

## **QUALITY ASSURANCE PROGRAM**

MSC's Quality Assurance Manual (QAM), applies to all products that will be supplied on contracts resulting from this proposal. The Marine Systems Corporation QA Program was developed to ensure the quality of all products supplied by MSC. MSC will strive to prepare and deliver engineering documents of the highest technical quality using engineering and administrative controls to assure compliance with applicable specifications and contractual requirements. Due to the page limitation, MSC's Quality Assurance Manual (QAM) is not included with this proposal but is on file at MSC's Office for review upon request. The QAM developed by MSC is based The Marine Systems Corporation Quality Assurance (QA) Program, as set forth in the upon our long term commitment to quality, total involvement and empowerment of all employees in meeting customers needs. The QAM includes sections implementing the QA Program for:

- Organization/Personnel Responsibilities
- Final Inspection and Testing
- QA Procedures/Planning
- Inspection and Test Records
- Purchasing
- Control of Inspection, Measuring and Test Equipment
- Product Identification and Traceability
- Process Control
- Inspection and Test Status
- Receiving Inspection and Testing
- Control of Non-conforming Product
- In process Inspection and Testing
- Corrective Action
- ∞ Control of Quality Records

The implementation of the Quality Assurance Inspection/Review Procedures and Corrective Action directives will result in the accumulation of documented data that will be auditable at any time during the life of the contract and will be available for surveys related to future considerations.

### **Defect Reporting and Corrective Action**

Engineers, Planners and Technicians will use checklists to review engineering drawings, technical reports and procedures to provide a consistent scope of auditing activities.

The QA Coordinator will use authorized checklists to review all project documentation to ensure compliance with contract/customer requirements. The checklists serve as a record to verify that the review has been completed, discrepancies reported, corrective action taken and that the documentation is ready for review by the QA Program Manager.

The QA Coordinator is responsible for recommending corrective action and will ensure that the deficiency has been corrected and will report actions taken to the QA Program Manager. The QA Coordinator will approve all corrective actions taken in response to reported deficiencies.

Project meetings will discuss reported defects to identify potential problems, retraining requirements and possible modifications to the QA procedures to prevent similar deficiencies.

Corrective action will extend to the performance of all suppliers and subcontractors. Deficiency reports will be forwarded through the Program Manager and QA personnel assigned to audit corrective actions.

If the product is recycled, the Program Manager must ascertain where the fault occurred, implement corrective action and monitor the corrected procedure until compliance is assured. Corrective action shall include as a minimum:

- Analysis of data and examination of the product to determine cause and extent
- Analysis of trends in work processes to correct non-conforming product
- Introduction of required improvements and monitoring of their effectiveness

The completed package will be reviewed by the Program Manager who will complete the Quality Assurance Validation Certificate prior to delivery.

If a product passes final review and approval and is found to be deficient by the customer, the Program Manager will scope the deficiency, provide direction for corrective action, and identify the weakness in the work processes which enabled the deficient product to pass. Identification of weaknesses in the system and implementation of corrective actions are the QA Program Manager's responsibilities and are pursued on a continuous basis and supported by all personnel.

Marine Systems Corporation Quality Control Program, as set forth in the MSC Quality Assurance Manual applies to all products that will be supplied on Task Orders issued under this contract. resulting from this proposal. The Inspection/Review Check Lists, Appendix A to the Marine Systems Corporation Quality Assurance Manual, are the basic documents utilized for quality assurance actions. Inspection Plans will be developed for each Task Order. The Inspection Plans will be kept on file at the Marine Systems Corporation Office and will be provided to the Administrative Contracting Officer (ACO) on request at any time. The Inspection Plan/Review Checklists will be tailored to apply to a particular product such as the programs included in the SOW of the RFP. The Checklists are periodically reviewed for applicability to the assigned product and changes are made whenever lessons or new directives warrant it as part of Marine Systems Corporation's Total Quality Management (TQM) philosophy.