLIN.
3. Review the next work item and repeat steps 1 and 2. Continue this review until all work items have been reviewed.
4. After the review of the total work package, examine each SWLIN and item listed in Column 3, starting at the top of the first page and going to the end of the review sheets. For the first SWLIN listed in Column 3, look under that SWLIN in Column 2 to see if its items match item numbers in Column 3. If there is a match, record the work item number corresponding to the SWLIN from Column 3 in Column 1 next to the matching SWLIN/item number in Column 2. If there is no match for an item in Column 2, record under the “Remarks” column that the SWLIN item is not contained in the SARP. Repeat this process for all items in Column 3.
5. All SWLIN items listed under Column 2 which do not have a work item number associated with them in Column 1 are SARP requirements which may not be covered in the work items. Some of these requirements may be covered by requirements identified in the remarks under step 1. Review the remarks to identify those work item requirements covered in a work item but which are not part of the SWLIN items listed for the work item. If there is a match, note the correct work item number next to the SWLIN item. Review the work item requirements again to verify that they correctly address the scope of work from the SARP and note the remarks as needed. For these requirements, note under the “Remarks” column that the work item PCN needs to be changed to include the additional SWLIN/item.
6. When the last review is complete, items in Column 2 which do not have related work item numbers in Column 1 should be noted in Column 4 as SARP requirements not covered in the specification work package.

USS _____ SPECIFICATION REVIEW SUMMARY SHEET

REVIEWER: _____ CODE: _____ DATE: _____

1	2	3	4
WORK ITEM NUMBER	SWLIN AND ITEMS	ADDITIONAL SWLINS/ITEMS	REMARKS

APPENDIX C
SUMMARY COST ESTIMATES

U.S.S. _____

<u>Cognizant Funding Authority</u>	<u>RMC/ Naval Shipyard Services</u>	<u>GFM</u>	<u>Contract</u>	<u>Total</u>
FLTCOM (TYCOM)				
NAVSEA (SHIPALTS)				
NAVSEA (ORDALTS)				
Other				
Contingency				
<u>TOTAL</u>				

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**APPENDIX D
WORK SPECIFICATION TRANSMITTAL**

Spec. No. ---/---/---

DATE _____ 1 _____

SHIP _____ 2 _____

TYCOM _____

TYPE OF AVAILABILITY	_____	FROM	_____	TO	_____
APPROVAL GRANTED BY	_____ 3 _____	ON	_____ 4 _____	BY	_____ 5 _____
	_____ 3 _____	ON	_____ 4 _____	BY	_____ 5 _____
	_____ 3 _____	ON	_____ 4 _____	BY	_____ 5 _____

SPECIFICATION NOS. _____ 6 _____

PLANNING ESTIMATES ESTABLISHED BY APPROVING AUTHORITY

REPAIRS \$ _____ BY _____ 7 _____

ALTS \$ _____ BY _____ 7 _____

OTHER \$ _____ BY _____ 7 _____

RMC ESTIMATES

	<u>HOURS</u>	<u>RATE</u>	<u>DOLLARS</u>
MANUFACTURING	_____	8	_____
ENGINEERING	_____	8	_____
MATERIAL			9

THE ESTIMATED DIVISION OF THE ESTIMATE BY FUNDING AUTHORITIES IS

_____ 10 _____

_____ GEOGRAPHIC LIMITATION ESTABLISHED FOR _____ 11 _____ BY

_____ 12 _____ SPLIT BIDDING IS NOT RECOMMENDED FOR THE FOLLOWING

REASON(S) _____ 13 _____

_____ THE WORK ITEMS AND WORK PERIOD FOR EACH SPLIT BID LOT ARE

DRY-DOCKING

14

TOPSIDE

14

IT IS CONSIDERED THAT THE WORK WILL _____ 15 _____ REQUIRE OVERTIME. THE RMC ESTIMATE INCLUDES _____ HOURS AT \$ _____ FOR THE OVERTIME.

THE WORK REQUIRED BY THE SPECIFICATIONS REQUIRES SPECIAL CAPABILITIES AS FOLLOWS

_____ 16 _____
_____ 16 _____
_____ 16 _____

THE WORK 17 DOES 17 DOES NOT REQUIRE ACCESS TO CLASSIFIED MATTER OR SPACES.

PREPARED BY _____ 18 _____ DATE: _____.

APPROVED _____ 19 _____ DATE: _____.

INSTRUCTIONS FOR PREPARING WORK SPECIFICATION TRANSMITTAL

(NOTE: No numbers are shown in blank spaces that are self-explanatory.)

- 1 Indicate date of the transmittal.
- 2 Indicate ship name and hull number.
- 3 Indicate authority approving repairs and alterations as appropriate.
- 4 Indicate date the approval received by RMC.
- 5 Indicate serial and date or date/time group of the authorizing correspondence.
- 6 Specify the work item numbers of the specification enclosed with the transmittal.
- 7 Indicate serial and date or date/time group of the correspondence establishing the planning estimates if other than 5 above.
- 8 Indicate composite rates provided by Contracts Department.
- 9 Value of material at commercial rates. Do not use Navy stock material prices.
- 10 Provide percentage breakdown of the estimate by grantor of funds.
- 11 Indicate the limitations established. If none, so state.
- 12 Indicate activity establishing limitation and serial number and date or date/time group of correspondence.
- 13 To be filled in only if split bidding is not recommended.
- 14 List the work items for each lot and the work period to be specified in the solicitation.
- 15 If no overtime is required, insert "not", otherwise leave blank and complete remainder of statement.
- 16 Indicate that work requiring special capabilities in the shipyards such as size of dry dock, special ordnance or electronic skills.
- 17 Indicate if access is required. If required, attach a completed DD Form 254.
- 18 Signature of preparer.
- 19 Signature of individual designated by RMC to transmit specifications to the Contracts Department.

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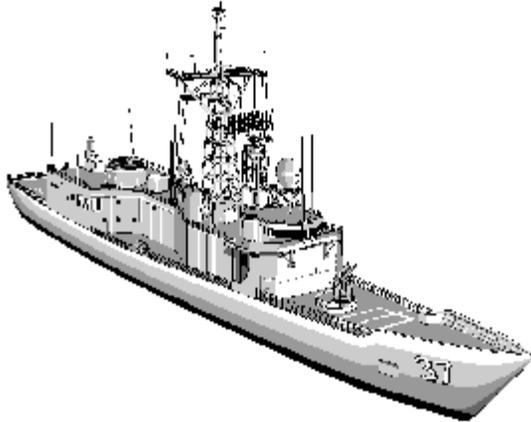
APPENDIX E
PROCEDURES FOR THE PREPARATION AND USE OF
WORK ITEM SPECIFICATIONS FOR SHIP REPAIR

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/CNRMC/SERMC/SSRAC1/default.aspx>, or copies can be obtained by e-mail request to ssrac@navy.mil or by phone to 904-270-5593.

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APPENDIX F
WORK PACKAGE INTEGRATION CONFERENCE AGENDA
AND CHECKLIST



USS

_____ *HULL NO.* _____

TYPE OF AVAILABILITY _____

Strategic Systems Project (SSP NO.) _____

DATE: _____

**WORK PACKAGE INTEGRATION CONFERENCE (WPIC)
AGENDA CHECKLIST**

USS: _____ HULL NO: _____ SSP: _____

TYPE OF AVAILABILITY: _____ DATE: _____

CONFERENCE AGENDA

A. REVIEW HABITABILITY ISSUES

1. DISCUSS HABITABILITY IMPACT
2. DISCUSS OFF-SHIP MESSING/OFF-SHIP BERTHING REQUIREMENTS
3. DISCUSS AVAILABILITY OF BERTHING BARGE
4. DISCUSS HABITABILITY "WORK AROUNDS" IF NO BERTHING BARGE WILL BE PROVIDED
5. FOR BOQ/BEQ, VERIFY QUANTITY OF SHIP'S FORCE PERSONNEL

B. REVIEW CRITICAL PATH / CONTROLLING ITEMS

C. IDENTIFY REQUIREMENTS THAT THE SHIP MUST MEET PRIOR TO AVAILABILITY START

1. DISCUSS AMMUNITION OFF-LOAD
2. DISCUSS FUEL OFF-LOAD/ON-LOAD
3. DISCUSS DEWATERING (COMPENSATED FUEL SYSTEMS)
4. DISCUSS REEFER / STORES OFF-LOAD

D. DISCUSS NEW WORK, DELETIONS OR MAJOR REWRITES

1. OBTAIN 2-KILOS FOR NEW WORK
2. DOCUMENT SPECIFICATION DELETIONS
3. IDENTIFY MAJOR SPECIFICATION REWRITES

E. REVIEW ALTERATION INSTALLATION TEAM (AIT) REQUIREMENTS

1. REVIEW QUARTERLY AIT SCHEDULE
2. IDENTIFY AIT INSTALLATIONS SCHEDULED DURING AVAILABILITY
3. OBTAIN 2-KILOS FOR ANY OUTSTANDING AIT SERVICES AND SUPPORT REQUIREMENTS

F. REVIEW AIT INTERFACE PROBLEMS

G. REVIEW POTENTIAL IMA AND SHIP'S FORCE INTERFACE PROBLEMS

1. PORT ENGINEER RESOLVE POTENTIAL CONFLICTS

H. REVIEW EARLY START AVAILABILITY REQUIREMENTS

1. TYCOM ISSUE AVAILABILITY MESSAGE (IF REQUIRED)

I. IDENTIFY ANY WORK ITEMS IN JEOPARDY

1. GFM NOT AVAILABLE
2. CUSTOMER FUNDING NOT AVAILABLE
3. DRAWINGS / REFERENCES NOT AVAILABLE
4. SCOPE OF WORK NOT DEFINED
5. INSUFFICIENT AVAILABILITY DURATION

J. DEFINE WORK THAT MUST BE STARTED BY A CERTAIN DATE (OTHER THAN OPTION ITEMS)

1. IDENTIFY WORK START DATES

K. DEFINE WORK THAT MUST BE ACCOMPLISHED BY PRODUCTION COMPLETION DATE (PCD)

1. REVIEW AND SIGN LOA/PCD MILESTONE SHEET

L. REVIEW TESTING REQUIREMENTS

1. COMBAT SYSTEMS TESTS
2. HM&E TESTS
3. SPECIAL TEST/CERTIFICATION REQUIREMENTS

M. REVIEW OPTION ITEMS AND INVOKE NLT DATES

N. REVIEW LIST OF PRORATED WORK ITEMS

O. REVIEW AVAILABILITY DURATION REQUIREMENTS

1. REVIEW CONTRACT AND CNO DATES
2. DETERMINE IF THERE IS SUFFICIENT TIME TO ACCOMPLISH SHIPALTS, MAJOR REPAIRS AND LOA REQUIREMENTS

P. REVIEW REMAINING ADVANCE PLANNING AND CONTRACTING MILESTONES

1. PLANNING ACTIVITY PROVIDE COPY OF AVAILABILITY STATUS REPORT (ASR)

Q. REVIEW STATUS OF ANY OUTSTANDING CUSTOMER FUNDING REQUIREMENTS

R. REVIEW UNRESOLVED BID SPEC REVIEW (BSR) REQUIREMENTS

S. ASSIGN ACTION ITEMS AND COMPLETION DATES

T. PROVIDE ALL WPIC ATTENDEES A COPY OF THE CONFERENCE ATTENDANCE LIST

U. TYPE DESK ISSUE WPIC COMPLETION MESSAGE

WORK PACKAGE INTEGRATION CONFERENCE (WPIC)

USS: _____ AVAILABILITY: _____ SSP: _____ DATE: _____

A. HABITABILITY ISSUES

Item Number/SWLIN	System/Equipment	Habitability Impact		Remarks
		Major	Minor	

Off-Ship Messing Req'd?		Off-Ship Berthing Req'd?		Barge Assigned?		Work Around If Barge Not Available
Yes	No	Yes	No	Yes	No	

Quantities Of Ship's Force Personnel (For BOQ/BEQ)	CO/XO	Officers	CPOs (E7 - E9)	Enlisted (E5 - E6)	Enlisted (E1 - E4)
Male					
Female					

B. CRITICAL PATH/CONTROLLING ITEMS

CRITICAL PATH			CONTROLLING ITEMS		
Item Number	Title	Mandays	Item Number	Title	Mandays

C. REQUIREMENTS THAT SHIP MUST MEET PRIOR TO AVAILABILITY START

Event	Applicable?		Remarks
	Yes	No	
Ammunition Off-Load			
Fuel Off-Load/On-Load			
Dewatering (Compensated Fuel Systems)			
Reefer/Stores Off-Load			

D. NEW WORK, DELETIONS OR MAJOR REWRITES

New Work

JCN Number	Nature of Work/Title	Remarks

Deletions

JCN Number	Work Item Number	Remarks

Major Rewrites

Work Item Number	Remarks

E. AIT INSTALLATIONS SCHEDULED TO BE ACCOMPLISHED DURING AVAILABILITY

AIT Sponsor	Work To Be Accomplished By	AIT Point of Contact/Phone Number	Support Services Req'd		Installation Dates
			Yes	No	

F. AIT INTERFACE PROBLEMS		
AIT Installation	Installation Accomplished By	Interface Problems

G. POTENTIAL IMA AND SHIP'S FORCE INTERFACE PROBLEMS		
JSN/SWLIN	Nature Of Work	Remarks

H. EARLY START AVAILABILITY REQUIREMENTS			
JSN	Work Item	Proposed Availability Dates	Remarks

I. WORK ITEMS IN JEOPARDY						
JSN	Item Number	Material	Reason for Jeopardy Status			Remarks
			Funding	Drawings	Insufficient Time	

J. WORK THAT MUST BE STARTED BY A CERTAIN DATE (OTHER THAN OPTION ITEMS)

Work Item	Title	Start Not Later Than

K. WORK THAT MUST BE COMPLETED BY PRODUCTION COMPLETION DATE (PCD) Review and sign Key Event Worksheet - Attachment (1)

Work Item	Title	Location	Description of Work To Be Accomplished

L. TESTING AND CERTIFICATION REQUIREMENTS

Work Item	Title	Type of Test/Certification Required	Activity Responsible for Testing/Certification	Complete NLT

M. OPTION ITEMS AND INVOKE NOT LATER THAN DATES

	Work Item Number	Title	Invoke Date (NLT)	
			A - Date	Calendar Date
Option (1)				
Option (2)				
Option (3)				
Option (4)				
Option (5)				
Option (6)				
Option (7)				
Option (8)				
Option (9)				
Option (10)				
Option (11)				
Option (12)				
Option (13)				
Option (14)				

N. LIST OF PRORATED WORK ITEMS

Work Item	Title	CNSL %	NAVSEA %	SHIPALT To Prorate Against	
				S/A Number	Title

O. AVAILABILITY DURATION REQUIREMENTS

Review the length of the Availability to determine if there is sufficient time to accomplish all SHIPALTs, major repairs and to support Light Off Assessment

P. REMAINING ADVANCE PLANNING AND CONTRACTING MILESTONES

Planning Activity provide AVAILABILITY STATUS REPORT (ASR)

Q. STATUS OF OUTSTANDING CUSTOMER FUNDING REQUIREMENTS

Amount of Funding Required	Customer Responsible for Funding	Funds Required NLT	Remarks

R. UNRESOLVED BID SPEC REVIEW (BSR) REQUIREMENTS

Work Item	Unresolved BSR Requirement/Issue	Action Required	
		NLT	Responsible Activity

S. ASSIGNED ACTION ITEMS AND COMPLETION DATES

Work Item	Responsible Activity	Action Required	Complete NLT

T. WPIC LIST OF ATTENDEES (Provide all attendees a copy) - Attachment (2)

U. TYPE DESK ISSUE WPIC COMPLETION MESSAGE (including outstanding issues/concerns and action items)

WORK PACKAGE INTEGRATION CONFERENCE

KEY EVENT WORKSHEET

USS _____ HULL NO. _____ SSP _____

KEY EVENT/MILESTONE	A + DATE	SCHEDULE DATE
START AVAILABILITY		
COMPLETE INITIAL GAS-FREEING		
DOCKING	NLT 25%	
UNDOCKING	KTR Provide	
COMPLETE BILGE PRESERVATION (Complete Before PCD)		
CREW MOVE ABOARD		
FUEL SHIP		
PRODUCTION COMPLETION DATE (Machinery Space Turnover)		
START (LOA) TRAINING		
START LIGHT-OFF ASSESSMENT (LOA)		
PROPULSION PLANT LIGHT-OFF		
START DOCK TRIAL		
START FAST CRUISE		
START SEA TRIAL		
AEGIS LIGHT-OFF		
COMBAT SYSTEM LIGHT-OFF		
COMPLETE PIER-SIDE COMBAT SYSTEM TESTING		
COMPLETE AVAILABILITY (CONTRACTOR)		
COMPLETE AVAILABILITY (CNO)		

PORT ENGINEER: _____ **DATE** _____

SHIP REPRESENTATIVE: _____ **DATE** _____

PROJECT MANAGER: _____ **DATE** _____

ADV PLNG MANAGER: _____ **DATE** _____

Attachment (1)

WORK PACKAGE INTEGRATION CONFERENCE (WPIC)

USS: _____ AVAIL TYPE: _____ SSP: _____
 WPIC LOCATION: _____ DATE: _____

LIST OF ATTENDEES

NAME	ACTIVITY/CODE	TELEPHONE	E-MAIL ADDRESS
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			

VII-4F-11

Attachment (2)

COMUSFLTFORCOMINST 4790.3 REV C

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VOLUME VII
CHAPTER 5
COST ESTIMATING

REFERENCES.

- (a) SWT 857-011 - Temporary Off Ship Berthing Equivalent to BOQ/BEQ; provide
- (b) DCAAM 7640.1, July 2004 Edition - DCAA Contract Audit Manual (CAM), Chapter 9-1004.2
- (c) SWT 857-01 - Temporary Galley and Messing Facilities; provide
- (d) Standard Work Template (SWT) 077-01 - Hazardous Waste Produced on Naval Vessels; control
- (e) NAVSEA SL720-AA-MAN-030 - Navy Modernization Process Management and Operations Manual
- (f) NAVSEAINST 4710.13 - Government Man-day Rates for Use in Private Sector Ship Overhaul and Repair, Planning, Programming and Budgeting

LISTING OF APPENDICES.

- A Standard Cost Estimate
- B Estimating Check-Off List
- C Category I Standard Item Hard-Core Labor Considerations
- D Excaliber Contractor Other Direct Labor Factor Calculation (6 Month Period)

5.1 **INTRODUCTION.** The Federal Acquisition Regulation establishes the requirements for an independent Government cost estimate to be used in the evaluation of bids and proposals. Cost estimates form the basis for management decisions by Fleet and Naval Sea Systems Command (NAVSEA) customers in the planning, programming and budgeting of repair and modernization work, including repair work brokering decisions, and in determining the developmental costs for ship alterations. Contracting activities require cost estimates for new procurements prior to issue of a solicitation, for modifications to a contract after award, for resolution of entitled claims and to close out contracts that have been terminated.

5.2 **TYPES OF ESTIMATES.** There are five types of estimates that Regional Maintenance Centers (RMC) commonly produce in conjunction with ship repair and modernization contracts. These include Pre-Contract Award, Post-Contract Award, Preliminary Costs, Contract Costs, Predicted End Costs and Costs for Contract Modifications.

5.2.1 **Pre- and Post-Contract Award Estimating.** Pre-award estimating can be associated with either competitive or noncompetitive procurements. Estimating non-competitive procurements is less complex because the identity of the contractor is known prior to award. Estimating for competitive awards can be more complex because of the uncertainty associated with the identity of the contractor. Estimates prepared for either competitive or noncompetitive procurements will be made using the Standard Government Estimating System. In both cases, the approach to preparing the labor hours and material estimate is the same.

5.2.2 **Preliminary Cost Estimate.** The preliminary cost estimate is the estimate prepared in terms of labor and material quantities required, without reference to labor rates or the cost of materials. This is the estimator's fully refined estimate, normally expressed in terms of man-hours and material required to accomplish the specific work identified in the work item. Contingencies for growth and other uncertainties are not considered in the estimate. To get the contract cost estimate, labor and material costs must be incorporated into the preliminary estimate. Material rates to be applied to material quantities required should be based on current prices. The rates to be applied to the labor estimate are dependent on the competitive environment. In the case of noncompetitive procurements, the rate used is that applicable to the contractor who will do the work. In the case of competitive procurements, a composite rate must be determined.

5.2.3 **Contract Cost Estimate.** Prior to award of a contract, the Contracting Officer must be satisfied that the contract price is fair and reasonable. An integral part of this process is comparing and analyzing the contractor's price to an independent estimate prepared by the Government. This estimate is referred to as the Government estimate for the contract or the "Contract Cost Estimate" and is determined by adjusting the composite rate to reflect current market conditions. The Contract Cost Estimate is determined by applying the appropriate composite rate to

the preliminary labor estimates and current material prices to required material quantities. The composite rate must be adjusted to reflect current market conditions as discussed above. The sum of the labor and material estimates is the Contract Cost Estimate.

5.2.4 Final Cost Estimate. The original Contract Cost Estimate is retained as a part of the contract file. After contract award, the Contract Cost Estimate is adjusted to reflect the successful contractor's current labor rates. The contracting officer will determine the current Other Direct Labor Factor (ODLF) applicable to the contractor and apply it to the contractor's current forward pricing rate to determine the labor rate to be used in establishing the Final Cost Estimate. This labor rate, in lieu of the competitive composite rate, is applied to the Preliminary Cost Estimate to calculate the Final Cost Estimate. The difference between the Final Cost Estimate and the contract award price represents the potential profit or loss of the contractor that should be maintained throughout the performance period, as stated in the Doctrine of Equitable Adjustment. A contractor that "buys-in" to a contract should not be allowed to recover the loss through excessive prices in contract modifications after award. Likewise, the Government must not attempt to reduce the contractor's potential profit by allowing insufficient consideration for changes after award.

5.2.5 Predicted-End-Cost. The Predicted-End-Cost (PEC) is the RMC's estimated cost of all ship work, which consists of several factors. PEC equals the Award Price/Base Cost plus the estimated cost of other items that are not covered by the Award Price/Base Cost. Other items can include such elements as fees, growth, new work, Government Furnished Material (GFM), messing and berthing and boat repairs, if these were not included in the Award Price/Base Cost. Advance planning funds or funds that are provided to other activities should not be included in the estimate. The PEC does not establish financial obligations on customers, but rather is the RMC's estimate of what the availability is most likely to cost. The RMC may be required to adjust the PEC when it is obvious that circumstances (i.e., buy-ins, potential for major growth/new work, etc.) exist that would inhibit the determination of a realistic PEC. These extenuating conditions shall be clearly reported, documented, assigned a dollar value and considered in the computation of a realistic PEC.

5.3 CLASSIFICATION OF COST ESTIMATES. There are five classifications of cost estimates: Class A, C, D, F and X.

5.3.1 Class A - Detailed Cost Estimate. An extensive cost estimate based on detailed engineering drawings, material lists and man-hours by required skills and trades. The level of detail addressed in a Class A estimate should be to the maximum extent feasible. It is comparable to a fixed-price offer developed by a Naval Shipyard (NSY) or a manufacturing estimate prepared in private industry. Variance is not expected to exceed 10 percent.

5.3.2 Class C - Budget Quality Estimate. Class C estimates are considered to be the best-cost estimate attainable for ship repair. It is the recommended level of estimates of cost developed by a field activity to be used in budget submissions. They are normally prepared for ship repair work prior to the start of availability. Variance is not expected to exceed 15 percent. **Class C estimates are the expected level of estimation by both the Multi-Ship/Multi-Option contractor and the Government Planning and Estimating Teams supporting the Independent Government Estimate, Continuous Execution Increment Planning and Review Process, Technical Availability Repair and Definitization processes. As a result, the Multi-Ship/Multi-Option planning floor, Shipbuilding Specialists and Planning Yard Representatives shall provide Class C estimates.**

5.3.3 Class D - Feasibility Estimate. Class D estimates are required prior to completion of the design or preparation of detailed specifications, reflecting the uncertainty associated with having incomplete information available for estimating purposes. It is usually exploratory in nature and is prepared to perform trade-offs and cost effectiveness analysis. Variance is not expected to exceed 20 percent.

5.3.4 Class F - "Ballpark" Estimate. Class F estimates are known as "ballpark" estimates. This is a quick cost estimate prepared in the absence of minimum design and cost information and is based on gross approximations. It is calculated by escalating previous costs to current dollars, using empirical costs for similar work and adding factors for expected changes in design, processes procedures and other economic considerations. Acceptable when higher-level estimates are not possible due to insufficient time or incomplete information. Variance is not expected to exceed 40 percent.

5.3.5 Class X - Directed or Modified Estimate. An estimate provided by other Government activities or as directed by higher levels of authority. It is generally a total cost restriction without a developed design, engineering or a detailed cost estimate. A directed estimate is also a modification of any previous cost estimate, Classes A through F, to conform to budget reductions or restrictions on cost which is not based on a change in the scope of work required.

5.4 STANDARD ESTIMATING.

5.4.1 Average Contractor. In a competitive procurement, the identity of the contractor cannot be determined until after contract award. Therefore, some assumptions must be made about the contractor in order to define the estimating environment. For estimating purposes, the planner assumes that an average contractor under average conditions will perform the work. This assumption, however, also leads to problems since it is difficult to define an “average” contractor; i.e., one that possesses average facilities, equipment, tools, work force, etc. To address this problem, **United States** Fleet Forces Command has directed that estimates for competitive procurements be prepared on Appendix A. This chapter, together with the “average contractor” and “average condition” assumptions, defines the framework for Standard Estimating for competitively awarded ship repair work. To ensure the validity of estimates, labor rates applied to labor estimates must be consistent. This requirement derives from the basic accounting requirement that estimating systems be consistent with applicable accounting systems.

5.4.2 Elements of Standard Estimating. Appendix A requires that estimates be prepared for only 13 labor elements and quality assurance personnel. These labor elements can be categorized as “hard-core” direct labor elements. These labor category titles, as shown in Table 5-1, are general descriptions of labor categories that would be found in any ship repair facility. The titles in the formal contractor chart of accounts will vary from contractor to contractor. However, the work performed by personnel in those labor categories is always charged as direct labor. For this reason, these labor elements are defined as “hard-core” labor elements in all discussions regarding estimating systems. In Standard Estimating, the hard-core labor elements are the only labor elements estimated by the estimator. All other labor required to perform the work being estimated is considered to be overhead labor or “other direct labor.” Neither overhead nor other direct labor is ever estimated by the estimator. These two elements, “overhead” and “other direct labor,” are accounted for by applying factors for overhead and other direct labor to the total hard-core labor estimate. See section 5.10 of this chapter for an example of the labor rate determination process.

5.4.3 Standard Estimating Example. Contractors are required to estimate work requirements using a method or system consistent with their accounting system. It has been shown through audits of contractors’ accounting systems that the hard-core labor elements identified in Appendix A are always charged as direct labor. It is also true that all contractors have other direct labor elements in the chart of accounts that must be considered in estimating work to be performed. Table 5-1 shows two sample charts of accounts for contractor direct labor. In these two samples, an asterisk notes those direct labor elements that are comparable to the Standard Estimating hard-core labor elements. The determination of which labor categories are hard-core is a matter of judgment. Any contractor labor category judged to be comparable to a labor category listed in Figure 5-2 is designated as a hard-core labor element. The remaining labor categories are included in the term “other direct labor.” The factors to be applied to Government estimates are based on actual audit of contractors’ accounting systems. For example, based on past accounting data for all direct labor charges in a contractor’s accounting system, other direct labor requirements are computed as a percentage of the direct labor charges covered by the hard-core direct labor elements. Typically, a Government estimate of 100 man-hours would be comparable to 140 man-hours in the contractor’s estimating system where the other direct labor factor was computed to be 40 percent of the hard-core charges. The key to achieving equity in estimating for a particular estimating system is to determine the appropriate factors to be applied to the Government estimate. The fundamental principle of estimating in Standard Estimating is for the estimator to estimate only those direct labor elements necessary to satisfactorily complete the task requirements, such as those listed on Appendix A.

Conversely, consideration of overhead and other direct labor is accounted for by applying the proper factors for overhead and other direct labor. It would be improper to estimate the cost of supervision, scheduling, material handling, fire watches and the like when those labor elements are properly accounted for in the labor rate applied to the labor estimate.

Table 5-1

SAMPLE CONTRACTOR CHARTS OF ACCOUNTS OF DIRECT LABOR			
Contractor A		Contractor B	
*Machinist	Mechanical Engineering	*Inside Machinist	Estimating
*Shipfitter	Marine Engineering	*Outside Machinist	Purchasing
*Chipper and Burner	Program Planning	*Pipe Covering	Contract Administration
*Crane Service	Program Management	*Pipefitting	Planning
*Welder	Financial Analysis	*Sheetmetal	Temporary Services
*Carpenter	Graphic Services	*Electrical	Material Support
*Painter	Technical Illustrators	*Carpentry	Laboratory Services
*Installation and Testing	Plant Protection and Safety	*Paint	Industrial Engineer
*Pipefitting and Covering		*Laborer and Sandblaster	Progressing
*Sheetmetal Worker		*Welding	Clerical Support
*Quality Assurance		*Cleaning Services	Program Management
Material Handler		*Staging	Accident Prevention
Procurement Personnel		*Shipfitting	Production Support
Change Control		*Mold Loft	Material Receipt
Cost Estimator		*Nondestructive Testing (NDT)	Scheduling
Secretary and File Clerk		*Inspection	Production Control
Naval Architecture		Technical Support	Material
Electrical Engineering		Drafting	

*Hard-core labor elements

Table 5-2

STANDARD COST ESTIMATE FORM LABOR CATEGORIES	
Shipfitter	Pipefitter
Sheet metal	Insulation/Lagger
Welder/Burner	Carpenter/Shipwright
Inside Machinist	Electronics/Ordnance
Outside Machinist	Painter/Sandblaster
Boilermaker	Rigger/Laborer
Electrician	Quality Assurance and NDT

5.5 ESTIMATING ENVIRONMENT.

5.5.1 Environment Defined. An estimating environment is defined as the estimating system and that collection of facilities, tools, equipment, materials, labor, skills, procedures, environment and other factors that may impact on the cost of performance of the activities estimated. Knowledge of the estimating environment as a frame of reference for the estimator is one of the fundamental prerequisites for estimating. In a NSY, this requirement is met as a natural consequence of the way business is conducted, while in the RMCs the estimator may be estimating for work that will be awarded competitively to a contractor whose identity is not known. Where contracts are sole-sourced, the estimator does have the opportunity to adjust the estimating to match the contractor's estimating environment.

5.5.2 Cost Accounting Standards. Most contractors will prepare cost estimates using an estimating system consistent with the contractor's accounting system. For large commercial contractors subject to the Cost Accounting Standards (CAS), the contractor is required under reference (a) to use an estimating system consistent with the methods used for recording or accounting for costs and to submit a formal CAS Board Disclosure Statement showing the chart of accounts used for all direct and indirect costs and the methods used to account for those costs.

- a. Small contractors and those not subject to CAS are required to use an accounting system which meets generally acceptable accounting standards. The Defense Contract Audit Agency (DCAA) periodically audits contractor's records to determine that the actual practices of estimating costs are consistent with the accounting system.
- b. Contractor estimates are generally consistent with the contractor's accounting system. In the case of businesses where the company owns two or more contractors, the estimating systems used in all contractors are similar since all use the same accounting system. The charts of accounts used to identify direct and indirect cost centers and accounting practices are essentially the same at all of the company's contractors. However, estimates from one of the contractors may not be valid in any of the other company contractors, since estimating is a function of more than the accounting system. For example, estimating is also a function of facilities, tools and equipment available to the work force for performance. If one contractor uses a state-of-the-art end-prep machine to machine piping joints for welding and another uses a hand grinding tool, the estimates of labor hours required may vary by as much as 400 percent for the exact same scope of work. Likewise, the use of precise numerically controlled machine tools is more efficient than the use of manually operated machine tools. Generally speaking, the use of new, modern facilities improves performance when compared to performance in older, obsolete facilities. In a contractor's accounting system, however, the cost of new, modern facilities and state-of-the-art machinery and tooling will increase the indirect cost factors used to determine the billing rate applied to direct labor hours. No two contractors have the same collection of facilities, tools or equipments available for performance and, therefore, there may be differences in estimates among contractors owned by the same company.

5.5.3 Other Factors Affecting the Contractors' Estimating Environment. Contractor estimating is a function of the labor skills available, the experience of the work force and the workload. Highly skilled employees can perform more efficiently than unskilled employees, but at a higher wage rate. A contractor work force experienced in overhaul of a particular ship class benefits from the learning experience and can perform more efficiently on subsequent ships of the same class. Other considerations, such as the ship repair market and level of work backlog, also play an extremely important role in estimating for competitive procurements. For example, market conditions may dictate a contractor estimate that can be significantly at variance with the estimate of actual costs. If the market is saturated, that is all contractors are at capacity or are operating with a significant backlog of work, the contractor does not need additional work. The addition of more work under these conditions may be very disruptive to ongoing work and the disruptive effects would have to be considered in estimating the costs of more work. Under these conditions, contractors may also seek higher profits to compensate for the added disruption. Therefore, any precise estimate of total costs based on work scope and labor rates would be overridden by an increase to account for the market being at, or in excess of, capacity. Conversely, when there is not enough work to keep all contractors busy, the marketplace becomes more competitive. Under this condition, contractor management will normally undercut well-conceived estimates in order to remain competitive. A basic principle of estimating is that an estimate prepared for any one contractor will not be valid for any other contractor. The estimator must know the estimating environment that is used and estimates must be prepared to reflect the total environment of where the work is to be performed.

5.5.4 Regional Maintenance Center Estimating Instructions. For each contractor actively performing a Master Agreement Job Order, the Administrative Contracting Officer (ACO) will identify to RMC estimators the set of direct labor categories to be estimated. No other estimates for labor will be provided. Indirect labor costs (overhead) and all other direct labor required for performance will be accounted for in the labor rate to be applied. The ACO/Procuring Contracting Officer (PCO) will determine through understandings with contractors, and as audited by DCAA, the appropriate rates and factors to be applied to ensure that Government estimates and rates are consistent with the contractor's accounting and estimating system. To the maximum extent possible, RMC estimates will be prepared using Appendix A. Where changes in the labor categories to be estimated are required, the ACO will provide written direction as to the changes to be made. Once the changes are made, all estimates for changes with that contractor will be made using the modified Appendix A. No other direct labor will be estimated. In all cases, independent Government estimates for changes will be prepared by consistently estimating direct labor only for the direct labor categories identified by the ACO/PCO. All other labor required for performance will be accounted for as a subcontracted effort or in the labor rate overhead applied to the direct labor cost estimate. Individual estimators are not authorized to change the labor categories on the Cost Estimate Sheet except as directed by the ACO/PCO.

- a. For those contractors who do not establish an understanding with the ACO about the contractor's estimating system, the ACO will establish appropriate rates and factors for use in Standard Estimating. If time and resources are available, this can be achieved by RMC examinations of the contractor's chart of accounts to identify hard-core and other direct labor categories, and then requesting audit by DCAA to establish the other direct labor factor as addressed earlier and in reference (b).
- b. If audit resources are not readily available, the ACO will establish in advance, from the contractor's chart of accounts, a listing of all hard-core and other direct labor categories as defined earlier. The ACO may request the contractor to prepare accounting records detailing the actual man hour expenditures in specific direct and other direct labor categories to support DCAA audits. Accounting records may be requested for periods not less than the preceding six months nor greater than the preceding three years. From this data, DCAA will compute and recommend to the ACO an appropriate ODLF. Labor rates used for pricing changes must be consistent with the factors determined.
- c. The contractor's estimating system must provide for reaching work scope understandings with the RMC when required. The parties must have a common understanding of the work requirements in order that the contractor's estimates and subsequent analysis by RMC will be made on the same basis. That portion of the estimating system dealing with the definition of work scope should cover the disposition of material made obsolete or excess as the result of the change.
- d. The understanding to be reached with the contractor must include provisions for the contractor to submit proposed revisions to procedures and practices which involve an understanding previously reached, in order that they may be evaluated and a new understanding reached. Periodic reviews will be made by the ACO and the audit office to see that the contractor's written procedures and practices are current.
- e. Any deviation from the estimating system must be clearly supported. Any estimate based on standards is designed to give reasonable figures on the average. To argue in any given case that a standard results in too many or too few man hours will probably open up arguments on other standards or other cases. There is one important exception to the need for consistency; if actual costs, hours, overhead, etc. are known, they must be used.
- f. The contractor's estimating system should provide for periodic adjustments in the labor and overhead rates to be applied in establishing estimated costs. The system should also provide a means for the contractor and the ACO to reach an understanding on the rates to be applied for work performed or to be performed during specified periods. Such rate understandings and the consistent use of the rates by the contractor in preparing change proposals will expedite proposal evaluations and negotiations.
- g. In establishing rates, factors and percentages to be used in estimating systems, it is essential to remember that the mix of overhead and direct labor skills will change with different kinds of work. Contractors that perform a variety of work for the Navy may require that multiple rates, factors and

percentages be prepared for each type of work performed by the contractor. For example, a contractor that builds and repairs ships would require different rates, factors and percentages for construction, repair and for each type of ship (e.g., submarines, aircraft carriers or surface force ships).

- h. In achieving understandings with contractors, the ACO must consider that many contractors will not have established estimating systems, nor can small businesses be required to establish formal estimating systems. Therefore, the ACO will be required to provide guidance and suggestions to the contractor to establish a mutually agreeable and beneficial system for both parties.
- i. Estimates developed on the basis of judgment without any analytical support must be reconciled with historical costs. Therefore, contractors should be encouraged to develop procedures for comparing estimates to the cost of performance as a basis for assessing the accuracy and reliability of their estimating practices.
- j. For pricing actions exceeding \$700,000, the Federal Acquisition Regulation requires that the contractor certify that his or her proposal is current, accurate and complete. If a contractor's estimating system, procedures and practices are inadequate, the proposal will be considered unacceptable. The ACO will require the contractor to correct the unsatisfactory elements or performance prior to completing the work package negotiations. For pricing actions less than \$700,000, the ACO should require that the contractor correct the unsatisfactory performance and revise the estimating system in order to resolve the problems prior to completing work package negotiations.
- k. The RMC estimator is responsible for the preparation of the following cost estimates, either concurrently with or subsequent to the preparation of the work item;
 - (1) Direct labor hours.
 - (2) Direct labor overtime hours.
 - (3) Direct material cost, including subcontracts which the prime contractor will have to procure. Subcontractor costs will not be estimated for competitive procurements except where a directed subcontractor is specified in the work item.

5.6 COST ESTIMATING METHODS, STANDARDIZATION AND STANDARDS.

5.6.1 Variables. A number of estimating methods and techniques have evolved which are applicable only under particular conditions. Cost estimates must take into consideration the current estimating environment, market conditions, weather, and any other factors that influence the labor hours and material costs associated with a cost estimate. In preparing detailed cost estimates for work activities, the estimator shall always use the best information available. Where standards are available and applicable, they shall be used. Where the estimator lacks experience or knowledge of the work being estimated, it is essential that other sources of information be examined. These sources include the following:

- a. Master Specification Catalog.
- b. Other estimators who have longer service or experience.
- c. Engineered labor standards prepared by naval or private contractors.
- d. Material catalogs from industry vendors.
- e. Contract files for similar work packages.
- f. Personal records made from past jobs or negotiations.
- g. Other Government agencies that have performed similar work.
- h. Personal observations made during job execution.
- i. "Rules of Thumb".
- j. Historical data.

5.6.2 Standardization of Cost Estimates. Original work items customized by a planner frequently result in contract changes. For this reason, planners should utilize the proven Standard Work Templates (SWT) found in the Navy Maintenance Database (NMD)/Master Specification Catalog whenever possible. Standardization of work items is coordinated by the Specification for Ship Repair and Alteration Committee described in reference (c). The planner shall use an applicable Class Standard Work Template if possible to prepare a work item addressing an authorized Ship Work Line Item (SWLIN). If an applicable Class Standard Work Template is unavailable, an applicable SWT should be tailored to the SWLIN item requirements. If an SWT is unavailable, a Local Work Template (LWT) should be tailored to the SWLIN requirements. As a last resort, the planner should develop an original work item, using current standard phraseology and applicable Category II NAVSEA Standard Items (SI). Estimates should be standardized to the maximum extent possible. When estimating work items to be used in a competitive environment, previous estimates used for the same item should be modified only after a careful justification and then only to reflect changes in scope or changes in the estimating system. When a previously used work item is tailored to meet a new SWLIN item requirement, the previously used estimated should also be tailored to meet the new requirements.

5.6.2.1 Estimating Standards. Estimating standards are established by relating labor and material costs to specific characteristics of products or services delivered. The use of estimating standards is designed to save time in estimating and is particularly effective in estimating the costs of recurring work. Estimating standards are used to estimate the cost of a single material item required for the work in question or the cost of a single labor operation, (e.g., welding rods per ton of steel, labor hours per linear foot of weld, gallons of paint per square feet or surface area, etc.). More complex estimating standards may also be used to estimate the costs of groups of materials or components or broader classes of labor operations. Estimating standards used must be consistent with the estimating system used to develop estimates. Standards derived from industry-wide statistics are generally applicable industry-wide. Standards that include contractor-specific procedures are applicable only in that contractor's estimating system. The use of such standards is limited to the environment where the standard was developed. When estimating for changes where the contractor is known, any approved engineering standards applicable at the contractor's plant should be used by both the contractor and the Government in developing estimates for the work. Large numbers of Engineered Standards and other standards have been developed by both naval and private contractors. Many of these standards contain basic charts and tables that depict labor and material allowances for various work elements. These allowances are then modified by unique factors to reflect skill levels of workers, facilities and tools available, etc. Some of these standards can be adapted for use in any contractor's facility, provided appropriate factors are used to modify the standard allowances.

5.6.2.2 Naval Shipyard Labor Standards. Standards applicable to all NSYs are categorized as Uniform Engineered Methods and Standards, while yard-specific standards are categorized as Engineered Methods and Standards. Estimating standards must be changed whenever any prime element affecting the standard changes. Engineered Standards are developed using industrial engineering techniques to estimate a repetitive item of work in a stable environment. Development of such standards involves such things as time and motion studies, application of fatigue and lost time factors, etc. The prerequisites for an engineered standard are:

- a. Specific method.
- b. Actual time for accomplishing the task or operation must be observed and recorded.
- c. Performance of the individual(s) is leveled by a performance rating technique applicable to the contractor.
- d. Allowances for personal needs and any special circumstances must be identified.

5.6.3 Detailed Estimating Techniques. Inherent in the concept of detailed estimating is a requirement that the estimator know how the work being estimated is to be accomplished. The "how" of work accomplishment is always unique at any contractor and it may also vary with time, workload and other considerations. The method of accomplishing the work must be consistent with the applicable estimating system. Detailed estimating requires that an estimate for hard-core labor and material for each activity of work required be developed and summed to obtain the total hard-core item estimate. This type of estimate can be referred to as a detailed estimate because the work required is broken down into as many detailed activities as needed to facilitate the estimating. A detailed estimate is built from the bottom up, starting with the lowest element of work required and building on it until the total job is estimated. The greater the level of detail, the greater the refinement is possible.

5.6.4 Use of Historical Data. When historical data has established a standard allowance in labor and material for a work item, that standard shall normally be used when estimating that item of work. The estimated cost will change, because labor rates and the price of materials change with time. The labor-hours and material quantities should remain constant, except for changes in work scope or the estimating system. The use of such historical standards should be validated with each use to ensure that new technology and work practices have been properly considered and that they are representative of the actual cost elements being estimated. When collecting and analyzing cost data, care should be used to distinguish between estimated costs and return or actual reported costs. When using return costs in historical files, an effort should be made to make adjustments to eliminate the excess costs that can be attributed to inefficiencies or other factors that are unique to the availability and the way the work package was executed. Use of return cost data in historical files without appropriate adjustment causes inefficiencies in performance to be extrapolated needlessly into future cost estimates. For this reason, historical files based on estimated costs are generally preferred over files based on return cost. Historical files can incorporate both estimated and return cost, but any return cost used should be properly adjusted.

5.6.5 Parametric Cost Estimating/"Rules of Thumb"/Cost Estimating Relationships.

- a. Parametric cost estimating is broadly defined as a technique employing one or more Cost Estimating Relationships (CER) for the estimating of costs associated with work to be performed or products to be delivered. In this sense, CERs represent the relationships between the cost of materials, labor or services and the products delivered or work performed. Simple CERs can be derived arithmetically from historical data. For example, examine the cost of quality assurance in performing machine shop work. If historical records show that the costs of quality assurance over the last six months of operations amount to 10 percent of the total effort expended in the direct labor pool, then it would be safe to use a CER which projects the cost of quality assurance as 10 percent of the total effort required in operations over the next six months, unless some prime condition changes which may impact the overall cost of performance. It is difficult to use sophisticated CERs in ship repair estimating because of the nonrecurring nature of most ship repair work. CERs are more useful in estimating manufacturing and construction costs as opposed to repair, overhaul or modernization costs. This does not mean, however, that simple CERs cannot be effectively used. They are used frequently, but they are generally referred to as "Rules of Thumb." Experienced estimators who have observed and recorded the results of prior estimates and adjusted them for changing conditions have developed many "Rules of Thumb" over the years. "Rules of Thumb" allow for estimates to be made on the basis of such concepts as cost per pound or hours per foot or unit. As with all CERs, "Rules of Thumb" are subject to change and, therefore, should be used in an informed manner. When changes occur in technology, procedures or other areas of cost affecting a CER, it should be modified to reflect the impact in cost expected.
- b. The first step in developing a CER is to determine its need and usefulness. Applications for CERs can be readily identified through logical reasoning and hypothesizing about the factors affecting the costs of performance. Once a need has been identified, the next step in developing the CER is to determine what it is that will be estimated and how it will be estimated. If labor hours are the desired items to be estimated, which categories of labor will be included, is there a fixed ratio of one category to another or which labor categories are to be excluded? The next step is to determine which factors will be used to estimate or drive the CER. All significant factors that cause costs to be incurred such as specific material quantities and prices, procedures or processes applicable, environment, etc., must be identified. Of these factors, isolate those that make the most significant cost contribution. The number of factors selected should be the smallest number possible to make the CER understandable and effective in producing the required estimates. Next, obtain historical data on both the cost variable being estimated and all the driving factors selected for use in the CER. The data collected must be consistent with the CER parameters isolated for analysis and must be extensive enough to represent a broad sampling of the costs expected under normal conditions when the CER would apply. Next, the data must be analyzed to determine the relationships that exist and the usefulness of those relationships in determining a CER. Then the relationship that best describes the data used is selected. The CER is quantified for use by providing a description of the CER, the independent variable or variables that are used and the method to predict the cost of the dependent variable.
- c. CERs may be presented in many forms, such as graphs, tables or charts. They may be based on relationships from simple straight-line (one-to-one correspondence) to complex multivariable non-linear relationships. CERs, like most tools used in estimating, must be tempered by good judgment.

The data used to develop CERs must be viewed in light of current conditions. New processes, technology or other factors may make CERs obsolete. It is necessary that estimators have some knowledge of the factors involved in CER development. Blind application of CERs can lead to disastrous results.

5.6.5.1 Return Cost Statistics. It is easy to accept a running average of historical return costs as the best estimate of future costs for the same or similar requirements. This practice does not always give the best estimate possible. This estimating technique may easily incorporate prior inefficiencies that have persisted unchecked. Worse yet, historical files based on return costs run an even greater risk of perpetuating erroneous estimates because of inaccuracies in reporting those costs and a lack of consistency in execution. The actual cost of performance of a job is a function of time as much as it is the hard-core cost elements of labor and material. Collecting actual cost data in a contractor cost accounting system is a requirement for all ship repair contractors and NSYs. The data collected does not always reflect the actual work accomplished. This can happen when workers erroneously charge labor to the wrong job order number or to the wrong contract. In private sector availabilities executed under a Master Ship Repair Agreement, return costs reported on departure reports are usually based on a prorated share of the contract price plus the negotiated costs of applicable contract modifications. The basis for the proration is the Government estimate of each work item. Thus, a return cost based on a substantial buy-in by a contractor would be terribly misleading when applied to a sole source negotiation or at a time when the market is saturated. For these and other reasons, return costs should be used only with great care in developing standard estimates for future work.

5.6.5.2 Estimated Cost Statistics. The best estimate of future costs is the statistical mean of a number of independent estimates for the same requirements. Even in the case of standard estimates derived from independent estimates, the standard shall be reviewed periodically to challenge its validity in all elements of cost estimated.

5.6.5.3 Adjustments to Historical Cost Data. When collecting completion cost data for historical files, acceleration, disruption and delay costs should be subtracted before entering the cost figures into the files. These costs are unique to a specific availability and should not be extrapolated for use in future availabilities.

5.7 PREPARING THE COST ESTIMATE.

5.7.1 Preparation. Estimates for labor required are limited to those direct labor categories contained in Appendix A. The form was designed for use in preparing work item estimates for both competitive and noncompetitive procurements, as well as contract modifications after award. In the case of estimating for a work item, the estimate is broken down by paragraph number in the work items and by Category I Standard Items, where applicable. In estimating for work items, the material requirements are designated as Contractor Furnished Material (CFM) or GFM. The form is designed to show only CFM requirements in the estimate breakdown by paragraph. The GFM requirements are estimated separately.

5.7.2 Developing the Estimate. In the estimating process, the estimator describes in broad terms the sequence of activities required to accomplish the work being estimated. Typical repair sequences are shown in Table 5-3. Next, each of these activities is further broken down to the lowest level of detail necessary to facilitate the estimating process. For example, in Sequence B of Table 5-3, the “inspect” activity may require a detailed inspection of a specific set of internal components. Each of the inspections may require a unique set of activities and measurement criteria. Thus, each component inspection could be estimated as a separate activity.

- a. In quantifying the work required, the estimator should envision what is to be done, as in a mental time and motion construction of the physical activity required to accomplish the work. Inherent in this task is a requirement that the estimator know the details of the work to be performed. If the estimator is unsure of the work activities required, a knowledgeable person should be consulted to determine the applicable requirements. It is essential that the correct processes, technology, tools and sequence of work activities be considered in developing a detailed estimate.
- b. After the mental time and motion analysis is complete, the estimator prepares a detailed listing of all activities that are to be estimated separately. The level of detail should reflect that level needed to support the estimating requirement. Experienced estimators do not normally need to break the work down into as many activities as an inexperienced estimator. In determining the activities to be considered in the estimate, it is helpful to use a check-off list of typical requirements in ship repair. The estimating check-off list shown in Appendix B is provided as an example and can be modified as

necessary to suit particular situations. Using the check-off list will prevent inadvertent omissions of incidental support requirements for the major activities of work required, (e.g., assist trades, rigging, staging, temporary lighting and ventilation).

- c. In developing the estimate activity list, examine each major activity in the repair sequence, shown in Table 5-3, to determine whether or not a further breakdown is needed and to identify the sublevel activities. Each of the new activities identified may also require further breakdown until the level of activities is detailed enough to develop a reasonable estimate.
- d. Once all of the activities to be estimated have been identified, the estimator has to assign labor-hours for each trade and support craft needed to accomplish each activity. The cost of material to support required work is also estimated for each activity. The work item estimate is the sum of all labor-hours and material cost estimates. Work item estimates of labor are normally expressed in terms of man-days rather than man-hours (one man-day being equal to eight man-hours). Labor estimates for contract modification are normally expressed in man-hours vice man-days.

Table 5-3

TYPICAL REPAIR SEQUENCES				
WORK ACTIVITY	SEQUENCES			
	A	B	C	D
1	REMOVE	OPEN	PREP AREA	RIP OUT
2	DISASSEMBLE	INSPECT	MASK	FOUNDATION
3	INSPECT	REPAIR	PAINT	LAND EQUIP
4	REPAIR	CLOSE	CLEAN	HOOK UP
5	TEST	TEST	TOUCH-UP	COLD CHECK
6	REINSTALL		CLOSE OUT	HOT CHECK
7	TEST			TEST

5.7.3 Quantification of the Labor Estimate.

- a. Most work activities are estimated on the basis of the estimator’s judgment and experience. Even in the absence of experience, the estimator can still assign reasonable estimates based on good judgment and knowledge of the work being estimated. By mentally going through each step of the work required, the estimator can assign a labor estimate based on judgment of the time required to accomplish each step of the work process. Such detailed estimating can parallel the industrial engineering methods used to develop estimating standards for repetitive type work. Industrial engineering standards are the result of comprehensive time and motion studies of a work process. The time required to perform each operation is measured repetitively. Through analysis, a standard is developed for each step, allowances are made for distractions and rest periods and a standard allowance is made by summing the standard for each step plus other applicable allowances. In mentally paralleling this process, the estimator is providing the time for each step or motion required. The estimates for each step are summed and additional allowances are added for distractions, rest periods and other possible considerations. The other considerations include such items as the following:
 - (1) Location of Work: Estimates for a work operation should be greater when the operation is performed in a congested area. For example, repairs to a water fountain in a congested machinery space with other work in progress would be more time-consuming than the same repairs to a similar water fountain located on the mess decks, in the absence of other work. Work operations of any kind are more time-consuming when performed in conjunction with other work (mutual interference) or when performed in a cramped or congested area.

Likewise, estimates should be escalated for work performed in a hostile environment such as in tanks or voids, in poorly ventilated spaces, in hot or cold spaces, in contaminated atmospheres, etc.

- (2) Ship's Force Work: When work is being performed on the same equipment or system by both the contractor work force and the Ship's Force, there is normally an added degree of mutual interference to be considered. Even when the two work forces are not in the same space, the mutual interference may lead to inefficiencies that should be considered in estimating the contractor work.
- (3) Prevailing Weather: When the geographic area for an assigned availability is known, the geographic weather pattern should be considered. Likewise, if the time of year is known, the seasonal weather should be considered. For example, it is normally more costly to blast and paint the underwater body of a ship hull in below freezing weather than in milder weather. Similarly, the weather may also impact paint curing times and other time factors considered.
- (4) Ship's Material Condition: Estimating Standards, historical estimates, "Rules of Thumb" and other estimating tools available for use are generally applicable under "average" conditions. Estimates for many work operations should be factored to reflect the material condition of the ship. If the ship is in average condition the standards need not be factored. If the ship is new, then the standards should be reduced to reflect the better than average material condition. If the ship is in very poor material condition the estimate should be increased. Not all work operations are affected by the ship's general material condition; however, many are, such as surface preparations, painting, insulation and lagging, structural repairs, etc.
- (5) Category I Standard Items: The NAVSEA Category I SIs are invoked in work packages in accordance with the guidance provided by the Ship Repair and Alteration Committee. When invoked in a job order, the provisions of the Category I SI apply for the duration of the availability without further reference. The estimator must know which Category I SI is applicable for the work and what the direct, hard-core labor cost impact of each SI is on the work required. Each time the provisions of the Category I SI are applicable in a work item, an allowance should be made to accomplish the hard-core labor requirements of the SI. An SI will be invoked if any work in the areas addressed in the SI is likely in the work package. Not all Category I SIs will have a direct hard-core labor cost impact. Those that do are discussed briefly in the following sections.
 - (a) SI 009-04: Quality System; provide. Invoked for all significant availabilities. This item requires the contractor to develop and use an inspection system acceptable to the Government. The contractor must develop an inspection plan for each item and record inspection results. This plan must provide for a corrective action program to correct defective or non-conforming work, maintain a calibration system for test equipment, control non-conforming material, conduct periodic quality reviews and provide notification to the Government for each CHECKPOINT. When this SI is invoked, nearly every work item should have approximately 10 percent of the effort allocated to Quality Assurance and NDT.
 - (b) SI 009-07: Fire Prevention and Housekeeping; accomplish. Invoked for all manned vessels, unless the Type Commander (TYCOM) requests SI 009-35. This item requires the contractor to provide acetylene or gas supply manifold systems off the ship with shutoff valves to gas supply on the pier. This requirement should be considered in each instance of gas use. When SI 009-07 is invoked, approximately 25 percent of the hot work effort should be allocated for estimating fire watch requirements.
 - (c) SI 009-10: Shipboard Asbestos-Containing Material; control. Invoked when any machinery, piping and compartment insulation and lagging may be removed. Under this item, the contractor is required to provide a process control procedure for the control of asbestos-based insulation and lagging materials. All insulation and lagging

materials are assumed to be asbestos-based until shown to be otherwise. Work accomplished must conform to Occupational Safety and Health Act requirements regarding insulation removals, work zones, protective equipment and clothing, and disposal of insulation. Compliance with these requirements is a labor-intensive operation that must be considered for each time and place the work is required. When SI 009-10 is invoked, approximately 33 percent should be added to the insulating and lagging estimate of the work item.

- (d) SI 009-24: Isolation, Blanking and Tagging Requirements; accomplish. Invoked when equipment, systems, piping or circuits require isolating, blanking and tagging for safety or cleanliness and to prevent operation of a system or equipment while work is being accomplished. Under the requirements of this item, the contractor is required to comply with the Ship's Force system for isolation, blanking and tagging of equipment or systems in the performance of required work. The contractor has to notify Ship's Force in each instance of starting or completing work and a contractor representative must sign the ship's tag out log. Further, the contractor has to provide, install and remove blanks on piping, valves, equipment and components that are isolated or removed during performance. Items removed must be tagged with metal tags. Electrical cables disconnected must be insulated and taped. Each of these requirements requires hard-core labor for accomplishment and must be considered as part of the work activity even though not specifically spelled out in the work item (2-Kilo). When invoked, approximately 5 percent of the trade hours should be added to the estimate to cover the requirements of SI 009-24.
- (e) SI 009-61: Shipboard Use of Fluorocarbons; control. Invoked for all specifications. Under this item, the contractor is required to develop and use a process control procedure to govern control of shipboard use of fluorocarbons. The contractor must notify the Government in each instance of use of fluorocarbons and must provide ventilation and telephonic communications for transfer operations, suspend hot work in spaces affected by atmospheric fluorocarbons, use at least two people for quantities in excess of 10 pounds and vent gases to ship exterior atmosphere. These requirements must be considered in all estimates involving the use of fluorocarbons. Approximately 20 percent should be added to the estimate to cover the requirements of SI 009-61.
- (f) SI 009-65: Polychlorinated Biphenyls (PCB); control. Invoked for all specifications. Under this item, the contractor is required to develop and use a process control procedure for control, clean up and disposal of PCBs. The contractor must inspect each equipment or component containing PCBs and make a report. These requirements must be considered in any work estimate where PCBs are involved.
- (g) SI 009-73: Shipboard Electrical/Electronic/Fiber Optic Cable; remove, relocate, repair and install. Invoked for all specifications requiring electrical work. Under this item, the contractor is required to remove completely all electrical cables no longer necessary due to work required in the job order. Work required includes blanking bulkhead and deck penetrations, removal of unused hangers and installation of new banding for remaining cables. Relocation of existing cables and installation of new cables requires banding, installation of hangers, deck and bulkhead penetrations and connection of cable leads to components or equipment. These requirements must be included as work activities in all work on shipboard electrical cables.
- (h) SI 009-106: Work Authorization and Control Process; accomplish. Invoked for all specifications. This requires the contractor to comply with Volume IV, Chapter 10 of this manual regarding work authorization. Specifically, the contractor is required to submit a Work Authorization Form to the designated representative of the ship's Commanding Officer for authorization to start work on each Work Item in the Job Order. This is considered an overhead/indirect charge so no direct labor charges are included in any estimates.

- b. References (a), (c) and (d) also can have significant labor impact. Appendix C is provided as a check-off list to assist the estimator in properly considering the impact of Category I Standard Items. Each of these SIs must be fully understood before an estimator can properly allow for the cost impact in performance of the work required. Those items characterized as “labor intensive” must have detailed estimates prepared to reflect the scope of work required. The scope of work will vary significantly from job to job.

5.7.4 Material Estimating.

- a. The material estimate usually receives the least attention of all the estimates provided. This may not significantly affect a small job, but the accumulation of small errors on a large package can affect the total estimate considerably. When estimating material costs, the following shall be considered:
 - (1) The kinds and quantity of each material required to accomplish the work.
 - (2) Whether the materials are procurable or will be manufactured.
 - (3) The “lead time” for procuring the material.
 - (4) Is the material commercially available?
 - (5) The current or future price for the material.
- b. The estimator is not expected to be as familiar with the material pricing as a purchasing agent, but should be familiar with the market, should know what is scarce and what is not available from commercial sources and should keep up with current prices and availability. The estimator should also use drawing material lists, equipment technical manuals and Allowance Parts Lists to determine material requirements. Cost estimates are then based upon records of previous recent purchases, current Government and vendor catalogs and consultation with Government and commercial sources.

5.7.4.1 Contractor vs. Government Furnished Material. In estimating material costs, no distinction is made between CFM and GFM. All material will be priced the same way using either Government or commercial prices, whichever is most readily available and appropriate. Generally speaking, because the Government purchases supplies in large lot quantities, the cost to the Government will be less than it would be to a private contractor making single item or small lot purchases. For this reason, Government prices should not be used when estimating costs for CFM in a work item, however, because the allowable variance in Class F estimates is 40 percent, it is permissible to use either commercial or Government material prices for Class F material estimates. This estimate should not include the cost of material to be provided as Special Program Material or Centrally Procured Material in support of the **Navy Modernization Process (NMP)**. Likewise, the cost of repairable items under special turn-around programs should not be included in the work package. In developing estimates for work items, a decision about CFM vs. GFM must be made before the estimate can be finalized. CFM estimates are provided on the reverse side of Appendix A. It is general Department of Defense policy that contractors provide all material necessary for performance. That means simply that all material should be CFM except where it is in the best interest of the Government to provide material as GFM. Exceptions to the CFM policy include:

- a. Items in long supply in the Navy Supply System (i.e., items stocked far in excess of expected item demand) should be provided as GFM since it would be wasteful to require contractors to buy such materials.
- b. Items with a set shelf life that will expire before normal draw down in the supply system should be issued as GFM if such usage remains within the shelf life requirements.
- c. Long Lead Time Material should be provided as GFM. In Government procurements, items that are not commercially available within the time period after contract award and the time the contractor needs the material for production should be considered as Long Lead Time Material.
- d. Standardization material should be provided as GFM. This material is the Special Program Material and the Centrally Procured Material purchased in support of the **NMP**.
- e. Material requiring Provisioning Technical Data should be provided as GFM. Normally, repair material does not require Provisioning Technical Data because it is already stocked in the supply system.

- f. Material items to be changed out under special turnaround or repairable programs should be provided as GFM.
- g. Material for contractor work performed outside of the U.S. Overseas contractors may not have ready access to materials meeting Navy specifications and are often procured as GFM.

5.7.4.2 Sources of Pricing Information. The most important source of pricing information for ship repair material is the Navy price list for stocked supplies and repair parts. This pricing information, when used in estimating, is adequate for pricing material requirements. Navy stock prices should not be used for estimating the cost of CFM in work items because the cost to industry for the same repair parts and supplies can be considerably higher. When the use of Navy pricing information is not appropriate or when the required pricing information is not available, the best source of current pricing information is the manufacturer or dealer who is in the business of distributing the materials or parts needed. Every estimator should maintain a listing of vendors, manufacturers, distributors, etc., that can be consulted to obtain current pricing information. Where available, catalogs of pricing data should be ordered and maintained in a central repository for reference by all estimators who may require the pricing information. Each RMC should maintain a library of current material pricing data for materials frequently required in typical ship repair activities estimated by the RMC.

5.8 ESTIMATING FOR CONTRACT MODIFICATIONS.

5.8.1 Contractor Modifications. For contract modifications, including Master Agreement Job Order modifications and for noncompetitive procurements, estimates must include allowances for known conditions in the estimating environment. The scope of the modification estimate must include consideration of additions and deletions required by the change, the impact on completed work by the change and the current status of materials made obsolete by the change. The cost estimate must consider the means of performing the work, the completion date and other factors impacting on performance such as delay, disruption or acceleration. These cost elements must be identified, quantified and included in any cost estimate. In considering the means of performance, due consideration must be given to the contractor's normal operating procedures. The estimate should be prepared based on the methods, procedures, facilities, equipment and employees available to the contractor. In such a sole source environment, it is unfair to the contractor to negotiate changes on any basis other than those that impact on the costs of performance by the contractor. Estimates for changes must be prepared based on the way the contractor would perform the work, considering current workload as well as contractor inefficiencies and disruptions that may result from the change. The estimate must also consider the timing of the work to be done. Change work authorized early in availability is less costly than change work authorized later. For example, work in a propulsion space, authorized three weeks prior to a Light Off-Examination by the Propulsion Examining Board could easily be three to four times the cost of the same scope of work authorized a week or two after the start of an availability.

5.8.2 Acceleration. Acceleration should be considered in developing estimates for contract modifications that increase the scope of work. Simply defined, acceleration is a speeding up of the work in an attempt to complete performance earlier than otherwise anticipated. Acceleration consists of such items as increased manning, added shift work, overtime, rescheduling of work force, new hires, new subcontracting, etc. Acceleration, when required, must be considered in any estimate for changed work in a job order. Acceleration costs will nearly always be incurred when significant growth or new work is added to a work package that is to be completed in the original contract performance period. A contract is also "accelerated" if the original performance period is decreased without an accompanying decrease in the scope of work. When acceleration is required, it must be identified in the contract modification (scope of work) and estimated as any other work element is estimated.

5.8.3 Disruption. Disruption costs should also be considered in developing cost estimates for contract modifications. It is the cost of the man-hours, materials and other costs that are expended to offset inefficiencies experienced as a result of Government-caused or contractor-caused changes or other departures from the original schedule that includes the effect of changed work on unchanged work. It is also the process by which the above inefficiencies in the performance of contract work are created. Disruption, when it can be identified, must be quantified and accounted for in any contract modification estimate prepared. As with most estimating, quantifying disruption is an inexact process and there are few official guidelines to draw on for assistance. The real requirements to be kept in mind are that it must be considered in determining the scope of work and, if present, the contractor must be compensated for disruption attributable to the change. Disruption attributable to the contractor's past performance, without regard for the change, must not be considered.

5.8.4 Delay. When a contract change affects the completion of the contract, a contractor may request additional compensation for this “delay”. Delay can also be an element of the contractor’s cost estimate when other Government action or inaction causes a delay to the contractor’s efforts. Delay is defined as that period of time a contractor is required to perform beyond the planned delivery or completion date, due to contractually remediable Government action or inaction (e.g., changes, stop work orders, suspension or late or defective GFM). Delay must also be considered whenever any time-oriented event affects the length of or causes a suspension in scheduled contract work. As with any other cost element, if present, it must be identified, quantified and accounted for in any estimate provided. Delay attributable solely to the contractor’s execution of the job order is not considered in any estimate for a contract modification.

5.9 SHIP CHANGE ESTIMATES.

5.9.1 Navy Modernization Process. **Reference (e)** defines policies and procedures and assigns responsibilities for the establishment and revision of man-day estimates, man-day cost estimates and material cost estimates for Ship Change (SC) installations. Realistic estimates of required man-days and correct application of man-day rates are important in programming and budgeting for the NMP. Additionally, capturing post-availability return costs for SCs, particularly when available in terms of both labor hours and material costs (as in the case of Cost Reimbursable contracts), provide a valuable resource to NMP managers in refining cost estimates for future installations.

5.9.2 Classification of Ship Change Estimates. SC estimates are usually prepared at either the Class F or Class C level. When Class C estimates have been previously prepared for a specific SC, that estimate, or the historical average of the estimate, should be used as the estimate for that work when it is authorized in future SCs. Recall that Class F estimates are “ballpark” estimates prepared in the absence of detailed design or engineering data, repair instructions and detailed material requirements. Before preparing such an estimate, all other sources of estimating data shall first be exhausted.

5.9.3 Sources of Ship Change Estimating Data. The preferred way to estimate a SC is to use the historical estimate for that item if it has been previously estimated. Generally, historical estimates are preferred over actual return costs. In both cases, differences in ship conditions (e.g., docking vs. non-docking availability) and the nature and location of other repair and modernization work performed on the ship during a given availability can significantly influence the return costs of the work performed. Selection of the best estimate source is a matter of good judgment based on the pertinent facts. If historical estimates or return costs are not available, the next preferred approach is to examine the estimates or return costs for similar work. By making adjustments to account for the differences in the actual work required, those estimates can be used as the basis for a new estimate.

5.9.4 Ship Change Estimating Techniques. When historical estimates or return costs are not available for use in SC documents, a Class F or Class C estimate must be prepared based on the SC work scope descriptions and estimating data available. All of the techniques available for estimating repair work items are also applicable in developing SC estimates. The basic difference between developing a SC estimate and an estimate for a repair work item is that repair work generally has more detailed information available in the work statement. In estimating a SC, the work scope statement is often a relatively simple direction to install in accordance with drawings. Particularly in the case of a first-time SC, the challenge for the estimator comes from a detailed review of what is required to accomplish the requirements of the SC drawings and any associated technical manuals and bills of material. The approach to estimating and the techniques used should still closely parallel those that would be used to estimate repair work. The work scope should be broken down into logical elements that can be estimated readily. The estimates for each element are then added together to obtain the total estimate.

5.9.5 Prorated Cost Estimates.

- a. In the preparation of total availability budgets and cost projections, as well as preliminary and final review estimates for SCs, it is necessary to identify each funding activity’s (e.g., TYCOM and NAVSEA) share of the proratable costs associated with the availability. Proration costs will vary between availabilities depending upon the relative magnitude of the work package under each customer funding account. Only those general type services that apply to more than one customer and are performed during an availability are proratable, (e.g., temporary services, crane services, docking services, guarantee engineer, etc.). Services that are performed in support of a specific job are not proratable. As an example, consider an access cut for removals in a machinery space where both repairs and alterations require removals. In this case, the cost of the access should be prorated. In the case of an access cut solely to support repair work, the cost of the access cut is not proratable and the

cost would be born by the TYCOM. Labor elements and other direct costs not estimated in the Government estimating system should not be considered in the cost to be prorated. These elements are accounted for in the Overhead (OH) or Other Direct Labor (ODL) categories of the labor rate used for the cost estimate. These costs include such items as the costs associated with scheduling, material handling, fire watches, etc.

- b. In general, the actual Direct Labor (DL) hours charged to the Government and attributable to a benefiting customer should be used as the basis to prorate service costs. In those cases where these costs are not available, it is appropriate to use the estimated labor hours to be funded by a benefiting customer as the proration basis.

5.10 LABOR RATE ESTIMATING.

5.10.1 Projections. Each fiscal year within the Department of Defense Planning, Programming and Budgeting System, the Navy is required to submit proposed changes to the Future Year Defense Plan that represent the proposed pricing of approved programs. This process forms the basis for the Navy budget. Each year in support of this budget request, NAVSEA will issue a call to the RMCs for projections of private contractor labor rates for the current fiscal year and five future fiscal years. The TYCOMs and NAVSEA Project Managers use this data in developing maintenance budgets. The following discussion related to labor rates addresses the importance and variability of labor rates used in estimating for ship repair:

5.10.2 Labor Rates. The term “labor rate(s)” is not used to denote just wage rates, but all costs except material (and profit, in the case of private contractors).

5.10.2.1 Private Contractor Labor Rates. Reference (f) directs RMC Contracting Officers to identify labor rates for the current fiscal year and to project labor rates for the next five future fiscal years for each active ship repair contractor. NAVSEA publicizes this information for use by Office of the Chief of Naval Operations sponsors, NMP sponsors, Fleet Maintenance Officers, TYCOMs, RMCs, Supervisors of Shipbuilding, Conversion and Repair, United States Navy (SUPSHIP) and Ship Availability Planning and Engineering Center planning activities. The information should be used in advance planning work definition and authorization, in pricing of solicitation work packages and in budgeting for pricing of approved maintenance projects.

5.10.2.2 Other Direct Labor Factor. ODLF is that factor which accounts for all direct labor charged by the contractor that is not identified and accounted for on Appendix A. A sample calculation is described in paragraph 5.10.2.4 of this chapter.

5.10.2.3 Labor Rate Determination.

- a. In determining private contractor labor rates, the RMCs and SUPSHIPS obtain accounting data from DCAA and each contractor. This data is analyzed to compute the ODLF required to make estimates prepared in the Standard Government Estimating System comparable to estimates prepared in the contractor’s estimating system. The ODLF will range from 10 percent to as much as 80 percent or more, with the average being between 30 percent and 40 percent. What this means is that for the same scope of work, the Government estimate will always be less than the contractor’s estimate because the contractor’s estimate will contain labor hours for the ODL categories that are not estimated in the Standard Government Estimating System. To account for the differences in the estimating systems, two approaches can be taken. The Government man-hour estimate can be inflated by the ODLF and be used with the contractor’s current forward pricing labor rate or the contractor’s labor rate can be inflated by the ODLF to obtain a new labor rate which is used with the Government man hour estimate to obtain costs. For budgeting purposes, the latter course of action is directed by NAVSEA. This method of equating the estimating systems is also recommended for other Government estimating. In any case, it is inequitable to apply the contractor’s labor rate to the Government estimate to project expected costs. This method will always result in understated costs.
- b. For a variety of reasons, including the many variations and complexities in contractors’ accounting systems, there are many different approaches to labor rate determinations. Indeed, the terminology varies as well with local customs and the vernacular. Labor rate determinations for contractors can be very simple or very complex, depending on such things as the size of the contractor’s work force and the sophistication of the contractor’s accounting system. The contractor’s labor rate is a function of many things related to the contractor. For example, the efficiency and skill of the work force, the mix

of trade categories required to perform the work, the facilities and tools available and other factors will impact the rate. Further, the rate will differ for different kinds of work. For example, work on nuclear power plants requires more inspection and verification than conventional power plant work. For this reason, the factors developed must be applicable to the type of work contemplated. Some contractors will require that factors be developed for each category of work performed (i.e., submarines, surface force, aircraft carrier or barge and boat work). An example of a typical rate determination follows:

Accounting data for a representative period, usually the firm's accounting year, is examined and after elimination of non-allowable costs, the costs in the various categories are computed. In this example, the cost categories are identified as DL, OH, and General and Administrative (G&A). The total DL hours computed to be worked are divided into the total wages computed to be paid for DL (excluding overtime premium) to determine the average DL wage rate. The OH and G&A rates are determined essentially the same way. However, DCAA may make other recommendations. The OH rate is divided into variable and fixed components. The variable portions such as certain fringe benefits vary with changes in the DL base hours worked, whereas the fixed portion does not change (within certain limits). The DCAA examines the contractor's rate proposal in conjunction with the ACO, discusses issues with the contractor and forwards the rate proposal to the ACO with recommendations for approval or partial approval where some data is unacceptable. The ACO then establishes a labor rate based upon the DCAA audit report results and discussions with the contractor. This composite rate is the sum of DL, OH, and G&A.

5.10.2.4 Sample Other Direct Labor Factor and Labor Rate Determination. A sample computation of a contractor's labor rate determination follows:

- a. For simplicity, assume this contractor does not have G & A and melds those costs into OH such that variable and fixed costs for the OH associated with 130,000 DL hours worked are:

Variable	\$700,000
Fixed	<u>\$600,000</u>
Total	\$1,300,000

The OH rate is then $\frac{\$1,300,000}{130,000 \text{ hr}} = \$10.00/\text{hr}$ (assuming the contractor allocates OH on a direct labor hour basis)

- b. The direct labor wages paid are \$2,600,000 and the average DL rate is $\frac{\$2,600,000}{130,000 \text{ hr}} = \$20.00/\text{hr}$.
- c. The rate then becomes: DL Rate + OH or $20 + 10 = \$30.00/\text{hr}$.
- d. Now using the sample figures shown in Appendix D, we calculate the ODLF, which when applied to the contractor's forward pricing rate will make the rate applicable to estimates prepared in the Standard Estimate. The ODLF is ODL expressed as a percentage of the Total Direct Labor or:

$$ODLF = \frac{ODL}{TDL} \times 100$$

- e. The contractor's forward pricing rate is increased by this percentage to make it applicable to Government estimates prepared on the Standard Cost Estimate Sheet. According to the totals in Appendix B, the TDL is 130,090 man-hours. The total hard-core labor is 101,010 man-hours. The ODL is 29,080 man-hours. Therefore, the ODLF is:

$$ODLF = 29,000 / 101,000 \times 100 = 28.71\%$$

- f. Thus, the forward pricing rate of \$30.00/hr is factored by 1.2871 to yield \$38.61/hr. Add to this a profit factor of 10 percent to yield \$42.48/hr. This hourly rate converts to a daily rate of \$339.80, which is the rate applicable to estimates prepared by the Government. It is also the rate reported by the RMCs and SUPSHIPs to NAVSEA 017 for use in the Planning, Programming and Budgeting System. Where contractors apply variable OH rates for different kinds of work, a labor rate must be established for each different category of work performed. For example, it is usually true that factors for new construction

and repair would be significantly different. Likewise, rates could differ appreciably for nuclear or non-nuclear plant work or surface force ship, aircraft carrier or submarine work. For contractors that do different kinds of work such as new construction and repair, nuclear or non-nuclear work or surface ship or submarine work, specific rates should be determined for each category of work contemplated in the Future Year Defense Plan.

5.10.2.5 Contractor Rate List.

- a. NAVSEA collects the rate data from all RMCs and SUPSHIPS for all contractors and prepares a contractor rate list. Table 5-4 is a sample of the contractor rate list.

Table 5-4

SUPSHIP SAMPLE					
	FY97	FY98	FY99	FY00	FY01
Contractor "A"	\$300	\$305	\$310	\$315	\$320
Contractor "B"	\$305	\$315	\$326	\$337	\$349
Contractor "C"	\$308	\$318	\$329	\$341	\$353

- b. In addition to the listing of contractor labor rates for each RMC and SUPSHIP, a composite labor rate for each port is developed to reflect the average labor rate for the area. Table 5-5 is a typical port composite labor rate projection for the West Coast.

Table 5-5

PORT COMPOSITE LABOR RATE (WEST COAST)					
	FY97	FY98	FY99	FY00	FY01
San Diego	\$300	\$305	\$310	\$315	\$320
Long Beach	\$310	\$325	\$342	\$359	\$377
San Francisco	\$326	\$342	\$359	\$377	\$396
Seattle	\$325	\$341	\$358	\$376	\$395
Pearl Harbor	\$350	\$367	\$386	\$405	\$425

- c. And finally, a composite coast labor rate for each coast is developed to reflect the average labor rate of all the major private contractors on that coast. Pearl Harbor is not included in the West Coast composite labor rate since West Coast solicitations are restricted to the Continental United States. Table 5-6 is a typical coast-wide composite rate projection.

Table 5-6

COAST COMPOSITE LABOR RATE					
	FY97	FY98	FY99	FY00	FY01
WEST	\$325	\$341	\$358	\$376	\$395
EAST/GULF	\$275	\$289	\$303	\$318	\$334

- d. The solicitation area must be considered in making the decision on which labor rate to use. Some of the choices to consider are:

- (1) A single contractor's labor rate can be selected if it is probable this particular contractor will be awarded the contract.
- (2) A port composite labor rate can be selected.
- (3) The coast composite labor rate can be assigned.

5.10.2.6 Labor Rate Evaluation for Competitive Procurements. Competitive procurements require at least two or more contractors be considered as "competitive" for the procurement. To be considered competitive for a procurement, a contractor must be capable of doing the work required by having requisite facilities capacity and, more importantly, the interest in responding to the solicitation. All contractors in the solicitation area may be interested in the solicitation, but some may not be competitive. The Government must assess the competitiveness of each contractor in order to determine an appropriate labor rate, which is representative of the net competitive environment to apply to the preliminary cost estimate.

5.10.2.7 Labor Rates for Noncompetitive Procurements. In noncompetitive procurements, the contract price is negotiated on a sole source basis with the contractor. The contractor labor rate can be computed to be consistent with the Government Estimating System or if the Government agrees with the contractor to use another estimating system, then the labor rate must be compatible with that system.

5.10.2.8 "The Right Labor Rate" Determination. Meaningful estimates depend on the prediction of the labor rate to be used in determining the dollar value of the estimate in question. In order to accurately predict the labor rate, it is necessary to identify the contractors within the solicitation area likely to be awarded the contract. A "composite rate" is computed from the contractors' labor rates and an evaluation of the "net" competitive situation. This evaluation should include consideration for:

- a. Solicitation area contractor attitudes, competitive assessment, recent award prices for similar types of work, other commercial and Navy workload, contractor profit considerations and other market conditions.
- b. Technical and production "risk" analysis of the availability work package.
- c. Input from other Government activities (Military Sealift Command, United States Coast Guard, DCAA).

5.10.2.9 Market Conditions Assessment. Cost estimates must be realistic if they are to be of use for the purpose for which they are intended. To be realistic, cost estimates must be based on present market conditions, which, in turn, must be related to the procurement in-hand and to the conditions in the private contractors being solicited. Cost estimates predicted solely on man hour and material estimates without considering current market conditions are unrealistic and may result in bids or proposals received for ship repair work that are too high or too low when compared with Government estimates. In assessing the impact of market conditions, the following elements are generally considered:

- a. When most yards are at full capacity the composite rate is adjusted upwards, somewhere between 10 and 30 percent, depending on the surge capacity of labor resources in the solicitation area.
- b. When most yards are below capacity the composite rate is adjusted downwards, depending on the extent of excess labor resources available. Potential "buy-ins" must be anticipated. The downward adjustment may be as great as 50 percent of the Government estimate.
- c. When making adjustments in rates, the nature of the work required is also considered. For highly technical or new, complex work, the larger yards should be more competitive.
- d. For well-written, tight specifications, where little or no growth or new work is anticipated, a composite rate as close as possible to the expected actual rate is used.
- e. For loosely written specifications with great potential for growth and for new work after award, a "buy-in" should be expected and the estimate should be adjusted downward at least 30 percent to 40 percent.
- f. In a very competitive market, award prices in the recent past for similar work packages in the same area are examined. The composite rate is adjusted to be somewhat less but comparable to the average of the rates that is determined by dividing the award prices by the total labor hours (or man-days) estimated for the work packages awarded.

5.11 FORWARD PRICING RATES. A forward pricing rate is a written agreement negotiated between a contractor and the Government to make certain rates available during a specified period for use in pricing contracts or modifications. Such rates represent reasonable projections of specific costs that are not easily estimated or identified. Generally, the RMCs and other administrative contracting officers will annually (or more frequently as needed) negotiate a forward pricing rate with contractors awarded Government contracts. Contractors and the Government can facilitate forward pricing of contract modifications by reaching an understanding regarding the estimating system and forward pricing rates to be used. Reference (f) allows contractors to propose forward pricing rate agreements or formula pricing agreements to incorporate cost estimating relationships which will reduce proposal documentation efforts and enhance the ease with which Government personnel can understand the contractors' estimating system. The RMC Contracting Officers normally negotiate with the ship repair contractors at least every six months to determine forward pricing rates. As with competitive labor rates discussed in earlier sections, forward pricing rates for labor calculations generally include projected work-load (direct labor), total overhead, labor costs and profit. An example of the calculation is shown in Table 5-7.

Table 5-7

FORWARD PRICING RATE CALCULATION	
DIRECT LABOR (HOURS)	100,000.00
FIXED OVERHEAD (\$)	200,000.00
VARIABLE OVERHEAD (\$)	800,000.00
TOTAL OVERHEAD (\$)	1,000,000.00
OVERHEAD RATE (\$/HOUR)	\$10.00
DIRECT WAGES (\$)	\$1,400,000.00
DIRECT LABOR RATE (\$/HOUR)	\$14.00
TOTAL HOURLY RATE (\$/HOUR)	\$24.00
PROFIT @ 10 PERCENT	\$2.40
HOURLY RATE W/PROFIT (\$/HOUR)	\$26.40
	x 8
FORWARD PRICING LABOR RATE (Man-day)	\$211.20

*For simplicity, it is assumed that G&A is included in OH and ODL is included in DL.

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**APPENDIX B
ESTIMATING CHECK-OFF LIST**

ESTIMATING CHECK-OFF LIST												SWLIN:	
												ITEMS:	
REQUIREMENTS/ CONSIDERATIONS		ACTIVITY/ITEM											
		1	2	3	4	5	6	7	8	9	10	11	12
1	INTERFERENCES												
2	ACCESSES												
3	GAS FREE REQUIREMENTS												
4	COFFERDAMS/DIVING SERVICES												
5	CRANE/RIGGING SERVICES												
6	STAGING/PROTECTIVE COVERS												
7	INSULATION/LAGGING												
8	TEMPORARY LIGHTING												
9	TEMPORARY VENTILATION												
10	SANDBLASTING												
11	LABORERS												
12	OTHER ASSIST TRADES												
13	PRELIMINARY/SHOP TEST												
14	OPERATIONAL TEST												
15	TRANSPORTATION												
16	CLEANING												
17	CHIPPING/GRINDING												
18	SYSTEM PURGE												
19	SYSTEM FLUSH												
20	CALIBRATIONS/ADJUSTMENTS												
21	REPORTS/DATA												
22	CERTIFICATIONS/SURVEYS												
23	MANUFACTURING												
24	FABRICATION/ASSEMBLY												
25	TOUCH-UP PAINTING												
26	WASTE/DAMAGE/REWORK												
27	PREVAILING WEATHER												
28	SHIP'S FORCE WORK												
29	MATERIAL CONDITION												
30	CATEGORY I STANDARD ITEMS												
31	CHECKPOINTS												
32	QUALITY ASSURANCE/NDT												
33	MATERIAL REQUIRED												

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APPENDIX C

CATEGORY I STANDARD ITEM HARD-CORE LABOR CONSIDERATIONS		ACTIVITY/ITEM							
STANDARD ITEM	HARD-CORE LABOR REQUIREMENTS								
009-04	INSPECTION SYSTEM (ROH/SRA) (QA & NDT)								
009-07	FIRE PREVENTION AND HOUSEKEEPING								
009-10	CONTROL OF SHIPBOARD THERMAL INSULATING MATERIAL (LABOR INTENSIVE)								
009-24	ISOLATING, BLANKING, AND TAGGING (LABOR INTENSIVE)								
009-61	CONTROL OF SHIPBOARD USE OF FLOROCARBONS (LABOR INTENSIVE)								
009-65	SHIPBOARD ELECTRICAL CABLE (LABOR INTENSIVE)								
007-73	SHIPBOARD ELECTRICAL CABLE (LABOR INTENSIVE)								
009-74	CONTROL OF NON-ASBESTOS THERMAL FIBER INSULATING MATERIAL (LABOR INTENSIVE)								

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APPENDIX D
EXCALIBER CONTRACTOR
OTHER DIRECT LABOR FACTOR CALCULATION
(6 MONTH PERIOD)

Direct Labor Categories	Hours	Other Direct Labor Categories	Hours
*Boilermaker	4,520	Planning and Progressing	2,508
*Bricklayer	4,276	Testing	992
*Burner	10,224	Program Manager	1,620
*Carpenter	23,958	Material Control	1,176
*Chipper	4,764	Hi-Lo Operator	1,302
*Electrician	7,744	Crane Operator	3,274
*General Labor	13,440	Calibration	2,266
*Grinder	1,784	Firewatch	12,606
*Joiner	900	Safety	1,714
*Lagger	3,000	Security	410
*Painter	3,610	Equipment Control	306
*Pipefitter	10,416	Transportation	826
*Plumber	1,682	Total Other Direct Labor	29,000
*Rigger	10,652		
*Scaler	1,230		
*Sheetmetal	2,000		
*Shipfitter	17,852		
*Welder	20,292		
*Inside Machinist	15,966		
*Outside Machinist	34,282		
Total Hard-Core Direct Labor	101,000		

$$TDL=HC+ODL$$

$$ODL=TDL-HC$$

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VOLUME VII
CHAPTER 6
FUNDING AND ACCOUNTING

REFERENCES.

- (a) 31 USC 1301(a) - Application
- (b) 31 USC 1341 - Limitations on Expending and Obligating Amounts
- (c) 31 USC 1342 - Limitation on Voluntary Services
- (d) 31 USC 1349 - Adverse Personnel Actions
- (e) 31 USC 1517 - Prohibited Obligations and Expenditures
- (f) 31 USC 1518 - Adverse Personnel Actions
- (g) DoD 7000.14-R - Volume 14 - Administrative Control of Funds and Anti-Deficiency Act Violations
- (h) DoD Directive 7200.1 - Administrative Control of Appropriations
- (i) NAVCOMPT Manual - Navy Comptroller Manual Volume 2
- (j) NAVSO P-3006 - Financial Management of Resources Operations and Maintenance, (Shore Activities)
- (k) NAVCOMPT Manual - Navy Comptroller Manual Paragraph 035400-035452
- (l) NAVCOMPT Manual - Navy Comptroller Manual Volume 3, Appropriation, Cost, and Property Accounting (Field)
- (m) 41 USC 23 - Orders or Contracts for Material Placed with Government-owned Establishments Deemed Obligations
- (n) 31 USC 1535 - Agency Agreements
- (o) Public Law 97-114 - DoD Appropriations Act
- (p) STARS Users Manual (FMSO P-104)
- (q) NAVCOMPT Form 2168/1 - Expense Operation Budget
- (r) DoD Financial Management Policy Manual
- (s) NAVCOMPT Form 2275 - Orders for Work and Services

6.1 **PURPOSE.** To provide information concerning the appropriation, allocation, management and accounting for funds that pay for services and materials used for ship maintenance, repair, modernization and during availabilities assigned to contractors through various types of contracts. This chapter provides discussion concerning the infrastructure and processes that must be considered and implemented to assure that the fiduciary responsibilities of the Procuring Contracting Officer and Administrative Contracting Officer and their appointed assistant financial managers are understood and consequences for noncompliance are articulated.

6.2 **SCOPE.** A Command's financial management program for the administration of funds is defined as an integral part of management. To accomplish the objective of financial management this chapter addresses the responsibilities associated with managing public funds that are appropriated for specific purposes as authorized by Congressional action, Department of Defense (DoD) allocations and Department of the Navy financial policies. The main purpose of financial management is to aid the higher-level management of ship repair planning and executing organizations. Appropriate accounting processes are engaged to account for funds and obligations committing funds of the Government's Treasury. This chapter specifically concerns financial management of funds authorized for the purpose of entering into contracts awarded to the private sector to accomplish repairs and modernization to ships, craft and other Government assets administered by Regional Maintenance Centers (RMC).

6.3 **POLICY.** Funds must be administered in accordance with current laws, regulations established by higher authority and policies established to provide for specific situations. The following are statutory requirements outlined in United States Code and other directives that establish funding controls requirements and policies:

- a. Reference (a) states that appropriations will be applied only to the objects for which the appropriations were made, except as otherwise provided by law. There is no requirement to report a violation of this statute. The accounting, however, must be corrected to reflect the proper funding. This accounting correction can lead to a reportable violation of the Anti-deficiency Act if the proper funds were not available at the time of the obligation or expenditure.

- b. Reference (b) states that an officer or employee of the United States may not make or authorize an expenditure or obligation exceeding an amount available in an appropriation or fund for the expenditure or obligation or involve the Government in any contract or other obligation for the payment of money before an appropriation is made, unless authorized by law.
- c. Reference (c) states that no officer or employee of the United States will accept voluntary services not authorized by law, except in cases of emergency involving safety of human life or protection of property.
- d. Reference (d) states an officer or employee of the United States Government or of the District of Columbia Government violating section 1341 and 1342 of this title shall be subject to appropriate administrative discipline including, when circumstances warrant, suspension from duty without pay or removal from office.
- e. Reference (e) states that an officer or employee of the United States may not make or authorize an expenditure or obligation exceeding an apportionment or the amount permitted by regulations prescribed.
- f. Reference (f) states an officer or employee of the United States Government or of the District of Columbia Government violating section 1517 (a) of this title shall be subject to appropriate administrative discipline including, when circumstances warrant, suspension from duty without pay or removal from office.
- g. Reference (g) provides that the Commanding Officer (CO) of an activity is solely responsible under 31 United States Code 1517 for the administration of all authorization of funds granted to the CO.
- h. Reference (h) addresses the statutory responsibilities inherent in the administrative control of funds.
- i. Reference (i), Appendix A addresses administration of funding by funds administrators. These individuals must also be informed of principles concerning the administration of the appropriations as contained in reference (i), Chapter 2.
- j. Reference (i), Chapter 3 and Reference (j) provide guidance to funds administrators concerning the administration of allotments and operating budgets.
- k. Reference (k) discusses the principles and procedures that are to be used concerning the use of various requests for work and services.
- l. Reference (l), Chapter 5, Section V states that all funded, reimbursable orders are subject to the recipient activity projecting that at least 51 percent of the funds will be used for "in-house" work.
- m. Reference (m) states that a project order is provided as a specific, definite and certain order issued for the production of material for repair, maintenance, or overhaul or for other specific work and services. It serves to obligate appropriations and funds in the same manner as contracts with a commercial enterprise.
- n. Reference (n) provides the authority as an economy act order is issued for work or services of a recurring nature where the scope of the work is not specific.
- o. Reference (o) requires that funds current at the start of a major availability must finance the cost of the modernization or repair, including all scope-of-effort changes necessary to complete it.

6.4 GENERAL INFORMATION CONCERNING FUNDING AND FUNDS ADMINISTRATION.

6.4.1 Appropriations. An appropriation is the authority provided by an Act of Congress to incur obligations for specified purposes and to make payments for them out of the Treasury. The following is a brief description of the seven types of appropriations most often used by a Naval Supervisory Authority. Refer to the Department of the Navy Financial Policy Manual for a detailed explanation of appropriations.

6.4.1.1 Operation and Maintenance, Navy. Operation and Maintenance, Navy (O&MN) funds are for expenses, not otherwise provided for, that are necessary for the operation and maintenance of the Navy, as authorized by law. Equipment purchases under this appropriation are limited to a unit price of less than \$250,000. This limitation may be changed in any future Congressional session. Operation and Maintenance funds are authorized on an annual basis.

6.4.1.2 Operation and Maintenance, Naval Reserve. This appropriation is for expenses, not otherwise provided for, necessary for the operation and maintenance of the Navy Reserve Fleet, as authorized by law. Equipment purchases under this appropriation are limited to a unit price of less than \$250,000. Operation and maintenance funds are authorized on an annual basis.

6.4.1.3 Shipbuilding and Conversion, Navy. The funds finance the construction of new ships and conversion of existing ships, including all hull, mechanical and electrical equipment, electronics, guns, torpedo and missile launching systems and communications systems. This appropriation is a multiyear appropriation and normally remains available for obligation for five fiscal years.

6.4.1.4 Weapons Procurement, Navy. Weapons Procurement, Navy is used to finance the procurement of missiles, torpedoes, guns, munitions and the installation of modernization equipment. This appropriation is a multiyear appropriation and remains available for new obligations for three fiscal years.

6.4.1.5 Other Procurement, Navy. Other Procurement, Navy finances the procurement, production and modernization of equipment not otherwise provided for. Such equipment ranges from the latest electronic sensors to training equipment and spare parts. The unit price of this equipment must be in excess of \$250,000. This appropriation is a multiyear appropriation and remains available for obligation for three fiscal years.

6.4.1.6 Research, Development, Test and Evaluation. Is used for expenses necessary for basic and applied research, development, test and evaluation, including maintenance, rehabilitation, lease and operation of facilities and equipment as authorized by law. This appropriation is a multiyear appropriation and remains available for obligation for two fiscal years.

6.4.1.7 Foreign Military Sales. Foreign Military Sales provides military assistance through the sale of defense articles and services to eligible foreign Governments and international organizations. The United States normally receives full reimbursement for costs associated with these sales.

6.4.2 General Classifications of Funds Transactions. All expenditures must be preceded by an authorization to expend from the available funds. In theory, every transaction progresses through the following four stages:

- a. **Initiations.** An administrative action that identifies funds set aside (reserved) for planning purposes before establishment of commitments or obligations related to the purpose of the reservation. Initiations will not be maintained as a part of the official fiscal records.
- b. **Commitment.** A firm administrative reservation of funds based on solid procurement directives, orders, requisitions, authorizations to issue travel orders or requests which authorize the recipient to create obligations without further recourse to the official responsible for certifying the availability of funds. A commitment is generally recorded when the comptroller signs the document to certify that the funds are available and properly cited for the effort. This is mandatory in the Standard Accounting and Reporting System (STARS) per reference (p).
- c. **Obligation.** Incurred when an order is placed, contract is awarded, service is received, orders are issued directing travel and similar transactions are entered into during a given period requiring future payment of money in an agreed amount. By law, obligations must be supported by documentary evidence of a mutual agreement in writing. Each individual transaction must meet the test of the following principles:
 - (1) A determination that the specific goods, supplies or services required according to contracts entered into or orders placed obligating an annual appropriation are intended to meet a bona fide need of the fiscal year charged.
 - (2) Contracts entered into or orders placed for goods, supplies or services will be executed only with a bona fide intent that the performing activity will commence work and perform the contract without unnecessary delay.
- d. **Disbursement.** Made when the bill is paid. This, plus accounts payable transactions processed by the RMC or disbursing office, as applicable, result in a reflection of expenditures.

6.4.3 Repair Funds.

- a. The Fleet Commanders budget, (based mostly on the ship's Maintenance Team proposed annual Maintenance and Modernization Business Plan), and fund repairs from O&MN and Operation and Maintenance, Naval Reserve (O&MNR) appropriations, as applicable. The funds are normally

provided to the RMC for specific use by the Type Commanders (TYCOM). These funds pay for contractual costs of authorized repairs and modernization of ships and for the incidental costs which include:

- (1) Naval Supervisory Authority material.
 - (2) Travel and salary cost for overseas ship check.
 - (3) **Ship Change** and preparation of drawings or sketches to be contracted out.
 - (4) **Sustainment Type One or Sustainment Type Two Fleet or Program Ship Changes** on installed equipments.
- b. Repair funds are received by the RMC from Fleet Commands (FLTCOM) on reference (q) based on quarterly or monthly phasing plans approved by the TYCOMs. An Operating Budget (OB) is subject to the statutory limitations of reference (e). OBs pass funds for the execution of centrally managed procurement programs. Details on ship repair and modernization funds, including current year and prior year availabilities, may be found in reference (r).

6.4.4 **Navy Modernization Process Funds**. This program is covered in detail in Volume VI, Chapter 36 of this manual. Effective in Fiscal Year 90, the **Navy Modernization Process** was transferred from the O&MN and O&MNR appropriations to the Other Procurement, Navy appropriation. The transfer shifted the emphasis from ship alteration to equipment orientation. Installation of equipment is now funded with the same appropriation and fiscal year funds that procured the Government Furnished Equipment. Naval Sea Systems Command (NAVSEA) provides Project Directives for the accomplishment of Program and Fleet Alterations (**Ship Changes**). This funding covers expenses incidental to the accomplishment of alterations such as:

- a. Preparation and reproduction of alteration drawings contracted out.
- b. Travel costs, other than local, for overseas ship checks of alterations.

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. Fleet **Commander's** 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 (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 **and availability** 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.

- a. The Maintenance Team, **with TYCOM N43 concurrence**, has the **ability** to shift controls between the Chief of Naval Operations (CNO) availability and Continuous Maintenance budget lines in order to most efficiently accomplish required maintenance and modernization.
- b. The Maintenance Team, **with TYCOM N43 concurrence**, has the **ability** to adjust the Maintenance and Modernization Business Plan in response to changes in ship operations, planned maintenance periods and other business case reasons provided the intended distributions do not exceed the total remaining annual budget requirement allocated for that ship. This redistribution will be documented via a revised quarterly phasing plan, which will be submitted to the RMC, for approval and adjustment of the Maintenance Team controls. If funding controls permit, the Maintenance Team is permitted to accomplish maintenance that falls below the Maintenance Figure of Merit threshold provided the maintenance is accomplished during the most cost effective maintenance period available.
- c. Depot level maintenance will normally be screened to the Multi-Ship/Multi-Option (MS/MO) contractor. The Maintenance Team may go to other contracting vehicles when there is no MS/MO contract in place or:
 - (1) The contractor and Government cannot agree on cost and scope.
 - (2) The contractor does not have the capability or capacity.
 - (3) Indefinite Delivery, Indefinite Quantity/Commercial Industrial Services (or Simplified Acquisition Purchases and a qualified vendors list) is available.
 - (4) Other organic RMC assets are available and have the capability for the work.
 - (5) Work is to be accomplished outside of homeport area.
 - (6) Work is to be accomplished by an Alteration Installation Team.
- d. When work deferral reduces the total cost of the job or maintenance completes with a cost under-run and funds can be recaptured, the funding controls will normally remain under the control of the respective Maintenance Team. If the funds are needed for critical work on another ship or to cover a funding shortfall at the TYCOM/Fleet level, the RMC, **with TYCOM concurrence**, **may** redistribute or recapture controls from all or selected Maintenance Teams. The change will be documented in a revised quarterly phasing plan and the Maintenance Team(s) should provide to the RMC, **and TYCOM**, an impact statement and recommended plan to mitigate the effects of the plan change.
- e. MS/MO contractors normally submit cost reports to Maintenance Teams on a bi-weekly basis. The Maintenance Team will utilize these reports to assess the cost performance of the MS/MO contractor and address items of concern to the RMC.

6.6.2 Regional Maintenance Center Funding Business Rules Responsibilities.

- a. Based on input from the Maintenance Teams and the TYCOM regarding modernization requirements, the RMC Commander will develop a consolidated spending plan for the execution year.

- b. The RMC will evaluate Maintenance and Modernization Business Plan (MMBP) adjustment requests based on the Summary of Events, recovery plan, and quarterly adjustment provided by the Maintenance Teams. If the RMC supports the request but lacks the spending controls required, the RMC will forward the issue to the TYCOM for consideration and resolution.
- c. The RMC, with TYCOM N43 concurrence, has the ability to redistribute controls across the surface force ship Maintenance Teams for which he is responsible. The RMC shall inform the TYCOM whenever redistributions are required on any ship and shall obtain prior approval from the TYCOM when controls require adjustment in excess of twenty (20) percent. The RMC may not redistribute funds between Active Fleet and Reserve Fleet funding lines or between different TYCOMs. The RMC shall provide the TYCOM a record of all control changes for tracking purposes.
- d. In the event of significant program wide control changes the RMCs shall:
 - (1) Provide an impact statement to the TYCOM regarding the effect on the execution of maintenance.
 - (2) Provide a recommendation to minimize the impact on Force readiness.
- e. The RMC shall evaluate the financial status of each of the Maintenance Teams on a monthly basis.
- f. The RMC shall submit end of quarter financial summary reports to the respective surface TYCOM. This end of quarter report provides a comparison of actual versus planned funding execution. The last quarterly report for the execution year shall include an annual summary showing how the funds were utilized, sorted by Naval Operations resource sponsor.
- g. Normally, Emergency Maintenance funds will be used to fund C3 or C4 Casualty Report (CASREP) related maintenance. The RMC Commander has the authority and responsibility to determine when Emergency Maintenance funds should be used for the correction of C2 CASREPs or other non-CASREP related, but nonetheless urgent maintenance. The RMC Commander may, with the respective TYCOM's approval, use Emergency Maintenance funds to execute CNO availability or Continuous Maintenance.

6.6.3 Type Commander Responsibilities.

- a. The TYCOM will provide a list of Fleet Alteration requirements for the execution year as input to the RMC business plan no later than 15 February in the year prior to execution. To assist with business plan development, the TYCOM will identify which alterations are scheduled for accomplishment and will provide the RMC with the cost estimates for accomplishment.
- b. When the Fleet issues the spending controls to the TYCOM, the TYCOM will in turn issue spending controls to the RMC and update them on a quarterly basis.
- c. The TYCOM has the authority to recapture spending controls previously issued to the RMCs in response to unforeseen Force budget requirements.
- d. Funds will be provided to Maintenance Teams early enough to avoid premiums associated with late contract award or assignment of work.
- e. If it is determined that the best course of action is not to fund a CNO availability, the TYCOM must approve the removal of funds before the RMC initiates this action. The TYCOM shall ensure Program Executive Office, Ships are included in the decision process to not fund any availability where Program Alterations are scheduled for accomplishment during that availability.
- f. The TYCOM will evaluate MMBP adjustment requests forwarded by the RMC, based on the Summary of Events, recovery plan and quarterly adjustment provided by the Maintenance Team. If the TYCOM supports the request but lacks spending "controls" required, the TYCOM will forward the issue to the Fleet for approval and additional controls.
- g. The TYCOM will evaluate the RMCs end of quarter financial status report to assess the degree of conformance to the approved RMC consolidated spending plan.

6.7 FUNDING VIOLATION REPORTING. When an over-commitment, over-obligation, over-authorization or over-expenditure of funds occurs, the violation must be reported in accordance with reference (g). Reports of violations are unique when compared to routine reports required by other laws or regulations. Each report shall be submitted through the chain of command to the Assistant Secretary of the Navy (Financial Management and Comptroller), who will forward it through the DoD to Office of Management and Budget for transmission to the President. Copies of the report will also be forwarded to the President of the Senate and the Speaker of the House of Representatives.

6.8 FUNDING VIOLATION PENALTIES.

- a. RMC personnel must avoid violation of the funding regulations addressed in reference (a), (b), and (c). Penalties are contained in reference (d). For non-criminal acts, appropriate administrative discipline is required. This could include removal. For criminal acts, which must be proven to be knowing and willful, a fine of not more than \$5,000 and/or imprisonment for no more than two years is required.
- b. Penalties for violation of reference (e) are contained in reference (f). For non-criminal acts, appropriate administrative discipline that could include removal is required. For criminal acts that must be proven to be knowing and willful, a fine of not more than \$5,000 and/or imprisonment for no more than two years is required.

6.9 FUNDING METHODS AND ACCOUNTING.

6.9.1 Accounting and Reporting.

- a. STARS is the official accounting system for Navy organizations with funding and accounting detailed in reference (p). This system, plus other command unique accounting systems, will eventually be integrated into the overarching Navy Enterprise Resource Planning System.
- b. Financial managers may issue funds usage documents or provide funds to other financial managers through the Comptroller through various funding documents. FLTCOM funds are provided on OBs. Modernization funding from NAVSEA is provided on Project Directives.
- c. RMCs are responsible for performing local accounting of all funds granted for maintenance and modernization in addition to other funding sources. Each RMC Comptroller is responsible for recording commitment and obligation transactions, performing periodic reviews of un-liquidated obligations and unmatched disbursements, validating expenditures and advising the funds grantor of excess funds available for recapture.

6.9.2 Operating Budgets.

- a. Ship repair and modernization funds are typically transmitted by means of OBs. The basic policy of funding mission operations is by use of OBs through command lines. However, in some instances a Technical Operating Budget (TOB) may still be the funding vehicle. TOBs are apart from a regular operating budget and may be issued, by a claimant or expense limitation holder, to a RMC within the chain of command or across command lines that are issued for implementation and execution of a headquarters-administered, centrally managed procurement program. The OBs and TOBs, carrying the same obligation and expense authority, and are governed by the same administrative and statutory controls, including reference (e).
- b. The RMC is responsible for obligating transactions in the approved accounting system. The Authorized Accounting Agency (AAA) is responsible for posting expenditures. The Defense Finance and Accounting Service, Defense Accounting Office is the designated AAA for FLTCOM funds. The AAA will prepare and submit official accounting reports as required by references (i) through (l). The RMC should maintain only necessary records and should not duplicate records readily available through other accounting systems. RMCs receive many funds from NAVSEA and other users on various funding documents. The Fleet, via each individual Ships Maintenance Team annual MMBP approved by the TYCOM establishes planning estimates for anticipated requirements.

6.9.3 Reimbursable Orders. Reimbursable orders are written agreements between components of the Federal Government requiring the performance of work or services by one component and payment by the other component. Reimbursable orders are accepted in accordance with reference (l), Section V. All funded reimbursable orders are

subject to the recipient activity projecting that at least 51 percent of the funds will be used for “in-house” work. If less than 51 percent of the work will be in-house effort, the funding for tasks to be contracted out should be provided on a Request for Contractual Procurement. Reimbursable order accounting requires extra effort in supporting documentation and accounting workload.

6.9.4 Project Orders. A project order is provided on reference (s). It is a specific, definite and certain order issued under the authority contained in reference (m) for the production of material, repair, maintenance or overhaul or for other specific work and services. It serves to obligate appropriations and funds in the same manner as contracts with a commercial enterprise. Funds are not obligated until the performing activity signs acceptance of the project order. The accounting is the responsibility of the accepting activity. The funds provided on a project order cannot be exceeded without written amendment by the ordering activity. The funds provided by project order remain available for completion of the work or services requested regardless of the date the funds cited in the order expire. Research, Development, Test and Evaluation funds cannot be utilized on a Project Order.

6.9.5 Economy Act Order. An Economy Act Order, like the project order, is issued on reference (s). The order is issued, however, under the authority contained in reference (n) and is intended for work or services of a recurring nature where the scope of the work is not specific. These orders are for services such as janitorial work, utilities and transportation. The funds are not obligated until acceptance is signed by the performing activity. The accounting is the responsibility of the accepting activity. The funds provided by an Economy Act Order cannot be exceeded without written amendment by the ordering activity. The funds provided can only be charged during the fiscal year of the availability of the funds cited on the document.

6.9.6 Direct Citations. Direct citations are requests from one Government activity to another for material, equipment or services that provide appropriate accounting data. The performing activity will cite the requesting activity’s complete line of accounting data for any obligation or expenditure of funds. The accounting function will remain the responsibility of the requesting activity and it’s AAA. The funding cited on the document will not be exceeded without an amendment issued by the requesting activity. The funds retain all legal limitations that existed when the requesting activity accepted them.

6.9.7 Requests for Contractual Procurement. Requests for Contractual Procurement are issued on NAVCOMPT Form 2276. This document is issued when the receiving activity will contract out at least half of the work. The document becomes effective when the performing activity signs acceptance. The performing activity must comply with all restrictive statements contained in the document and ensure that confirmed copies of the contracts or orders that result are promptly provided to the requesting activity and it’s AAA for posting of obligations and expenditures. For funds received from other STARS/Human Capital Management users, a Project Directive is the preferred funding document in order to reduce memorandum accounting and reporting.

6.9.8 Letters of Authority. A Letter of Authority (LOA) can be used in funding work or services in instances when the activity requesting the work or services does not have the authority to issue a TOB and no other appropriate funding document can be identified for use. LOAs authorize the recipient to direct-cite the funds of the requesting activity on applicable financial documents. LOAs shall contain complete line of accounting data, a statement of the maximum dollar amount authorized and the purpose for which the LOA is issued. If the LOA requires requisitioning material from stock, a universal fund code should be provided. The LOA should be assigned a standard document number. The LOA must provide for acceptance by the performing activity. The document becomes effective when the performing activity signs acceptance. RMCs will promptly provide a copy of all financial documents issued to the requesting activity. Due to this requirement for official accounting at the source activity, the use of LOAs is minimized.

6.9.9 Orders Placed With Government Agencies. Orders required by law to be placed with Government agencies will be recorded as obligations at the time the orders are issued. This category includes orders placed with the General Services Administration, Federal Prison Industries, Government Printing Offices, Defense Supply Agency, printing plants authorized to be established by the Joint Committee on printing and the Navy Publications and Printing Service Management Office. Military Interdepartment Purchase Request, DD Form 448, is used for orders placed with non-Navy DoD activities.

6.10 GENERAL INFORMATION CONCERNING AVAILABILITY AND OBLIGATION OF FUNDS.

6.10.1 General. In funding an availability, RMCs should treat any contingent liabilities such as the difference between the Government estimate and a lower bid price, as commitments, rather than as obligations, in accordance with NAVCOMPT and DoD policy. The use of commitments will allow RMCs to encumber balances needed to finance future valid obligations and help to prevent possible Anti-Deficiency Act violations. Increases of ship work funds, if required, should be requested from the grantor of funds. If the increases are not granted, the work items to be included in the solicitation must be reduced in accordance with the priority requirements of the funds' grantor so the RMC estimate is equal to the funds authorized. Funds must be obligated at contract award. Contract solicitations may be advertised before receiving funding authorization when there is reasonable expectation that the requirements are firm and valid. The award of a contract or job order can in no case be made in excess of the funds available.

- a. Reference (o) requires that funds current at the start of a major availability must finance the cost of the modernization or repair, including all scope-of-effort changes necessary to complete it. Material requisitions entered into the supply system after normal expiration of the funds must cite the law. This provision does not apply to availability or modernization efforts not directly related to the completion of the modernization availability. This provision extends the fiscal year availability of induction-appropriated funds for overhaul scope-of-effort changes from one year to indefinite availability. Changes authorized within the scope of the job order for other than a major availability are chargeable to the funds supporting the job order.
- b. Un-priced contract or job order modifications cannot be executed when the RMC estimate exceeds the funds available. It is extremely important that un-obligated funds be returned to the grantor of funds as soon as the excess can be identified so that the funds may be applied to other requirements before expiration. If funds are required for the authorization of changes after the end of the fiscal year, the funds will be requested from the fund's grantor when an upward obligation has been approved. Job order modifications that are outside the scope of the job order are chargeable to funds current at the time the modification is authorized.

6.10.2 Effects of the Grassley Amendment. The Grassley Amendment requires the validation of obligations in the accounting systems before making a payment to the contractor. This validation applies to all invoices contractors submit (New Construction and Repair), regardless of the value of an invoice. When the accounting system finds a matching obligation, it moves it into the accounts payable account and freezes the account. This action prevents the account from being reduced until payment is made. A delay of several weeks in payment to the contractor may result. If payment is late, no interest is paid on progress payments. Because progress payments are made for the contractor's financial convenience, no interest is paid. Payments are most often made late for the following reasons:

- a. Improper or late distribution of contracts.
- b. Direct Cite Funding - Most payment problems arise in this category. The funding activity inputs obligations for direct cite lines of accounting. If the obligation is not input or is input incorrectly, the RMC cannot correct the obligation. The reason is the RMC does not have access to the funding activity's Unit Identification Code in the accounting systems. Thus the Defense Finance and Accounting Service office must obtain a guarantee from the activity that the obligation is awaiting payment.
- c. Delete Modifications - Contractors tend to ignore "delete" modifications or bill them at a much later date. When validation is attempted, insufficient funds are available. The result is the contractor has to resubmit the invoice.
- d. Misapplied Payments - Misapplied payments are the most time-consuming reason for late processing of invoices. The processing of previous payments to the wrong line of accounting results in insufficient funds. It often takes a great deal of time to identify and correct the problem.

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AVAILABILITY AND PROJECT MANAGEMENT

REFERENCES.

- (a) NAVSEAINST 5370.1 - Standards of Conduct and Statements of Affiliations and Financial Interests
- (b) NMCARS 5233.9000 - Documentation of Significant Contract Events
- (c) NAVSEA SI 009-04 - Quality Management System
- (d) NAVSEA SL720-AA-MAN-030 - Navy Modernization Process Management and Operations Manual
- (e) NAVSEA Technical Specification 9090-100 - Planning Yard (PY) Representatives
- (f) NAVSEAINST 4710.8A - Cost and Performance Reporting for CNO Scheduled Ship Maintenance Availabilities
- (g) NAVSEA OP-4 - Ammunition Afloat
- (h) NAVSEA SI 009-01 - General Criteria; Accomplish
- (i) NAVSEA SI 009-08 - Fire Fighting and Fire Prevention
- (j) NAVSEA SI 009-07 - Procedures and Equipment Required for the Prevention of Fire
- (k) DFARS 252.217-7015 - Compliance With OSHA Regulations
- (l) NAVSEA S9086-7G-STM-000 - NSTM Chapter 997 (Drydocking of Naval Vessels)
- (m) 10 USC 7311 - Repair or Maintenance of Naval Vessels: Handling of Hazardous Waste
- (n) FMP Manual Section 4-11 - Procedures for Ships Selected Records
- (o) FAR 4.802 - Contract Files
- (p) NAVSEA SI 0009-60 - Ship Repair Scheduling
- (q) FAR 52.232-16 - Progress Payments Clause
- (r) 31 USC 1517 - Prohibited Obligations and Expenditures
- (s) 31 USC 1301(a) - Application
- (t) DFARS 252.217-7012 - Master Ship Repair Agreement (MSRA) and MSMO Liability and Insurance Clause

LISTING OF APPENDICES.

- A Arrival Conference Agenda
- B Fire Fighting and Fire Prevention Conference Agenda
- C Drydocking Conference Agenda
- D “Activity” Progressing Method Example
- E Progress Guidelines

7.1 **PURPOSE.** This chapter provides general guidance concerning the statutory and contractual requirements for management of availabilities and emergent work on Fleet units. In this chapter, the term Project Manager refers to the individual that has been assigned the administrative and statutory authority for the management of an availability or an assigned project that is to be or has been awarded as a contract. This chapter focuses on the management team and in particular addresses the fact that the Project Manager and the Contracting Officer (Procuring Contracting Officer (PCO) and Administrative Contracting Officer (ACO)) for the assigned project or availability must have a strong communications network through various commands and individuals who assist them in exercising their responsibility.

7.2 **GENERAL.**

- a. The awarded contract establishes the rights and obligations of the contractor and the Government. The Government’s actions or inactions in performing responsibilities such as providing Government Furnished Information and Government Furnished Material (GFM) to support the contractors’ schedules, approving or disapproving of contractors’ requested contractual actions, responding to contractor reports and participating in conferences to discuss technical and contractual issues as well as performance, could have a significant impact on the contractors’ ability to perform contract requirements. These responsibilities make the Government an active participant in the management of the contract.

- b. The execution of any availability or contract with the private sector requires personnel with special training in their select area of responsibility when it applies to the administration of contracts.

7.2.1 Areas of Responsibility. Two of the more important general areas of responsibility are:

- a. Personal conduct in working with the contractor to ensure that the terms and conditions of the contract are complied with.
- b. The necessity to validate observations and maintain accurate records of these observations in “significant events” logs that include action that was taken to resolve the issues.

7.2.2 Standards of Conduct in Availability Management. All personnel engaged in matters related to contractual action must be familiar with and comply with the Standards of Conduct, avoiding not only situations involving an actual conflict of interest, but also any appearance of such a conflict. Personnel performing certain functions in the Regional Maintenance Centers (RMC) must submit the Status of Filing Report, RCS NAVSEA 5370-2, by 15 November of each year in accordance with reference (a).

7.2.3 Improper Actions. While participating in the management of a contract, personnel must avoid certain actions even if not specifically prohibited. Command instructions provide in-depth guidance on personal conduct including regulations concerning fraud, waste and abuse. Personnel involved in Contract Administration or Availability Management shall avoid any actions that might create the appearance of:

- a. Using a Government office for private gain.
- b. Giving preferential treatment to any person or entity.
- c. Impeding Government efficiency or economy.
- d. Losing complete independence or impartiality.
- e. Making a Government decision outside official channels that might affect public confidence in the integrity of the Government.

7.2.4 Documenting Significant Events. This is one of the most significant actions that every member of the availability management team shall comply with. Significant events are personal observations of conditions or actions by or to any party to the contract which would affect the performance of the contract.

- a. Reference (b) requires that “significant events” be recorded to assist in maintaining adequate documentation to be used to verify, qualify or refute matters relating to a contractor’s claim or Request for Equitable Adjustment (REA). The documentation of “significant events” is required for all contracts in excess of \$5 million or for which a claim is expected. A claim can be expected against any contract associated with ship modernization and repair. All Government personnel who are responsible for observing a contractors’ performance, production processes, observing “G” check points and monitoring operational tests and evaluations shall document their observations and maintain a continuous real time notebook of significant events. Notebooks shall be turned over to the ACO, via the Project Manager, at the completion of the availability.
- b. The contracting officer retains this documentation in the “Significant Events” file. All Government personnel involved in the performance of such contracts shall maintain this continuous real time notebook to record significant events that occur during the contract period.
- c. The significant events file and related documentation allows the Government to support or refute claims, terminations of contracts, settlements and determinations or to provide evidence for litigation to investigative bodies, as required. They also include written records of nonconformities in work progress and accomplishment. Contract related documentation such as correspondence, meeting minutes, labor records, material purchase orders, project schedules, schedule updates, productivity data and project monitoring information form the basis for the assertion or rebuttal of a claim. This information is beneficial in documenting the contractors’ performance reported in the Contractors Performance Appraisal Reporting System (CPARS) submitted at the conclusion of the performance period.

- d. The individual's significant events notebook should be a ledger-type, bound notebook having sequentially numbered pages. Events shall be recorded in black ink as they occur. Each recorded event shall indicate the date, time and a brief but complete description of the event. No page shall be removed. Mistakes shall be deleted with only a single line through the text and initialed, permitting an unobstructed view of the mistake. This notebook and related memoranda will become a part of the "Significant Events" file and will be marked "FOR OFFICIAL USE ONLY."

7.3 PROJECT MANAGEMENT.

7.3.1 Project Management Team. The **Project** Management Team as defined in Volume VI, Chapter 41 of this manual is included in the advanced planning processes as well as the contract type to be awarded. The **Project** Team for availability must be designated well in advance to preserve the continuity of the planning and execution phases of the acquisition process. The Project Manager, Comptroller, Support Staff and the Contracting Officer and their assigned teams shall coordinate their actions. The overall **Project** Management Team is accountable, and in some cases liable, for administering the contract and associated contractor and Government actions following award and throughout the contract execution phase as specified in the period of performance. The Government's **Project** Management Team shall insure that the contractors' performance complies with the specific terms and conditions of the contract and that the services are provided at a fair and reasonable price.

7.3.2 Project Manager. The Project Manager is the individual who is responsible for the management of the **Project Team during** an availability or emergent unscheduled work. The Project Manager is assigned by the Commanding Officer (CO) of the RMC and is the coordinator of the on-site shipbuilding specialist team. The authority of the Project Manager shall be clearly defined, identified to all concerned, and in particular the Contractor in relation to contract administration. Duties of this position include but are not limited to the following:

- a. Acts as business agent with other activities on availabilities and contracts assigned that includes ensuring that TYCOM funds are utilized properly.
- b. Maintains liaison with customers, the ships Maintenance Team, Ship's Force Representatives, RMC functional departments, financial/accounting personnel and contractor.
- c. Acts as assistant funds administrator (when designated in writing from the RMC CO) for assigned availabilities and contracts.
- d. Coordinates planning and cost estimating and design specification preparation and scheduling.
- e. Reviews specifications to ensure completeness and conformance with authorized work.
- f. Arranges and conducts the Arrival Conference, weekly progress conferences and attends or arranges for RMC representation at all conferences pertaining to assigned availabilities and contracts.
- g. Evaluates all Technical Analysis Reports (TAR) and supports the Contracting Officer in contract negotiations.
- h. Evaluates and acts on the reports received from other members of the availability management team.
- i. Manages ship repair and modernization work items, job orders and contracts assigned by progressing and evaluating all work to anticipate, prevent and minimize delays, resolving all problems that affect the end cost, quality, schedule and performance of assigned availability or contract.
- j. Prepares reports on current status of assigned project or contract.
- k. Coordinates the on-site work effort in observing the contractor's in process production performance and operational testing events for projects assigned to the team.
- l. Acts as the availability management team point of contact for outside agencies seeking information relating to the project, the contractors performance or technical issues under review.
- m. Attends on-site meetings to provide comprehensive information to all concerned and to remain current in all aspects of the project.
- n. Reviews all work accomplished by assigned Shipbuilding Specialists to ensure compliance with regulations, directives, instructions and policies as well as to ensure that intended work is practical and necessary.

- o. Identifies and initiates action to correct, prevent and minimize delays, resolving all problems that affect quality, schedule and contractor performance.
- p. Reviews contractors work schedules, manning curves, material ordering/receipt schedules and special tasking/equipment requirements. Evaluates contractors' proposals prior to and during contract execution. Takes corrective actions to eliminate conflicts and prevent work stoppages.
- q. Performs all administrative duties and actions normally assigned to a supervisor.
- r. Maintains a Significant Event Log.
- s. Participates in the "Hot Wash Up/**Lessons Learned Conference**" following the completion of a major availability **and in support of availability planning, execution and close out.**
- t. Provide written reports to the Contracting Officer for Award Fee Evaluations Multi-Ship/Multi-Option (MS/MO) contracts.
- u. Prepares CPARS for Chief of Naval Operations (CNO) Availabilities.
- v. Project Manager records to be passed to the Contracting Officer should include but are not limited to the following:
 - (1) Correspondence files containing copies of all correspondence to the Contracts Office both internal and external.
 - (2) Work authorizations for growth and new work. Work authorizations may be in the form of naval messages, Speed Letters, letters, other transmittals or documents. In the case of growth work, the authorization may be verbal, a memo at a meeting or a telephone call. Verbal authorizations should be documented with a Memorandum for the Record.
 - (3) The Project Manager shall maintain a ledger notebook to assist in funds administration. For each contract modification initiated in the work package, the Project Manager shall show the title of the item, cite the proper funding authorization and account and show the Government estimate. The ledger shall show funds committed and obligated for each contract modification and other financial transactions and provide an indication of funds available for future use. When changes occur during the negotiation process, the funds reserved or obligated shall be changed to reflect the current funding status. Periodically, at least monthly, the Project Manager shall reconcile ledger accounts with the Contracting Officer and Comptrollers' accounts to ensure that funds are not over obligated or expended.
 - (4) Material requisitions for GFM with prices.
 - (5) Project orders and economy act orders issued to other Government activities.
 - (6) Completion reports.
 - (7) Departure reports including summary costs of individual work items.
 - (8) All significant events logs from the shipbuilding specialist.

7.3.2.1 **Material Expediter**. The RMC will normally assign a material expediter to monitor the GFM that has been ordered for an availability or project. The material expediter, working with the RMC Material Personnel, Fleet Industrial Support Center (FISC) Representatives and contractor should be able to provide the current status of GFM, but will challenge the system to improve delivery dates or identify alternative sources to satisfy production schedule requirements.

7.3.3 **Ashore Ships Maintenance Manager**. As defined in Volume VI of this manual, the **Ashore Ships** Maintenance Manager for each ship is responsible for determining the extent of modernization and repair to be addressed in the specification package to be awarded to a private contractor. The **Ashore Ships** Maintenance Manager is a key player in the day-to-day activity of work execution that is being performed on the ship by all activities. The ship's **Maintenance Team (MT)** and the RMC **Project** Team shall approve new work items that have the potential to impact the schedule, finances or other aspects of the progression of the availability and the completion date. Generally, the **Project** Team supports accomplishing additional work items or contract modifications through the contracting

officer only when on-site inspection of actual material conditions supports a need for repairs to meet the established operational performance criteria following the availability and that are within the Type Commander (TYCOM) designated Figure Of Merit. During contract performance, contractors are not to accomplish new work or significant growth work without authorization from the Contracting Officer. **The Ashore Ships Maintenance Manager's primary input on all matters related to Combat System integration, modernization and Combat Systems Light-off and testing schedules will be from the AEGIS Combat Systems Project Engineer, as assigned.**

7.3.4 Shipbuilding Specialists. Shipbuilding Specialists are individuals that possess a primary trade background but effectively perform across trade lines in two or more trade skill disciplines. Team assignments are made to balance trade expertise appropriately with the type of work in the project. A wide variety of comprehensive duties and responsibilities are assigned to these individuals who are expected to act as decision makers with comprehensive knowledge of each work item assigned. Typical assignments include the following duties and responsibilities (as with Project Managers, this may vary depending on the supporting organization):

- a. Provides current information relating to assigned work items to the team leader who is usually a Project Manager.
- b. Attends meetings, resolves production problems, develops scope of work requirements, assists in the development of Government TARs and negotiation positions, assesses contractor capabilities, work progress and performance, provides technical support to the ACO, participates in claims avoidance and provides other technical support as required.
- c. Interfaces with members of the Ship's Force to provide current project information, notifies responsible personnel of scheduled evolutions and solicits required or desirable Ship's Force.
- d. Receives and investigates contractor reports, assists with the development of the Government's technical response, requests engineering support, prepares necessary contract modifications, develops the Government cost estimates, estimates the delay and disruption that may occur because of a contract modification, assists with negotiation preparation relative to TARs and contract modifications (as authorized by the ACO), provides the ACO support in negotiations and maintains records of actions taken.
- e. Perform/witness Government "G" notification points, identified in the work specifications, when the contractor calls them out. Accomplish random Product Verification Inspections (PVI) utilizing checklists or an attribute system to determine contractor compliance with the quality and technical requirements of the work specifications/contract. Write a Corrective Action Request when nonconformities are detected in accordance with Chapter 11 of this volume.
- f. Participates in various Government evolutions such as boat inspections, hull inspections, combat systems inspections, drydocking and undocking, habitability inspections, pre-Light Off Assessments and other evolutions that may require or benefit from technical trade expertise.
- g. Determines the physical progress, as a percentage of work completed, of each work item and each contract modification assigned. This information is updated weekly in a comprehensive progress report that is used in calculating the contractor's entitlement to progress payments as well as in evaluating the contractor's schedule performance.
- h. Monitors the GFM and Contractor Furnished Material (CFM) report to anticipate actions that may be necessary to preclude schedule impact by unsatisfactory material delivery dates and initiates material orders to replace unsatisfactory GFM or to provide items with unique Government control and confirms the necessity for the contractor to make cash purchases from the Naval Supply system when it is in the best interest of the Government.
- i. Monitors the contract guarantee period to help determine whether failure of equipment or systems covered by the guarantee clause is the responsibility of the Government or the contractor, ensures that the work determined by the ACO to be the responsibility of the contractor, whether it is covered by guarantee or was an exception to the completion of the contract, is repaired in accordance with the specification requirements and provides cost estimates for incomplete work so that the ACO can ensure that appropriate contract funds are retained in the event that the work must be deleted from the contract requirements or be procured from another contractor.

- j. Provides positive lessons learned along with feedback related to deficient or inefficient work specifications or work authorizations to the appropriate planning group for use in improving future procurements.
- k. Conducts oversight coordination and inspection of work-related environmental issues associated with Ship's Force and contractor's operations. This effort includes but is not limited to hazardous material (HAZMAT) and hazardous waste (HW) handling, removal, storage, transportation and disposal.
- l. Conducts safety inspections jointly with the contractor, Ship's Force and Government Environmental Safety and Health (ESH) Representative(s).
- m. Maintains a Significant Events Log.
- n. Provides written reports to support Award Fee Evaluations and CPARS.
- o. Shall maintain the following records:
 - (1) Work item specifications, references and estimates for the work package, updated to reflect all modifications.
 - (2) Contractor condition reports including Government replies.
 - (3) New work identified and not authorized.
 - (4) GFM delivery status.
 - (5) Quality Assurance (QA) records.
 - (6) Records relating to the contractor's capabilities and capacity.
 - (7) Contractor performance evaluations.

7.3.5 Quality Assurance Manager. The RMC QA Manager will administer the Contract Administration Quality Assurance Program outlined in Chapter 11 of this Volume to evaluate the effectiveness of the Contractor's Quality Management System on work being performed both shipboard and in the contractor's/subcontractor's plant. Shipbuilding Specialists and/or Quality Assurance Specialists will conduct and document in-process inspections (PVI) of the contractor's/subcontractor's work, attend "G" point call outs and, if appropriate, document a Corrective Action Request when the contractor fails to satisfy contractual quality and technical requirements. In addition, Shipbuilding Specialists/Quality Assurance Specialists on site maintain a significant events log and provide written documentation that supports Award Fee Evaluations and CPARS.

7.3.5.1 Contractor Quality Management System. The contractor is required by the contract to have a government approved Quality Management System that meets the requirements of reference (c). The Quality Management System is an ISO 9001 based quality system that includes a staff and an inspection system with procedures to ensure that all of the terms and conditions identified in the work specification/contract requirements are adequately met. The goal is to ensure the contractor inspects its own work and inspects and accepts the work of subcontractors before presenting it to the Government for acceptance.

7.3.5.2 Alteration Installation Teams. Alteration Installation Teams (AIT) are activities tasked by a Naval Sea Systems Command (NAVSEA), Program Executive Office or TYCOM to accomplish an alteration under Government authorization and supervision. Reference (d) provides requirements for the planning, estimating, programming, budgeting, scheduling, funding, design and accomplishment of alterations as well as the Quality System to be used during accomplishment of such work. Whenever an alteration, to be accomplished by an AIT, is scheduled for an availability, AIT coordination with the RMC and Project Manager is required from planning through installation and testing.

7.4 CONTRACT ADMINISTRATION TEAM. The Contracts Administration Team assists the Project Manager and consists of the Administrative Contracting Officer, Contract Program Managers, Contracting Specialists, Cost Monitors and others as are necessary for a specific project. The main types of contracts administered are cost reimbursable contracts and fixed price contracts.

- a. Cost reimbursable contracts require functional expertise and sufficient contract administration staffing to monitor the contractor's actions and validate that the terms and conditions of the contract have been complied with. The level of effort shall include frequent and unscheduled observations to preclude incurring unnecessary costs by inefficient or excessive performance of contract requirements. This action is required since the contractor is reimbursed for cost of labor expenditures based on the accounting documented in the contractor's performance measurement system (time keeping documentation) and material costs incurred during the execution phase of the contract. The Defense Contract Audit Agency audit results shall be utilized to assist with validating observations of manpower utilization. The accounting for labor and material charges is essential when a contractor is working both cost reimbursable and fixed priced contracts in their facility. Any proposed change by the contractor should have a TAR prepared with all details of the Contractor's proposed change available for Project Managers and Contracting Officer to use in the negotiation process. Since the contractor will be reimbursed for all allowable costs incurred, most of the risk in a cost type contract is on the Government.
- b. Firm Fixed Price contracts, particularly those with short durations, may require more technical personnel during the performance period because contract modifications that may be essential to the accomplishment of the intent of the contract must be quickly identified and resolved to minimize costly delay and disruption to the contractor's schedule. After award, changes are negotiated on a sole source basis. These contractor-developed reports require time-consuming investigation and a timely written response to the contractor and each could result in a contract modification. In this situation significant effort must be expended by Government technical personnel to develop a reasonable Government position and, when required, a TAR for negotiation of the cost of the change. Under these conditions, the contractor's negotiation position is significantly strengthened. It may be difficult to reach an equitable position on the cost of the change. Government's action or inaction has the potential to create increased costs to the Government. Additionally, because of the risk on the contractor, efforts to minimize costs associated with a fixed price contract could result in poor compliance with requirements of the contract that in turn will require more contract supervision and performance monitoring.

7.4.1 Administrative Contracting Officer. Chapters 1 and 2 of this Volume provide extensive coverage on contracting and the contract administration responsibilities. After a contract has been awarded for ship repair or modernization, only the assigned warranted ACO, within the designated limit of the warrant, may change the terms or conditions of the contract or make a contractual commitment on behalf of the Government. In RMCs, the Contracts Department Head, Code 400, is the senior contracting officer within the Command with the inherent authority and responsibility for the day-to-day administrative contracting functions. The Contracts Department Head may appoint subordinates to perform some or all of the functions of administering a specific contract whose authority is contingent upon the individual's warranted authority from NAVSEA. Typically, the ACO is assisted by a Contracts Specialist and Cost Monitor who reside in close proximity to the location where the availability is being performed. Administrative functions may be delegated to individuals with special technical or trade skill backgrounds who will obtain or have received additional training in the relevant contract administration areas including the Defense Acquisition Workforce Improvement Act (DAWIA) process so that they can function as a Contracting Officers Representative. The complex technical requirements of ship repair and modernization require the assignment of trade skill and technical personnel from a variety of functional disciplines who must work closely with the Project Manager and Contracting Officer to ensure that the specified terms and conditions of the contract are complied with and that upon final closure of the contract there are no non-conformant or exceptions to the work items except those that have been approved for deviation or waiver by the Contracting Officer.

7.4.2 Commercial Industrial Services Contract Program Managers. The Commercial Industrial Services (CIS) Program/Indefinite Delivery, Indefinite Quantity (IDIQ) Contract Managers administer the CIS program or IDIQ Contracts. The managers are part of the availability management organization due to technical determinations required and the need to recognize and coordinate interfaces to preclude contract delay and disruptions. Consolidation in one office provides the most efficient organization. Duties and responsibilities of a CIS/IDIQ Program Manager are:

- a. Represents the command and acts as the command point of contact in all matters pertaining to the contract.
- b. Chairs the IDIQ Contract Advance Planning Committee to review current contracts and to determine the need for and propriety of additional contracts.

- c. Coordinates daily program operations.
- d. Manages and coordinates requirements with Project Managers to resolve schedule conflicts and interface problems with other contracts and activities.
- e. Performs the duties and responsibilities of the Assistant Funds Administrator for all IDIQ Contracts.
- f. Accepts or rejects the request for work based on the scope of work required, the necessity of the work requested, the appropriateness of the contracts or program and the capacity of the contractor.
- g. Determines the scope of the actual work requirements to develop the Government position.
- h. Makes ordering decisions such as grouping the work with other requests, assessing the time available and time required to accommodate the contracted performance period, determining other work to be scheduled in the area, identifying interface requirements with other scheduled work, assessing how the work will impact the contractor's capacity to complete other work ordered and deciding whether to order against an existing IDIQ contract, propose the use of an appropriate Master Ship Repair Agreement (MSRA)/Agreement for Boat Repair (ABR) job order or initiate a one-time procurement with FISC or the RMC Contracts Department.
- i. Coordinates preparation of the specification package to provide to the appropriate procurement office.
- j. Authorizes and initiates contract changes with the ACO to accomplish growth within the scope of the work authorized.
- k. Performs contract department duties in the acceptance of work.
- l. Provides support to the ACO in negotiations and the resolution of contractor claims.

7.4.3 Contract Specialist. The ACO duties parallel the responsibilities of the Contracting Officer but their authority is limited as specified by the level of their DAWIA qualifications level of authority, specific limitations of their warrant and specific assignments made by the Contracting Officer. The ACO is assisted by warranted, DAWIA qualified personnel, who are assigned specific responsibilities for processing contractual issues and to assist with the management and administration of a contract.

7.4.4 Cost Monitors. Working directly for the Contracting Officer and administratively with the RMC Comptroller, these personnel primarily function in the capacity of "keeping the books" that track the financial status of each project. Following contract award, all contract changes shall be reviewed by the assigned cost monitor who will work directly with the Contracting Officer who is designated as the Funds Administrator and who is accountable for financial management and obligating the Government funds that are provided to the contractor.

7.4.5 Navy Property Administrator for Contracts. The Navy Property Administrator, assigned by official appointment from the RMC Contracting Officer, is responsible for all Government property related to a specific contract including GFM, CFM for which the Navy claims title and material removed from the ship by contract requirements. The disposition of salvage and scrap material is determined by the Property Administrator in accordance with Chapter 9 of this Volume. The Property Administrator screens work specification clauses to determine the contractor's responsibility for Government property. Generally, the contractor is responsible for the proper care and protection of all Government property in the contractor's custody. The contract will not be closed until the contractor has accounted for all Government property or the Government has received acceptable consideration.

7.4.6 Allowance Specialist. The Allowance Specialist is responsible for allowance list corrections made necessary by modifications to existing equipment or the substitution of new for old equipment during an availability. The Allowance Specialist screens work specifications and identifies necessary changes.

7.4.7 Accounting Technician. The Comptroller assigns specific accounting responsibilities to an Accounting Technician knowledgeable of the type of funds and cost codes applicable to each availability or project who works closely with the contract Cost Monitor, Project Manager and Contracting Officer. The Accounting Technician is the only official source for obtaining a balance for a given account. Delegated Funds Administrators for each availability should establish a close working relationship with their assigned Accounting Technicians.

7.5 SUPPORT STAFF.

7.5.1 Functional Support Staff. Typically the waterfront receives significant support from technical and functional specialists who support several availabilities and special projects.

7.5.2 Design Coordinator. When workload permits, an engineer or engineering technician, accountable to RMC Chief Engineer, will be assigned the responsibility of coordinating requests for all design assistance to resolve technical problems identified during performance of the contract that are not the responsibility of the Planning Yard (PY). The waterfront design coordinator assigned to the availability or project arranges for the appropriate engineering discipline to investigate the identified problems and provide engineering guidance. Maintains a significant events log and when appropriate provides reports to support Award Fee Evaluations and CPARS.

7.5.3 Planners and Estimators. Government trade skilled and technical personnel are assigned to prepare work specifications, in accordance with Chapter 4 Appendix E of this Volume (4E specification procedures), and planning estimates. They are also responsible to identify material requirements for a solicitation when responsibility for this task is not assigned to a contractor as in the case with the MS/MO contract. They may also be tasked to assist with the preparation of TARs for work items to support the Contracting Officers negotiations. These personnel may be required to prepare work specifications for essential growth and new work authorized during the performance of an existing contract or may be required to perform work on-site in order to resolve production problems.

7.5.4 Combat Systems Managers/Representatives. Electronics Engineers or Electronics Technicians with experience in the various disciplines involved in combat systems are assigned to availabilities that include significant combat systems requirements. These specialists monitor the contractor's performance of work and testing in the combat systems work package. The combat systems representative provides expert advice in the anticipation, identification and resolution of problems that may occur during the maintenance, repair and alteration installation phases, as well as during the grooming and complex systems level testing phases. RMCs may assign Electronics Engineers or Technicians as Combat Systems Managers for the availability. The Combat Systems Managers take a more active role by accomplishing duties similar to those of Production Controllers/Ship Surveyors/Shipbuilding Specialists in addition to those of Electronics Engineers or Technicians for combat systems work items during an availability or project. Combat Systems Managers responsibilities include the following:

- a. Provide current information relating to assigned work items to the Project Manager. This may also include reports to the ship's assigned Port Engineer for Combat Systems.
- b. Attend meetings to resolve production problems, develops scope of work requirements, assists in the development of TARs to support the Government negotiation positions, assesses contractor capabilities, work progress and performance, provides technical support to the ACO, participates in claims avoidance and provides other technical support as required.
- c. Interface with members of the Ship's Force to provide current project information, notifies cognizant personnel of scheduled evolutions, solicits required or desirable Ship's Force participation and provides technical advice.
- d. Receive and investigate contractor reports, writes and receives answers to Liaison Action Reports, provide interim answers to Test Problem Reports, assist in developing the Government's technical response to contractor requests, assist the TAR writer by providing engineering support and in developing the Government cost estimates, assist in preparing necessary contract modifications, estimate the delay and disruption that may occur because of a contract modification, provide the ACO support in negotiations and maintains records of actions taken.
- e. Observes "G" POINTS for electronic systems and equipment identified in the work specifications when they are presented by the contractor, witnesses required equipment or system tests and accomplishes random in-process inspections (PVI) at the work sites to determine contractor compliance with the requirements of the specification. Documents the contractor's failure to satisfy contractual responsibilities.
- f. Determine the physical progress, as a percentage of work completed, of each work item and each contract modification assigned. This information is updated weekly in a comprehensive progress report that is used in calculating the contractor's entitlement to progress payments as well as in evaluating the contractor's schedule performance.

- g. Monitor the GFM and CFM report to anticipate actions that may be necessary to preclude schedule impact by unsatisfactory material delivery dates. Assist the FISC or RMC Material Department in visually identifying and verifying receipt of GFM. Initiate material orders to replace unsatisfactory GFM or to provide items with unique Government control and authorizes the contractor to make cash purchases from the Naval Supply system when it is in the best interest of the Government.
- h. Monitor the contract guarantee period to help determine whether failure of equipment or systems covered by the guarantee clause is the responsibility of the Government or the contractor. Ensure that the work determined by the ACO to be the responsibility of the contractor, whether it is covered by guarantee or was an exception to the completion of the contract, is repaired in accordance with the specification requirements. Provide cost estimates for incomplete work so that the ACO can ensure that appropriate contract funds are retained in the event that the work must be deleted from the contract requirements or be re-procured.
- i. Provide lessons learned and feedback related to deficient or inefficient work specifications or work authorizations to the appropriate planning group for use in improving future procurements.
- j. Maintains a Significant Events Log.
- k. Coordinate the efforts of the MSRA/ABR and each combat systems related AIT.
- l. The Combat Systems Manager is the primary point of contact for combat systems technical issues during the availability that arise with other technical organizations.
- m. Participate in the “Hot Wash Up/Lessons Learned Conference” following the completion of a major availability and in support of availability advanced and pre-planning, integration, execution and close out.
- n. Provide written reports to support Award Fee Evaluations and CPARS.

7.5.5 Manager - Environment Compliance and Occupational Safety and Health Act. The Manager for ESH may have subordinate Safety Inspectors and Environmental Compliance Representatives in addition to the Shipbuilding Specialist who also perform similar observations. The ESH Manager assists the availability management team in understanding and recognizing obligations of the contractor and the Government. The Safety Officer shall be the first point of contact in matters relating to the safety of people and equipment; environmental issues, such as oil spills or other contamination of the water; asbestos and ceramic fiber insulation control and all HW control. Any personnel injuries occurring at the work site (whether Government or contractor, military or civilian) shall be immediately reported to the Safety Officer. Unresolved issues noted in the daily safety and housekeeping walk-through or as required by contract shall be referred to the Safety Officer for assistance or resolution as appropriate. All observed or suspected safety or environment violations or any related issue shall be brought to the immediate attention of the Manager for ESH. The Manager for ESH reports directly to the CO of the RMC on safety-related matters and on environmental and other related matters. The Manager for ESH maintains a significant event’s log and provides written reports to support Award Fee Evaluations and CPARS. Detailed information on this subject is contained in Chapter 10 of this Volume.

7.5.6 Technical Representatives from Other Activities. Throughout the availability there are typically a large number of other Government activities that are participants in the execution phase of a contract. It is essential that these activities be identified prior to commencement of the performance period and they must comply with all of the contractor’s security requirements prior to gaining access into the production facility. These activities should designate one individual as the Point Of Contact to facilitate coordination of their work or involvement with the contractor’s production, to interface with the RMC Contracting Officer, Project Manager and Ship’s Maintenance Team/Maintenance Manager, and for coordination and attendance at appropriate progress and production status meeting.

7.5.7 Planning Yard Technical Representative. The PY provides technical liaison services regarding PY drawings or technical documentation. The PY Technical Representative provides additional information or interpretation of PY drawings and technical documents, resolves requests for drawing changes, waivers or deviations and initiates drawing changes when the change is approved by the PY. PY liaison requirements are addressed in reference (e).

7.6 AVAILABILITY PERFORMANCE.

7.6.1 Preparation for a Contracted Availability. The Contracting Officer that is charged with the responsibility and accountability, in accordance with Federal Acquisition Regulation (FAR) and Defense Federal Acquisition Regulation Supplement (DFARS), to assure that the contractor is prepared to execute the availability or project in accordance with any previous agreements and the specific terms and conditions of the specifications for the availability. The level of effort that is required to administer a contract depends on numerous factors that include the completeness of the advanced planning effort, the type of contract, level of effort and complexity of the modernization package, performance period versus size of the total work package including forces afloat work and key events and seasonal consideration during the production phase. Once the work package is defined and the contract solicited when required, outside of the MS/MO concept, there is sufficient cause to involve the other participants in preparations for the availability at the earliest opportunity. Contract administration personnel should be assigned as early as possible. If the availability is not with a MS/MO contract, the Project Manager and as many other key personnel as possible shall be assigned to the availability in time to participate in the contract award phase.

7.6.2 Pre-Award Survey. In some instances the PCO may direct a full or modified pre-award survey to assess areas where past performance has been less than satisfactory as noted in previous CPARS or other documents. When the PCO directs a full or limited Pre-Award Survey of the apparent low bidder, RMC personnel may be assigned to participate in the survey, particularly for those contractor(s) selected for award of Master Agreement for Repair and Alteration of Vessels job orders. An in depth Pre-Award Survey is most often not required for contractors who hold an MS/MO Contract or MSRA or ABR due in part to their compliance with the Agreement Process plus the familiarity of the PCO and ACO with the capabilities and past performance of the contractor. This familiarity with a specific contractor does not relieve the PCO of the accountability attendant to making the award. The Project Manager shall participate as a minimum. In addition to being able to comment knowledgeably on the contractor's qualifications and readiness for performance of the work, the survey team members may gain additional insights about the contractor's approach to accomplishing the work which will facilitate the management of the contract.

7.6.3 Readiness to Start. A "Readiness to Start" report is required by reference (f) and shall be prepared by the assigned Project Manager. In some projects or availabilities it may be necessary to obtain written pre-availability agreement(s) initiated by the executing activity with the customer(s) or other Department of Defense activities and the status of any required agreement(s) should be addressed as well.

7.6.4 Work Specification Review. Where there is a MS/MO contract, the Ship's Management Team/**Ashore Ships** Maintenance Manager and other personnel assigned for availability management shall review the work specifications as well as all references to understand the full scope of the work package details and to identify discrepancies and areas of concern. For non-MS/MO contracts, the Planning Activity and other personnel, as required, should conduct the specification review procedures that are outlined in Chapter 4 of this Volume. The planning objective should be to have the executing activity participate in the pre-award specification review. If such participation is not possible, at the earliest opportunity personnel charged with administering the specifications of the contract shall review and familiarize themselves with the specification package. Every detail that could have a negative impact on the performance schedule, quality of work or cost must be identified early so that intelligent decisions can be made to remove work from the contract, modify work requirements in the contract or add essential work necessary to accomplish the intent of the work authorized. Personnel may be able to recognize potential contract deficiencies from familiarity with the contractor's practices or from experience with a class of ships or a particular ship. Early action on the part of the Government helps to minimize the impact of contract modifications on the contractor's schedule and the final contract price.

7.6.5 Ammunition Off-Load Prior to an Industrial Availability. In general, to obtain maximum safety during industrial work periods, all or most of the ammunition should be off-loaded prior to the commencement of work during a scheduled availability unless there is a specific waiver approved. The specific off-load requirements will be in accordance with the instructions of the TYCOM, the Senior Officer Present Afloat, the Commander of the Naval Base or Naval Station and local port regulations. Ships and crafts entering contractors' facilities for a period in excess of six weeks shall offload all ammunition and other explosive materials except for those for Anti-Terrorism Force Protection. Navy units entering contractor's or Naval Station facilities for industrial work periods of less than six weeks will provide data required for necessary waivers in accordance with reference (g). The message should identify appropriate work boundaries with respect to ammunition storage areas (e.g., ammunition

and other HAZMAT must be separated from hot work by one compartment, tank or void (two bulkheads or two decks), a minimum of 20 feet and when such work does not result in heating the exterior boundary surface of the separated compartment, tank or void).

7.6.6 Fuel Off-Load Prior to an Industrial Availability. Surface force ships and aircraft carriers should enter any significant availability with a maximum fuel load of 15-20 percent unless there is an approved waiver to enter with more fuel onboard. The extent of this requirement will be determined by the nature and magnitude of work to be accomplished. Tanks that will be directly involved or in known or anticipated hot work boundaries should be at low suction levels. It is difficult, very costly and disruptive to off-load and transport or even shift fluids during any availability, especially in a contractor's facility that has the potential to result in a REA or even a claim for delay and/or disruption. The RMC shall advise the ship of specific off-load or transfer requirements sufficiently in advance of the availability start to allow the ship to schedule and accomplish the required effort.

7.6.7 Berthing of Ship and Crew.

- a. Messing and berthing, transportation and other related issues that impact the quality of life of the crew must be anticipated during the availability planning period and provisions made to satisfy the requirements in accordance with current United States Fleet Forces Command instructions. The designated Planning Activity or MT have the responsibility to determine if the authorized work package will render the ship or a part of the ship uninhabitable. If any off-ship berthing is authorized, the Project Manager must verify that there is adequate funding and consult with Ship's Force prior to making final arrangements for acceptable berthing and messing for the duration of the uninhabitable conditions.
- b. Any requirement to be satisfied by the contractor must be included in the specification work package. If the availability is to be conducted in the contractor's facility, arrangements must be made for a safe and timely transfer of the ship into the contractor's facility and for the immediate connection of utilities and services. The MSRA and MS/MO Contract requires the contractor to make provisions for the personnel assigned to the ship to have access to the ship at all times. Contract requirements shall state that the contractor not interfere with the normal berthing and messing of personnel attached to the ship. If the crew will be berthed off of the ship, written agreements should be established clearly identifying what is being provided, the responsibilities of the provider of the facilities and the responsibilities of the crew. Normally, the crew will be responsible for all routine maintenance and housekeeping that would be accomplished on the ship. Conditions existing in the facilities prior to use by the crew must be carefully documented to resolve questions that may arise when the crew leaves the facility. It is the RMC's responsibility to ensure a smooth transition with a minimum loss of time for the crew during the move and to validate arrangements for transportation of the crew to and from the ship when the crew is berthed off of the ship or to and from meals when the ship is unable to prepare meals because of authorized contractor work in the messing facilities or support systems.

7.6.8 Contractor's Assumption of Responsibility. If availability is to be accomplished in a contractor's facility, the contractor's responsibility for the ship will commence when the contractor's tugs accept the ship's lines or the contractor's line handlers accept the ship's lines at the contractor's pier. Except as otherwise specified in the contract or job order, the contractor will furnish all necessary labor, material, services, equipment, supplies, power, accessories, facilities and other supplies and services as are necessary for accomplishing the work specified in the job order.

7.6.9 Security.

- a. Force Protection and physical security within the contractor's facility is the contractor's responsibility in accordance with the requirements outlined in the contract or job order. The contractor must establish and maintain a personnel identification system, control visitor access to the facility and control the receipt and removal of property from the facility. Government personnel, when in the contractor's facility, must comply with the contractor's security regulations. If the Government wants physical security arrangements other than those the contractor is required to provide, then the requirement must be authorized by the funds grantor, funded and added to the contract requirements. Additional security requirements could include such items as security guards in Ship's Force parking areas, barriers to preclude access to the ship by unauthorized waterborne craft or the patrol of water approaches to the contractor's facility.

- b. Both the contractor and RMC must provide personnel access lists to the ship that identify security clearances and the nationality of assigned personnel. The contractor must also provide access lists for subcontractors. The contractor should provide sample identification badges including those of subcontractors to Ship's Force to facilitate worker identification and access. Foreign nationals are not permitted to work on naval vessels without a waiver approved by the RMC. A workable procedure for granting contractors and other non-Ship's Force personnel access to the ship and work areas on the ship must be established by the ship's CO prior to the start of work. The RMC and Ship's Force, working together with the contractor, must ensure that the contractor's performance schedule is not delayed or disrupted because workers were not given access to the ship or the work site in a reasonable time.
- c. The contractor, like Government personnel, must also comply with the requirements of the Industrial Security Manual. Prior to contract award, the Contracting Officer is required to validate that the contractor and/or the designated subcontractor possesses the appropriate up to date documentation that specifies the level of security clearance that the contractor has been authorized, and to verify that he is authorized to have access to classified material and spaces as specified in the contract and that the contract does not require a clearance level that exceeds the level of classification which is documented. In this regard, the contractor is responsible for ensuring that personnel with appropriate security clearances are assigned for work in classified areas, on classified equipment or on work requiring the use of classified information. The Project Manager must ensure that appropriate clearance letters are provided to the ship, both for RMC and contractor personnel. Reference (h) provides the requirements for the contractor to obtain access to classified spaces or materials.
- d. During an industrial availability, the ship's CO remains responsible for the security of the ship and the material and equipment onboard. Ship's Force should be reminded to provide for the safeguarding of pilferable items onboard. Likewise, the contract administration team shall be alert for potential breaches in security and the inappropriate handling and unauthorized access to classified material.

7.6.10 Special Events During Availabilities. When special events such as changes of command, special training or drills are to be conducted by Ship's Force, readiness for light off, etc. are anticipated during an availability, certain contractual and administrative safeguards shall be used to preclude the potential for the contractor to submit REAs or claims for delay and disruption to the contract that resulted from Government actions that were not covered by the specification package or prior arrangements to minimize impacts on production.

7.7 SCHEDULED CONFERENCES AND MEETINGS. Conferences and meetings should be requested any time there is a perceived need to resolve matters concerning the scope of work, a quality or safety issue, a schedule or progress issue, or to coordinate or harmonize the participants in the availability. Certain regularly scheduled meetings may require participation by managers with decision-making authority.

7.7.1 Arrival Conference. The Project Manager arranges and conducts an Arrival Conference on the ship's arrival for the availability or immediately preceding the availability if the ship is available. The arrival conference is a two-part meeting attended by RMC representatives, the Maintenance Team members, other ship representatives, other Government representatives with an interest in the availability and the contractor. Contractor representatives shall not attend the part of the conference on Government issues and funding. The purpose of the Arrival Conference is to:

- a. Introduce the key personnel involved and explain their roles and responsibilities.
- b. Discuss specific work items and explain the impact of the Standard Items referenced.
- c. Discuss local policies and procedures.
- d. Explain constructive changes and discuss avoidance techniques.
- e. Explain procedures for the acceptance of contractor work.
- f. Review the schedule and the availability execution "game plan".
- g. Define growth and new work and the impact of each.
- h. Discuss the scheduling interface requirements between contractor and Ship's Force work, as well as Government events.
- i. Discuss fire watches, housekeeping and other matters pertinent to the availability.

- j. Explain the contractor's plan, procedures, schedules and key events.
- k. Describe contractor-furnished facilities and services.
- l. Describe contractor fire watch requirements.
- m. Discuss safety, housekeeping, and environmental policies and procedures, as well as other pertinent issues requiring clarification.
- n. Establish the ship's security requirements for personnel access to the ship. A typical agenda for an Arrival Conference is provided in Appendix A.

7.7.2 Weekly Commanding Officer's Conference.

- a. A briefing report of the results of the weekly progress meeting and other issues of significance to the Government including AIT progress, safety issues, environmental compliance, physical security and funding status may be required for review by the RMC CO. The Project Manager will conduct the brief. The brief will address the results of the progress meeting and specific high visibility problems and actions planned or requested to resolve the problems. Based on this report and the comments and positions of the various Government representatives, the CO will approve the planned actions or direct other action as needed. After each briefing concerning the status of the overall availability has been presented, the RMC CO may conduct a Weekly Conference with all or selected COs of ships in current availabilities. The purpose of this conference is to give both the RMC CO and the ship COs an opportunity to discuss availability issues face-to-face and resolve the significant differences that may exist. The RMC CO will present a current status report to the ship's CO on the high visibility issues, and the CO will in turn address the customers' concerns to the RMC.
- b. The CO of the ship is required by Navy regulations to be aware of the status of the ship at all times, and during a depot-level availability the ship's CO should pay particular attention to work being performed by Ship's Force, the Government's shore maintenance activity, CIS/IDIQ contractors, AITs and others as well as the ship repair contractor. Therefore, in advance of the Weekly Conferences, the ship's CO should conduct a shipboard meeting with the **Project Team**, MT, Ship's Force availability managers and department heads to obtain a current assessment of the status of the overall availability. Through such meetings, the ship's CO should be sufficiently well informed to contribute meaningfully to the substance of the Weekly Conferences.
- c. The Weekly Conference is an integral part of the weekly routine established for availability management. The routine will not be the same at all RMCs, nor for that matter need it be the same for each availability. Typically, the routine will include the following:
 - (1) The week begins by assessing the weekend's activities and planning for activities to be accomplished during the week ahead. Typically, individual work items that must be progressed that week are assessed on Monday and Tuesday, and during this time preparations are made for the progress meeting.
 - (2) The availability progress meeting is typically held during the middle part of the week as previously discussed. On Wednesday or Thursday, the RMC and senior staff are briefed and actions are taken to affect the plans approved or directed. In the latter part of the week, the Weekly Conference is held with the ship's CO. On Friday, required availability status reports are prepared and forwarded as required.

7.8 AVAILABILITY MANAGEMENT.

7.8.1 Quality Assurance.

- a. The contractor is required by reference (c) to maintain a quality management system. The Contract Administration Quality Assurance Program is addressed in Chapter 11 of this volume. The contractor is responsible for offering to the Government for acceptance, only products that conform to required quality standards and for maintaining and furnishing substantial evidence of this conformance.
- b. The work item specifications include "G" points at selected points in the performance requirements. The purpose of the "G" point is to require the contractor to give the designated RMC Representative advance notification of the event noted in the "G" point. Having such advance notification gives the

Government the option of concurrently witnessing the contractor's performance at the "G" point. "G" points are included in work items for all important tests or inspections, at critical points in the repair process or at points where the next step in the performance will conceal critical work accomplished.

7.8.2 Constructive Changes. A constructive change to a contract occurs whenever the Government, through its action or lack of required action, causes the contractor to depart from plan or perform other than as specified in the contract. During the performance period of the contract, the on-site team must exercise great care to minimize the impact of constructive changes. Constructive changes are discussed in detail in Chapter 2 of this volume.

7.8.3 Work Stoppage. The contractor cannot be directed to stop work by anyone other than the ACO or another authorized contracting officer with one exception. The only exception to this requirement is to protect the safety of personnel or prevent the loss of or destruction of property and equipment. Because the Government is a self-insurer or may otherwise be liable for some portion of large insurance claims, the Government has a vested interest in any conditions or actions of the contractor or the contractor's employees which may lead to an insurance claim. The Government is liable for the loss or damage of Government property in excess of the specified limits in the contract. Further, the Government may be liable in situations where third party claims against the contractor exceed the contractor's commercial insurance coverage. Government employees involved in the availability shall be vigilant and, when necessary, act to correct situations or conditions which could easily lead to personnel injury or damage to Government property. In situations where the loss of or damage to Government property is imminent and economically significant, the Government employee should act immediately to stop the work in progress or otherwise correct or rectify the cause of the problem. Likewise, if unsafe conditions or contractor work practices are observed which could lead to imminent injury to personnel or loss of life, the Government employee should act to stop the unsafe practice, correct the condition or otherwise remove the imminent threat. In situations where the danger or potential for loss or damage is not imminent, the Government employee should refer the matter to the appropriate Supervisor Shipbuilding Specialist or Project Manager for action.

7.8.4 Award Fee Board Conferences. An Award Fee Board Conference is required for all Cost-Plus-Award-Fee contracts. An appointed Award Fee Board representing NAVSEA, the ACO, the RMC and customers, chaired by the Waterfront Operations Department Head, convenes to hear presentations from the on-site Project Management Team and the contractor. The Board then evaluates the contractor's performance against established award fee criteria and determines the amount of award fee to which the contractor is entitled for a set period of contract performance.

7.8.5 Fire Fighting and Fire Prevention Conference. When the ship enters the contractor's facility for availability, the contractor is required by reference (i) to conduct a Fire Fighting and Fire Prevention Conference. This conference should be attended by RMC representatives, Ship's Force representatives, contractor representatives and a representative from the municipal or other local fire fighting organization, as applicable, if possible. This conference must be conducted within five days after arrival at the contractor's facility. The meeting familiarizes the Ship's Force with the contractor's procedures for fire prevention and fire fighting, as well as the procedures used by the local fire fighting organizations. The contractor and the local fire fighting organization should be familiarized with the ship's fire fighting systems and plans. Appendix B provides a list of subjects that must be addressed.

7.8.6 Fire Prevention, Safety and Housekeeping.

- a. The contractor must comply with the Occupational Safety and Health Administration (OSHA) under the cognizance of the United States Department of Labor. The RMC Representative for Occupational Safety and Health, who is typically the Command Safety Officer, or the designated Safety Office Representative for the ship, monitors the contractor's compliance with OSHA requirements. This monitoring function is passed from Department of Labor to agencies that provide Contract Administration Services. Any Government employee that observes an accident, a fire, an unsafe act, or unsafe or hazardous conditions on or around the work site should immediately inform the RMC Safety Office and provide as many pertinent details as possible. The designated Safety Office will investigate all incidents and issue the required reports. When deemed necessary, an investigative team may be required to prepare findings for the Judge Advocate General. All Government personnel will cooperate fully with the Judge Advocate General investigators.
- b. In addition to the Federal, state and local laws and ordinances, contract clauses require the contractor to exercise reasonable care to protect the vessel and Government property. These clauses also require the contractor to keep the site of the work on the vessel free from the accumulation of waste material or

rubbish caused by its employees or the work, and at the completion of the work to remove all rubbish from and about the site of the work and leave the work in its immediate vicinity “broom clean” unless more exactly specified in the job order or contract specifications.

- c. In addition to the contract clauses, reference (j) specifies procedures and equipment required for the prevention of fire. These requirements address the gas-free checking of tanks, the training and use of fire watches, the use of fire retardant materials, the conduct of daily fire prevention and housekeeping inspections and the establishment and maintenance of fire zone boundaries. When the ship is in a contractor’s facility reference (i) requires the contractor to provide fire protection capabilities in addition to the OSHA requirements, including a requirement to conduct the Fire Fighting and Fire Prevention Conference.

7.8.7 Fire Watches. The contractor is required by OSHA and references (j) and (k) to provide fire watches for contractor hot work. The ship’s CO is always responsible for the safety of the ship and crew and may desire to supplement the contractor’s system with additional fire watches or establish a fire watch monitoring system. In some cases the TYCOM may direct the Ship’s Force to provide fire watch personnel to save Government funds.

7.8.8 Docking Conference. When the ship is required to be drydocked during availability, a Docking Conference is scheduled by the dockmaster or the RMC docking officer. This conference is held onboard or near the ship, conducted by the dockmaster or docking officer and attended by the Project Manager, the ship’s CO, **Project Team**, the MT and Ship’s Force representatives, particularly the Engineer Officer and Damage Control Assistant, and the contractor’s dockmaster and other cognizant personnel. The details of determining the docking position, establishing the stability conditions before docking and undocking, and defining safety and service requirements are discussed as well as responsibilities for a ship’s movement in and out of dock. A typical agenda for a Docking Conference is provided in Appendix C.

7.8.9 Drydocking.

- a. Reference (l) provides procedures for the safe drydocking and undocking of Navy Ships. Drydocking requirements are included as a work item in the contract and identify the required drydock position and other pertinent information for docking the ship. The details of drydocking the ship, the stability conditions that must be established and requirements for the protection of underwater projections are discussed at the Drydocking Conference. The RMC is represented at all drydock evolutions by an experienced dockmaster, a docking officer or both. In addition, experienced RMC docking observers should monitor docking evolutions.
- b. When docking in a contractor’s facility, the contractor assumes the duties and responsibilities that Navy Regulations prescribe for the docking officer. The ship is under operational control of the contractor’s dockmaster while the ship is in the drydock and while the ship is entering or leaving the drydock. For safety, while the ship is under the operational control of the dockmaster, the Ship’s Force must comply with dockmaster’s requests. The only time that the Government shall interfere with the dockmaster’s operational control of the ship is in the case of dire circumstances involving the safety of the ship.
- c. As soon as practical after the ship is safely positioned on the blocks and the water is removed from the drydock, the ship’s underwater hull should receive a cursory inspection by the ship’s MT/Maintenance Manager to include the ship’s Chief Engineer, dockmaster, and other interested parties to identify additional work that may be mandatory. After the underwater hull has been cleaned, a more comprehensive underwater hull inspection is accomplished by the Project Manager, engineers, Shipbuilding Specialists, dockmaster, the ship’s CO, **Ashore Ships Maintenance Manager**, ship’s engineer, other representatives and the contractor’s cognizant personnel. This inspection is a detailed inspection to document the condition of the underwater hull, the underwater machinery, all projections and underwater devices, and the effectiveness of the cathodic protection system and to determine if the contract paint requirements for the underwater hull will be sufficient.
- d. Before undocking, the Ship’s Force must notify the RMC and dockmaster of significant changes in stability factors created by Ship’s Force actions. This information is provided to the contractor and will be included by both the RMC and the contractor in stability calculations for the ship to determine if corrections are needed for a safe undocking. Ship’s Force will be advised of necessary actions required, if any.

- e. When all drydock work is completed, a joint walk through is conducted by the MT/Maintenance Manager, Project Manager, and the contractors to ensure that all work is complete and all openings have been properly closed. Ship's Force monitors all underwater valves and openings such as propulsion shafting seals to ensure watertight integrity while the drydock is being flooded.

7.8.10 Hazardous Material.

- a. HW means any discarded material (liquid, solid or gaseous) that may, because of quantity, concentration, or physical or chemical characteristics, cause or significantly contribute to an increase in mortality or in serious irreversible or incapacitating reversible illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed or otherwise managed (excluding infectious or radioactive waste provided that neither is mixed with Environmental Protection Agency/state-regulated HW), or any material designated as HW by the Environmental Protection Agency (EPA), the state or local regulations. Chapter 10 of this volume outlines the policy and RMC oversight functions for environmental matters.
- b. The CO of RMC shall appoint by letter the Manager for Environmental Protection. The Manager provides information on the identification of HAZMAT and HW to coordinate storage, control and handling procedures required by current applicable Federal, state and local regulations. They also will identify types and amounts of HW expected to be generated by Ships' Force, Navy Fleet Maintenance Activities or other Navy personnel during the availability. AITs are accountable for HW handling that is generated in the course of their work.
- c. Reference (m), and applicable state laws define the responsibilities of the generator in the disposal of HW. HW is listed in three types of waste: contractor-generated, Navy-generated and co-generated. All HW/HAZMAT identified for disposal will be transferred to an authorized disposal site through an HW manifest identified with an EPA generator number. When the ship is located in the contractor's facility, the contractor is tasked to handle all HW generated during the contract. The RMC furnishes an EPA generator number for use by the contractor in the disposal of Navy and co-generated HW. When the ship is located at a Government facility, Navy-generated HW is handled by the local Navy public works center. Contractor-generated HW is handled by the contractor using the contractor's EPA generator number. Co-generated HW is handled by the contractor with the RMC furnishing a Government EPA generator number for use in the disposal in concert with the contractor's EPA generator number. HW training for Ship's Force is available through the Manager for Environmental Protection.
- d. COs of naval vessels will be responsible for removing known HW, including expired shelf life material, from the vessel before the contract start date or the vessel's arrival at a contractor's facility, whichever is earlier, to the extent such removal is feasible. Because the disposal of HW is difficult and costly, and to reduce the adverse impact of HAZMAT and HW, Ship's Force will maintain the absolute minimum inventory of HAZMAT and will offload HAZMAT and HW in excess of minimum requirements.

7.8.11 Government Furnished Material.

- a. If material is available in a Government supply system, GFM identified by the Planning Activity is ordered from the providing source. If GFM requirements are not available from a Government source or exceed the purchase limitation authority of the RMC, the material requirement must be forwarded to a local Naval Supply Systems Command contracting office for procurement. The RMC material department may receive and store GFM and subsequently issues this material to the contractor.
- b. The status of GFM and CFM is monitored by the on-site team and discussed at progress meetings. Material status reports are developed and maintained by material expeditors who should also attend progress meetings and work closely with the RMC on-site team in locating required material. Every effort should be made to resolve material shortages before shortages affect the production schedule. Techniques such as changing GFM to CFM, when it has been determined that the contractor can find an alternate source for late GFM are appropriate if a Government-responsible delay in the contractor's schedule can be avoided.
- c. After the award of the contract, the contractor may discover that material that was commercially available during the pre-award period is no longer available. Although under most circumstances the contractor remains responsible for the potential impact of late or missing CFM, it is still in the best

interest of the Government to work with the contractor to resolve CFM problems. If the contractor can show that for unforeseeable and unusual conditions the material that should have been available is no longer commercially available, then the contractor may be entitled to an equitable adjustment in contract price and delivery schedule for the adverse impact. In any event, if the Government can mitigate the adverse impact, it is best to do so. Assistance to the contractor can include the following:

- (1) When required materials are delayed at a subcontractor's plant over which another Defense Contract Management Agency Contract Administration Office has cognizance, the RMC may request assistance from that office in expediting delivery of the materials. If the original subcontractor or supplier is unable to deliver the required materials and the prime contractor has been unable to locate an alternate supplier, the RMC may provide the names of other sources or may contact the local Defense Contract Management Agency office for the names and addresses of firms which may be able to provide the desired material.
- (2) Authorize, by means of a contract modification, the use of substitute material if the substitution will not degrade the work. The job order modification authorizing the substitution will reflect an appropriate change in the job order price for any increased or decreased cost to the contractor. The material may be obtained directly from Ship's Force stores or other afloat vessels, from Government Supply Systems or from the Navy Supply System under the Navy Cash Sales Program.
- (3) Convert the CFM to GFM by means of a job order modification, if the Government has the material available and the modification results in a decrease in job order price, which is negotiated on the basis of what it would have cost the contractor to procure the material from commercial sources. This procedure will be used as a last resort and only after a determination is made by the ACO.
- (4) In some extreme cases and with TYCOM approval, the material may be obtained by cannibalization from other ships.
- (5) The RMC should determine if the needed material is available in the Navy Supply System. If the material can be located, then a decision must be made whether or not to authorize the contractor to make a cash sale procurement. When possible, a cash sale procurement by the contractor is the preferred alternative since the contractor will remain responsible for any potential schedule impact. The cash sale procedure requires the contractor to complete a form which identifies the item and the vendor's price and requests that the item be provided as a cash sale from the Navy Supply System. Items obtained through the cash sales program cannot exceed a cost of \$5,000. A member of the Governments' on-site team certifies the requirement, and the RMC material department then verifies the information provided by the contractor and certifies that the material is required and not available commercially. The contractor may then procure the material from the Navy source at a cost of the higher of either the vendor's price or the Navy list price.

- d. The material office may also procure services, within given limitations, in support of a specific ship availability, such as the services of a manufacturer's technical representative to provide technical assistance to RMC personnel.

7.8.12 Testing of Ship's Systems and Equipment. The Ship's Force will operate all systems and equipment installed in the ship for testing or any other purpose. The contractor is not permitted to operate installed ship's systems or equipment for any purpose. The RMC should impress upon Ship's Force personnel the importance of this contractual obligation. Failure in this matter may lead to delay, disruption and claims against the Government. Detailed guidance on testing is provided in Volume IV of this manual.

7.8.13 Ship's Selected Records. The MT/**Ashore Ships** Maintenance Manager is required to assist Ship's Force to obtain the required documentation that includes:

- a. Ship's Selected Records (SSR) contain significant technical information on the ship's operation, maintenance, supply and other logistic requirements and are maintained current throughout the life cycle of the ship. SSRs are comprised of:

- (1) Selected Record Drawings: Consist of basic hull, mechanical and equipment drawings and are selected for their reference value for operational, maintenance, training and consulting purposes.
 - (2) Selected Record Data: Consist of basic technical information relative to certain shipboard arrangements, equipment and systems under the cognizance of NAVSEA that is selected because of its value for operational, maintenance, training and consulting purposes.
 - (3) Allowance Lists: Depict authorized onboard repair parts and equipage support of shipboard equipment and components and are published as a Consolidated Shipboard Allowance List. The Consolidated Shipboard Allowance List also includes authorization for non-component-related equipage and miscellaneous categories of material.
- b. The delivery of this documentation is required before the TYCOM/RMC will accept redelivery of the ship to the Fleet. Detailed SSR update procedures are addressed in reference (n).

7.8.14 Documentation. The contracting officer is required to maintain contract files as prescribed in reference (o). Chapter 2 of this Volume provides detailed information on the responsibilities of the Contracting Officer. The ACO is required to document each contract transaction sufficiently to provide a complete history of actions taken. The ACO's files provide background information supporting actions taken, provide information for reviews and investigations, and document the essential facts to support potential litigation. Some of the more significant data that should be found in the ACO's files include the following:

- a. A copy of the contract and all modifications with copies of supporting documents.
- b. Pre-award survey information.
- c. Progressing, expediting and production surveillance records. All documents that are considered pertinent from the Project Manager, Shipbuilding Specialist and other project members.
- d. QA records.
- e. Property administration records.
- f. Documentation regarding termination actions for which the contract administration office is responsible.
- g. A cross-reference to other pertinent documents that are filed elsewhere.
- h. Significant Events files from all sources.
- i. Copy of the CPARS.

7.8.15 Fast Cruise, Dock Trials and Sea Trials. Information on these subjects is available in Volume II of this manual.

7.9 AVAILABILITY PROCESSES.

7.9.1 Schedules. Availability scheduling is governed by the processes outlined in Volume II of this manual. The contract will have a start date and a completion date (Period of Performance) for the work specified in the contract. These dates will be determined with input from the TYCOM. Considerations will be based on the type and magnitude of the work to be accomplished, as well as other factors such as port workload and the ship's scheduled events. The dates may or may not coincide with the assigned availability. Fleet Commanders or TYCOMs are authorized to delay or advance scheduled starting dates up to five weeks and delay completion up to five weeks from the latest approved date. The TYCOM's authority to delay or advance starting dates and delay completion dates is limited to 15 days from the latest approved date. The RMC must concur and the modified starting dates must remain in the same fiscal year as the original dates. Early completion of availabilities may be authorized by the Fleet Commanders or TYCOMs if so designated. Changes in the start and completion dates of complex overhauls which will exceed established CNO duration must be approved by CNO.

- a. The Navy's ship repair scheduling requirements included in reference (p) are network based and the methodology is commonly described as the Critical Path Method (CPM).
- b. In developing a CPM schedule, the key steps include:

- (1) Generation of a listing of project related activities.
 - (2) Arranging the activities in a network strictly on the basis of the logic of assembly showing the relationships of all the tasks/activities required to complete the project.
 - (3) Identifying each activity by narrative description and an event numbering system.
 - (4) Estimating and assigning time durations to each activity (except for dummy activities).
 - (5) Setting the time boundaries or limits for each activity by accomplishing basic CPM computations known as the forward pass and backward pass.
 - (6) Computing the amount of float or slack that the various activities in the network possess.
- c. An activity is any portion of a project which consumes time and/or resources and has a definable beginning and end. The Critical Path is defined as that sequence of activities, which forms the longest duration and directly affects the completion date of an availability. It depicts the project's activity sequence and interdependency allowing determination of project duration, start and finish dates and project end date. Since a CPM schedule is network-based, and since the project's Critical Path is along a path of activities, the identification of critical activities' logic "relationships" or interdependencies within the network is vital to the legitimacy of the schedule. A logic "relationship" defines the relationship between two activities identifying when one can start in relation to another. For example, a Finish-to-Start logic relationship requires that the succeeding activity cannot start before the preceding activity has finished. The network provides a graphic display showing the planned sequence and interdependent relationship of activities, milestones and key events within a Job Order. It identifies the work that is sequential and the work that can be done in parallel. The network must not have loops. The total number of days that a path of activities can be delayed without affecting the project finish date is known as Total Float. Total Float is the difference between Early Start (ES) and Late Start (LS) or between Early Finish (EF) and Late Finish (LF) dates (i.e., $TF=LS-ES$ or $LF-EF$).
- d. Distributing the number of persons on a project so as to optimize performance is known as manpower leveling. Generally, ship repair and new construction contractors forecast the required manpower and then level it. Prior to leveling the manpower on a project, it must first be determined what the manpower requirements are at the activity level. In this regard, it is useful to determine the total number by discipline or trade for each project day, week and month based on all the activities being performed at their early start-finish dates. Then it is possible to estimate total reasonable levels. To understand manpower leveling in conjunction with CPM scheduling, it is necessary to understand that an activity with float time is permitted to start somewhere between its ES and LS dates. Float is the scheduling tool or the wherewithal of resource leveling. For by judicious allocation of float, the peaks of manpower and equipment required to execute the project are reduced while still completing the project on schedule. An alternative method of manpower leveling is the sequencing of key resources through the addition of crew movement constraints to the network.
- e. The contractor may have developed the best possible schedule with input from various specialists regarding activity content, sequencing, duration and manning estimates. But unless the project's performance is measured against the schedule, you will never know where the project is and, most important, where it is going. To this end, it becomes necessary to track actual progress against planned progress.
- f. If it becomes apparent that the contractor is falling behind in some areas of the availability with regard to the established percentage of schedule completion, controlling work items or non-achievement of specified key dates or milestones, the RMC should apprise the contractor of this fact and request remedial action. The RMC should ensure that the contractor is informed of this fact sufficiently in advance of the scheduled completion date to permit the necessary action to be taken. Among the remedies which may be available to the contractor are multi-shift work, overtime and the employment of additional workers. When addressing this subject with the contractor, the Government shall take great care to ensure that the contractor cannot interpret the discussion as an "order" from the Government to accelerate the work. Other alternatives to explore to determine whether time can be recovered include re-sequencing of activities, reduction in durations and deletion of work, if feasible. The Government cannot order acceleration without incurring the risk of a claim from the contractor.

Therefore, the contractor should specifically be advised that the Government is not ordering acceleration, that the responsibility for acceleration, if it is undertaken, remains solely with the contractor and that any acceleration ordered by the Government will be in the form of a contract modification.

- g. In addressing schedule adherence with the contractor, the Government must also assess the impact of Government actions or failures to act, when required, on the contractor's performance. If the Government is responsible for even a small portion of the perceived delay or for disruption which has caused the delay in performance of scheduled work, then that issue should be addressed in a contract modification to properly compensate the contractor for the required acceleration to recover and maintain schedule adherence.
- h. If the contractor alone is responsible for failure to produce as scheduled and such failure is viewed by the RMC as significant enough to place availability completion in jeopardy, then the Government concerns should be conveyed in writing to the contractor. Such a letter can be referred to as a "View with Concern" or "View with Alarm" letter, depending on the degree of severity of the contractor's situation. In the letter, the RMC should identify the areas of concern and how the Government "views" the situation and offer perceived reasons for the situation. The contractor should also be requested to provide a written response to the letter, identifying action the contractor proposes to take to prevent delay in completing the availability. Where the contractor insists that work can be completed on schedule without acceleration or other measures involving added cost, the Government cannot direct the contractor to perform otherwise. Any direction contrary to the contractor's plan will generally result in an REA or a subsequent claim.
- i. While the contractor is trying to recover from poor schedule adherence, the Government should be as cooperative as possible, doing all that needs to be done to make it possible for the contractor to recover on its own. If it becomes clear that the contractor is not performing in a manner that will allow completion on schedule, a meeting should be convened with the contractor's top-level managers and the contracting officer. At this meeting, the contracting officer should again convey the Government's concern over the contractor's lack of progress and discuss the specific issues of concern. The contractor should be requested to address the specific issues causing problems, including the contractor's view of the cause of the problem. If the contractor identifies the Government as the primary cause of the schedule slippage, the issues raised must be addressed by the contracting officer. If the RMC agrees with the contractor that the Government is a party to the schedule delay following review of the contractor's contemporary schedule and cost documentation, then action must be taken to compensate the contractor for the impact. If the Government does not agree with the contractor about responsibility for the schedule slippage, then the contracting officer must make this view clear to the contractor. The meeting should result in an agreement about the actions to be taken to ensure availability completion on schedule. In the very worst of cases, termination should be considered. Otherwise, the results of the meeting should be documented in a letter from the contracting officer to the contractor. This letter should document the relative positions of the parties to the contract where there is disagreement and document the agreement made. This letter serves to place the matter on a business-like footing, documents the contract file for future reference and should be used in future pre-award surveys in assessing the contractor's past performance.
- j. Personnel attached to the ship may not unduly interfere with the contractor's work or the contractor's employees. The contractor is obligated to accomplish the work specified by the contract within the dates specified by the contract. Therefore, when progress is impeded by some action or lack of required action on the part of the Government that will cause delay or disruption in the contractor's scheduled work, the contractor will generally be entitled to an equitable adjustment in contract price and delivery schedule. This will be resolved by awarding the contractor compensation in the form of additional time or additional money or both as agreed by the parties.
- k. A detailed schedule of the work to be accomplished by Ship's Force should be developed as well as the work that will be accomplished by other activities not under the control of the RMC. The complexity of this schedule will be determined by the resources that the ship can apply, the magnitude of work and interfaces and the perceived need. Automated scheduling systems may be made available to the ship. However, as a minimum, a simple bar chart schedule or GANTT chart should be developed and

maintained by Ship's Force to assist in working around the contractor's schedule whenever possible. On occasion, Ship's Force will not be able to work around the schedule, and in such cases, the RMC must work with the contractor for resolution and coordination. Reference (h) requires the contractor to provide a representative whose only function is to coordinate Ship's Force work with contractor work. In addition to the representative being required to meet daily with the Ship's Force coordinator, the representative among other things, is required to submit weekly a report of conflicts where programmed Ship's Force work interferes with the contractor's schedule. When the RMC or the Ship's Force becomes aware of approaching disruptive events (e.g., work schedule conflict, planned power outages, drills, visits, Change of Commands) the contractor should be notified immediately to mitigate the impact on the contractor's schedule by allowing time for a shift of resources.

7.9.2 Progressing. A project or availability that is not planned cannot be controlled. Once the project has commenced, project control is possible only when one knows the status of the project at a given point in time. The process of creating the project schedule baseline established the benchmark against which schedule progress is measured. The dynamic nature of a ship repair availability necessitates change. Some of the primary factors, which influence such change, include added and deleted work, delays, strikes, weather problems, changes in sequence and acceleration in the work, among others. "Updating" involves the periodic review of the project plan, schedule and progress to provide a complete and accurate report of actual versus planned progress. It can be utilized as a basis for the purpose of determining the amount of periodic progress payments to which the contractor is entitled. It may also serve as a basis for allowing the parties to schedule their remaining work in order to achieve the overall schedule objectives.

- a. The pertinent information to be gathered and analyzed during each update period includes the following:
 - (1) Commencement and completion dates for all activities commenced and/or completed during the update report period.
 - (2) Current progress of activities which commenced in prior update periods, indicating actual completion dates or, if still in progress, the remaining time duration.
 - (3) The determination of what activities need to be re-sequenced, added, deleted or modified to clarify or reflect a change in plan or operation which to maintain requires schedule detail for proper monitoring and controlling.
 - (4) Fragments, which have been incorporated into the network diagram, to reflect delays and/or changes.
- b. RMCs are required to develop an independent assessment of progress for use in comparison with the contractor's production progress report. A progress report is developed by determining the ratio of the planning estimate for labor and material separately for each work item compared to the planning estimate for labor and material for the total contract. This will establish a weight factor for the labor and a weight factor for the material for each work item. Every attempt should be made at the outset of the availability to reach agreement with the contractor on the relative value of each work item for progressing purposes. To ignore a contractor's justified concern about potential progress payments could be extremely harmful. In every case where there is a significant disparity between the Government's weight factor and that of the contractor, the RMC should investigate the cause and adjust the factors as needed. Contractors may attempt to front load the contract for progressing purposes to maximize early cash flow. In this regard, the weight factors for items scheduled for early accomplishment may be inflated. On the other hand, the contractor may have good justification for a weight factor significantly in excess of the RMC developed factor. Where the contractor has adequate justification for a weight factor, the RMC factor should be adjusted. In those cases where the RMC does not agree with the contractor, the Government weight factor must be used.
- c. The total of all weight factors for labor added to the total of all weight factors for material should equal 100 percent. The actual percentage of completion of work is then determined independently for labor completion and material for each work item. Material progress assessments are made on the basis of the estimated dollar value of satisfactory material received by the contractor. The percentage of completion of the labor for each work item is multiplied by the labor weight factor established for that work item, and the percentage for material for each work item is multiplied by the material weight

factor established for each work item. The sum of the products for labor and material for a work item is the total percentage of completion of the work item. For example, the weight factor for a work item is determined to be .01 percent and at a point in the contract the estimated actual labor and material completion is 50 percent; the contractor could be authorized a progress payment of .005 percent of the current contract value, less retentions. The sum of the products for the labor completed for all work items is the total percentage of labor completion, and the sum of the products for material for all work items is the total percentage of material completion. The total labor completion added to the total material completion is the total percentage of completion of the contract.

- d. Contract modifications including change orders and other changes waiting to be adjudicated are included in the progress determinations when they are executed by the contracting officer. A contract modification may be considered along with the basic work item modified or for major modifications for growth or new work or may be considered as a separate item for progressing purposes. When considered along with the work item modified, weight factors for each modification, including changes waiting to be adjudicated, are based on the Government estimate for the changes and not on the contractor's proposal. However, if settled, the settled price should be used. After the weight factors are initially established, the factors should not be changed except when the contract is modified. Each time the contract is modified, all weight factors in the program must be reconfirmed or changed as required.
- e. The on-site Shipbuilding Specialist usually estimates the actual percentage of completion of assigned work items and modifications and routinely accomplishes in-process inspection. The Shipbuilding Specialist also reviews contractor condition reports on assigned work items and prepares responses and contract modifications, if necessary. Commands that do not have Shipbuilding Specialists may assign progressmen, production controllers, ship surveyors or others to accomplish the percent progress determinations. Typically, personnel who are Shipbuilding Specialists determine progress percentages only. The current contract value and value of the earned progress payment to the contractor is determined by the ACO, based on the technical progress assessment percentage. Labor progress determinations are made for each work item requiring a productive effort. For those work items currently not being worked by the contractor, the progress status from the previous week will simply be carried forward in the current week's progress assessment. Progress determinations on the remaining work items are made by physically assessing the status of work performed and comparing it to the total work required for the items. The progress assessment must be based on a valid progressing method appropriate for the nature of the work required. There are four basic approaches to progressing a work item: the uniform method, the 0 or 100 method, physical percent complete and the activity method.
- (1) The uniform progressing method is applicable to work items that require a constant level of effort throughout the availability. The Level of Effort classification of work measurement includes general or supportive activities having no definitive or deliverable product. Budget is scheduled over the period of performance. The Budgeted Cost of Work Performed (BCWP) earned is based on the passage of time. Typical Level of Effort work activities include, but are not limited to, program management, production engineering, contract administration and field engineering. Hotel services to the ship can also be progressed as a uniform item, such that when the elapsed time of the availability is at 40 percent, the item is 40 percent complete.
 - (2) The 0 or 100 percent progressing method is applicable to small work items that will require a relatively short period of time to complete. The progress status of the items is carried at 0 percent until completed and at 100 percent after completion. Final acceptance remains the responsibility of the ACO.
 - (3) The physical percent complete classification of work measurement often depends upon individual evaluation of work accomplished. It is also commonly expressed as follows: BCWP cumulative divided by Budgeted Availability Cost (BAC)

$$\text{Percent Complete} = \frac{\text{BCWP cum}}{\text{BAC}}$$

Percent complete, when defined as an activity's percentage of completion based on duration is often misleading and should be avoided.

- (4) The activity progressing method is applicable to large or complex work items that cannot be progressed by a simpler means. To apply this method of progressing, the work item is broken down into a number of discrete work activities consistent with the requirements specified in the work items. A weight factor is assigned to each activity that is approximately equal to the estimate for the work item paragraphs covered by the activity.
- f. Two examples of activity progressing are provided in Appendix D and Appendix E. In the following examples, a work item requiring in shop overhaul of a fire pump is broken down into discrete activities.
 - (1) In the first example the Shipbuilding Specialist has broken the work item down into 11 significant activities that cover 100 percent of the work required, and a percentage of the total is assigned to each activity which is approximately equal to the percentage of the estimate of the activities covered to the total work item estimate. For example, the estimate for repairs to be accomplished in the shop is about 20 percent of the total work item estimate.
 - (2) In this second example there are 12 activities that contribute to achieving 100 percent complete. Progressing is accomplished by using each significant activity that is associated with the work item as a cumulative percentage of the total of all completed activities. In this example, the work item will be reported as 75 percent complete when the pump is delivered back to the ship and reinstalled. Examples are also provided for “on-ship repair” and Ship **Change** installations. For large activities, progress credit can be taken at a uniform rate for the time allocated to the activity, or the activity can be further divided into sub-activities to facilitate more detailed progressing.
- g. Contractor’s incurred costs and unsatisfactory work are not to be considered in the determination of the percentage of progress completion. The RMC must certainly monitor a contractor’s incurred cost as a matter of principle. Incurring costs in excess of the expected cost for the percentage of work completed may indicate that the contractor will have trouble financing the completion of the work. For this and related reasons, the Government must be aware of the contractor’s financial condition and the contractor’s relative loss or gain position for the contract. That a contractor has expended a specific percentage of the contract value cannot be used in any way to influence the progress determination. Likewise, the contractor cannot be given credit for progress on a work item when deficient work has been reported. If a work item has a Corrective Action Report/Quality Deficiency Report issued against it, the progress for that work item should not be changed until the Corrective Action Report/Quality Deficiency Report is resolved. Progress percentages cannot be adjusted as a punitive measure in attempting to resolve a problem with the contractor; the ACO has other methods available to resolve such problems.
- h. Material progress is based on the material cost incurred by the contractor. The material must be satisfactorily receipted and paid for by the contractor. This amount is divided by the overall material amount to determine the percentage of material completion. The contractor submits a progress report with completion percentages as required by the contract, normally each week. Independently, Shipbuilding Specialists will mark up the Government-generated work item labor and material completion percentages. The marked-up percentages will then be used to determine the contractor’s current progress and to update the official progress reports. Differences in opinion with the contractor should be resolved in the weekly progress meeting.

7.9.3 Progress Payments. There are two types of payments provided by Government contracts: “Provisional Payments” associated with cost reimbursable type contracts, and “Progress Payments” associated with fixed price type contracts. Progress payments are further categorized as “customary” and “unusual”. Customary payments are based on a payment rate, cost base and a frequency of payment. The unusual type of progress payment is based upon the actual amount of work completed and material acquired by the contractor for the work. Details of these types of payments may be found in reference (q). The process described in paragraph 7.9.2 of this chapter to determine the progress of repair and modernization is normally used to verify the payment of contractor’s invoices.

7.9.4 Progress Conferences.

- a. Progress Conferences should be scheduled with the contractor, Ship’s Force or both, when there is a need to resolve schedule or progress issues. The RMC and ships MT may require these meetings with the contractor, Ship’s Force and other activities as needed to address problems.

- b. During the Progress Conference, the discussion of contractual issues must be avoided unless the ACO is present. A discussion of the status of funding must be avoided if the contractor is present. The purpose of the Progress Conference is to:
- (1) Review the progress of each work item and modification.
 - (2) Identify and evaluate the controlling jobs.
 - (3) Resolve identified production problems or devise work around solutions.
 - (4) Review quality and safety problems.
 - (5) Review the status of GFM and CFM.
 - (6) Discuss key events or evolutions.
 - (7) Review and discuss the project's schedule including, but not limited to, the critical path's total float value.
- c. Weekly progress meetings are conducted by the Project Manager and are usually held onboard or near the ship and are attended by key personnel from the RMC, the ship's CO and other MT members, key Ship's Force personnel and the contractor's key representatives. The Project Manager shall ensure that an agenda of issues developed from input previously solicited from the participants in the weekly progress meetings is prepared at least one day prior to the meeting. Ship's Force should discuss problems with the contractor's performance, workmanship or the actions of the contractor's personnel with the RMC before addressing the problems with the contractor. All issues between Ship's Force and the RMC should be resolved prior to meeting with the contractor. If such issues cannot be resolved before meeting with the contractor, the Government only issues should not be discussed in the presence of the contractor. The Government must speak with one voice to the contractor as this is an opportunity for the contractor to perceive that the discussion was a constructive change to the contract.
- d. The contractor is required by the scheduling work item to "provide cognizant management representation to participate." The specification further states, "The representative must be authorized to make management decisions relative to routine requirements of the job order which, in good faith, commit the contractor." The contractor is normally required by contract to submit among other things, the following information to the RMC and Project Manager one working day prior to the weekly progress meeting:
- (1) The revised production schedule including additions, completions, modifications, progress and completions.
 - (2) Manpower utilization data.
 - (3) A report listing each work item's scheduled start date, scheduled completion date, actual start date and percentage complete.
 - (4) A report listing contractor and GFM not received, expected delivery date, required delivery date and action proposed to resolve problems resulting from late delivery.
 - (5) A report listing late or deficient Government Furnished Information and proposed corrective action.
 - (6) A report of overdue contractor condition reports and expected submission date. The report shall also include those deficiency or condition reports for which Government response is outstanding.
 - (7) The revised weekly test schedule.
- e. Two of the most critical aspects of ship repair and modernization project management is the management of resources and communication to accomplish the required work. Unlike other tasks, project management communications center largely around time-sequenced and logic-sequenced events and the resources required to complete them. It includes the processing of project data to plan and control a project in terms of cost and time. When discussing and evaluating production problems

during weekly progress meetings, or when evaluating or negotiating the cost and time impact of contract changes, communicate with the contractor, contract cost and schedule variances. To do so, knowledge of the contractor's production control and cost systems is necessary. In order to communicate and understand performance measurement for specific work, identify and discuss BCWP, Budgeted Cost of Work Scheduled (BCWS) and Actual Cost of Work Performed (ACWP) up through the contractor's Work Breakdown Structure and Organizational Breakdown Structure. Review the contractor's cost accounts and cost account descriptions (typically available through the local Defense Contract Audit Agency office, should the contractor be reluctant to provide such information). The "cost account" is a key and natural management control point as it represents the work assigned to a specific responsible organizational element on one work breakdown structure element. It is an element of work for which responsibility is assigned, and is further defined by work packages and work orders. In forecasting and evaluating problem areas on any given project, focus more on BCWP trends rather than ACWP trends. Cost Variance = Earned Value or BCWP - ACWP. By documenting and comparing actual hours expended to date (ACWP) to the earned value of the work performed (BCWP), it is possible to project the cost at completion and the completion date. Furthermore, the parties can then also compare the projects past work history to the amount of remaining work as a reality check on forecasts by the contractor's scheduling department.

- f. The difference between the BCWS and BCWP is referred to as the schedule variance (and is favorable if the earned value is greater than the BCWS). The difference between the ACWP and the earned value is referred to as the cost variance (and is favorable if the earned value exceeds the actual costs). The ratio of the earned value to ACWP or BCWP/ACWP is referred to as the Cost Performance Index (CPI). The CPI indicates the cost efficiency with which contract work has been accomplished. A CPI of less than one implies a cost overrun, of more than one implies a cost under-run and of unity implies an on target condition. CPI data at the cost account level or below is particularly helpful when asked to measure and estimate loss of efficiency or "disruption". Be advised that most of the commercially available project management software allows the determination/calculation of CPI at the work order level and above. For more information on earned value management techniques and contemporary program management software capabilities, access the Earned Value Management Home Page at www.acq.osd.mil/pm/.

- g. **Cost Performance Index (CPI)/Schedule Performance Index (SPI) (Surface Force Ships only) On a weekly basis, the CO, Project Team and RMC shall report CPI and SPI.**

- (1) **Cost Performance Index (CPI) - This is an earned value analysis technique that is used to calculate cost performance efficiency with which contract work has been accomplished. CPI should consider only the "projected" cost of an availability against the actual cost of an availability over the timeline associated with that availability. This will provide the CPI with raw factual data to give you the most accurate and true indication of CPI. The formula for CPI is: Projected Cost/Actual Cost=CPI**
- (2) **Schedule Performance Index (SPI) - This is a performance index that calculates schedule performance efficiency with which contract work has been accomplished. SPI should consider only the "projected" schedule of work to be performed during an availability against the actual work performed during an availability over the timeline associated with that availability. This will provide the SPI with raw factual data to give you the most accurate and true indication of SPI. The formula for SPI is: Project Schedule/Actual Schedule=SPI**

NOTE: REBASELINING PROJECTED FIGURES IN EITHER CASE SHALL NOT BE PRACTICED AS IT WILL RENDER REAL TIME DATA USELESS IN THE PERFORMANCE OF THE AVAILABILITY.

- (3) **Based on SPI and CPI, an availability will be referred to as green, yellow or red as seen in Figure 7-1.**
 - (a) **In order for an availability to be referred to as GREEN, the SPI/CPI must be .95-1.05.**
 - (b) **In order for an availability to be referred to as YELLOW, the SPI/CPI must be .94-.80 or 1.06-1.20.**

- (c) In order for an availability to be referred to as RED, the SPI/CPI must be >1.20 or <.80.

Figure 7-1 SPI/CPI Metrics Chart



7.10 FUNDS ADMINISTRATION.

7.10.1 Over Obligation. Reference (r) establishes that Government funds may not be over obligated or over expended. Severe penalties may be imposed on the CO, RMC as well as any individual involved in such an infraction. Reference (s) establishes that funds must be obligated or expended only for the purpose for which the funds were authorized. Funds administration has been addressed further in Chapter 6 of this Volume.

- a. Personnel in Waterfront Operations must be involved in the funds administration process for the same reason that these personnel are involved in contract administration. The ACO is responsible for ensuring that the contract is properly funded and the Comptroller is responsible for proper financial management. Individuals in these positions will not normally be aware of the validity of the technical requirement for an obligation or expenditure. It is usually the waterfront staff that knows that the material ordered is actually required for the project that the funds grantor provided the funds to accomplish. It is usually the waterfront staff that is aware of the proper funds to apply to a project and shall not proceed until the Funds Administrator obtains the proper authorization to use the funds from the funds grantor.

- b. The Funds Administrator shall be assigned in writing by the CO of the RMC and will be held responsible for the use of funds granted as well as for technical accountability. The funds administrator is then responsible for identifying funding requirements to the funds grantors, apprising the Comptroller on the advisability of acceptance and returning excess funds to the funds grantor.
- c. Generally, the funds administrator is the only individual who can authorize the Comptroller to initiate, commit, obligate or expend the funds for an assigned availability or project. Requirements to increase work in an availability, no matter how critical, must be authorized by the funds administrator. Prior to the preparation of contract modifications, Shipbuilding Specialists must receive authorization from the funds administrator, who will cause the estimated funds to be committed. Funds must be available before negotiations can begin with the contractor or before the ACO can direct a change order, except in the case of impending disaster. In some cases, the funds administrator may be required to receive authorization from the funds grantor to authorize a modification, such as for growth work in excess of an established threshold. In the case of insufficient funds, the funds administrator must obtain additional funds before authorizing any obligation.

7.10.2 Growth and New Work.

- a. Contract clauses and NAVSEA Standard Items require contractors to submit reports identifying additional work or material procurement necessary to produce a reliable or complete repair. The contractor is additionally required in various work items to submit condition reports that identify additional work necessary to accomplish the intent of the work authorized. The contractor may also submit unsolicited reports that may generate additional work, increase the value of the contract and affect the scheduled completion of the contract.
- b. In the process of nearly continuous work identification, some new work may be identified that was not contemplated in the contract nor considered to be within the intent of the original work authorization. That work necessary to complete a satisfactory repair covered in the specifications will usually be authorized as growth within scope, or simply growth work by a contract modification if the funds can be made available. New work to be added to the contract should be the subject of a new work request. New work should not be added to the contract unless it is considered to be mission critical or a safety item. Growth work should not be authorized except as necessary to complete the intent of the original work scope authorization. Any work, new work or growth work added to the contract after award will impact the contractor's scheduled requirements and will require additional resources, additional time or both.
- c. The contractor condition reports will normally be received by the Shipbuilding Specialist that is assigned responsibility for the trade area of concern who will review the work item and references, as well as all related work items, to determine whether or not the work is already covered in the basic specifications. If the work identified in the condition report is not already a part of the contract, the Shipbuilding Specialist and the ship's **Port Engineer** for surface **force** ships and the Maintenance Manager for aircraft carriers will go to the ship, inspect the work site and, if possible, discuss the problem with the individual who generated the report for the contractor. If in the judgment of the Shipbuilding Specialist and the **Port Engineer** or Maintenance Manager, the work is already required by the contract, is not necessary to accomplish the intent of the work authorized, or can be deferred for later accomplishment, the Shipbuilding Specialist will annotate the report with the appropriate disposition and return it to the contractor after review by the Project Manager. The timing of the condition report review process is critical. Reports shall be time stamped upon receipt from the contractor and returned within three days. When issues raised in a condition report require a longer processing time, the contractor should be advised as to the expected response time.

7.10.3 Contract Modifications.

- a. When the Shipbuilding Specialist and MT/**Ashore Ships** Maintenance Manager concludes that a condition report identifies an additional work requirement necessary to complete a reliable repair and accomplish the intent of the work authorized, the Project Manager will be notified that a contract modification is necessary and a TAR will be necessary for the additional work. The ACO shall likewise be alerted that a contract action will be forthcoming. If the Project Manager, **Ashore Ships Maintenance Manager** and MT agree the contractor's initial estimate is within the funds grantor's

authorization and the necessary funds are available, the Project Manager should immediately request the ACO to commit the necessary funds and authorize the preparation of the work item specification and a TAR to support the negotiation process associated with a contract modification.

- b. In some cases, the activity providing funds may place a dollar limit on individual growth work changes which can be authorized by the Project Manager and the ship's MT/Ashore Ships Maintenance Manager without the grantor's prior approval. Changes for growth work under this established threshold can be authorized by the Contracting Officer to process the change. For other changes, the Project Manager must obtain concurrence from the MT/Ashore Ships Maintenance Manager and advance approval from the funds grantor before the change can be authorized and in some cases additional funds will be required. This requirement may cause delay in processing needed changes and increase the cost of the additional work. The Project Manager shall do all that can be done to expedite the funding authorization to minimize the potential delay impact.
- c. In some situations, problems may be identified which cannot be addressed adequately by the Project Team. When needed, the Shipbuilding Specialist will initiate a request for technical advice, assistance or direction from the RMC engineering department or the cognizant technical agent, as appropriate. For example, the local engineering department and Chief Engineer should be consulted first for any problem related to the repair work package. Additional consultation with other outside activities should be initiated only after local resources have been exhausted. Problems with the authorized alteration package should be referred to the on-site design liaison representative of the cognizant PY. Local engineering services and PY liaison services do not require funding from availability funds. However, requests for reimbursable services from other activities should be initiated only with the approval of the Project Manager, after consulting with the MT/Ashore Ships Maintenance Manager and Contracting Officer, who must be able to provide the required funding.

7.11 DELAYS IN PERFORMANCE.

7.11.1 Risk. Generally, the contractor bears the risk of both time and cost for delays which the contractor causes or which are within the contractor's control. This may be excused for delays caused by factors for which the contractor is not responsible.

7.11.2 Performance. Contractors are always responsible for providing plant, machinery, labor and finances required for the performance of contracts awarded. Failure to have the necessary machinery or other such means for performance, whether at the time of contracting or subsequently, generally is not a valid excuse for delay or failure to perform. For example, a breakdown of a contractor's machinery is not excusable unless the breakdown was caused by an excusable event.

7.11.3 Material. In a fixed price contract, the contractor assumes the risk of obtaining the materials necessary for performance and a subsequent market shortage is not an excusable cause for nonperformance. The fact that supplies cannot be obtained except at a cost in excess of the contract price is no excuse. Unwillingness to perform at a loss does not relieve the contractor from its contractual obligation. A contractor, even in a time of volatile prices, is deemed to have assumed the risks of increases in material cost. This does not apply in a cost type contract. The Government assumes the risk for providing GFM to meet the contract requirements and contractors production schedule as mutually agreed upon.

7.11.4 Excusable Delays.

- a. In most cases of excusable delay, the contractor must bear the cost impact of such delays. For excusable delay in a contractor's facility, the Government usually will compensate the contractor only for the cost of services provided for the benefit of the crew of the vessel and no other costs. The Government, however, will compensate the contractor for both the time and cost effect of delays caused by the Government.
- b. Most excusable delays involve temporary work interruptions. When the impediment is removed, the contractor is expected to resume performance. Generally, the contractor is not liable for any excess costs if failure to perform the contract arises from causes beyond the control and without the fault or negligence of the contractor. "Fault or negligence" deals with acts or omissions of the contractor which cause delay. Examples of events beyond the contractor's control and without the contractor's fault or negligence may include:

- (1) Acts of God or of a public enemy.
 - (2) Acts of Government in either its sovereign or contractual capacity.
 - (3) Fires.
 - (4) Floods.
 - (5) Epidemics.
 - (6) Quarantine restrictions.
 - (7) Strikes.
 - (8) Freight embargoes.
 - (9) Unusually severe weather.
 - (10) Terrorist Acts including bomb threats.
- c. In each instance, the delay must be beyond the control and without the fault or negligence of the contractor. The element of “foresee-ability” must be considered regardless of any specifically enumerated excusable factors in order for a contractor to be entitled to excusable delay. If a delay is caused by a subcontractor at any tier, and if the delay is beyond the control of both the contractor and subcontractor and without the fault or negligence of either, the contractor is excused for the delay unless the subcontracted supplies or services were obtainable from other sources in sufficient time for the contractor to meet the required delivery schedule. Generally, delay is not excusable if the supplies or services were obtainable from other sources in sufficient time to permit the contractor to meet the required delivery schedule. Delays caused by sole source subcontractors, even those designated by the Government, do not qualify for excusable delays if the subcontractor is at fault. When the Government directs the installation of a sole source item, it represents only that the requirements of the contract can be met by using that item. However, such representation is predicated upon the assumptions that the item has been properly manufactured and timely delivered by the vendor and that it will be installed properly and timely by the contractor. Excusable delay may result from:
- (1) Acts of God: Delays caused by “Acts of God” (such as delay caused by earthquake) or other naturally occurring events are generally excusable. An “Act of God” has been defined as a “singular, unexpected and irregular visitation of a force of nature.”
 - (2) Strikes: Delays caused by strikes are generally excusable. Strikes include job actions by a contractor’s own employees and by a subcontractor’s employees. Excusable delay may also be allowed for other job actions which have the effect of a strike against the contractor, such as organizational strikes, jurisdictional strikes, pickets protesting another contractor at a site, delays caused by impending strikes and wildcat strikes. In order to obtain an excusable delay for a strike, a contractor must prove that it acted reasonably by not wrongfully precipitating or prolonging the strike and took steps to avoid its effect. In the absence of a strike or other enumerated cause of delay, a contractor is generally not excused for labor difficulties. These difficulties usually involve either the loss of key personnel or an unexpected labor shortage. The boards have strictly adhered to the rule that the contractor assumes the risk of hiring and retaining a competent work force.
 - (3) Weather: Generally, delay caused by unusually severe weather is excusable. Unusually severe weather is that weather which is abnormal compared to the past weather at the same location for the same time of year. Normally, proof that weather is unusually severe is accomplished through the comparison of the United States weather statistics for past periods in the area with those recorded during the period of performance. When weather conditions are not totally abnormal from a statistical or average standpoint, but are abnormal and unusually severe in their effect on the particular type of contract work being performed, the contractor may be entitled to excusable delay. In cases where the nature of the work requires specific environmental conditions and when the work is delayed because of weather conditions, the delays are excusable to the extent that the weather conditions exceed the normal weather delays contemplated for the period of the performance.

- (4) Government Acts: Acts of the Government in either its sovereign or contractual capacity may be cause for excusable delay.
 - (a) Contractual Acts: For a contractor to be excused by an act of the Government in its contractual capacity, the contractor must show that delay resulted from the Government's failure to perform its express or implied contractual duties.
 - (b) Sovereign Acts: Sovereign acts which delay the contractor's performance may be grounds for excusable delays. In general, however, when the Government's acts are for the general public good and are indirect in nature, the contractor is not excused for any resultant delay.

7.11.5 Non-Excusable Delays. Even though it may be argued that the following delays occurred through no fault of the shipyard and were unforeseeable, the shipyard is typically held responsible and the resulting delays are not excusable.

- a. Subcontractor delay involves delay occasioned by a shipyard's own subcontractors. A shipyard assumes a non-delegable duty to perform a construction contract, and it is generally no excuse to allege that a shipyard has been delayed by its own subcontractors. The shipyard can, of course, look to the subcontractor for any damages incurred as a result of such delay.
- b. Lack of sufficient working capital does not constitute an excusable cause of delay. A shipyard is expected to have the financial ability to perform the contract. The shipyard's delay or failure to perform resulting from its inability to obtain money is ordinarily inexcusable regardless of the reason; whether due to an economic downturn, general financial distress or failure of a third party on whom it relied on in furnishing support.

7.11.6 Compensable Delays. A contractor's ability to recover increased costs resulting from delays will depend upon the cause of the delay, the nature of its impact on the contractor and the contractual provisions dealing with compensation for delays. Generally, compensable delays result from either changes in the work, the existence of a differing site condition, or an unreasonable suspension of work or failure of the Government to perform its duties under the contract.

7.11.6.1 Government Delay of Work. The contractor cannot be directed to stop work by anyone other than a warranted ACO with one exception. The only exception to this requirement is to protect the safety of personnel, environmental compliance or prevent the loss of or destruction of property and equipment. If the contracting officer orders the contractor to suspend or stop work, the contractor will always be entitled to an equitable adjustment in both contract price and delivery schedule to compensate for the impact on performance. In other situations, the Government will be at fault if it breaches its implied duty not to hinder or interfere with the contractor's performance or its implied duty to cooperate with the contractor. Generally, the Government will be at fault when it is responsible for:

- a. Delays in making the work site available.
- b. Delays caused by interference with the contractor's work.
- c. Delays in providing required Government reviews and approvals.
- d. Delays in providing funding.
- e. Delays in performing required inspection of work.
- f. Delays in issuing changes.
- g. Delays in furnishing Government Furnished Property.
- h. Delays which are unreasonable in duration.
- i. Delays caused by conflicting or defective Government specifications.

7.11.6.2 Excusable Delay Relief. A contractor is not entitled to relief upon the mere occurrence of an event that qualifies as an excusable delay. The contractor must show that the delay was caused by an excusable event and that the event caused delay to the overall completion of the contract, and the contractor must establish the number of days of relief to which the contractor is entitled. The event alone is insufficient to justify the granting of an excusable delay. Not every fire, quarantine, strike or freight embargo is an excuse for delay. Events may not be beyond the contractor's

control if the contractor could have overcome the effects of the event, and further, when the event is considered foreseeable, the contractor may be held responsible for making alternative arrangements for performance. Even though a contractor can establish that an event or occurrence was unforeseeable, beyond its control and occurred without its fault or negligence, the contractor is not entitled to an excusable delay unless the contractor can prove that the time lost delayed the completion of the job. It is not sufficient to establish that some work was prevented. The work prevented must be work that will delay the overall completion of the job. When the CPM of schedule control is used, the delay must be on the critical path.

- a. Generally, the duration of the time extension is governed by the extent to which the excusable cause of delay either increases the amount of time required for performance of the contract work as a whole, or defers the date by which the last of the required work will be reasonably capable of completion. The extension granted may be longer, shorter or of the same duration as the delay period.
- b. Generally, the amount of equitable adjustment recoverable by a contractor is equal to the costs that were greater than those which would have been incurred but for Government caused delay. Generally, cost increases attributable to the delay, such as those associated with increased labor rates, time-related labor, equipment, insurance and overhead, if any, are accepted and negotiated. Acceleration costs are also recoverable against the Government if they are incurred in mitigation of the effects of a Government caused delay. When reviewing a contractor's request for delay or acceleration costs, particularly unabsorbed overhead, it is helpful to confer with responsible contracting personnel and legal counsel in order to ensure the appropriate criteria is applied to the specific alleged entitlement.

7.11.7 Concurrent Delay. Generally, in a case where the Government and the contractor are each responsible for delay in completing the work, the Government is barred from assessing liquidated damages against the contractor and the contractor is precluded from recovering delay damages. Concurrent delay does not bar extension of time, but it does bar monetary compensation for, among others, daily fixed overhead costs because such costs would have been on account of the concurrent delay even if the Government responsible delay had not occurred.

7.12 AVAILABILITY FINALIZATION.

7.12.1 Availability Completion Conference.

- a. After Sea Trials and before the scheduled availability completion date, the Project Manager will arrange for the Availability Completion Conference. Generally, the scheduling of the conference will be deferred until most of the contractor's deficiencies have been corrected. The Availability Completion Conference is chaired by the Project Manager and should be attended by the **Project and Maintenance Teams**, TYCOM Representative, ship's MT, NAVSEA (if significant NAVSEA alterations were accomplished), the ship's CO and the contractor's representatives including the ship superintendent. For major availabilities, the CO of the RMC shall also attend the conference.
- b. The purpose of the Availability Completion Conference is to establish the date and conditions under which the TYCOM and NAVSEA will accept redelivery of the vessel. To complete the availability and redeliver the vessel, the contractor's work must be completed or exceptions to completion must be documented and agreed upon by the parties concerned. For each exception permitted, a plan to complete the work must also be agreed upon and documented. Additionally, the RMC must ensure that Government responsible work is completed before redelivery or completed with exceptions.
- c. Exception items that the contractor is allowed to complete after the redelivery date must be monitored by Ship's Force and RMC Representatives to ensure contractor compliance with contract requirements. Additionally, the ACO will retain sufficient retention funds to cover the estimated value of the incomplete work. Final payment and release of other retained funds is made when the ACO is satisfied that the contractor has substantially complied with all contract requirements and documented exception agreements.

7.12.2 Exceptions to Completion of the Contract. The exception list developed at the Availability Completion Conference will be reviewed by the Project Manager and the ACO to determine if the contract should be declared complete with the exceptions remaining to be completed. The Project Manager reviews the list with the **MT/Ashore Ships Maintenance Manager** and Project Management Team to identify items that should be deleted from the contract. Items that should be deleted are those items requiring Long Lead Time Material for completion or items that cannot be completed because of factors beyond the control of the contractor. Work item specifications and

TARs are then prepared to support negotiation of contract modifications to delete the work from the contract and reduce the contract value. The on-site team also provides estimates for the outstanding items on the exception list so that the ACO can ensure that adequate funding is retained to complete the outstanding items. The redelivery date of the ship is established by the ACO when agreement is reached by all parties on the disposition plan for all exception items.

7.12.3 Availability Completion. When the RMC considers the ship ready for redelivery to the Fleet, the TYCOM is notified. The TYCOM generally concurs if, in the TYCOM's judgment, the exception list does not include outstanding work which would prevent the ship from being fully capable of accomplishing its mission or an accumulation of smaller items which would seriously affect the ship's safety or operations. When agreements of the Availability Completion Conference have been met (if applicable for the class of ship), the TYCOM will accept redelivery of the ship to the Fleet, the contract is declared complete with exceptions and the availability is officially ended.

7.12.4 Contract Guarantee Period.

- a. When the ship is redelivered to the Fleet, the contract guarantee period begins. The MS/MO contract guarantee period is typically 60 days. For fixed price contracts, the contractor must correct deficiencies in the work performed or in the materials supplied for a period of 90 days. The guarantee period on the items that were exceptions to the completion of the contract will start when the RMC accepts the completed work. Defective contractor work or material deficiencies identified after completion by Ship's Force or others must be reported to the RMC promptly. RMC Representatives investigate the deficiency, and, if it is determined to be a contractor-responsible deficiency, the ACO notifies the contractor in writing. If it is reasonable to do so, the Government must allow the contractor access to the ship to correct the noted deficiencies. If the ship is in port and accessible, the contractor has the option to accomplish the repairs or arrange for another contractor to accomplish the repairs. If the contractor corrects the defect directly or by the use of a subcontractor, then a new guarantee period begins when the repairs are accepted by the RMC. The total guarantee period for any item under a fixed price contract cannot exceed a maximum of 180 days.
- b. If the contractor fails to arrange for the correction of the deficiencies, then the ACO will arrange for the defects to be corrected by other means and execute a contract modification with the contractor for an equitable reduction in the contract value. The defects can be corrected by various Government resources, including Ship's Force or by another prime ship repair contractor. If the ACO contracts with another contractor to correct the defect, then the new contractor is responsible for a new contractor 90-day guarantee period when the repair is accepted by the RMC.
- c. In the case of split availabilities, the contract guarantee period may begin prior to redelivery of the ship to the Fleet if the Navy uses the equipment provided or the repaired item prior to redelivery.
- d. Throughout the guarantee period, the Project Manager must maintain contact with the ship and monitor the contractor's completion of exception items and the correction of guarantee defects. Disputes about guarantee work items must be resolved by the ACO.

7.12.5 Completion Reports. The RMC reviews the records and compiles a number of reports at the conclusion of the availability, the completion of the guarantee period and the closing of the contract.

7.13 INSURANCE.

7.13.1 Introduction. NAVSEA's insurance policy differs from most Government agencies since NAVSEA is basically a self-insurer beyond contractually specified deductibles for which the contractor is responsible. In general, there are two types of insurance coverage. The first covers loss, damage or destruction to the vessel, its equipment or materials; the second covers third party and collision, protection and indemnity liabilities. It is essential to remember that insurance claims are different from contract claims. Specifically:

- a. Require direct physical damage to vessel from external cause.
- b. Excludes delay, disruption, faulty work and materials, cost of sea trials and consequential damages.
- c. Excludes fixed overhead.
- d. Excludes overtime, unless authorized.

- e. Excludes cost of money.
- f. Can pay negotiated profit influenced by degree of contractor fault and based upon profit of all yard work.
- g. Reimbursement not to be based on estimates, but on return costs for labor performed and bills paid for material.
- h. Can settle outside contract price (targets).
- i. Deductible is not a contract cost.

7.13.2 Master Ship Repair Agreements/Multi-Ship/Multi-Option Contracts - Loss or Damage to Government Property. Reference (t) does not refer to any Navy Syndicate Forms (i.e., the coverage is self-contained). The contractor is directed to exercise reasonable care and use best efforts to prevent accidents, injury or damage to all employees, persons and property in and about the work and to the vessel or part on which work is being done. The term "reasonable" is normally defined in terms of criteria established by the National Fire Protection Association. Of course, any specific contract requirements will govern. Issues regarding Insurance should be directed by the Contracting Officer and the Counsel for the RMC. For example, the requirements are very complex and the Department of Defense is self insured as noted in the following:

- a. The contractor will not, unless otherwise directed or approved in writing, carry or incur the expense of any insurance against any form of loss or damage to the vessels or to the materials or equipment to which the Government has title, or which have been furnished by the Government for installation by the contractor. The Government assumes the risks of loss or damage to the vessels and such materials and equipment. The Government does not assume any risk with respect to loss or damage compensated for by insurance or otherwise, or resulting from risks with respect to which the contractor has failed to procure or maintain insurance, if available, as required or approved.
- b. Further, the Government does not assume risk with respect to and will not pay for any costs of the contractor for the inspection, repair, replacement or renewal of any defects themselves in the vessel(s) or such materials and equipment due to the following:
 - (1) Defective workmanship or defective materials or equipment performed by or furnished by the contractor or subcontractors.
 - (2) Workmanship or materials or equipment performed by or furnished by the contractor or subcontractors which does not conform to the requirements of the contract, whether or not any such defect is latent or whether or not any such nonconformance is the result of negligence.
- c. In addition, the Government does not assume the risk of and will not pay for the costs of any loss, damage, liability or expense caused by, resulting from or incurred as a consequence of delay or disruption of any type; or willful misconduct or lack of good faith on the part of any of the contractor's directors, officers, and any of its managers, superintendents or other equivalent representatives who have supervision or direction of all or substantially all of the contractor's business or all or substantially all of the contractor's operations at any one plant. However, for such risk assumed and borne by the Government, the Government will be subrogated to any claim, demand or cause of action against third persons which exists in favor of the contractor, and the contractor will, if required, execute a formal assignment or transfer of claims, demands or causes of action. Moreover, nothing in the above will create or give rise to any right, privilege or power in any person except the contractor, nor will any person (except the contractor) be or become entitled to proceed directly against the Government or join the Government as a codefendant in any action against the contractor brought to determine the contractor's liability, or for any other purpose. In addition, the contractor will bear the first \$50,000 of loss or damage from each occurrence or incident, the risk of which the Government otherwise would have assumed under the provisions specified above.
- d. The Insurance Clause typically requires that the contractor will, at the contractor's expense, procure and maintain such casualty, accident and liability insurance in such forms and amounts as approved by the Government, insuring the performance of its obligations under paragraph (c) of the clause. Further, the contractor will procure and maintain Workers' Compensation Insurance (or its equivalent) covering

employees engaged on the work and will insure the procurement and maintenance of such insurance by all subcontractors engaged on the work. The contractor will provide evidence of such insurance as required by the Government.

7.13.3 Administration of Insurance Requirements.

7.13.3.1 Responsibilities of the Assistant Secretary of the Navy Research, Development and Acquisition - Acquisition and Business Management. The Assistant Secretary of the Navy (ASN) Research, Development and Acquisition (RD&A) - Acquisition and Business Management (ABM) is available to contracting activities to provide guidance on insurance matters. The ASN (RD&A) - ABM is authorized by direction of the Secretary of the Navy, or the duly authorized representative of the head of a contracting activity, the contracting officer or any other naval official designated in such a contract, to do the following:

- a. Require or approve insurance when a contract provides that a contractor will procure such insurance.
- b. Execute, sign or endorse in the name of and by direction of the Secretary of the Navy any and all lost policy releases, proofs of loss, subrogation agreements, endorsements of policies for claims or return premiums, payment orders and insurance drafts made payable to the Secretary of the Navy and not affecting the obligating of appropriations.
- c. For risk pooling arrangements, confirm to the cognizant activity the amount of premium due and, if the funds allocated to the contract are not sufficient, the amount due shall be paid as an item of cost under the contract out of other appropriated funds.
- d. Advise and recommend to the Secretary of the Navy or other authorized interested officials of the Navy Department regarding insurance drafts that affect the obligating of appropriations and assignment, in order to assure payment of premiums found to be due after the completion of a contract.

ASN (RD&A) - ABM should be consulted if any assistance is required in determining Government responsibility. All matters concerning self-insurance covering any kind of risk will be submitted to the ASN (RD&A) - ABM.

7.13.3.2 Procuring Contracting Officer/Regional Maintenance Center Administrative Contracting Officer Responsibilities and Actions. Responsibilities outlined in the NAVSEA Contracts Handbook, Subpart 28.301, include:

- a. Establishing and maintaining adequate records on required contractor insurance.
- b. Expediting acquisition of the required insurance by the contractor.
- c. Reviewing insurance policies. The previous requirement to forward insurance policies to the ASN (RD&A) - ABM for review has been canceled. If problems exist with specific contractor insurance policies that the ACO cannot resolve, then NAVSEA 02 assistance should be requested.
- d. Ensuring the contractor maintains qualifying insurance under the annual Public Law 85-804, Secretary of the Navy Determination or individual authorization (see FAR Part 50.3).
- e. Establishing and maintaining adequate contract records of contractor claims when the Government assumes the risk or indemnifies the contractor under the contract, analyzing such claims to ascertain patterns of neglect or misconduct, and calling such matters to the attention of the contractor.
- f. Taking action on insurance as directed by NAVSEA.
- g. Ensuring that contract modifications for repairs to GFM are not issued when the need for corrective action results from damages of an insurance nature.
- h. Ensuring that any loss or damage that may be the subject of an insurance claim is promptly reported by the contractor in writing to the ACO.
- i. Take the following actions and record the specified information for loss or damage that may be the subject of an insurance claim:
 - (1) Contractor's name and contract number.
 - (2) Navy classification symbol and hull number, if appropriate (not the contractor's hull number).

- (3) Claim number or job order number.
- (4) Date of occurrence.
- (5) Full description of damage and of accident or event causing damage in simple, non-technical language.
- (6) Estimated or actual cost of repair in full detail.
- (7) Comment on any circumstances that make the contractor responsible for the loss, such as willful misconduct, with the Navy not having title to the material because the material was in the possession of a subcontractor, or where the damages were not accidental. The ACO's investigation concerning responsibility must be thorough (the contractor's investigation will not be the only investigation made). When the ACO considers that there are mitigating circumstances concerning the responsibility of either party, the ACO's comments should provide a full report of the circumstances.
- (8) Comment on any need to place the contractor on notice that, due to a repetitive pattern of claims, the Government would not be liable for any future claims.
- (9) Comment to the extent of the contractor's entitlement.
- (10) Legal review by activity counsel.

7.13.3.3 Notification of Legal Actions Against the Contractor. As required by the insurance clause(s) of job orders or contracts, a contractor will immediately, or as soon as practical, notify the ACO of any legal action filed against the contractor if the legal action arises out of the performance of the contract and if the cost may be reimbursable, the risk is uninsured or the amount claimed is in excess of the amount of insurance coverage. The ACO will then direct the contractor to immediately furnish copies of all pertinent papers received in connection with the claim, if not provided with the contractor's notification. The ACO will also promptly notify the NAVSEA contracting officer, or NAVSEA 02, and NAVSEA counsel of any such legal actions filed against the contractor and forward copies of all papers and statements of available facts concerning any action resulting from bodily injury, death or property damage and involving a member of the public or any employee of the contractor or subcontractor.

APPENDIX A

ARRIVAL CONFERENCE AGENDA	
Introduce key players and their roles	Discuss paper flow of contractor reports
Brief RMC role	Define growth and new work and impact
Brief contractor organization and history	Discuss delay and disruption
Brief local policies and procedures	Explain the contractor's fire watch responsibilities
Explain weekly management review cycle	Discuss housekeeping and safety
RMC explain the contract terms	Have contractors explain their approach
Brief each work item	Discuss procedures of communication
Brief each Standard Item referenced	Have contractors discuss the schedule
Outline key event and milestone dates	Identify the contractor-furnished facilities and services
Discuss contractor's and Ship's Force schedules	Discuss security of the ship and the contractor's facilities
Explain constructive changes and acceptance of work	

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APPENDIX B

FIRE FIGHTING AND FIRE PREVENTION CONFERENCE AGENDA	
Fire alarm and response procedures	Shipboard arrangement including access routes, availability of fire fighting systems (installed and temporary) and communication systems
Contractor fire fighting capability and procedures	Shipboard fire fighting organization, systems, drills and equipment
Municipal fire fighting capability and procedures	Ship, space and equipment security consideration
Fire fighting jurisdictional cognizance	Compatibility of ship, contractor and municipal fire fighting equipment
Communication system for fire reporting and control of fire fighting efforts	Industrial work scope, including location of ship, and effect on fire fighting systems, access and communications

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APPENDIX C

DRYDOCKING CONFERENCE AGENDA	
Date of drydocking and time across the sill	RMC dockmaster responsibilities
Docking position	Contractor dockmaster responsibilities
Tugs and pilots	Line handling
Stability for moving into and out of drydock	Sounding tanks after ship has landed on the blocks
Liquid load	Monitoring weight changes while in drydock
Electrical power	Drydock services
Fire pumps	Drydock safety precautions

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APPENDIX D

"ACTIVITY" PROGRESSING METHOD EXAMPLE	
Rip out	10%
Ship to Shop	5%
Disassemble	10%
Shop Report	5%
Repairs accomplished	20%
Reassemble	15%
Shop Test	5%
Shop to Ship	5%
Reinstall	10%
Test in Place	10%
Final Acceptance	<u>5%</u>
	100%

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APPENDIX E

PROGRESS GUIDELINES					
In-Shop Repair	%	On-Ship Repair	%	Ship Changes	%
Interferences Removed	5	Interference Removed	5	Interference Removed	5
Equipment Removed	15			Rip Out Started	15
Equipment Opened	25	Equipment Opened	20	Rip Out Complete	25
Inspection Report Submitted	30	Inspection Report Submitted	25	Installation Started	35
Repairs Started	35	Repairs Started	30		
Repairs Completed	60	Repairs Completed	60		
Equipment Reassembled	70	Equipment Reassembled	75	Installation Complete	70
Equipment Reinstalled	75				
Interferences Replaced	85	Interferences Replaced	85	Interferences Replaced	75
Testing Completed	95	Testing Completed	95	Testing Completed	90
Test Report Submitted	98	Test Report Submitted	98	Test Report Submitted	95
Touch-Up Completed	100	Touch-Up Completed	100	Touch-Up Completed	100

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VOLUME VII

CHAPTER 8

TESTING, TRIALS, REDELIVERY AND GUARANTEES

REFERENCES.

- (a) NAVSEAINST 3960.4 - Implementation of Total Ship Test Program for Ship Production
- (b) NAVSEAINST 3960.5 - Policy on Ship Testing
- (c) NAVSEA S9095-AD-TRQ-010/TSTP - Total Ship Test Program Manual
- (d) DFARS 222.101 - Labor Relations
- (e) NAVSEAINST 4790.14 - Ship Departure and Alteration Completion Reports
- (f) NAVSEAINST 4700.6 - Guarantee Engineer and Industrial Availability Quality Assessment
- (g) OPNAVINST 4700.7 - Maintenance Policy for U.S. Naval Ships

LISTING OF APPENDICES.

A Work Item Completion Report

8.1 PURPOSE. To provide an overview of the processes and requirements that are to be used in the final phases of the performance period in validating satisfactory completion of all work items through post production testing and trials in preparation for the Naval Supervisory Authority (NSA) to certify completion and redelivery of the ship to the Fleet following a maintenance or modernization availability.

8.2 SCOPE. This chapter provides general guidance and identifies processes, testing and trials plans and specific events and meetings that are the responsibility of the NSA as contract administrator to use in validating that the terms and conditions of the contract have been complied with and certifying completion of the contract. The discussion centers on actions to ensure that the contractors work performance is demonstrated during production acceptance testing and trials. Guarantees are required following preliminary acceptance of the work to offset the cost of any premature failures resulting from poor performance that could not be determined before the ship was redelivered to the Fleet.

8.3 APPLICATION OF TOTAL SHIP TEST PROGRAM TO MODERNIZATION AND REPAIR WORK.

8.3.1 Introduction. Production acceptance testing is required by references (a) and (b). Volume I, Chapter 4 and Volume V, Part I, Chapter 7 of this manual contain additional guidance on Tests and Inspections that may apply to significant modernization availabilities or overhauls.

- a. Depending upon the complexity and duration of the Chief of Naval Operations (CNO) availability, the NSA will ensure that test program management and testing is accomplished in accordance with reference (c). The objectives of the Total Ship Test Program principles are to provide a test program that will effectively and efficiently assure that the work performed by all organizations was properly completed and to assess the ship's readiness to perform its mission at the completion of the industrial period.
- b. The technical and inspection requirements to be met by the contractor are detailed in the work item specifications. Normally, both the work specification and the Naval Sea Systems Command (NAVSEA) Standard Items (or other requirements) referenced in the work item must be used to determine the complete technical requirements, check points and other testing to be satisfied by the contractor.
- c. The extent of system testing required will be determined by an engineering analysis performed by the NAVSEA designated Ship Systems Test Development Director or Combat Systems Test Development Director and will be specified in the Integrated Test Package. The Total Ship Integrated Test Package will be provided according to milestones established by the Regional Maintenance Center (RMC) Project Manager or Supervisor of Shipbuilding Advanced Planning Manager or by the Type Commander (TYCOM) or the ship's Maintenance Team.
- d. Reference (c) contains a detailed description of test methodology, development, organizations, processing, witnessing and test problem reporting.

8.3.2 Ship System Testing (Hull, Mechanical and Electrical). The primary assessment agent for Light Off Assessments will be determined by the Immediate Superior In Command. For major availabilities, a Fleet Engineering Mobile Assessment Team may visit as necessary to conduct inspections onboard the ship prior to the Light Off Assessment so corrective action can be identified and written into the work package, as required.

8.3.3 Combat System Testing. Requirements are invoked in the specifications by appropriate work items based on the NAVSEA standard work item 009-67. Work Item 009-67 tasks the contractor to **prepare and manage a comprehensive test plan in accordance with general specifications for overhaul. The Lead Maintenance Activity will develop a test plan, generate test sequence networks, arrange for temporary services to support testing and manage the testing to ensure an orderly and timely completion. Combat system testing normally occurs during the last weeks of the availability. Current NAVSEA guidance has established the following criteria:**

- a. For short availabilities, normally less than 120 days, Stage 3 (equipment tests) and Stage 4 (intra-system tests) of the Total Ship Test Program will be scheduled only for equipment and systems modified, overhauled or repaired. Selected additional Stage 4 and Stage 5 through Stage 7 testing will be specified in the Integrated Test Package to check interfaces disconnected or changed during the availability. Except for testing associated with Ship **Changes**, testing requirements for shorter availabilities is a TYCOM/RMC decision.
- b. Testing requirements will increase proportionally with the length and complexity of the combat system work. Longer availabilities require Stage 3 testing of all equipment, Stage 4 intra-system and Stage 5 through Stage 7 testing of all systems to demonstrate overall combat system operability readiness. Lower level testing of equipment modified, overhauled or repaired will be accomplished by the activity screened to perform the work item.
- c. The industrial activity should accomplish the higher level intersystem testing (Stage 5 and above).
- d. **If assigned, the Combat Systems Project Engineer will assist with integration of the work package and develop the Combat Systems Test Sequence Network as an input to the Integrated Total Ship Test Plan. Working with Ship's Force, the In-Service Engineering Activity and Alteration Installation Teams, the Combat Systems Project Engineer is responsible for all applicable stage testing requirements and will confirm that at availability completion, the Combat Systems are ready to commence training.**

8.4 TRIALS FOR OVERHAUL AND REPAIR AVAILABILITIES.

8.4.1 General. The Master Ship Repair Agreement (MSRA) discussed in Chapter 3 of this volume requires that if dock trials or sea trials are required by the NSA, the trials will be specified in the job order. Accordingly, the specifications will include requirements for such trials if the trials are considered necessary. For a commissioned ship, the ship is operated by Ship's Force and the contractor normally provides a specified number of personnel by trades to ride the ship. The NSA will provide the ship with the list of personnel who will be onboard for the trial. The Naval Ships Technical Manual contains further information on dock and sea trials. The requirement for these trials will specify a scheduled number of days before the completion of work, usually from four to seven days to allow for adequate adjustment and correction of defects found during the trial. The dock trial should be scheduled from two to four days prior to the sea trial for similar reasons.

8.4.2 Post Repair Trials. When required by the specifications, dock trials and post-repair sea trials are conducted before the completion of modernization and extensive repair availabilities primarily to determine satisfactory work performance by the contractor. The ship's Commanding Officer, in coordination with NSA and Repair Yard, is responsible for the scheduling and conduct of trials, preparation of the trial agenda and arrangement of necessary services.

8.4.2.1 Dock Trials. The primary purpose of this trial is to conduct preliminary checks and tests necessary to ensure the ship is ready for operations at sea. Operation of all equipment during dock trials will be attended by NSA and contractor personnel. In addition to tests of the propulsion and damage control systems, special attention should be given to the electrical, electronic and mechanical equipments required for safe navigation at sea.

8.4.2.2 Fast Cruise. The purpose of this evaluation is for Ship's Force to operate the ship while still secured to the pier, as if the ship were at sea. NSA Representatives may be present to witness the operation of certain equipment whose condition was suspect during dock trials. Special attention is given to operation of the combat systems and casualty control drills during this period.

8.4.2.3 Sea Trials. When a post-repair sea trial is required by the specification, RMC Supervisor of Shipbuilding will provide a list of RMC/NSA and contractor personnel required for the sea trials.

8.5 FINALIZATION PROCEDURES FOR REPAIR AND MODERNIZATION AVAILABILITIES.

8.5.1 General. After completion of the required dock and sea trials, the contractor must remedy all contractor-responsible defects (non-conformities) uncovered during the trials and other work which may be authorized. The contractor must make every effort to complete all unfinished work items by the scheduled job order or contract completion date. Where delays are due to the fault or negligence of the contractor, the contractor should be reminded that failure to meet the scheduled delivery date will make the contractor liable to assessment of liquidated damages, in accordance with the terms of the contract. When the contractor's failure to complete the work within the specified time arises from causes beyond the control of and without the fault or negligence of the contractor, as defined in Clause 15(b) of the MSRA or Agreement for Boat Repair, any additional time required for adjustment of job order price for hotel costs for the ship's crew to complete the work may be granted as a job order modification. Reference (d) contains guidance on labor disputes. Disagreements on whether delays are or are not excusable under the terms of this clause are resolved in accordance with procedures established by Clause 17, Disputes, of the MSRA. Disagreements on whether delays are or are not excusable under the terms of this clause are resolved in accordance with procedures established in the job order contract. In either case, the NSA must obtain an extension of the availability period from the parent TYCOM. If an extension cannot be obtained, the percentage of uncompleted work must be determined.

8.5.2 Availability Completion and Readiness for Sea.

- a. The successful completion of an availability or modernization period depends on reaching a mutual agreement between the NSA and the customer (ship's Commanding Officer, TYCOM, NAVSEA Ship's Program Manager) that all work authorized in the approved work package specifications and supplemental work authorizations have been either satisfactorily completed, or an agreement has been reached concerning a completion plan and schedule for any items partially completed. The job order completion date is determined by the contracting officer and formalized by an Availability Completion Certificate. Format for such certificates varies by NSA offices.
- b. **(Surface Force Ships only)** The Readiness for Sea (RFS) period is a period immediately following the maintenance or modernization availability period that is scheduled for active Fleet ships to provide time to complete additional preparations before commencing active sea duty. The RFS period allotted to a ship will not normally exceed seven days and will frequently be less. The RFS period may even be omitted entirely when there is an immediate operational need for the ship. If a ship has been assigned an RFS period immediately following a major availability, the contractor is not normally permitted to use this period for the accomplishment of work items which the contractor has been unable to complete by the scheduled delivery date without obtaining authority from the TYCOM/RMC. If such authority cannot be obtained, the RMC should obtain the assignment of a new availability or an extension of the present availability.

8.5.3 Completion Report.

- a. Based on evaluations of work completion made during the final progressing conference, the senior NSA representative at the contractor's yard should prepare a Completion Report reflecting the final status of all authorized work for the Administrative Contracting Officer (ACO) and other NSA personnel. This report should list and describe each work item and indicate for each item:
 - (1) The dollar value assigned.
 - (2) The final percentage of completion, as determined at the final progressing conference.
 - (3) The final amount due the contractor.
- b. In addition, the report should include a statement on the value of any scrap sold by the contractor so that this amount may be deducted from the final sum due. If the contractor has not yet sold such scrap or if the sale is to be handled by a naval activity, an appropriate notation will be made on the Completion Report, Appendix A.

- c. The ACO may subsequently use the Completion Report as the basis for releasing funds retained from progress payments and for final adjudication with the contractor on any revisions in the contract price resulting from uncompleted work, sale of scrap and similar factors. Any disagreements between the contractor and NSA representative on the percentage of completion of unfinished work items or dollar value of uncompleted work may be resolved with the ACO at this time. Once agreement has been reached, a decrease cost supplemental agreement will be prepared reflecting this agreement.

8.5.4 Terminal Inventory Report. After completion of the availability, the contractor must make a terminal inventory of all excess Government property, including material, equipment, scrap and salvage. This report should be forwarded to the NSA property administrator for appropriate disposal action. The quantity or value of any scrap sold by the contractor in accordance with NSA directions should also be included in this report, as well as in the Completion Report.

8.5.5 Release of Retained Funds and Final Payment to the Contractor. The ACO is required under the progress payments provision of the Payments clause of the MSRA and Agreement for Boat Repair to retain funds sufficient to protect the Government's interests at all times. Conversely, as the contractor meets or, by mutual agreement with the ACO, settles contractual obligations, funds previously retained for these purposes should be released for making payments to the contractor.

8.5.6 Release of Retained Funds. On receiving the Completion Report, the ACO will schedule the release of retained funds in accordance with the sequence of events listed below and advise the contractor of the amount that the contractor may be paid on submitting each invoice. Except as indicated below, the ACO has no authority to retain a percentage of the value of progress payments as a guarantee reserve until expiration of the 90-day guarantee period in anticipation of guarantee defects for which the contractor would be responsible.

- a. First Event - Completion and Acceptance of All Work: Release all retained funds, except those estimated by the ACO to be required to cover the net value of the amount due the Government, if any, resulting from the algebraic addition of all estimated cost changes (unsatisfactory work and incomplete work including missing software), liquidated damages and outstanding increased cost changes.
- b. Second Event - Final Payment to Contractor: On receiving the invoice marked Final Payment, release the balance of the funds retained if the adjusted job order price shown on the invoice includes all equitable adjustments for:
 - (1) Decreased cost changes.
 - (2) Contractor-responsible guarantee defects not corrected by the contractor.
 - (3) Increased cost changes adjudicated before the date of final payment invoice.

8.5.7 Final Payment to Contractor.

- a. Based on the Completion Report and after allowing for any payment from the retained funds, the contractor may make the final billing to the NSA for approval and referral to the local payment office. This billing will normally be made for the final sum specified in the Completion Report (or the sum reached as the result of subsequent negotiations between the contractor and the ACO, less the sum of all previous progress payments and the sum of any payment of retained funds).
- b. The balance of retained funds may not be released for payment until all of the conditions prescribed in section 8.6 of this chapter are fulfilled, including delivery of all of the software required by the job order. If spares have been borrowed by the contractor from the ship, funds should be retained to cover the cost until the NSA is notified of the ship receiving the spares. Although the final billing may be made before the disposition of Government property listed on the terminal inventory report, the final billing should not be certified by the NSA for final payment until receipt of the inventory report, even though the report may be negative.
- c. The NSA certification of the contractor's final invoice is similar to certification of invoices for progress payments. In brief, the cognizant NSA representative and the Inspection Officer should first certify that the work for which the contractor claims payment has been satisfactorily accomplished. Appropriate personnel in the Contracts Department should then make a further check to ensure the accuracy of the computations. The ACO should provide an appropriate certifying statement and affix the ACO

signature. The ACO or other appropriate NSA personnel must indicate on the invoice the amount of the total sum to be paid from each cost category or allotment. The invoice is then forwarded to the paying office for final payment.

- d. When liquidated damages are to be assessed against the contractor, the ACO should include a statement with the contractor's final invoice, notifying the paying office to the applicability of the Liquidated Damages clause of the job order. The paying office will then assess liquidated damages based on the NSA calculation of the amount of liquidated damage that is based on scheduled completion date, the actual date and hour of completion as stated in the final invoice and the daily rate established in the job order for the computation of liquidated damages. If the ACO determines that delays in the completion of the vessel are excusable, a job order modification extending the date should be prepared. In the absence of this modification, the paying office will assess liquidated damages based on the stated completion date.

8.5.8 Departure Reports.

- a. In accordance with reference (e), the NSA is required to submit a Departure Report consisting of the following:
 - (1) Ship Departure Report, reference (e).
 - (2) Alteration Completion Report, reference (e).
- b. The reports required by reference (e) apply to the NSA administering contracts for the performance of repairs and alterations to U.S. Navy ships and crafts for all CNO scheduled availabilities and any other availabilities of 3000 man-days or greater. These availabilities include complex overhauls, regular overhauls, selected restricted availabilities, conversions, inactivations, activations and phased maintenance availabilities. Reference (e) is not applicable to new construction and normally will not be applicable to conversions. These reports would be applicable to conversions only when the authorization procedures used parallel those for regular overhauls of the same type of ship.
- c. Departure Reports and Alteration Completion Reports are to be submitted within 60 calendar days after completion of the availability, unless separately negotiated with individual customers.

8.5.9 End of Availability Certification. The NSA will certify to the NAVSEA Ships Program Manager the status of each logistic element with respect to its completed delivery and receipt onboard the ship. Copies of this certification shall be provided to the TYCOM, Planning Yard and the ship. This form is due 30 days after the end of the availability.

8.5.10 Guarantee Engineer and Industrial Availability Quality Assessment Reports. Reference (f) defines the Guarantee Engineer as the manager for the correction of guarantee items on CNO-scheduled modernization or repair availabilities accomplished by naval and private shipyards. NAVSEA policy requires that a guarantee engineer be assigned to each ship completing a major modernization availability. This guarantee engineer will have the authority to establish the contractor's position on all discrepancies and to initiate immediate corrective action on those considered contractor-responsible. In addition, this instruction requires an Industrial Availability Quality Assessment Report for all CNO-scheduled availabilities. Following the completion of the guarantee period, the Guarantee Engineer Report will be submitted to NAVSEA in accordance with the flowchart provided with this instruction. The NSA will flag any discrepancies on the Guarantee Engineer Report with which the NSA disagrees. The Industrial Quality Assessment Report, a comprehensive appraisal of the availability and a narrative assessment of the Guarantee Engineer's Report will be provided, noting any disagreements or questionable data found. Both reports must be submitted within 30 days after completion of the guarantee period.

8.5.11 Integrated Logistic Support Requirements. Reference (g) states that all logistics required for the support of maintenance during the life of new ships or classes will be identified, and necessary resources will be programmed and budgeted, sufficiently in advance of ship deliveries to ensure that all required maintenance logistic support is in place on ship delivery and will be fully supported during the life cycle of the ship. Specific Intergrated Logistic Support reporting is located throughout Volume VI of this manual.

8.6 FINAL ACCEPTANCE.

8.6.1 Guarantee Period. The contractor is responsible for the correction or repair of defects in work performed by the contractor on the ship, if such defects are discovered within a period of 90 days after completion of the job order. The responsibilities of the NSA are specified by Clause 11, Guarantees, of the MSRA and Agreement for Boat Repair. This clause also provides that the starting date of the guarantee period for items which were incomplete at the time of completion of the job order is the date that work on that item is completed. For example, if a pump repair is only 75 percent complete at the time the availability is completed but this repair is finished 10 days afterwards, then the initial guarantee period for this pump repair is end of overhaul plus 10 days to end of overhaul plus 100 days. The NSA will maintain a record of the completion dates of such items to establish the guarantee period.

8.6.2 Correction of Defects. If defects in the work performed or material furnished by the contractor are found during the guarantee period, the NSA will, if practical, afford the contractor an opportunity to effect such corrections and repairs. When the condition, location or operating commitments of the vessel require immediate use of the defective equipment, or for any other reason returning the vessel to the contractor is impractical or undesirable, or when the contractor fails to proceed promptly with the repairs when directed by the contracting officer, such correction and repairs will be effected at the contractor's expense at another location which the Government will determine.

8.6.3 Availability Extensions. If additional time is required for correction of defects, the NSA shall request from the TYCOM or RMC a Continuous Maintenance Availability. The ACO shall obtain certification of completion from the Commanding Officer of the ship once the defect has been adequately corrected. In addition, if the corrective work is of sufficient scope and importance, the ACO may request the NSA nearest to the current location of the ship to act as the inspection officer and provide further certification after satisfactory completion of the work. When qualified private contractors are unavailable in a given area, the contractor may prefer to have a Naval Shipyard perform the work. In such cases, the NSA should contact the Naval Shipyard to determine whether it can accept the work and, if so, to make appropriate administrative arrangements with the shipyard and the TYCOM for performing the work. The contractor will then be required to deposit funds adequate to cover the performance of the work in advance. Excess funds will be returned to the contractor after completion of the work.

8.6.4 Notices to Contractor.

- a. If returning the ship to the contractor is considered practical and feasible, the notice to the contractor will advise the contractor of:
 - (1) The nature of the defects and deficiencies deemed to be the contractor's responsibility.
 - (2) The reason why the contractor is responsible, including references to the applicable job order, specification work item and work item requirements.
 - (3) The place and date the ship will be available for the contractor to inspect the defects and deficiencies involved and the arrangements made for the contractor's inspection.
- b. If returning the ship to the contractor is considered impractical or undesirable, the notice to the contractor will advise the contractor of:
 - (1) Nature of the defects and deficiencies deemed to be the contractor's responsibility.
 - (2) Reason why the contractor is responsible, including references to the applicable job order, specification work item and work item requirements.
 - (3) Explanation why returning the ship to the contractor for repairs is impractical or undesirable.
 - (4) Place and date the ship will be available for the contractor's inspection of the defects and deficiencies involved and the arrangements made for the contractor's inspection.

8.6.5 Work Correction Under Another Naval Supervisory Authority. When permitting the contractor to repair the defect is not practical, the TYCOM/RMC should arrange for an additional availability of the ship under another NSA or at a Naval installation. The original NSA should provide the Authorization Letter and applicable Work Specifications to the other NSA or Naval Installation. The original NSA should be furnished a copy of the Departure Report after completion of the work describing the work performed and the costs incurred. The original NSA should ensure that no other repairs of a non-guarantee nature are included or, if such work were performed, that the repairs are charged to the TYCOM and not to the original contract. Once the costs for the corrective work

have been determined, the NSA should advise the contractor of the costs and should obtain a check in the billed amount made out to the U.S. Treasurer. This check should be deposited at the proper Authorized Accounting Agency with the request that the amount be credited to the funds used originally to pay for the work.

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APPENDIX A
WORK ITEM COMPLETION REPORT

From: Senior NSA Representative

To: Contracting Officer,

Subject: DD-175 USS Ready, Completion Report

Contractor: Jones Corporation

Type Availability:

Availability:

Work Started:

Arrived:

Undocked:

Dry-docked:

Departed:

<u>Item</u>	<u>Description</u>	<u>Percent Completed</u>
099-00	GENERAL CRITERIA (NEW 3/73)	
099-02	CALIBRATION AND CERTIFICATION REQUIREMENTS (2/73)	
099-04	CHECK POINTS (2/73)	
099-06	ABRASIVE BLASTING	
099-09	PROCESS CONTROL PROCEDURE REQUIREMENTS (2/73)	
099-14	DOCUMENTATION (2/73)	
099-23	INTERFERENCE (2/73)	
099-50	GOVERNMENT PROPERTY (NEW 3/73)	
099-51	GANGWAYS/BROWS (NEW 3/73)	
099-52	KEY EVENT/REPORT SCHEDULE FOR SHIPS (NEW 3/73)	
099-62	PROCUREMENT OF PARTS (REV 10/73)	
099-63	INSTALLATION OF ELECTRICAL AND ELECTRONIC CABLES (NEW 3/73)	
099-64	PAINT WORK (NEW 6/73)	
099-65	POST REPAIR TRIALS	
099-66	TEMPORARY SERVICES	
099-67	TOWBOAT SERVICES	

<u>Item</u>	<u>Description</u>	<u>Percent Completed</u>
099-68	GAS FREEING LOT I (APPLICABLE TO LOT I ONLY)	
099-68	GAS FREEING LOT III (APPLICABLE TO LOT III ONLY)	
099-70	PURCHASE ORDERS AND PURCHASE ORDER INDEX (NEW 8/73)	
099-72	INSPECTION SYSTEM REQUIREMENTS (NEW 8/73)	
999-01	DRYDOCKING AND UNDOCKING	
999-02	STATIC GROUNDING	
999-03	UNDERWATER HULL INSPECTION	
999-04	BOTTOM CLEANING AND PAINTING	
999-05	WATER SLEEVES REPAIR	
999-06	FATHOMETER TRANSDUCER REPLACEMENT	
999-07	RUDDER REPAIRS	
999-08	UNDERWATER LOG VALVE REPAIRS	
999-09	DRAFT MARKS VERIFICATION (S/A 150K IN PART)	
999-10	SEA VALVES REPAIR	
999-11	PROPELLER REPAIRS	
999-12	SHAFTING AND BEARINGS	
999-8	CATHODIC PROTECTION, ANODES REPLACEMENT	

8,000 lbs of Scrap sold by the contractor

I certify that the above percentage of completion is correct as of date shown, all Navy-owned Scrap has been accounted for, and all reports and test results as required have been received.

Senior NSA Representative

VOLUME VII
CHAPTER 9
PROPERTY ADMINISTRATION

REFERENCES.

- (a) Federal Acquisition Regulation (FAR) Part 45 - Government Property
- (b) Defense Federal Acquisition Regulation Supplement (DFARS) Part 245 - Government Property
- (c) Navy and Marine Corps Acquisition Regulation Supplement (NMCARS) Part 5245 - Government Property
- (d) NAVSEA Contracts Handbook (NCH), Part 45 - Government Property
- (e) Department of Defense (DoD) Manual 4161.2 - Manual for Performance of Government Property Administration
- (f) DFARS 245.505 - Records and Reports of Government Property
- (g) NMCARS 5245.505 - Records and Reports of Government Property
- (h) DFARS 245.7001 - Selection, Appointment and Termination
- (i) DFARS 245.7002 - Duties and Responsibilities of Plant Clearance Officers
- (j) 10 USC 1724 - Defense Acquisition Workforce Improvement Act (DAWIA)
- (k) DD Form 1638 - Report of Disposition of Contractor Inventory
- (l) FAR 45.6 - Scope of Subpart
- (m) FAR 45.102 - Policy
- (n) FAR 45.5 - Management of Government Property in Possession of the Contractor
- (o) FAR 45.306 - Providing Special Tooling
- (p) FAR 45.307 - Providing Special Test Equipment
- (q) FAR 45.310 - Providing Agency Peculiar Property
- (r) FAR 45.302 - Providing Facilities
- (s) FAR 45.301 - Definitions
- (t) DFARS 245.302 - Providing Facilities
- (u) NMCARS 5245.302 - Providing Facilities
- (v) DFARS 245.301 - Definitions
- (w) DoD Automation Resources Manual 7950.1-M
- (x) FAR 45.4 - Contractor Use and Rental of Government Property
- (y) FAR 52.245-4 - Government-Furnished Property (Short Form)
- (z) DFARS 245.6 - Reporting, Redistribution and Disposal of Contractor Inventory
- (aa) DFARS 245.608-70 - Contractor Inventory Redistribution System (CIRS)
- (ab) OPNAVINST 5090.1 - Environmental and Natural Resources Program Manual
- (ac) FAR 52.245-2 - Government Property (Fixed Price Contracts)
- (ad) Naval Facilities Engineering Command (NAVFAC) Manual MO-322 - Inspection Guides, Structural, Mechanical and Electrical
- (ae) NAVFAC Technical Publication DM-29 - Drydocking Facilities

9.1 SCOPE. Government property administration will be accomplished in accordance with specific contract requirements and references (a) through (e). This chapter provides additional guidance to be used in application of Government property administration. When terms of the contract conflict with other directives, the terms of the contract will generally govern.

9.2 REAL AND PERSONAL PROPERTY. Government Property includes all property, both real and personal, and generally falls into one of the following types of property:

- a. Land.
- b. Other Real Property.
- c. Industrial Plant Equipment.
- d. Other Plant Equipment.
- e. Special Tooling.

- f. Special Test Equipment.
- g. Agency Peculiar or Military Property.
- h. Material - Government Furnished Material (GFM) and Contractor Furnished/Provided Material (CFM).

9.2.1 Government Property Types. Definitions of types of Government Property are found in reference (a) and (b). The following paragraphs provide key additional information.

- a. Government property consists of both Government Furnished Property (GFP) and contractor-acquired property. GFP is property that the Government has possession of and provides to a contractor or directly acquires to provide to the contractor, including related data and information requested or furnished to the contractor that is reasonably required for the intended use of the property. The definition of GFP is especially important in the material area because of the requirement to report, as a separate line, the value of GFM on DD Form 1662 of references (f) and (g).
- b. Contractor acquired property is property acquired or otherwise provided by the contractor for performing a contract and to which the Government has/takes title. When a contract is a cost type, all property purchased as a direct charge to the contract becomes Government-owned contractor-acquired property. Under fixed price and fixed price incentive contracts, all property purchased by the contractor which is spelled out as a line item in the contract or is a change order line item becomes Government-owned contractor-acquired property. A requirement exists to report the value of Contractor Acquired Material as a separate line on the DD Form 1662 of reference (f).
- c. CFM is a term in common use in the property administration field that is not used in the Federal Acquisition Regulation or Defense Federal Acquisition Regulation Supplement. CFM is considered to be material provided by the contractor to which the Government has acquired a lien or title solely because of partial, advance or progress payments (usually a fixed price contract). The requirements of reference (a) do not apply. This definition allows the discussion of all types of material in the contractor's possession related to a fixed price contract, that is: GFM and Contractor Acquired Material, which are covered by reference (a) requirements and CFM, which is not covered under reference (a) requirements. Any other property to which the Government acquired title or lien solely because of partial, advance or progress payments can be considered contractor-furnished property to which the requirements of reference (a) do not apply.

9.2.2 Duties and Responsibilities for Contract Administration of Government Property.

9.2.2.1 Head of Regional Maintenance Center Contracts Department.

- a. Select, appoint and terminate Property Administrators in writing to comply with references (e) and (h).
- b. Appoint the Plant Clearance Officer in writing with responsibilities as outlined in reference (i). The Property Administrator may serve in this capacity.
- c. Validate that Property Administrators and Plant Clearance Officers have completed and continue to satisfy the mandatory training course requirements for their certification level as required by reference (j).

9.2.2.2 Regional Maintenance Center Property Administrator Duties and Responsibilities.

- a. Administer Government Property per the guidance in references (a), (b), (c) and (e) and as outlined in the Government Property Clauses or specific contractual provisions (e.g., Insurance clauses and the Liens and Title Clause) of each contract ensuring that all types of government property are considered in property administration oversight.
- b. Conduct annual property control surveys and validate that the contractor's approved Property Control Procedures comply with government requirements and contract clauses for the upcoming fiscal year.
- c. Review each contract to determine the requirements and clauses in effect concerning GFM, Government Furnished Information, CFM, Special Tooling and Test Equipment, Rental of Property and Agency – Peculiar Property.
- d. Verify that contract clauses exist which allows contractor access to the supply system for purchase of material for particular purposes such as "cash sales".

- e. Oversee disposition of excess government property as prescribed in the contract or direct disposition when required. This includes submitting a quarterly report per reference (k).
- f. Ensure the transfer of Government property between contracts when required.
- g. Certify that contractors annually, as required by contract, enter data in the Contract Property Management System or submit information to Assistant Secretary of the Navy (Research, Development and Acquisition).
- h. With the Contracting Officer authorization, coordinate the repair or modification of Government Furnished Property when it has been received in a condition that is not suited for its intended use.
- i. Administer all facility contracts and leases for which Regional Maintenance Center (RMC) has been designated contract administrator, either by specific letter, contract document or by Naval Sea Systems Command (NAVSEA) instruction.
- j. When required, supervise the contractor's preparation and maintenance of property record cards for Class III property, maintaining individual equipment identification logos, ensuring that equipment is properly marked and identified and taking periodic inventories.
- k. Ensure that contractors use facilities in accordance with lease agreements and in the event that the involved contractor is using the facilities for commercial work when such work is not authorized, immediately direct the contractor, in writing, to cease the unauthorized use.
- l. Review and approve the contractor's program for the inspection, maintenance, repair, adjustment, protection and preservation of equipment under facilities contracts. Such reviews are conducted at the inception of a contract and at least annually thereafter, as long as the facilities remain in the contractor's possession.
- m. Monitor rental payments for facility contracts, floating drydock leases and production equipment leases to ensure payment in accordance with the agreements and report pertinent information to NAVSEA as required.
- n. For government-owned facilities, when required, verify that the contractor or lessee maintains the proper type of insurance in amounts acceptable to the Insurance Examiner of the Navy.
- o. Provide the annual inspection of civil works.
- p. Arrange for periodic inspections of fire protection measures at reserve plants under RMC's cognizance.
- q. Maintain Shore Facilities Planning System documents for facilities under RMC's cognizance.
- r. Administer the removal/transfer and disposal of facilities under RMC's cognizance.

9.2.2.3 Contractors.

- a. Annually, as required by contract, enter data in the Contract Property Management System or submit information to Assistant Secretary of the Navy (Research, Development and Acquisition).
- b. Identify Government property when it is no longer needed to perform the contract, in accordance with reference (l), the terms and conditions of the contract, and report excess property to the Plant Clearance Officer.
- c. Coordinate the disposal of all government property with the Plant Clearance Officer as directed by contract or in compliance with Contractor Inventory Redistribution System (CIRS) or other Navy plant clearance programs designated for the reutilization and disposal of excess material.
- d. Coordinate the disposal of hazardous material and hazardous waste in accordance with the terms and conditions of the contract and in coordination with the Plant Clearance Officer and Environmental Coordinator.

9.3 PROVIDING GOVERNMENT PROPERTY TO CONTRACTORS.

9.3.1 Property. Under reference (m), contractors are ordinarily required to furnish all property necessary to perform Government contracts. If contractors are provided Government property, the Navy is required to ensure that the requirements of reference (m), concerning minimization of competitive advantage, use of Government property only as authorized, rental when appropriate, contractor responsibility and accountability, contractor justification for retention and reutilization of contractor inventory within the Government, are met.

9.3.2 Material.

- a. Contractors ordinarily furnish all material for performing Government contracts. The Navy provides material to a contractor when necessary to achieve significant economy, standardization, expedited production or when otherwise in the Government's best interest in accordance with references (a) and (b). These directives also provide guidance for economic utilization of available Government-owned material as GFM (in lieu of CFM).
- b. In repair and overhaul contracts, GFM is usually identified by the Planning Activity in the schedule of the contract or the specifications. In new construction contracts, GFM is usually identified in Schedule A of the contract, with Government Furnished Information identified in Schedule C. Outfitting material provided as GFM is usually identified (by the Navy Inventory Control Point - NAVICP, Mechanicsburg, PA) in the Consolidated Shipboard Allowance List, which is considered to be part of the contract.
- c. During the performance of the contract, if the contractor has difficulty in obtaining CFM for contract use, the Government has three options:
 - (1) Issuing a supplemental agreement authorizing substitute material (with no degradation or increase in contract price and appropriate reduction in price if substitution results in lower overall cost to contractor).
 - (2) Authorizing the contractor to obtain the required CFM through the "cash sales" procedure in accordance with Naval Supply Systems Command guidance.
 - (3) Issuing a supplemental agreement converting the CFM to GFM with a decrease in contract price and release of any government responsibility for delay or disruption if subsequent material is not received in a timely manner. This method should only be used as a last resort.
 - (4) The Property Administrator should ensure that contractor's approved Property Control Procedures address special considerations when any of the three options are used.

9.3.2.1 "Cash Sales" Procedures.

- a. Naval Supply Systems Command Manuals contain procedures to permit contractor purchase from Navy sources, as well as providing direction to the Administrative Contracting Officer for developing local instructions on use of the cash sales method. The Property Administrator must ensure that the contractor has specific procedures to address requests for cash sales purchases, as well as procedures for receiving and tracking of cash sales material to ensure that all Navy policies and requirements for control, use and return (if required) of cash sales material are met. The Property Administrator will include a review of the contractor procedures during the annual/biennial contractor property control surveys. The Navy Supply System considers all purchases from the supply system that are not Government requisitions to be cash sales because of the method of payment used. NAVSEA refers to cash sales only for unique circumstances where the Government is providing assistance to the contractor to meet contract requirements without the administrative burden of contract modification. Other contract clauses exist which allow contractor access to the supply system for purchase of material for particular purposes. The Property Administrator must review the individual contract upon award to determine if such a clause has been included.
- b. RMC monitoring of contractor access to the supply system for purchase of material, excluding the Navy cash sales procedure, should be kept to a minimum. Involvement will vary depending on the type of contract. In all cases other than cash sales, the supply system is another vendor for the contractor. The material purchased by the contract will be covered by reference (n) requirements if purchased under a

cost type contract or as a line item under a fixed price contract. If the material is purchased under a fixed price contract (and not defined as a line item purchase), reference (n) requirements do not apply. RMCs should still monitor contractor actions under fixed price contracts in order to ensure that no fraud, waste or abuse is occurring. The property is CFM (if not a line item purchase) and Government oversight of that material is limited.

9.3.3 Special Tooling. Reference (o) gives direction for providing special tooling to contractors both existing special tooling and special tooling purchased by the contractor under cost-reimbursement contracts (Government acquires title) and fixed price contracts (Government may or may not acquire title). Special tooling requirements and clauses may vary between contracts. Therefore, the Property Administrator must review each contract carefully to determine the requirements and clauses in effect.

9.3.4 Special Test Equipment. Reference (p) addresses requirements for providing existing Government-owned special test equipment as well as requirements for acquiring special test equipment. It also references applicable Federal Acquisition Regulation clauses.

9.3.5 Agency-Peculiar Property. Reference (q) notes requirements for providing the contractor with agency-peculiar property (i.e., military property).

9.3.6 Facilities. Contractors are required to furnish all facilities required for performing Government contracts except as provided under reference (r). Reference (s) addresses the requirements for facilities contracts when the Government does provide facilities. Additional facilities determinations and approval guidance is provided in reference (t). Reference (u) gives specific Navy guidance on determinations and approval for providing facilities.

9.3.7 Industrial Plant Equipment. Reference (v) relates requirements for providing industrial plant equipment with an acquisition cost of \$15,000 or more.

9.3.8 Automated Data Processing Equipment. Reference (t) provides guidance to Administrative Contracting Officers on processing acquisition of automatic data processing equipment to the Defense Information Systems Agency in accordance with reference (w).

9.4 CONTRACTOR USE AND RENTAL OF GOVERNMENT PROPERTY. Reference (x) prescribes policies and procedures for use and rental of Government production and research property. Generally Government use is on a rent-free basis. Non-Government use is on a rental basis. RMCs administer very few contracts that allow rental of Government property for non-Government use. The value of those administered is very small. The Government Property Administrator must be aware of any rental clauses, since utilization rates for the property must consider Government and non-Government utilization.

9.5 ADMINISTRATION OF GOVERNMENT PROPERTY.

9.5.1 Regulation and Contractual Requirements. The primary contractual clauses affecting the administration of Government property are the Government Property clauses of reference (y). They may be used in solicitations and contracts when a fixed price, time-and-material or labor-hour contract is contemplated where the acquisition cost of all GFP is \$100,000 or less.

9.5.1.1 Oversight of Contractor Operations. Reference (x) and its supplemental documents contain extensive and detailed administrative requirements regarding Government property. The most detailed guidance is provided in Chapter 5 of reference (e), which addresses special topics related to the property administration process that may be applicable to property administrators. The Property Administrator must ensure that all types of government property are considered in property administration oversight. Property to which the Government has acquired a lien or title solely as a result of advance, progress or partial payments is not subject to the requirements of reference (n). There are special provisions related to the disposition of excess Government property related to fixed price incentive contracts that are not applicable for other types of fixed price contracts as explained in paragraph 9.5.3.5 of this chapter. The property administrator may be involved in review of contractor furnished material for fixed price contracts under other contracts requirements related to areas such as Material Management and Accounting Systems, but not under reference (n) requirements.

9.5.1.2 Liens and Title Clause. Specific contractual provisions that affect the administration of Government property (e.g., the Insurance clauses and the Liens and Title clause) are usually included in contracts. The Liens and Title clause in fixed price contracts does not affect the reference (a) guidance that property to which the Government acquires a lien or title solely as the result of advance, progress or partial payments is not subject to the requirements.

9.5.1.3 Transfer of Government Property Between Contracts. The Property Administrator must ensure that transfer of Government property between contracts is accomplished in accordance with reference (c). Excess Government property from one contract should be transferred for use on another contract where a need is identified, but must not be transferred to another contract where a need for the property is not identified.

9.5.1.4 Annual Property Administration Plan and Report. At the beginning of each fiscal year, each RMC shall schedule analyses of the contractor's system for property administration to be conducted for all active contractors during the upcoming fiscal year.

9.5.1.5 Annual Reports. For contracts that require annual property reports, property administrators and contractors should enter data in the Contract Property Management System no later than 15 November at <http://web1.dcmde.dema.mil/cpms/> or mail paper copies of the certified DD 1662s of reference (f) to:

Assistant Secretary of the Navy (Research, Development and Acquisition)
OASN (RDA)ACQ,
1000 Navy Pentagon BF992
Washington, DC 20350-1000

9.5.1.6 Additional Reports. In accordance with reference (b), each RMC will submit a DD Form 1638 report to NAVSEA on a quarterly basis. Reports are required at NAVSEA by 15 October, 15 January, 15 April and 15 July. The Remarks Block of the form should be used to explain major increases or decreases in value of excess property reported and/or dispositioned. Excess property reutilized on other Government jobs or contracts at the contractor facility should not be reported on the DD Form 1638.

9.5.2 Responsibilities and Duties. Whatever the organizational alignment, personnel designated as Government Property Administrators are primarily responsible for the administration of contractual provisions related to Government property.

9.5.2.1 Appointment and Duties of Property Administrators. The selection, appointment and termination of appointment of property administrators shall be made in writing by the Head of the Contract Administration Office or designee. Reference (h) addresses selection and appointment/termination requirements. Reference (e) addresses the duties and responsibilities of the Property Administrator.

9.5.2.2 Appointment and Duties of Plant Clearance Officers. The Plant Clearance Officer shall be appointed in writing by the Head of the Contract Administration Office or designee. The Property Administrator may serve as the Plant Clearance Officer. Reference (w) delineates Plant Clearance Officer duties.

9.5.2.3 Training Requirements for Property Administrators and Plant Clearance Officers. Property Administrators and Plant Clearance Officers will satisfy the mandatory training course requirements for their certification level as required by reference (j).

9.5.3 Plant Clearance.

9.5.3.1 Procedures. In accordance with reference (l), contractors are to identify Government property when it is no longer needed to perform the contract. The Plant Clearance Officer should work with contractors to ensure excess Government property is disposed of in a timely manner by established time frames for reporting excess Government property with contractors.

9.5.3.2 Disposal Methods. References (l) and (z) address the plant clearance process and reference (aa) stipulates the use of the CIRS. The Navy has established other plant clearance programs to expedite and increase reutilization and disposal of excess material that should be utilized prior to CIRS actions. New, ready-for-issue, standard stock-numbered material may be returned to the Navy supply system through the Material Turn Into Stores program. Non-standard, ready-for-issue material may be returned through the Material Returns Program for identification and reutilization screening. Other Navy programs that are appropriate for the particular type of excess material to be disposed may be utilized. Disposition of Automated Data Processing equipment, Industrial Plant Equipment and special test equipment should follow procedures in reference (z). CIRS may be utilized for disposal of excess material that cannot be handled by the Navy disposal program.

9.5.3.3 Disposing of Hazardous Material/Hazardous Waste. The distinction of hazardous material and hazardous waste is important, particularly regarding the disposal actions. Reference (ab) provides the following definitions:

- a. Hazardous Material (or hazardous substance): Any material, which because of its quantity, concentration or physical, chemical or infectious characteristics may pose a substantial hazard to human health or the environment when released or spilled.
- b. Hazardous Waste: Any waste material, liquid, solid or gaseous, that because of quantity, concentration or physical or chemical characteristics may:
 - (1) Cause or significantly contribute to an increase in mortality or to a serious and irreversible or reversible but incapacitating illness.
 - (2) Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed or otherwise managed. This excludes infectious and radioactive waste. If infectious or radioactive wastes are mixed with an EPA/state-regulated hazardous waste, then the hazardous constituents remain regulated as a hazardous waste. Hazardous waste does not include hazardous material with an expired shelf life unless designated as such by a Defense Reutilization Marketing Service.

Coordination between Plant Clearance Officer and the Environmental Coordinator is necessary to ensure that excess hazardous material and hazardous waste are properly identified for disposition actions in accordance with contract requirements and federal, state and local environmental regulations.

9.5.3.4 Disposal Actions Resulting From Engineering Changes. Under fixed price contracts, engineering changes may result in CFM being converted to Government property. If the contractor has already purchased material to perform a part of the contract covered by the fixed price and that part is changed so that the contractor can no longer use the material, the engineering change will normally identify the material for purchase by the Government. The contractor should have a system to ensure that the material is identified to the Plant Clearance Officer as excess Government material. The Plant Clearance Officer then follows normal procedures to dispose to the material.

9.5.3.5 Disposal Provisions Under Different Types of Contracts.

- a. The need of the Government for the excess material should be considered in determining title to excess material since there is a cost to the Government associated with disposal actions. Contractor needs for the excess material may also be considered in determining title, as well as “value” to be credited to the contract if the contractor retains the material. The value credited to the contract will vary depending on the needs of the Government and the needs of the contractor. The value of the material can be zero, depending on the material and circumstances associated with disposal actions.
- b. Identifying excess Government property under firm-fixed-price and cost-reimbursable type contracts is straightforward.
 - (1) Under firm-fixed-price contracts, all excess GFP and property paid for as a line of the contract (outside the firm-fixed-price) is considered to be Government property for the Government plant clearance actions (though the form of the Liens and Title clause must be followed in the plant clearance process).
 - (2) In cost-reimbursable contracts, all excess GFP and excess contractor-acquired property accountable to the contract is considered Government property for plant clearance operations. Fixed price incentive contracts (with the fixed price Government property clause) require a more involved process to distinguish excess Government property (to be disposed through the plant clearance process) from excess contractor-owned property for contractor actions. The incentive portion of the contract creates a share line between the Government and the contractor. Other clauses in the contract may affect ownership of excess. Identification of ownership of residual contractor furnished material under the fixed price incentive contracts requires the coordination of the Property Administrator, Plant Clearance Officer and contracting officer, as well as NAVSEA 02, 00L and 04.
- c. The contractor is required to provide a list of all residual material on the fixed price incentive contract to the Government.
 - (1) If the Government takes title to the material, no further contract actions are required.

- (2) If the Government does not take title to the material and the material is retained by the contractor, the contract must be credited for the value of the material (the value may be negotiated). The Government may take title to only part of the residual, with the remainder going to the contractor and the contract being credited for only the value of the material going to the contractor.

9.6 RESPONSIBILITIES OF THE CONTRACTOR. Specific contract requirements determine responsibilities of the contractor. However, reference (n) was developed to allow the Government to review an entire system of contractor-Government property control. The Property Administrator must be aware of unique or additional contract provisions to ensure that the contractor adjusts his Government property control system to meet special requirements.

9.7 REPAIR OR MODIFICATION OF GOVERNMENT FURNISHED PROPERTY. When Government property is furnished to a contractor and is received in a condition not suited for its intended use, the contracting officer may, under the terms of the Government Property clause or other contract provision, direct the contractor to affect the necessary repair or modifications. Equitable adjustment in the contract price and other provisions may be necessary following procedures in the "Changes" clause or other provisions of the contract. Reference (ac) provides procedures to allow effective and economic ordering and pricing of repair or modification of GFP.

9.8 FACILITIES AND LEASES.

9.8.1 General. The RMC is responsible for the field administration of all facility contracts and leases for which it has been designated contract administrator, either by specific letter, contract document or by NAVSEA instruction. The RMC may also be assigned responsibility for administering the National Security clause in instruments of sale of industrial facilities.

9.8.2 Property Accountability. The cognizant RMC has property accounting responsibility for facilities which exist regardless of whether the facilities are under NAVSEA contracts, leases or permits for which representatives of other offices are the contract administrators. The responsibility includes supervising the contractor's preparation and maintenance of property record cards for Class III property, maintaining individual equipment identification logos, ensuring that equipment is properly marked and identified and taking periodic inventories. These functions are performed in accordance with the requirements of the Navy Comptroller Manual.

9.8.3 Use of Facilities. Facilities contracts may limit the contractor's use of the facilities to specified NAVSEA contracts or to other specified work. In the event that the involved contractor is using the facilities for commercial work when such work is not authorized, RMC will immediately direct the contractor, in writing, to cease the unauthorized use. When the unauthorized use is in performance of another Government contract, the RMC will inform the contractor that it must seek proper contractual authorization for use. All instances of unauthorized use of facilities will be reported in detail to the cognizant facility's contracting officer.

9.8.4 Rental Payment. NAVSEA facilities contracts, floating drydock leases and production equipment leases provide for rental payments to the Government on various bases. Rental payments are made monthly, quarterly or annually. To ensure prompt payment, the cognizant RMC should obtain from the contractor either a copy of the letter transmitting the rental payment to the Agency as designated in the lease/rental agreement or other assurances of payment, as necessary. When rental payments become 30 days overdue, the RMC should notify NAVSEA describing the circumstances. The RMC should also furnish NAVSEA with any other pertinent information it may have about the contractor's financial condition, so that NAVSEA may take appropriate action with regard to the delinquency. Any questions involving interpretation of the method of computing the amount of rental payments also should be referred to NAVSEA for clarification.

9.8.5 Insurance. When insurance of Government-owned facilities is required by the terms of the contract or lease, it is the RMCs' responsibility to see that the contractor or lessee carries the proper type of insurance in amounts acceptable to the Insurance Examiner of the Navy.

9.8.6 Need for Funds. The cost of normal maintenance and security for each facility must be borne by the contractor, lessee or occupant to the extent of its responsibility under the agreement. The cost of long term or Capital Maintenance may be funded by NAVSEA or through Contracting Officer approved use of lease revenue for Capital Maintenance projects with Not to Exceed ceilings. The RMC will monitor the contractor/lessee

maintenance efforts and inform NAVSEA of problems, if any, and when approved maintenance has been completed. In addition, the RMC should continually study and make recommendations as to the means by which preservation of essential reserve production capacity at reserve plants can be maintained on a self-supporting basis whenever possible.

9.8.7 Maintenance Responsibility Under Facilities Use Agreements.

- a. NAVSEA facilities contracts and leases generally require the contractor to protect, maintain, preserve and repair the facilities involved in accordance with sound industrial practices. Capital expenditures are not the contractor's responsibility and capital repairs at Government expense can generally be made only on the basis of specific authority and funding from the NAVSEA contracting officer.
- b. The beginning of the non-use period should be considered as that point at which productive use for the Government has terminated. Termination for productive use for the Government generally comes with the delivery of the last ship or boat to the Government. Incidental use of transportation or other equipment in connection with the storage and disposal of surplus Government-owned material and equipment alone should not delay the beginning of the non-use period.
- c. Prior to the time when maintenance expenses will become reimbursable by the Government under the contract, the contractor, in conjunction with the RMC, should prepare a maintenance and protection plan and budget, according to NAVSEA maintenance and protection standards. This plan and budget should then be forwarded to NAVSEA for approval. If the plan and budget are approved by NAVSEA, expenses incurred in performing the work are reimbursable under the facilities contract. The contractor should prepare and submit separate invoices for work performed in accordance with the approved plan and budget.

9.8.8 Inspection and Report of Machinery and Equipment Maintenance. The property administrator must review and approve the contractor's program for the inspection, maintenance, repair, adjustment, protection and preservation of equipment under facilities contracts. Such reviews are conducted at the inception of a contract and at least annually thereafter, as long as the facilities remain in the contractor's possession.

- a. The property administrator's inspection and intervening spot checks should be sufficiently detailed to determine that the machinery and equipment are receiving the care that the contract and good industrial practice require. Maintenance practices must include lubrication of bearings and other moving parts, adjustments for wear of moving parts before deterioration of associated parts takes place and regular and proper cleaning. Any evidence of inadequate care, unsatisfactory performance or possible damage to machinery or equipment that is discovered by the property administrator should be fully investigated.
- b. Maintenance inspection by the field office must include Navy machinery and equipment that is in storage or that is idle pending transfer. The removal of the machinery or equipment to storage or its contemplated transfer does not relieve the contractor of its maintenance responsibilities. The contractor is responsible for seeing that the property is properly handled and safeguarded against damage when it is moved into storage or prepared for transfer to a new location. Some time may elapse between the date on which machinery or equipment is reported idle and the date of its shipment to a new location. Prior to the removal of the machinery or equipment in such cases, the RMC should determine whether any damage, loss or deterioration that might alter the decision to transfer the property has occurred. If such a change has occurred, NAVSEA should be notified and confirmation or revision of the shipping order requested.
- c. Immediately following each maintenance inspection or spot check, the RMC shall notify the contractor by letter of any deficiencies that have been noted and direct it to take appropriate corrective action. Follow-up letters should be sent to the contractor as necessary to ensure that the deficiencies are corrected. Copies of all such letters shall be sent to NAVSEA. Any damage, excessive wear or deterioration of machinery or equipment should be recorded on all copies of the property record card, with a statement of the corrective action taken to repair the damage. If a periodic inspection of a plant (other than an occasional or spot check) discloses no deficiencies in the care, maintenance or use of the Navy-owned machinery or equipment and if the RMC is fully satisfied that the contractor is fulfilling its contractual obligations in this respect, NAVSEA should be so informed by letter. Whenever a

recommendation is made that maintenance should be accomplished, as a financial responsibility of NAVSEA, an estimate of the cost of making such repair should be included, along with an explanation of why the cost is considered NAVSEA's responsibility.

9.8.9 Inspection and Report of Maintenance of Civil Works.

- a. The Naval Facilities Engineering Command Engineering Field Division provides technical services to the RMC in connection with the inspection and maintenance of civil works. Civil works include lands, structures and utilities owned by the Government that are operated by contractors, are in the possession of contractors or are held under the National Security clause. Transportation and weight handling equipment are also considered civil works for purposes of this inspection. It is the RMC's responsibility to see that civil works are inspected at least annually (unless this requirement has been specifically waived by NAVSEA).
- b. Civil works inspections, conducted in accordance with reference (ad), are made by a team composed of representatives of the RMC, the Facilities Engineering Office (FEO) and the contractor. If the plant is under the administrative control of the General Services Administration, a representative of that agency will also participate in the inspection. Any deficiencies noted in the civil works should be called to the attention of the contractor's representative during the inspection.
- c. Following the inspection, the FEO submits a report of the deficiencies noted, with its recommendations for corrective action. This report is submitted to the RMC, with copies sent directly to NAVSEA by the FEO. The RMC, in turn, furnishes NAVSEA with its comment on the report and any special recommendations it may wish to make. The RMC also provides a copy of the report to the contractor and requests the contractor to submit a schedule of dates by which the recommended maintenance will be completed. With the assistance of the FEO the RMC then takes appropriate follow-up action to ensure that the work is, in fact, completed. If the RMC feels that the work is the responsibility of the Government rather than the contractor, NAVSEA should be so informed, with supporting reasons, contractor's estimate of cost and the FEO's comment as to the reasonableness of the estimate.

9.8.10 Inspection of Dry Docks. Periodic inspections of dry docks under facilities contracts or leases administered by the RMC shall be made in accordance with reference (ae).

9.8.11 Fire Protection Measures. The RMC is responsible for arranging for periodic inspections of the fire protection measures at the reserve plants under its cognizance. Inspections shall be made annually unless NAVSEA specifically waives this requirement. A waiver should be requested only in exceptional circumstances.

9.8.12 Inspection and Report of Mobilization Readiness. NAVSEA is required to submit to the Secretary of Defense annual inspection reports with regard to each plant in the National and Departmental Reserve for which NAVSEA is responsible. These reports are prepared by RMC and must be submitted to NAVSEA no later than 15 August each year. The preparation of the report should be correlated with the report of the annual inspection of civil works.

9.8.13 Shore Facilities Planning System. Except where the requirement has been specifically waived, the RMC is responsible for maintaining the Shore Facilities Planning System documents for facilities under its cognizance.

9.8.14 Redistribution and Disposal. The RMC is responsible for administering the removal, transfer and disposal of facilities under its cognizance. In addition, idle production equipment in industrial reserve plants should be reported to NAVSEA for further reporting by NAVSEA to the Defense Industrial Plant Equipment Center. No facilities may be removed or transferred from a facilities project until authority to do so has been received from NAVSEA.

VOLUME VII
CHAPTER 10
ENVIRONMENTAL, SAFETY AND HEALTH

REFERENCES.

- (a) OPNAVINST 5090.1 - Environmental and Natural Resources Program Manual
- (b) NAVSEA Standard Work Item 077-01 - Hazardous Waste Produced on Naval Vessels; control
- (c) Federal Acquisition Regulation (FAR)
- (d) Occupational Safety and Health Act of 1970
- (e) 29 CFR 1910 - Occupational Safety and Health Standards
- (f) OPNAVINST 5100.23 - Navy Occupational Safety and Health (NAVOSH) Program Manual
- (g) NAVSEA S9086-CH-STM-030 - NSTM Chapter 074 V3 (Gas Free Engineering)
- (h) National Fire Protection Association Codes and Standards 306 - Standards for the Control of Gas Hazards on Vessels
- (i) 10 USC 7311 - Repair or Maintenance of Naval Vessels: Handling of Hazardous Waste

10.1 PURPOSE. This chapter outlines Navy policies and Regional Maintenance Center (RMC) responsibilities associated with the protection of the environment, the safety and health of government personnel and the safety of government property in private shipyards.

10.2 ENVIRONMENTAL PROTECTION.

10.2.1 Background.

- a. Reference (a) describes the Navy's Environmental Protection (EP) Program and establishes Navy policy for conducting operations in an environmentally sound manner. The goals of this program are to comply with existing federal, state and local environmental laws and regulations, conserve natural resources, prevent pollution, clean up existing waste sites and facilitate the development and introduction of new technologies that will support these goals.
- b. Federal facilities and personnel are responsible and liable for compliance within their areas of control. In addition, the Navy may be determined to be responsible for activities that occur in private shipyards associated with the construction, repair and modernization of Navy vessels.

10.2.2 General Policy. This section delineates policy guidance established by reference (a) for RMC implementation of the EP program. It contains a brief overview of inspections, liabilities, specific elements and limitations of the EP mission. In accordance with the policy stated in reference (a), RMC personnel are to perform their duties in compliance with federal, state and local laws, as well as Navy regulations and directives. Navy EP regulations, unless contractually invoked for shipboard applications, do not apply to contractors. Additionally, RMCs performing their contract administration responsibilities will not directly assume an enforcement role with respect to contractor EP program management, either by contract language or administrative or personnel actions, unless directed by higher authority.

10.2.3 Regional Maintenance Center Responsibilities.

10.2.3.1 Regional Maintenance Center Commanding Officers. RMC Commanding Officers are responsible for ensuring that the command mission is accomplished in accordance with applicable federal, state, local and Navy environmental protection laws and regulations. Specific EP program areas that should be addressed include, but are not limited to:

- a. Establishment of an appropriate environmental management system and organization.
- b. Reductions in internal hazardous materials usage.
- c. Oversight of contractor and Ship's Force hazardous materials and hazardous waste management efforts.
- d. Acquisition pollution prevention.
- e. Environmental self-evaluations.

- f. Management of government-furnished materials (including shelf-life management) for ship repair and modernization.
- g. Collection and reporting of data for determination of contractor performance award fees (when applicable).
- h. Collection and reporting of data for contractor past performance databases.
- i. Interface with Ship's Force during availabilities to ensure compliance with applicable requirements.
- j. Environmental issues related to management of inactive Fleet assets.
- k. Performing generator duties with regard to Navy-generated hazardous wastes (where applicable).
- l. Ensuring appropriate environmental controls are in place for new construction warranty work on homeported vessels.

10.2.3.2 Manager for Environmental Protection. The Manager for Environmental Protection (which may be combined with the Manager for Occupational Safety and Health) reports to the RMC Commanding Officer. Primary functions include:

- a. Developing, implementing, managing and evaluating local policy and directives to address the requirements defined above.
- b. Advising the RMC Commanding Officer on EP matters.
- c. Serving as the single point of contact on EP issues.
- d. Interfacing with contractor, regulator and other Navy personnel on EP issues.
- e. Developing and providing training for personnel.
- f. Submitting reports required by reference (a).

10.2.3.3 Environmental Self Evaluations. RMCs are required to conduct Environmental Self-Evaluations using the Naval Sea Systems Command (NAVSEA) 04R Environmental Compliance Checklist. The RMC should add all applicable state and local regulatory requirements as specific attributes to ensure compliance with issues applicable to the individual RMC. RMCs must conduct Environmental Self-Evaluations annually unless they are exempted from this requirement by the responsible Naval Facilities Engineering Command Engineering Field Division and NAVSEA. The result of the Environmental Self-Evaluation is a report to the Commanding Officer (CO) that allows the command to evaluate its own environmental compliance posture and its overall environmental management.

10.2.4 Regional Maintenance Center Oversight Functions.

- a. The RMC performs oversight, but not enforcement, of contractor EP programs. This oversight is limited to ensuring compliance with contractual requirements. The contractors are responsible for compliance with applicable federal, state and local environmental regulations in their facilities. Contractual deficiencies are to be brought to the contractor's attention for correction. Non-contractual deficiencies identified by RMC personnel shall be informally reported to the contractor. The RMC shall conduct more in-depth oversight in the event that significant or recurring deficiencies are identified, or in the event the contractor fails to take appropriate corrective action within a reasonable time frame. The RMC shall report violations of federal, state or local laws and regulations identified in the contractor's facility to the appropriate regulators and the contractor should be notified whenever this action is taken.
- b. Correction of EP deficiencies in contractor workplaces, whether at the contractor's facility or a Navy facility, is the contractor's responsibility. The RMC shall employ the Corrective Action Request (CAR) in accordance with Chapter 11 of this volume to bring deficiencies to the attention of the contractor. These CARs shall be titled "Environmental Deficiency Report" to differentiate them from other types of deficiencies reported in a CAR. CARs shall also be considered as supporting documentation for evaluation of contractor performance for award fee determination, where applicable, and also as past performance data for consideration in award of future contracts.

- c. RMCs shall coordinate with other Navy commands, whether shore facilities or ship COs, when contracts administered require work on Navy property to ensure contractor compliance with applicable Navy facility requirements.

10.2.5 Hazardous Waste. RMCs shall ensure that handling, storage, transportation and disposal of hazardous wastes from ships undergoing repair is in accordance with reference (b), and all Federal, State, and local regulations. Section 52.223-3 of reference (c), and the Alternate I clause of that same paragraph, provide additional guidance on the management and disposal of hazardous waste. Different states have established specific procedures for issuing Environmental Protection Agency generator numbers and disposal procedures for hazardous waste generated at private and government facilities. Ship COs and hazardous waste coordinators shall check with their local Manager for Environmental Protection to ensure that proper hazardous waste disposal procedures are used. The RMC shall establish a Memorandum of Agreement with Ship's Force to define responsibilities for disposal of hazardous and infectious wastes generated by the ship. Ship's Force-generated wastes are not subject to regulation as hazardous wastes while the wastes are on board the ship.

10.3 OCCUPATIONAL SAFETY AND HEALTH.

10.3.1 Background. It is Navy policy to enhance operational readiness and mission accomplishment by establishing an aggressive and effective Occupational Safety and Health (OSH) Program. The goals are to reduce job-related injuries, material damages, and to maintain healthful working conditions. Occupational safety addresses control of hazards that can result in immediate injury or death. Occupational health is primarily concerned with the identification and minimization of exposure to hazardous chemical, biological and physical agents.

- a. Section 19 of reference (d) and subsequent Presidential Executive Orders direct Federal Agencies to establish and maintain OSH programs. Reference (e) contains the requirements for these programs.
- b. The Navy OSH (NAVOSH) Program is a major component of the Navy's overall mission. A comprehensive overview of NAVOSH is contained in reference (f), the Navy Occupational Safety and Health Manual.

10.3.2 Policy Guidance. Reference (f) establishes policy guidance for implementation of the NAVOSH program. It contains a brief overview of liabilities, specific elements and limitations of the OSH program.

10.3.3 Regional Maintenance Center Responsibilities.

- a. RMC Commanding Officers are responsible for ensuring safe and healthful workplaces. Specific OSH program functions and responsibilities include, but are not limited to:
 - (1) Establishing an appropriate OSH management system and organization.
 - (2) Providing mishap prevention programs.
 - (3) Establishing hazard abatement programs.
 - (4) Providing OSH training.
 - (5) Conducting workplace inspections.
 - (6) Coordinating occupational health and industrial hygiene field support.
 - (7) Establishing OSH councils/committees.
 - (8) Establishing clear lines of authority to ensure all personnel are fully aware of their rights and responsibilities.
 - (9) Fostering hazard awareness in all personnel.
 - (10) Conducting contractor oversight.
 - (11) Collecting and reporting data for determination of contractor performance award fees.
 - (12) Collecting and reporting data for contractor past performance databases.
- b. Manager for Occupational Safety and Health. The primary functions and responsibilities of the Manager for Occupational Safety and Health include:

- (1) Developing, implementing, managing and evaluating local policy and directives to address the requirements cited above.
- (2) Advising the Commanding Officer on OSH matters.
- (3) Serving as the single point of contact on OSH issues.
- (4) Interfacing with contractor, regulator and other Navy personnel on OSH issues.
- (5) Developing and providing training for personnel.
- (6) Providing timely and accurate submittal of reports required by reference (f).

10.3.4 Occupational Safety and Health Oversight Functions.

- a. **Navy Workplaces.** Navy workplaces are defined as Navy-owned or Navy-leased facilities or those furnished by a contractor for Navy exclusive use. Navy workplaces should be inspected at least annually. Hazardous workplaces should be inspected more frequently as determined appropriate by the Manager for Occupational Safety and Health.
- b. **Contractor Workplaces.** RMCs will not conduct inspections of facilities owned and occupied solely by contractors. The contractor is responsible for providing safe working conditions for their personnel, in accordance with regulations, in contractor production shops, shipways, dry-docks, etc., that are not occupied by Navy personnel. When a contractor is performing work on board a Navy ship, the ship space involved is a contractor workplace in which the RMC and the ship's CO have a NAVOSH responsibility for protection of government personnel and property. The RMC does not enforce Occupational Safety and Health Act requirements in contractor workplaces, but does conduct monitoring to ensure safe working conditions for government employees. The RMC monitors the contractor's efforts, especially aboard Navy ships under construction, overhaul and repair, to ensure safe working conditions in areas where government personnel are present. It also brings OSH deficiencies to the contractor's attention for correction.
- c. **Shared Workplaces.** Certain workplaces, such as receiving areas for Government Furnished Equipment, are shared by both government and contractor personnel. As with contractor workplaces, the RMC monitors shared workplaces to ensure safe working conditions for government personnel and inform contractors of OSH deficiencies. RMCs may remove Government employees when a space is not compliant with Occupational Safety and Health Act, even if no imminent danger is present.
- d. **Deficiency Abatement.** NAVOSH deficiencies identified in Navy-owned workplaces are to be abated by the RMC or another cognizant Naval command. Abatement of OSH deficiencies at contractor facilities is the contractor's responsibility. Safety and environmental deficiencies are brought to the contractor's attention through the use of a CAR in accordance with Chapter 11 of this volume. These CARs should be titled "Safety Deficiency Report" to differentiate them from other types of deficiencies reported in CARs. These CARs should also be considered as supporting documentation for evaluation of contractor performance for award fee determination, where applicable, and also as past performance data for consideration in award of future contracts.
- e. **Imminent Danger.** In the event of imminent danger to personnel or property, work will be stopped immediately by the observing party (RMC, Ship's Force or contractor), and the RMC will immediately remove all government personnel from the site, notify responsible management and insist on immediate correction or termination of the operation.
- f. **Ship CO Coordination.** RMCs should collaborate with the ship's CO in NAVOSH inspections relating to contractor work sites and operations. Unless otherwise specified by agreement, NAVOSH responsibilities do not extend to Ship's Force. Nevertheless, NAVOSH requirements are essentially the same for each party. The RMC should keep the CO and prospective CO informed of significant deficiencies that could adversely affect the ship or Ship's Force.
- g. **Gas-Free Engineering.** Requirements for gas-free engineering by Navy personnel are addressed in reference (g). Gas-free operations accomplished by contractors are addressed in reference (h), Section 306.

10.3.5 Inspections.

- a. The Navy Inspector General coordinates the inspection program of NAVOSH and conducts oversight inspections of Navy shore activities. Additionally, **United States** Fleet Forces Command, Pacific Fleet and NAVSEA will conduct periodic onsite Environmental, Safety and Health reviews of ship repair contracts and the controls exercised by the RMC to ensure compliance with contractor oversight responsibilities and reference (i) requirements.
- b. RMC and other government personnel should comply with contractor safety precautions as well as Occupational Safety and Health Act regulations while in the contractor's facility. Navy fire protection and NAVOSH requirements, unless contractually invoked for shipboard applications, do not apply to the contractor. RMCs should not directly assume an occupational health and safety enforcement role with respect to the contractor's safety program, either by contract language or by administrative or personnel actions. Both the RMC and contractor are responsible for providing safe and healthful working conditions for their respective employees.

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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) **Quality Maintenance Plan Standard Operating Procedures Instruction**
- (m) NAVSEAINST 4700.17 - Preparation and Review of Trouble Reports
- (n) 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 (QMS)** 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 **QMS** 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 **QMS** adequate for the work. The contractor must provide and maintain a **QMS** 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 **QMS**, 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 (**NSI**) 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 **NSIs** (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 **NSI** 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 QMS 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 **QMS**.
- 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 **QMS**. The RMC will conduct an adequacy review and furnish the contractor written notice of the acceptability of the documented **QMS**.

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 **QMS** audits (functional audit), and **horizontal or vertical** product quality audits are conducted to determine the effectiveness of the contractors **QMS**, analysis of the process and assessment of product conformance. The **QMS** audit may be conducted as a single audit or may be a combination of several audits. **Targeted Process and Product Quality Audits shall be scheduled at least once every 12 to 18 months for each contractor**, provided a complete **QMS** audit is performed every five years. Attributes for the accomplishment of the **QMS** 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 QMS, 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. **The RMC will schedule and conduct the following audits** at least once every 12 to 18 months at a minimum:

- a. **Contract Administrative Quality Assurance Program (CAQAP).**
 - (1) **Planning.**
 - (2) **Documents Review/PR.**
 - (3) **PE.**
 - (4) **PVI.**
 - (5) **Quality Audits.**
 - (6) **Correction Actions.**
 - (7) **QDE.**
 - (8) **Work Specification Review:**
 - (a) **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 are clearly stated and includes the appropriate tolerances.**
 - (d) **The use of references in work specifications should be avoided unless the material is too expensive to quote or paraphrase.**
 - (e) **An (I), (V) and (G) point is not invoked in the work specification before a paragraph which references a NSI which invokes the same (I), (V) and (G) points.**
 - (9) **Training:**
 - (a) **Personnel providing in-process oversight of the contractors shall complete introduction/overview training of CAQAP elements.**
 - (b) **Personnel performing contractor Quality Management System Audits shall receive both introduction/overview training of CAQAP elements and also introduction/overview of ISO 9001 training.**
 - (c) **Personnel performing quality audits of the contractor must satisfactorily complete ISO 9001 Internal Auditor or Lead Auditor training or equivalent.**
 - (d) **Personnel assigned as Lead Auditor/Audit Team Leader must satisfactorily complete ISO 9001 Lead Auditor training as a minimum.**
- b. **Quality Management Plan for Chief of Naval Operations (CNO) Continuous Maintenance Availability (CMAV) availability requiring certification, reference (I).**
 - (1) **Navy Maintenance Database (G)-Point Tracking - G-Point completion recording is current with work progression and consistent with the contractor's Test and Inspection Plan (TIP).**
 - (2) **Population of Contractor's TIP - Is consistent with the corresponding (I), (V) and (G)-Points required by the individual work items and the associated NSIs.**
 - (3) **Maintenance or Contractor's TIP - Work progression is up to date and completed tests and inspections are in accordance with NSI 009-04 and 009-67.**
 - (4) **Objective Quality Evidence documents captured and complete.**

- (5) Closeout processing of completed Expanded Process Control Process.
- c. Additional items for internal audit consideration. Reports for CNO/CMAV availability certification.
 - (1) Required Reports:
 - (a) Submission.
 - (b) Compliance to content dictated by the Work Specification.
 - (c) Appropriate RMC routing and technical parameter review via Engineering Support Request (ESR).
 - (d) Appropriate response with technical direction via ESR.
 - (e) Contractual incorporation into the work package of resultant technical direction.
 - (2) Condition Reports (growth):
 - (a) Appropriate RMC routing and technical parameter review via ESR.
 - (b) Appropriate response with technical direction via ESR.
 - (c) Contractual incorporation into the work package of resultant technical direction.
- d. Additional items for internal audit consideration. Certification Process/Execution for CNO/CMAV availability.
 - (1) Undocking (if applicable).
 - (2) Production Completion Date.
 - (3) Combat Systems Production Completion Date (AEGIS Light-off for AEGIS Ships).
 - (4) Dock Trials.
 - (5) Fast Cruise.
 - (6) Sea Trials
- e. Expanded Process Control Process program review.
- f. Total Ship Readiness Assessment program review.

11.5.5.3 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 (m) 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 B 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 QMS.
- 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 (n) 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.dcms.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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APPENDIX A

PRESERVATION DEPARTURES FROM SPECIFICATIONS PROCESS DECISION TREE

NOTE: THIS DECISION TREE DOES NOT CHANGE ANY TECHNICAL REQUIREMENTS. THE LEVEL OF AUTHORITY REQUIRED INDICATES AT WHAT LEVEL AN OUT-OF-SPECIFICATION CONDITION CAN BE APPROVED WHEN PROPERLY DOCUMENTED AND WITH AN ACKNOWLEDGED INCREASE IN THE RISK OF PREMATURE FAILURE. THIS DOES NOT MEAN THAT THE OUT-OF-SPECIFICATION CONDITION WILL NECESSARILY BE ACCEPTED. THE DECISION TO ACCEPT OR REJECT WORK WILL BE MADE BASED ON THE APPLICABLE REQUIREMENTS AND OTHER CONSIDERATIONS.

General Usage of the Table

- A. This decision tree does not change any technical requirements. The “Level of Authority Required” indicates at what level an out-of-specification condition can be approved. Mitigation guidance on out-of-specification requirements does not imply that a particular out-of-specification condition will be accepted. The decision to accept or reject an out-of-specification requirement will be made at the level indicted in the table.
- B. Minor out-of-specification conditions as described in the columns for “Mitigation Only” and “Local Chief Engineer (CHENG)” in this table represent a low risk of premature coating failure as long as required mitigation actions are taken and the out-of-specification condition is limited with respect to the area being worked. More significant out-of-specification conditions require a formal Waiver/Deviation (Departure from Specification (DFS)) for adjudication of the condition.
- C. The “Mitigation Only” category must be adjudicated by the local Technical Authority (shipyard, Regional Maintenance Center and TRIDENT Repair Facilities) at the first occurrence of an out-of-specification condition during a particular work item after which the government Quality Assurance (QA) activity/representative can apply the same mitigation guidance for the specified requirement. Re-occurrences of a previously mitigated condition require documentation at each occurrence (see J, below).
- D. All DFSs (minor or major, temporary or permanent) must be adjudicated in accordance with Naval Sea Systems Command (NAVSEA) 5400.95 Enclosure 2.
- E. Unless otherwise specified, this table applies only to critical-coated areas.
- F. This table does not apply to NAVSEA 08 cognizant spaces as described in NAVSEA Instruction C9210.4, which specifically includes potable water tanks and reserve feed tanks.
- G. When using this decision tree for submarine preservation, the local technical authority is required to evaluate the nonconformance in accordance with the appropriate Unrestricted Operation/Maintenance Requirement Card requirements.
- H. Repeated waiving of the same out-of-specification requirements shall be cause for the applicator, with the assistance of the local Technical Authority (shipyard or Regional Maintenance Center engineering code), to determine and eliminate the root cause of the noncompliance. If it is determined that the applicator cannot meet the stated requirements, notify NAVSEA accordingly.
- I. The local Technical Authority shall decide when multiple out-of-specification conditions or repeated (same) out-of-specification conditions on the same work item warrant a minor or major DFS. In particular, if multiple out-of-specification “Mitigation Only” and/or “Local CHENG” conditions exist and/or affect an area in excess of 0.3% of the total surface area of a work item, the local Technical Authority will submit a minor or major DFS, depending on the severity/risk of the cumulative out-of-specification conditions.
- J. Unless otherwise specified, action to “document” an out-of-specification condition requires submittal of the **NSI 009-32** QA inspection forms (included in the appendices of 009-32). These forms become part of the Objective Quality Evidence and shall be retained.

PRESERVATION DEPARTURES FROM SPECIFICATIONS PROCESS DECISION TREE

TABLE A

Surface Preparation					
QA Element	Requirement	Level of Authority Required			
		NAVSEA Major DFS	DFS	Local CHENG DL/DR/ESR/etc.	Mitigation Only
A. Surface Profile					
1. Critical-Coated Areas					
a. Average (mils)	2 ≤ profile ≤ 4	<2 ⁽²⁾	>6	5 ≤ profile ≤ 6	4 < profile < 5
b. Individual gage readings (mils)	1 ≤ gage reading ≤ 5	<0.6 ⁽²⁾	>6	0.6 ≤ profile ≤ 1 and 5 ≤ profile ≤ 6	n/a
2. Nonskid (flight deck, hangar bay and weather decks only)					
a. Average (mils)	3 ≤ profile ≤ 4.5	<3	>6	4.5 < profile ≤ 6	n/a
b. Individual gage readings (mils)	None	<2	>6	5.5 < profile ≤ 6	n/a
3. QA Readings	(1)	≥10% missing	5% < missing < 10%	0% < missing < 5%	n/a
Notes:					
1. Documentation Requirement: measurements are to be taken in accordance with Method "C" of American Society for Testing and Materials (ASTM) D 4417 with a sampling rate of five (5) readings for the first 1000 ft ² or portion thereof; two (2) for each additional 1000 ft ² or portion thereof. For individual areas of less than 25 ft ² two (2) readings are required. If several small areas are combined on one QA record, at least one (1) tape is required from each area not to exceed five (5) readings per 1000 ft ² . In accordance with Method "C" of ASTM D 4417 one "reading" is defined as the average of three (3) tapes taken in one area.					
2. Only when discovered during a record review; otherwise the condition should be corrected as it represents extremely high risk.					

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COMUSFLTFORCOMINST 4790.3 REV C

PRESERVATION DEPARTURES FROM SPECIFICATIONS PROCESS DECISION TREE

Surface Preparation

Rationale for Allowing Departure:

- **Profiles below the limit:** The greatest risk of coating failure due to improper profile is if the profile is insufficient. If an inspection reveals that a profile is too low, local engineering or the inspector shall direct the area to be reblasted. A major departure will be written for a low profile only if the low profile is discovered during a record review. NAVSEA will then be consulted to weigh the various factors contributing to the decision and to determine if the risk of premature failure is justified based on the known schedule impact and cost of rework.
- **Profiles above the limit:** There is low risk of coating failure due to an excessively thick profile, but it does indicate that Quality Control has failed. With solvent based coatings, however, the risk of solvent entrapment increases with excessive profile as more coating must be applied to cover the high peaks with the proper WFT. Excessive profile may indicate a poor choice of abrasive and typically increases the cost of the job due to additional raw materials (paint and abrasive) and labor hours for blasting and clean up. When Dry-Film-Thickness (DFT) readings are performed per Society for Protective Coatings (SSPC)-PA 2, one of the requirements is to "zero" the gage on a blasted, unpainted area. This ensures that the gage readings reflect the coating thickness above the top of the profile peaks, which ensures that the coating thickness is adequate regardless of the surface profile.

Mitigation:

- When high profiles are allowed, mitigation efforts shall be documented and shall include: increased frequency of WFT gage use, special attention to DFT gage calibration, and increased primer thickness when deemed necessary. For paints with lower solids (e.g., MIL-DTL-24441), additional cure time may be necessary to ensure the complete release of solvent as the film cures.

PRESERVATION DEPARTURES FROM SPECIFICATIONS PROCESS DECISION TREE

TABLE B

Surface Preparation					
QA Element	Requirement	Level of Authority Required			
		NAVSEA Major DFS	DFS	Local CHENG DL/DR/ESR/etc.	Mitigation Only
1. Staining a. SSPC-SP 10, SSPC-WAB 10 (L) and SSPC-SP 12 WJ-2 (L)	random staining of an area ≤5%	n/a	random staining of an area >15%	10% < random staining of an area ≤15%	5% < random staining of an area ≤10%
2. Tightly Adherent Coating ⁽¹⁾ a. SSPC-SP 10, SSPC-WAB 10 (L) and SSPC-SP 12 WJ-2 (L)	none remaining	>0.05% remaining or size of largest tightly adherent area >5in ²	Area Affected ≤0.05% and Size of Largest Area <5in ²	Area Affected ≤0.02% and Size of Largest Area <2in ²	n/a
3. Flash Rusting a. SSPC-WAB 10 (L) and SSPC-SP 12 WJ-2 (L)	flash rust no greater than "L" on entire surface(2)	5% < not "L"	2% < not "L" ≤5%	0.5% < not "L" ≤2%	not "L" <0.5%
Notes:					
1. As defined by SSPC-SP 7.					
2 NAVSEA allows SSPC-WJ-2 and SSPC-WAB-10 surfaces to flash rust to "L" or "Light" for application of coatings on Naval vessels. SSPC defines flash rust as discoloration that develops within a few hours of completion of blasting as the surface dries. Any rust that develops over several hours or days after the surface has completely dried is defined as rust-back, not flash rust. Immediately after the surface has dried, the amount of flash rust that has developed shall be determined, and shall not be greater than "Light", as defined below. Immediately prior to painting, however, if rust-back has occurred such that rust is present in excess of the amounts allowed by SP-10, WJ-2, or WAB-10 (whether tightly adherent or not), the surface must be re-blasted to remove this rust and bring the surface back into the required condition. Rust-back is also an indication that chlorides remain present on the surface, which will directly negatively impact the final coating system performance, even if the rust itself is tightly adherent.					

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COMUSFLTFORCOMINST 4790.3 REV C

PRESERVATION DEPARTURES FROM SPECIFICATIONS PROCESS DECISION TREE

Surface Preparation

Rationale for Allowing Departure:

- **Staining:** Paragraph 5.4.7.3 of NSTM 631 states in part that SSPC-SP-6 (which allows 33% random staining) will result in a degree of cleaning that is adequate for the majority of conventional coating systems under normal exposure conditions. The current requirement for dry abrasive blasted areas is SSPC-SP 10 (which allows 5% random staining) - allowing up to 15% staining with adjudication and mitigation at the local level does not represent a high risk.
- **Staining and Productivity:** If a small area of out-of-specification cleanliness is discovered prior to complete cleaning of the tank or area, the inspector or local engineering code normally direct further blasting. If the condition is discovered after completion of the final cleaning, reblasting would normally involve the loss of two to three production days (as much as 60% of the original production blasting cost) to reblast and reclean the area. The cost of reblasting and recleaning generally is not cost effective since the small amount of surface prepared to SSPC-SP-6 is not expected to impact the coating performance.
- **Tightly Adherent Coating:** Paragraph 7.2.4.4 of NSTM 631 states in part, "Brush-off blasting (SSPC-SP-7) may be used instead of blasting to bare metal in those instances where an epoxy coating is in good condition and has been applied over a well-prepared surface. This method should result in a surface retaining all paint films, but free from all corrosion products, scale, and foreign matter". SSPC-SP-7 is considered an adequate surface preparation method when the remaining coating is in good condition.
- **Excessive Flash Rust:** During preparation of a large area with wet abrasive or Ultra high pressure, some of the adjoining area will flash to "M" or "H". Recovery from flash rusting often requires an effort equivalent to the initial preparation of the surface. In cases where a small area has excessive flash rust bloom adjoining a larger area of acceptable surface, the rework to recover the required surface condition will result in contamination of the adjoining surface with water, "mud" from the removed surface corrosion, grit and dust if an abrasive is used. Once an area is contaminated, the potential to leave some contaminant on the surface is increased, regardless of the recovery actions to clean the surface. The allowance above requires the area to be generally within specification with small areas of flash rusting in excess of "L", resulting in a very low risk of coating failure.

Mitigation:

- **Tightly Adherent Coating:** Mitigation of this condition consists of: 1) documenting the size and general location of remaining coating, 2) ensuring that the remaining coating is truly "tightly adherent" as defined by SSPC-SP 7, 3) ensuring remaining coating has a visible profile, and 4) ensuring that the estimates of size and percent area covered are as accurate as possible.
- **Excessive Staining:** Documentation of the extent of staining.
- **Excessive Flash Rust:** Flash rust must be minimized in areas that are prone to coating failure, e.g., edges, beneath overboard discharges, weld beads, etc. Document extent and location of flash rust.

PRESERVATION DEPARTURES FROM SPECIFICATIONS PROCESS DECISION TREE

TABLE C

COMUSFLT/FORMCOMINST 4790.3 REV C

Surface Preparation					
QA Element	Requirement	Level of Authority Required			
		NAVSEA Major DFS	DFS	Local CHENG DL/DR/ESR/etc.	Mitigation Only
A. Surface Contamination					
1. Conductivity					
a. All Immersed Areas	<30μS	>35μS	30μS< conductivity ≤35μS	n/a	n/a
b. Flight Decks, Weather Decks, Hangar Bay and All Other Areas	<70μS	>85μS	70μS conductivity ≤85μS	n/a	n/a
2. Hydrocarbons					
a. SSPS-SP 1 (before and after surface preparation)	none visible	when mitigation efforts fail and area contaminated >0.03%	when mitigation efforts fail and area contaminated ≤0.03%	n/a	n/a
3. Dust (ISO 8502-3)	dust quantity ≤2 dust particle size ≤2	dust quantity >3 dust particle >3	n/a	2< dust quantity <3 2< dust particle <3	n/a
4. QA Readings	(1)	missing >25%	10%≤ missing ≤25%	missing ≤10%	
Notes:					
1. Documentation requirement for conductivity: five (5) readings for each 1000ft ² of surface being prepared. Documentation requirement for dust test: three (3) tapes for the first 1000ft ² , one (1) tape per 1000ft ² thereafter, minimum of three (3) tapes per area being preserved.					

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PRESERVATION DEPARTURES FROM SPECIFICATIONS PROCESS DECISION TREE

Surface Preparation

Rationale for Allowing Departure:

- **Conductivity:** Excessive chloride contamination can result in blistering of the coating in an immersion area, and can accelerate corrosion under the coating in immersion or non-immersion areas. Because chloride contamination presents a significant risk for premature spot coating failure there is very little tolerance for an out of specification condition. The values that will be resolved by NAVSEA approach a level where premature coating failure may occur, therefore NAVSEA involvement is required to ensure adequate recovery actions, process control and inspection is invoked.
- **Hydrocarbon Contamination:** Hydrocarbon contamination on a surface is a more significant cause for premature spot coating failure than chlorides. When contamination is discovered prior to surface preparation or upon completion of surface preparation, the surface will be rejected and re-cleaned. Local engineering codes and the inspectors will not authorize surface preparation or coating in cases where there is known contamination. The only time a DFS (local or off station) will be processed is if the contaminant is discovered after the surface preparation is completed and there is suspicion that the contaminant has been driven into the surface during surface preparation.
- **Dust:** Dust remaining on the surface prior to coating can significantly impact the long-term adhesion of the coating. The rationale for the high percentage of missing readings allowed prior to NAVSEA involvement is that normally very few readings are required. 25% missing readings may be only 1 reading less than the required number of readings.

PRESERVATION DEPARTURES FROM SPECIFICATIONS PROCESS DECISION TREE

TABLE D

Surface Preparation					
QA Element	Requirement	Level of Authority Required			
		NAVSEA Major DFS	DFS	Local CHENG DL/DR/ESR/etc.	Mitigation Only
A. Environmental Conditions (times are cumulative)					
1. % Relative Humidity					
a. Tanks	RH \leq 50%	>55% for >2 hours	n/a	50%< RH \leq 55% for \geq 2 hours	50%< RH \leq 55% for <2 hours
b. Other Areas	RH \leq 85%	>90% for >2 hours	n/a	85%< RH \leq 90% for \geq 2 hours	85%< RH \leq 90% for <2 hours
2. Substrate Temperature					
a. High, Out of Specification	varies by application	temperature during painting or curing >110% of maximum allowed ⁽³⁾	n/a	100%< temperature during painting <i>or</i> curing \leq 110% ⁽³⁾	n/a
b. Low, Out of Specification	varies by application	temperature during painting or curing <90% of minimum required ⁽³⁾	n/a	90% \leq temperature during painting <i>or</i> curing <100% with no mitigation ^(2, 3)	90% \leq temperature during painting <i>or</i> curing <100% ⁽³⁾
c. Flight Deck Temperature	varies by application	any noncompliance	n/a	n/a	n/a
d. At or Close to Dew Point	substrate temperature >5°F above the dew point	at or below dew point during painting <i>or</i> curing	n/a	temperature <5°F above the dew point with no mitigation ⁽²⁾	temperature <5°F above the dew point (<i>not</i> allowed on submarines)
3. QA Readings	(1)	missing >25%	10%< missing \leq 25%	missing \leq 10%	n/a

PRESERVATION DEPARTURES FROM SPECIFICATIONS PROCESS DECISION TREE

Surface Preparation and Coating Application

Notes:

1. Varies by application, review technical documentation for specific documentation requirements.
2. This would occur when the condition was discovered during a record review of completed or in-process preservation.
3. Temperature in °F only.

Rationale for Allowing Departures:

- **Substrate Temperature:** When the substrate temperature is out of specification (except for high temperature), additional cure time within specification can be added prior to application of the next stripe or full coat of paint to mitigate “out of specification” conditions (additional cure time required is the amount of time the environmental conditions were out-of-specification). This additional cure time must be documented properly. Additional cure time after application of a subsequent coat of paint does not satisfy the curing requirement. For excessive temperature conditions, local engineering resolution is required.

Mitigation:

- **Substrate Temperature, At Or Close To Dew Point:** Painting or blasting when the substrate temperature is less than 5°F above the dew point may be acceptable in some circumstances, e.g., during the early morning when temperatures are clearly rising. Proper mitigation for this condition is a documented increase in dew point/substrate temperature measurement to ensure that the substrate temperature does not fall below the dew point and frequent visual inspection to ensure that moisture has not condensed on the surface.

PRESERVATION DEPARTURES FROM SPECIFICATIONS PROCESS DECISION TREE

TABLE E

Coating Application					
		Level of Authority Required			
QA Element	Requirement	NAVSEA Major DFS	DFS	Local CHENG DL/DR/ESR/etc.	Mitigation Only
A. Receipt Inspection	(1)	product applied, no receipt inspection possible	n/a	coating applied and sufficient coating remaining to perform receipt inspection	n/a
B. Shelf Life	verify coating shelf life not expired prior to application of coating	product applied, no shelf life extension possible	n/a	coating applied and sufficient coating remaining to perform shelf life extension inspection	n/a
C. Mixing (mixing temperature and ratio)					n/a
1. All Paint (except nonskid)	varies by application	improperly mixed or off-ratio paint applied	n/a	mixing temperature out of- specification ⁽²⁾	n/a
2. Nonskid	varies by application	any noncompliance	n/a	n/a	n/a

Notes:

- Receipt inspection requirements: 1) surface ships require Certificate of Conformance for all coatings, and 2) submarine requirements are covered in NSTM Chapter 631, Table 11-1.
- This would occur when the condition was discovered during a record review of completed or in-process preservation.

Rationale for Allowing Departure:

• **Shelf Life:** Coatings must be certified based on receipt inspection for submarines per NSTM Chapter 631, or based on receipt inspection or a Certificate of Compliance for surface craft per SI 009-32. In some cases due to logistical problems the coating is received without receipt inspection, or with an expired shelf life, just prior to when it must be applied.

PRESERVATION DEPARTURES FROM SPECIFICATIONS PROCESS DECISION TREE

TABLE E (CON'T)

Coating Application

QA Element	Requirement	Level of Authority Required			
		NAVSEA Major DFS	DFS	Local CHENG DL/DR/ESR/etc.	Mitigation Only
D. DFT (measured IAW SSPC-PA 2)					
1. Ultra-High Solids (UHS) Coatings (per coat or full system) ⁽³⁾	varies by application	overall average coating applied >30mils	system maximum < overall average coating applied ≤30mils	localized average coating applied ≤50mils on ≤20% of the surface ⁽²⁾ and area covered by runs, drips, and sags >1% or of thickness >50mils	area covered by runs, drips, and sags ≤1% of thickness ≤50mils
2. Solvent Based Coatings (per coat or full system) ⁽³⁾	varies by application	measured DFT >150% of maximum allowed	n/a	100% < measured DFT ≤150% of maximum allowed	n/a
3. All Coatings					
a. Total System	varies by application	low, out-of-specification	n/a	n/a	n/a
b. Individual Coat DFT	varies by application	n/a	n/a	low, out-of-specification	
4. QA Readings	(1.)	missing >25%	0% < missing ≤25%	n/a	n/a

Notes:

- SSPC-PA 2 requires five (5) DFT measurements over the first 100 ft², and, for areas up to 300 ft², each 100ft² area shall be measured. For areas up to 1000ft², three (3) 100ft² areas shall be measured. For areas larger than 1000ft², measure three (3) 100ft² areas in the first 1000ft², and one (1) 100ft² for each additional 1000ft² thereafter.
- This is intended to allow for film thickness variations caused by stripecoating and overspray during coating adjacent areas, not for poor workmanship.

PRESERVATION DEPARTURES FROM SPECIFICATIONS PROCESS DECISION TREE

TABLE E (CON'T)

Coating Application

Notes:

3. Film thickness indicated does not include stripe coat thickness unless specifically referenced.

Rationale for Allowing Departure:

- **High Solids Coatings:** Currently NSTM 631 Table 11-1 Note 7 allows coatings to be applied to 150% of the required coating thickness. Based on discussions with representatives, “required” thickness refers to the range if a range is stated. The result is that coatings can be applied up to 150% of the maximum range identified by the manufacturer. This interpretation has been common practice by the Naval Shipyards as well as contractors, in accordance with the understanding stated above with NAVSEA.
- **Solvent Based Coatings:** For solvent-based coatings there is a potential for solvent entrapment when a coating is applied at a higher DFT than the manufacturer recommends. The change in interpretation requires closer control for excessive thickness of solvent-based coatings. The risk of solvent entrapment may be mitigated by ventilation, temperature, humidity and the amount of cure time between coats. The new interpretation is somewhat more restrictive for solvent-based coatings, and requires engineering review if the coating is not applied within manufacturer’s recommendations.

Mitigation:

- **High DFT Readings:** Mitigation of high DFT values is mitigated by taking additional DFT readings (as necessary) to identify the extent of the nonconforming condition, documenting these findings, reducing the thickness of follow-on coats when appropriate, and increased attention to application processes (nozzle sizes, stand-off distances, etc.) to prevent recurrence.

PRESERVATION DEPARTURES FROM SPECIFICATIONS PROCESS DECISION TREE

TABLE E (CON'T)

COATING APPLICATION					
QA Element	Requirement	Level of Authority Required			
		NAVSEA Major DFS	DFS	Local CHENG DL/DR/ESR/etc.	Mitigation Only
E. Overcoat Window	see ASTM F-718 datasheet	time for cure insufficient <i>or</i> >125% of maximum time allowed	time for cure insufficient <i>or</i> 115% < of maximum time allowed ≤125%	time for cure insufficient <i>or</i> 100% < of maximum time allowed ≤115%	n/a
F. Cure to Service	see ASTM F-718 datasheet	insufficient	n/a	n/a	n/a
G. Amine Bloom					
1. Prime, Intermediate or Stripe Coat	none present	no corrective action taken	n/a	corrective action taken	n/a
2. Topcoat	n/a	n/a	n/a	condition documented	n/a
<p>Rationale for Allowing Change:</p> <ul style="list-style-type: none"> • Overcoat Windows: Temperature changes during curing can change the minimum and maximum overcoat windows. Local engineering oversight is directed for overcoat window problems because often the contractor or paint shop believes that there is an overcoat window problem in cases where close scrutiny of the environmental records show that there is additional overcoat window remaining. If there is an overcoat window problem the recovery may be to solvent wipe the coating, abrade the coating, or abrasive blast the coating. The local engineering code is to consult with the coating manufacturer to determine the appropriate recovery action, if recovery is possible. 					

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PRESERVATION DEPARTURES FROM SPECIFICATIONS PROCESS DECISION TREE

TABLE F

Surface Preparation					
QA Element	Requirement	Level of Authority Required			
		NAVSEA Major DFS	DFS	Local CHENG DL/DR/ESR/etc.	Mitigation Only
A. Blasters	SSPC-C 7	no certification	out of date certification	n/a	n/a
B. Equipment Operators and Sprayers Utilizing Plural Component Equipment	MPCAC	no certification	out of date certification	n/a	n/a
C. Contractors Performing Preservation Work	QP-1	no certification	out of date certification	n/a	n/a
D. Coating Inspectors	NPBI or NACE CIP Level 1	no certification	out of date certification	n/a	n/a

**APPENDIX B
CORRECTIVE ACTION REQUEST**

(LOGO HERE)

CORRECTIVE ACTION REQUEST

TO:	FROM: (Your address here)	
SHIP/HULL NUMBER:	REFERENCES:	
CONTRACT NUMBER:		
SERIAL NUMBER:		
STATEMENT OF NONCONFORMANCE (INCLUDE CONTRACT/SPECIFICATION REQUIREMENTS):		
_____ SIGNATURE OF GOVERNMENT REPRESENTATIVE	_____ DATE	<input type="checkbox"/> SEE ATTACHED
CONTRACTORS RESPONSE (including corrective actions, root cause analysis and preventive actions for potential nonconformities identified):		
_____ SIGNATURE OF CONTRACTOR REPRESENTATIVE	_____ DATE	<input type="checkbox"/> SEE ATTACHED
VERIFICATION AND EVALUATION OF REPLY: <input type="checkbox"/> SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/> SEE ATTACHMENT		
COMMENTS:		
_____ SIGNATURE OF GOVERNMENT REPRESENTATIVE	_____ DATE	<input type="checkbox"/> SEE ATTACHED

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APPENDIX C**LETTER OF DELEGATION (Example Only)**

From: _____ (Activity)
 To: _____ (DCMA Component)

Subj: (Insert contract or purchase order number, vendor or subcontractor and address, as appropriate)

Encl: (1) Contract Quality Assurance Requirements Invoked on DCMA at Source
 (2) "DCMA Acknowledgment" of Invoked Contract Quality Assurance Requirements
 (3) Specifications, Contract or Purchase Order (when required)

1. Enclosure (1) is forwarded for implementation by your activity on the subject contract or purchase order and is not intended to restrict any additional inspection requirements imposed by the QAR in accordance with Navy Special Emphasis Program or DCMA Quality Assurance Policy's.
2. Requests for reduction/elimination of any specific inspection requirements listed herein will be considered when supported by proper documentation attesting to the Contractor's control over the process. This documentation may include a copy of the QAR's facility surveillance and inspection program plan that details the method of DCMA verification, manner in which performed and statistical method in which derived. Documentation should include (where appropriate/practicable) a flow chart of the process under consideration detailing product and process audit points and the results of the Contractor's/DCMA statistical analyses of the process which clearly indicates the process is under control and meeting specifications.
3. It is requested that enclosure (2) be completed by the QAR and returned to (appropriate Activity and Code) by the date specified therein. In this endeavor, the QAR is advised as follows:
 - a. Contact (appropriate Activity and Code) when inspection performance requested in enclosure (1) may result in additional costs or delayed delivery.
 - b. Promptly notify this office if any portion of this delegation cannot be accomplished.
 - c. Take exception to enclosure (1) when any specific inspection requirement listed therein meets the conditions of paragraph 2, listed above, with the supporting documentation.
4. A copy of the QAR's inspection and surveillance records, or Navy Special Emphasis Program surveillance and inspection plan, generated in accomplishing enclosure (1) inspections, be submitted to the RMC with each shipment when requested.
5. In lieu of a copy of the actual QAR's inspection records, this Activity will accept a statement similar to that specified below, submitted to the RMC with each shipment. When this method is elected, this Activity reserves the right to request copies of specific records as needed and to review records during Activity's surveys. The QAR's records will be maintained and available upon request.

Contract Quality Assurance requirements invoked by (appropriate Activity and Code) transmittal letter serial number _____ dated _____ on contract or purchase order number _____ and vendor or subcontractor _____ have been satisfactorily completed.

QAR (print name) _____ QAR (Signature) _____ Date _____

GOVERNMENT CONTRACT QUALITY ASSURANCE REQUIREMENTS
INVOKED ON DCMA AT SOURCE

Contract Number: _____ Level: _____
Prime Contractor: _____ DCMA Loc: _____
Subcontractor: _____ DCMA Loc: _____

A. GENERAL INSTRUCTIONS:

The DCMA Quality Assurance Inspection/Surveillance Records or the Navy Special Emphasis Programs surveillance and inspection plan is a prime requisite to assure successful completion of this contract. Assurance of the Contractor's compliance to contract technical and quality requirements is required.

B. DEFINITIONS:

The words listed below are used throughout this delegation and defined herein to clarify intent to the QAR:

- (1) Perform (physically accomplish tests and/or inspections).
- (2) Witness (observe contractor's performance of tests and/or inspections).
- (3) Verify (by reviewing the Contractor's documented evidence of tests/inspections).
- (4) Visually Inspect (view the component, part features or characteristics (e.g., surface condition, cleanliness, marking)) and verify conformance to each visually discernable contract or specification requirement.

C. SPECIFIC INSTRUCTIONS:

The QAR is requested to maintain characteristic numbering as listed. Since only certain characteristics from the NAVSEA Master List are applicable to this contract, the numerical sequence may not be continuous. All correspondence should reference the numbers as listed below in order to assist this Activity to identify to overall program reporting.

Characteristics 1 through 4 below are required to be recorded on the QAR inspection records submitted, are highlighted here to alert the QAR to realize that they are an integral part of the overall control system and shall be administered on each lot ready for shipment:

1. Documentation: The QAR shall verify that paperwork (software pertaining to the shipment) is complete in quantity and applicable to the procurement document and shipment.
2. Damage: The QAR shall perform inspection to ensure damage free condition of shipping containers or protective devices to prevent impairing or degrading the function or quality of the material.
3. Preservation, Packaging, Packing and Marking: The QAR shall perform inspection to assure that preservation, packaging, packing and marking of each shipment is in accordance with the procurement document.
4. Visual: The QAR shall perform visual inspection to assure the material displays an appearance of cleanliness and good workmanship.

Characteristics 5 through 25 will be identified (e.g., circled) as applicable to the purchase order. The characteristics identified will meet the requirements of the purchase order.

5. Material Identification: (perform/verify)
6. Material Verification Tests: (verify)
7. Radiography: (verify)
8. Magnetic Particle Test: (verify)
9. Ultrasonic/Eddy Current Test: (verify)
10. Liquid Penetrant Test: (verify)
11. Operational or Functional Test: (witness)

12. Pressure Test: (witness)
13. Electrical/Electronic Test: (witness)
14. Missing, Wrong or Improperly Assembled Parts: (perform)
15. Dimensions: (perform)
16. Welding: (verify)
17. Brazing: (verify)
18. Soldering: (verify)
19. Finish: (perform)
20. Shelf Life: (verify)
21. Contracted Technical Data: (verify)
22. Mercury Free: (verify)
23. Procedure Approval (Special Process): (verify)
24. Manufacturing Process: (verify)
25. Design Evaluation Tests: (witness)
26. Other (describe in detail)

“DCMA ACKNOWLEDGMENT” OF INVOKED GOVERNMENT CONTRACT
QUALITY ASSURANCE REQUIREMENTS

Government Contract Quality Assurance (GCQA) requirements per transmittal letter dated _____ have been received. The following action(s) will be taken:

- (1) GCQA requirements as specified will be performed.
- (2) GCQA requirements as specified will be performed with exceptions noted below.
- (3) GCQA requirements as specified cannot be performed for reasons explained below.
- (4) QAR inspection records will be forwarded with each shipment per your transmittal letter.

QAR (printed name) _____ QAR (signature) _____ Date _____

Contract Number _____ Subcontractor/Vendor _____

Note: Addressees will check appropriate number(s), complete and return to:

Activity: _____

Location: _____

By Date: _____

VOLUME VII

CHAPTER 12

CONTRACTED SUBMARINE PRESERVATION SYSTEM REPAIRS

REFERENCES.

- (a) NAVSEA Standard Item 009-32 - Cleaning and Painting Requirements Accomplishment
- (b) NAVSEA T9081-AD-MMO-010 & 020 - URO MRC SSN 21 Class
- (c) NAVSEA 0924-LP-064-8010 - URO MRC SSN 688 Class
- (d) NAVSEA T0700-AA-PRO-010 - URO MRC SSBN/SSGN 726 Class
- (e) NAVSEA T9081-AE-MMO-010 - URO MRC SSN 774 Class
- (f) NAVSEA MS 7650-081-091 - Submarine Hull Inspection
- (g) NAVSEA MS 6310-081-015 - Submarine Preservation
- (h) NAVSEA 0924-LP-062-0010 - Submarine Safety (SUBSAFE) Requirements Manual

12.1 PURPOSE. To ensure compliance with the Unrestricted Operations (URO) Maintenance Requirement Cards (MRC) Program when accomplishing contract preservation work on submarines. Reference (a) provides standard preservation requirements whereas references (b) through (h) provide submarine specific preservation requirements. This Chapter provides information for the Supervisor of Shipbuilding (SUPSHIP) contracting work on Submarine Preservation Systems to ensure that specific submarine URO MRC requirements are met.

12.2 SCOPE. This chapter provides requirements for Intermediate Maintenance Activities and Navy Contractors to be used in maintaining, repairing, and replacing preservation systems on non-nuclear components and spaces of U.S. Navy submarines. Technical questions regarding the structural URO MRCs or Submarine Preservation shall be directed to Naval Sea Systems Command (NAVSEA) 07T12.

12.3 APPLICABILITY. This chapter is applicable when contracting maintenance on preservation systems of all submarines in service.

NOTE: SUPERVISOR IS RESPONSIBLE TO ENSURE COMPLIANCE WITH ALL URO MRC PROGRAM REQUIREMENTS AND TO ENSURE THAT A URO MRC MEASURED PARAMETER IS NOT VIOLATED.

12.4 SUBMARINE PRESERVATION REQUIREMENTS FOR CONTRACTING. Submarine preservation work has additional requirements to ensure continued safe unrestricted operations until the next inspection. The URO MRC Program contains these requirements. URO MRC inspections and repairs shall be accomplished in accordance with references (b) through (g). The URO MRC Program is invoked by reference (h) and the Submarine Class Maintenance Plans. Preservation system repairs are a URO MRC attribute and are to be accomplished in accordance with reference (g). It is the responsibility of the SUPSHIP to ensure that all URO MRC requirements are met when invoking reference (a) for contracts. Reference (a) has been updated to contain submarine specific painting requirements, however SUPSHIP shall review references (b) through (h) to ensure all submarine safety requirements are accomplished. This may involve requiring structural inspections, repair and reporting.

12.4.1 Structural Integrity. Maintaining the protective capability of the coating system applied to areas that are listed on the Equipment Guide List of the URO MRC inspection and monitoring program is critical to maintaining structural integrity during the periods between inspections. For this reason, complying with requirements for coating system application for all aspects of the preservation process is essential. Other systems that impact the URO MRC 003 program are Special Hull Treatment application process, including Mold-In-Place, maintenance of Impressed Current Cathodic Protection systems and anodes, and installation of various types of tiles (acoustic, damping, etc.).

12.4.2 Tanks. Preservation work in submarine tanks and enclosed spaces is usually scheduled to occur when the tanks are opened and entered to perform URO MRC 003 structural inspections. Any time a tank is entered, if the scheduled URO MRC 003 structural inspection is not being performed, a structural visual examination in accordance with reference (f) shall be performed. There are specific qualifications for performing these inspections; requirements are contained in references (b) through (f).

12.4.3 **Blasting.** Any URO MRC 003 and URO MRC 002 item being blasted and painted must have the URO MRC 003 hull survey inspection and URO MRC 002 inspection performed prior to blasting and prior to repainting. When blasting and repainting an item, ensure that URO MRC structural repair sites are not contaminated with paint overspray until repairs have been completed. Upon completion of structural repairs, the affected areas will be abrasive blasted to SSPC-SP-10 prior to paint application unless otherwise specified.

12.5 REPORTING.

12.5.1 **Existing Conditions.** Report existing paint conditions and all preservation work performed as required by reference (g). This report and all preservation in-process Quality Assurance and Quality Control documentation are considered URO MRC Objective Quality Evidence. Submarine as-arrived coating inspection requirements are per reference (g) Attachment 7.

12.5.2 **As Arrived Conditions.** Report as-arrived coating inspections on Submarine Tanks/Voids/Free floods, Sail, Superstructure, and Interior Miscellaneous Inspection Worksheet, reference (g) Form 1, or Submarine Underwater Hull Inspection Worksheet (3.0 Form 2) electronically using the Corrosion Control Information Management System (CCIMS) database located at the following web address: <https://ccims.supship.navy.mil> or as a legible hard copy to SUPSHIP. Sample copies of preservation data forms and information on reporting requirements are provided in Section 8 of reference (h). Preservation feedback must be submitted for validation by email notification to preservation.SUBMEPP.ftc@navy.mil at the time the URO MRC report is due. This feedback is considered URO MRC 003 Objective Quality Evidence.

12.5.3 **SSN 21 and SSN 774 Class Submarines.** For SSN 21 and SSN 774 Class submarines, excessive use of mechanical tools (grinders, sanders, chippers, abrasive blasting, etc.) must be minimized to avoid metal loss due to lack of corrosion allowance. Overly aggressive blasting which causes metal thickness loss over the amount required for surface profile should be avoided. Any areas of potential metal loss by corrosion or mechanical means must be investigated in accordance with URO MRC 003. Mold-In-Place/Special Hull Treatment removal shall be accomplished only by water jetting. Removal by mechanical means is not allowed.

12.6 SUBMARINE PRESERVATION WAIVERS AND DEVIATIONS.

12.6.1 **Requirements.** Submarine Preservation Waivers and Deviations shall be in accordance with reference (g) section 9. URO MRC Program Waivers and Deviations requirements are as follows:

- a. Nonconformance requests that result in a change of the URO MRC inspection periodicity (not authorized by the URO MRC), a change in a URO MRC technical requirement, or deferral of required work during accomplishment of the URO MRC require NAVSEA approval. Local (Chief Engineer or Type Commander) approval is not authorized for these non-conformances.
- b. To support operational commitments, Commander, Submarine Force Atlantic (COMSUBLANT) and Commander, Submarine Force Pacific (COMSUBPAC) may authorize temporary periodicity extensions (not already authorized by the URO MRC) after consultation with SEA 07T. The periodicity extensions should be limited to the next availability or in port period, where a Submarine Fleet Maintenance Activity is available, and shall be documented by a Major Departure from Specification in accordance with Volume V, Part I, Chapter 8 of this manual. The Departure from Specification shall then be submitted to NAVSEA for approval.

12.6.2 **Notification.** The cognizant NAVSEA (SEA 07T) and Type Commander codes shall be notified in writing within two days of any URO MRC related decision made by an inspection activity that will result in a change of periodicity, a change of technical requirements, or deferral of required work.

- a. A copy of the notification shall also be forwarded to SUBMEPP (Code 1832). Any subsequent waiver or deviation requests shall be sent to NAVSEA for review and approval or disapproval.
- b. An official signed copy of all NAVSEA approved waivers or deviations shall be included with the Data Report Form when forwarding URO MRC inspection results to SUBMEPP and other addressees.

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 **Naval Sea Systems Command (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 **Force Ship/Aircraft Carrier** Multi-Ship/Multi-Option Contracts.** The first strategy is the optimal use of Surface **Force Ship/Aircraft Carrier** 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 Contracts 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.

13.7.2 Contracts Governance Council. The CGC shall implement the Comprehensive Contracting Strategy for shipboard maintenance and modernization by managing the approved Contracts Portfolio available for customers with shipboard work requirements.

13.7.3 Systems Commands and Program Executive Offices. The Systems Commands and Program Executive Offices shall use contracts in the Contracts Portfolio (including MS/MO) for any maintenance or modernization work that is performed on board ships or crafts, or if the work will require substantial integration with other executing activities.

13.7.4 Fleet Maintenance Activities. All CONUS and Hawaii maintenance activities shall ensure all contracted shipboard maintenance and modernization work is done using a contract in the Contracts Portfolio (including MS/MO).

13.8 CONTRACTS GOVERNANCE COUNCIL.

13.8.1 Structure. The CGC is a standing body co-chaired by Commander, Naval Regional Maintenance Center (CNRMC), NAVSEA 21 and NAVSEA 02. It is responsible for the continuous improvement of the Contracts Governance process and for providing strategic guidance for the Navy's overall ship maintenance and modernization contracting strategy.

13.8.2 Contracts Governance Council Process. The governance process encompasses shipboard maintenance and modernization contracts used on Fleet assets in CONUS and Hawaii (all customers and all locations). The focus of the CGC is non-nuclear work. Maintenance and modernization of nuclear propulsion systems and supporting sub-systems, as well as SUBSAFE systems and sub-systems, are not applicable under the CGC's cognizance.

13.8.3 Contracts Governance Council Membership. The CGC will consist of senior members representing the following government maintenance and modernization organizations:

- a. CNRMC (Co-Chair)
- b. NAVSEA 21 (Co-Chair)
- c. NAVSEA 02 (Co-Chair)
- d. NAVSEA 00L (Legal Council)
- e. NAVSEA 02A, 02B, 21A, 024, PMS 400F, PMS 470, PMS 505
- f. Naval Regional Maintenance Center (NRMC) Code 300 and Code 400
- g. RMC Code 300 and Code 400
- h. Additional members may include:
 - (1) Fleet Forces Command N43
 - (2) Commanders Pacific Fleet N43
 - (3) Other RMC personnel
 - (4) Submarine Force, Surface Force and Aircraft Carrier Type Commanders (N43)
 - (5) Warfare Centers
 - (6) Program Executive Offices
 - (7) Naval Space and Warfare Command (SPAWAR) 04
 - (8) Naval Supply Fleet Logistics Center

13.8.4 Contracts Governance Council Policy. The CGC seeks to implement and support policy from the Assistant Secretary of the Navy Research, Development and Acquisition and this manual for Comprehensive Contracting and Depot Work Integration for ship maintenance and modernization contracting as follows:

- a. Operate the CGC to oversee contracts that support, plan and execute shipboard maintenance, modernization and sustainment production work.
- b. Manage the portfolio of approved shipboard contracts maintained by CNRMC.
- c. Focus on RMCs to implement standard policy throughout the non-nuclear maintenance and modernization enterprise. This includes any repairs, modernization, installations or alterations where potential exists for systems or boundary entry, work control or tag-out procedures.
- d. Discuss acquisition strategy and how future spirals of MS/MO Contracts will be developed.

13.8.5 Contracts Governance Council Products. The CGC will provide:

- a. Management of authorized contracts portfolio to optimize the number of contracts needed to complement MS/MO contracts.

- b. A quarterly summary report to CGC Membership. The RMCs shall provide metrics to support the quarterly reports per the Basis for Measurement provided by the CGC.
- c. Business rules for implementing CGC governance at the RMCs.

13.8.6 Contracts Governance Council Expectations. The CGC expects to impact cost and benefits in the following manner:

- a. Increase standardization in the execution of contracts across all RMCs.
- b. Optimize the number of contract vehicles required for shipboard work.
- c. Improve waterfront work integration.
- d. Increase discipline in the contracting process.

13.8.6.1 Contracts Governance Council Monthly Meetings. USFF N431 (Fleet Maintenance Acquisition Manager) will chair the monthly meetings of the CGC. The CGC will render one of three possible actions:

- a. Option year renewal(s) of existing contracts.
- b. Solicitation and award of new contracts.
- c. Incorporation of existing contracts not yet in the Contracts Portfolio.

13.8.6.2 Contracts Governance Council Consideration. The CGC shall approve or disapprove the request(s), or return the request to the requiring agent for clarification or alternate sourcing consideration.

13.8.6.3 Contracts Governance Council Decision. CGC approvals and disapprovals shall be by unanimous decision. Any request for which a unanimous decision can not be achieved will be referred to the “expanded” FMBOD for resolution. The Expanded FMBOD includes the permanent FMBOD members as well as a flag officer or senior executive of the requiring agent’s organization. The Expanded FMBOD will resolve the request.

13.8.6.4 Meeting Administration. CNRMC Business Office will prepare the agenda for the CGC, coordinate all CGC actions, replies, and record the minutes of the meeting. USFF N431 will send a status report to the CNRMC’s Business Officer informing him/her of the disposition of each request for CGC action within five days of the monthly CGC meeting.

13.8.6.5 Quarterly Briefing. USFF N431 will brief the FMBOD quarterly of actions taken by the CGC, and present any unresolved contract action requests for disposition by the FMBOD. The quarterly summary report to the FMBOD will include:

- a. Any changes to the Contracts Portfolio.
- b. Summary statistics on CGC actions.
- c. Any changes made to the review process.
- d. Any problems encountered.
- e. Any recommendations for process improvement.