

REVISIONS

LTR	ECN #	DESCRIPTION OF CHANGES	DATE	ORIGINATOR
A	XXXXX	Complete update and rewrite to new standards	01-08-09	M. Abrams





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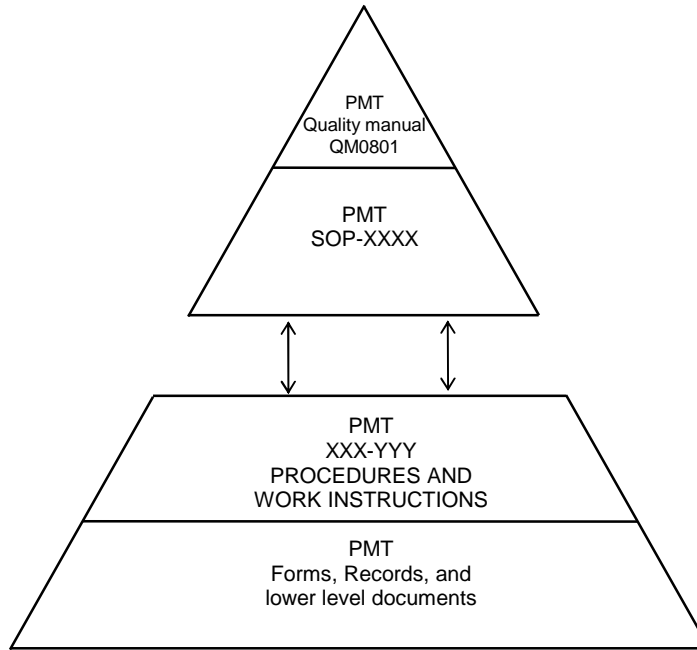
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1.0 GENERAL

1.1 **Purpose.** This manual defines the Quality Management System at PMT and describes the quality disciplines and practices to ensure compliance with any required government and industry specifications determined necessary within PMT. This manual is intended to be an interface between the PMT Quality System Manual (QM0801), the PMT Procedures, and all documents internally controlled through SOP-08010. (See Cross Reference Matrix).

1.2 **Scope:** This manual is to be used by all employees of PMT.

1.3 **PMT System Diagram**



1.4 **Documents**


1.4.1 Reference

IPC-A-610	Acceptability of Electronic Assemblies
ISO-9001:2000	Quality Management System Requirements

1.4.2 PMT

QM0801	PMT Quality Manual
XXX-YYY	PMT Quality Procedures
SOP-0820	Management and Functional Responsibilities for PMT
SOP-0830	Management Review Procedure
SOP-0810	Document Release and Maintenance
SOP-0840	Design


For additional documentation, see specific sections within this document.

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- 1.4.3 Recognizing that quality is a total cross functional concept, PMT shall design, procure, manufacture, and provide follow-up services across traditional functional boundaries to ensure these quality standards are maintained.

1.5 Quality Management System Requirements


- 1.5.1 SOP-0820 shows the flows, responsibilities and interrelationships, which define the operations controlling the operations and the products manufactured by PMT.
- 1.5.2 Criteria and methods are defined in Travelers, Test Plans, Work Instructions and Process documents.
- 1.5.3 Continual Improvement shall be planned, approved and measured by management and shall be a part of management review meetings, held quarterly (minimum).
- 1.5.4 If any process is outsourced, PMT shall maintain control over such processes.
- 1.5.5 Quality Policy is defined in the PMT Quality Manual (QM0801)
- 1.5.6 Quality Objectives shall support the Quality Policy and shall be documented, approved and reviewed for effectivity by the President, and the Quality Manager, at least once per quarter.
- 1.5.7 Documentation requirements for this system are covered in SOP-00810 and in customer purchase orders.
- 1.5.8 Documentation shall exist to control the Quality Management System and all aspects of the process which produce the products provided to customers.
 - 1.5.8.1 Personnel performing quality functions shall have sufficient, well-defined responsibility, authority and the organizational freedom to identify and evaluate quality problems and to initiate, recommend or provide solutions.

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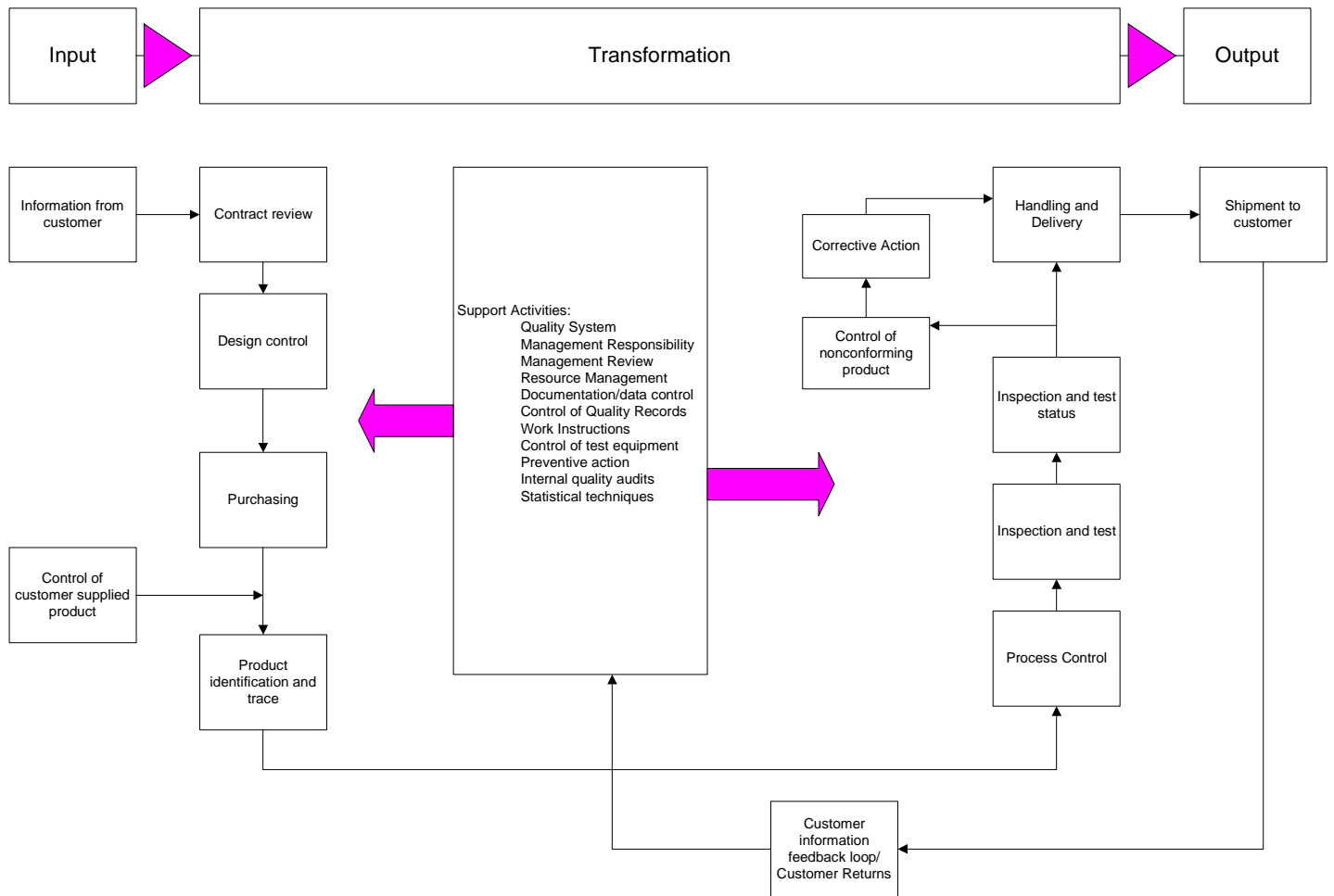
1.6 CROSS REFERENCE MATRIX


SECTION	TITLE	MIL-Q-9858	MIL-I-45208	ISO-9000 (1994)	ISO-9001:2000	ISO-9001:2008	08-XXX-YYY
1.0	General/Quality Policy	1.2	3.1	4.1	5.1, 5.3, 5.4.1		MGT-001
	Organization Chart	3.1	3.1	4.1.2	4.2.1		DOC-003
2.0	Management Responsibility				5.0		MGT-001
3.0	Management Review				5.6		MGT-001
4.0	Resource Management	3.2	-	4.18	6.0		TRN-001
5.0	Documentation and Change Control	4.1	3.2.4	4.5	4.2.3		DOC-001
6.0	Control of Quality Records	3.4	3.2.2	4.16	4.2.4		RCD-001
7.0	Work Instructions	3.3	3.2.1	-	7.5.1		PRO-001
8.0	Contract Review	3.2	-	4.2	7.2		CON-001
9.0	Design Control				7.3		DSN-001
10.0	Purchasing and Supplier Control	5.1/5.2/7.1	3.11	4.6	7.4		PUR-001
11.0	Measuring and Test Equipment	4.2/4.3/4.4	3.3	4.11	7.6		CAL-001
12.0	Government/Customer Furnished Property...	7.2	3.6	4.7	7.5.4		CFM-001
13.0	Process Controls and Traceability	6.2	3.4	4.9/4.8	7.1, 7.5.1, 8.2.3		PRO-001
14.0	Production Control						PRO-001
15.0	Receiving Inspection	6.1/6.2	3.2.1	4.10	7.4.3, 8.2.4		QAP-001
16.0	In process and Final Inspection	6.1/6.2	3.2.1	4.10	7.4.3, 7.5.1, 8.2.4		QAP-001
17.0	Indication of Inspection Status	6.7	3.5	4.12	7.5.3		QAP-001
18.0	Nonconforming Material	6.5	3.7	4.13	8.3		QAP-001
19.0	Corrective/Preventive Action	3.5	3.2.3	4.14	8.5.2, 8.5.3, 8.4		QAP-001
20.0	Handling, Storage, Packaging,	6.4	-	4.15	7.5.5, 7.5.1		HST-001
21.0	Government/Customer Interactions	4.4/7.1	3.3/3.11/ 3.13	-			CON-001
22.0	Customer Returns	3.5	-	-	7.2.3		QAP-001
23.0	Internal Quality Audits	3.1	-	4.17	8.2.2, 8.2.3		QAP-001
24.0	Statistical Methods	6.6	3.9	4.20	8.1, 8.2.3, 8.2.4, 8.4		SPC-001

- 1.7 **ORGANIZATION CHART.** The formal organizational chart may be found in Doc-003. An organization chart with all names shall be kept by the administrative assistant.

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1.8 System Organization



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2.0 Management Responsibility

- 2.1 **Purpose:** This document defines the Management Responsibility at PMT
- 2.2 **Scope:** This document is to be used by PMT management to define the responsibilities within the organization.


2.3 Documents:

- 2.3.1 **Applicable:**
- | | |
|----------|--|
| SOP-0820 | Management and Functional Responsibilities for PMT |
| SOP-0830 | Management Review Procedure |
| SOP-0840 | Design |
| DOC-003 | PMT Organizational Chart |

- 2.3.2 **Referenced:**
- | | |
|--------|--------------------|
| QM0801 | PMT Quality Manual |
|--------|--------------------|

2.4 Responsibility:

- 2.4.1 Management and Functional Responsibilities are defined in specification SOP-0820.
- 2.4.2 The President at PMT shall regularly communicate to the organization, customer expectations and any special customer requirements in addition to communicating the status of customer satisfaction IAW SOP-0820
- 2.4.3 Quality Objectives shall be established and reviewed during management review meetings.
- 2.4.4 PMT shall support the quality policy and shall develop local programs to achieve objectives.
- 2.4.5 Responsibility and Authority are defined within the documentation at PMT. Specific responsibilities and flow charts in SOP-0820 show the interrelationships within the organization. The organizational chart (document FM-) shows departmental responsibilities. It is the responsibility of the President at PMT to ensure that the documented system is followed.
- 2.4.6 The Quality Assurance Manager has the responsibility to ensure that the processes needed to maintain the Quality Management System are established, implemented and maintained and that any deviations, need for resources or improvements are reported to top management.
- 2.4.7 Management Review: Management Review of the Quality Management System shall take place, as a minimum, on a quarterly basis per SOP-0830. Quarterly review information shall be provided, by the Staff at PMT, for review by the President. Copies of this information shall be forwarded to the Manager of Quality of PMT for review. Information submitted for Management Review shall be retained by the Quality Department for a minimum of 5 years.

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3.0 Management Review

3.1 **Purpose:** This document defines the Management Review procedure at PMT


3.2 **Scope:** This document is to be used by the management at PMT for the purpose of planning and execution of the management review function.

3.3 Documents:

- 3.3.1 Applicable
 - SOP-0830 Management Review Procedure
 - SOP-0820 Management and Functional Responsibilities at PMT

3.4 **Procedure:** Management Review Meetings shall take place quarterly (minimum) per SOP-0830

- 3.4.1 The Quality Assurance Manager shall organize and chair the meeting where each manager shall provide specific information regarding their areas of responsibility as described in SOP-0830.
- 3.4.2 Following the conclusion of the meeting, the Quality Assurance Manager shall provide a meeting summary report to all managers, along with a report to President of PMT.
 - 3.4.2.1 The summary report will include recommendations for improvement, identification of resource needs and any changes or adjustments to the quality goals and objectives that were the results of the meeting.

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4.0 Resource Management

4.1 **Purpose:** This document defines the responsibilities for Resource Management

4.2 **Scope:** This document is to be used by the President and staff, who are responsible for providing the needed resources to support the Quality Management System at PMT.

4.3 Applicable Documents:

QM0801 PMT Quality Manual
TRN-001 Employee Training Program
SOP-0820 Management and Functional Responsibilities at PMT
SOP-0830 Management Review

4.4 Management shall provide the necessary resources to support and continually improve the quality management system and to enhance customer satisfaction by meeting customer requirements

4.5 Human Resources:

4.5.1 Personnel at PMT shall be competent for the job that they perform. Competency may be determined by education, previous experience, demonstrated skills or training. Demonstration of competency is determined by immediate supervisors and managers, and may be demonstrated by tests, employee reviews or other means.

4.6 Work Environment and Infrastructure:

4.6.1 Top management (President) shall ensure that the work environment and infrastructure support the product requirements. Deficiencies shall be addressed during management review meetings or directly with the President.

4.7 Training

4.7.1 Departmental Training of employees shall be IAW TRN-001


4.7.2 Each director or manager has the responsibility to ensure that department employees are trained and competent for the jobs for which they are responsible.

4.7.3 If outside training is needed the manager or supervisor shall make sure that the necessary training is provided.

4.7.4 Human Resources or designee group are responsible for maintaining training records.

4.7.5 Special training required for personnel manufacturing customer specific products shall be established IAW contractual requirements and/or the quality program plan.

4.7.6 Designated individuals, whose functions require specialized certification by outside activities, such as soldering, may require specialized training and shall be required to demonstrate their proficiency in performing that specific function at periodic intervals.

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5.0 DOCUMENTATION CONTROL

- 5.1 **Purpose:** This document defines the control of documentation necessary to PMT.
5.2 **Scope:** This document applies to all documentation needed to support the Quality Management System at PMT and to the personnel who use and/or create that document.

5.3 Documents


- 5.3.1 Applicable
SOP-0810 Document Release and Maintenance

5.4 Responsibilities

- 5.4.1 The document control department, under the Quality Assurance Manager and Production Manager jointly, shall be responsible for assuring that all released documents have been reviewed and approved by the responsible personnel, and that they comply with written policies and procedures.
- 5.4.2 The Quality manager and Production Manager are responsible for assuring that documents within the system are controlled and retained.

5.5 Requirements

- 5.5.1 Controlled documents shall exist for products, processes, operations, testing, test software, marking, manufacturing equipment, materials, and quality procedures.
- 5.5.2 All documentation in the Document Control system shall be protected against unauthorized alteration or damage.
- 5.5.3 Software shall be controlled IAW SOP-0810.
- 5.5.4 Controlled documentation shall be released and maintained IAW SOP-0810.
- 5.5.5 When so stipulated by contract or quality plan, proposed changes to the customer approved product baseline shall be communicated to the customer.
- 5.5.6 Customer documentation shall be handled IAW SOP 0810.

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6.0 CONTROL OF QUALITY RECORDS

6.1 **Purpose.** This document defines the requirements for Quality Records which support the Quality Management System and also provide evidence of conformity to documented requirements.

6.2 **Scope.** This document applies to all documented records (any media) that affect the quality system.

6.3 Documents

6.3.1 Applicable

RCD-001	Record Maintenance
CON-001	Control of Customer Documents
SOP-0810	Document Release and Maintenance

6.4 Responsibilities

6.4.1 **Quality.** The quality department is responsible for all records concerning the maintenance of the quality system.

6.4.2 **Manufacturing.** The manufacturing department is responsible for records concerning the maintenance of the manufacturing function.

6.4.3 **Production Control.** The Production Control department is responsible for all records concerning work order, move orders and, as required, any associated data.

6.4.4 **Purchasing.** The Purchasing department is responsible for all records concerning supplier quotes and purchase orders.

6.4.5 **Shipping and Receiving.** The Shipping and Receiving department is responsible for all shipping and receiving documents.


6.4.6 **Sales.** The sales department is responsible for sales records and customer documentation per CON-001

6.5 Requirements

6.5.1 Record retention shall be as required in RCD-001.


6.5.2 Records shall be made available for review by the government or customer representative upon request.

6.5.3 Records shall be in blue or black ink (preferred). Mistakes on records shall be corrected by initialing and dating (space permitting) and putting a single line through the mistaken data. 'White out' is not allowed on any record. Red may be used to mark changes to a document to be submitted for Engineering Change.

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7.0 WORK INSTRUCTIONS

- 7.1 **Purpose.** This document describes the documentation and use of work instructions.
- 7.2 **Scope.** This document applies to all work instructions affecting product quality and to the personnel who create and utilize those documents.
- 7.2.1 A work instruction is defined as any work instruction, process specification, job instruction, procedure or process.
- 7.3 **Documents**
- 7.3.1 Applicable
IAW IPC-A-610 Acceptability of Electronic Assemblies
SOP-0810 Document Release and Maintenance
PRO-002 Process Control and Traceability
- 7.4 **Responsibilities**
- 7.4.1 Department Managers. Department Managers are responsible for the development and maintenance of work instructions in their area of control. All work instructions shall be clear, concise, and complete for the operation described, and where workmanship is addressed, shall meet the requirements of internal travelers and customer requirements.
- 7.4.2 Quality. The Quality Department is responsible for the review of all work instructions for the inclusion of required workmanship criteria and customer requirements.
- 7.4.3 Document Control. Document control is responsible for the release of controlled copies of documentation to the appropriate areas.
- 7.5 **Requirements**
- 7.5.1 Each operation affecting quality from purchasing through shipping shall be documented by appropriate work instructions. These work instructions shall be reviewed by the controlling operation for improvement and additional requirements on a continuing basis.
- 7.5.2 Work instructions shall be generated using the guidelines documented in SOP-0810. The documents may establish quantitative or qualitative criteria for determining that each work operation has been accomplished satisfactorily.
- 7.5.3 Work instructions shall be written such that they can also be used in supervising, inspecting and managing the production, test and inspection work, where applicable.
- 7.5.4 Work instructions shall meet the customer specifications for all contracted requirements.
- 7.5.5 Work instructions shall be controlled IAW SOP-0810/PRO-001.

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8.0 CONTRACT REVIEW

8.1 **Purpose.** This document establishes quality planning required to assure that quality provisions and inspection requirements specified by customer contracts and purchase orders are identified, completely and adequately. Also, that the quality program is in compliance with the contract provisions or that a Quality Program Plan (QPP) is initiated.

8.2 **Scope.** This document applies to all customer contracts and purchase orders containing specifications that include additional quality requirements beyond the scope of the referenced specification and to the personnel who review or handle those documents.

8.3 Documents

8.3.1 Applicable

CON-002	Customer Purchase Order Review
CON-006	Quality Program Plan, Initiation of and Requirements for
CON-003	RFP/RFQ Review Procedure

8.4 Responsibilities

8.4.1 Sales: Sales is responsible for the analysis of customer requirements contained in Request for Proposal (RFP), Request for Quotation (RFQ), purchase orders, subcontracts, and contracts. Sales is responsible for assuring that those purchase orders, subcontracts, and contracts which require formal QPP's, are initiated and enforced. Quality shall be contacted as required to interpret requirements.

8.4.2 Sales/Marketing. Sales/Marketing is responsible for obtaining customer documents and providing them as requested for review. Sales/Marketing shall be responsible for creating (with inputs from other departments) and sending the quote to the customer or field sales office


8.4.3 Engineering. Engineering is responsible for the analysis of customer requirements of a technical nature, and for the generation of PMT documentation as necessary.

8.5 Requirements

8.5.1 Pre-accepted Orders. A complete review of requests for proposal or quotation shall be performed IAW CON-001 to identify requirements for specific controls, processes, testing, test software, component function, pricing, quality requirements, testing, material availability, and scheduling requirements.

8.5.2 Accepted Orders. A complete review of the subcontract, contract, or purchase order shall be performed IAW CON-002 to identify quality, program, and/or production requirements.

8.5.3 When required by contract, or when determined to be necessary by the quality manager, a Quality Program Plan will be created for the customer IAW CON-006.

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9.0 DESIGN CONTROL

9.1 **Purpose:** This document establishes the design control requirements to ensure that customer requirements (input) are transformed into customer satisfaction (output).

9.2 **Scope:** This document applies to all new or revised product development at PMT.

9.3 Documents:

9.3.1 Applicable:

SOP-0840 Design and Development of New Product at PMT
DSN-001 Engineering Evaluation Procedure
SOP-0810 Document Release and Maintenance

9.4 Responsibilities:

9.4.1 Engineering is responsible for all design and development of new product and for technical changes to the product per SOP-0840


9.4.2 Input may come from customers or other sources.

9.4.3 Sales is responsible for customer interface.

9.4.4 Quality is responsible for overseeing and retaining records of engineering evaluations and to ensure that there is data to support new documentation or engineering changes of existing documentation.

9.5 Requirements:

9.5.1 New development and/or design changes shall be handled in accordance with SOP-0840 and SOP-0810.

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10.0 PURCHASING AND SUPPLIER Control

10.1 **Purpose.** This document defines the requirements for purchased product and establishes the requirements for supplier (supplier and subcontractor) control. It is intended to ensure that supplier provided materials and services meet the requirements of PMT.

10.2 **Scope.** This document applies to all suppliers/subcontractors and the purchasers of those goods and services, which directly affect the quality of the product produced by PMT.

10.3 **Documents:**

10.3.1 Applicable

PUR-002	Supplier-Subcontractor Control
PUR-001	Purchasing
QAP-008	Return Material Authorization

10.4 **Responsibility.**

10.4.1 Purchasing shall provide the necessary information to suppliers to ensure that purchased product will conform to specified requirements.

10.4.2 Purchasing is responsible for the collection of supplier performance data and publication and distribution of supplier rating reports.

10.4.3 Quality is responsible for supplier approval and evaluation IAW PUR-002.

10.5 **Requirements:**

10.5.1 Purchasing shall be performed IAW PUR-001


10.5.2 The review of outgoing purchase orders to assure all required quality clauses and quality requirements are included, shall be accomplished IAW PUR-001

10.5.3 Purchasing shall not procure supplies from suppliers determined to be unacceptable by the supplier rating system IAW PUR-002.

10.5.4 Supplier Control , including approval, disqualification and evaluation, shall be performed IAW PUR-002.

10.5.4.1 Supplier surveys shall be IAW PUR-002.

10.5.4.2 The Quality Department is responsible to coordinate the evaluation and approval of all suppliers. Supplier rating reports will be based on data from approved suppliers.

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11.0 Measuring and Test Equipment

11.1 **Purpose.** This document establishes the methods to be used to assure the control, calibration and maintenance of measuring and test equipment.

11.2 **Scope.** This document applies to the calibration and maintenance of all mechanical measuring equipment and electronic test equipment. It includes company-owned, leased, and government furnished equipment that is used for engineering, production, quality assurance and acceptance testing.

11.3 Documents

11.3.1 Applicable

CAL-001	Calibration
CAL-002	Preventative and Maintenance Procedure
MIL-STD-45662	Calibration System Requirements
ANSI Z540.1	Calibration Laboratories and Measuring and Test Equipment - General Requirements
ISO-10012	Quality Assurance Requirements for Measuring Equipment

11.4 Responsibility.

11.4.1 The quality manager is responsible for the administration of the calibration program IAW CAL-001 and the P/M program IAW CAL-002. This responsibility includes calibration of equipment owned by the US government, company, or by private individuals that is used for acceptance testing.

11.5 Requirements


11.5.1 All equipment that cannot be repaired or calibrated shall either be removed from service or sent to a qualified repair or calibration laboratory which conforms to applicable military/commercial calibration specifications as noted above..

11.5.2 All calibration records are maintained IAW CAL-001.

11.5.3 An equipment recall list shall be followed to ensure that equipment is removed from use prior to its becoming past due or inaccurate.

11.5.4 Notification of the user and appropriate higher authority of any significant out-of-tolerance condition found, to assure an adequate evaluation of the possible impact on product quality.

11.5.5 Preventative and Maintenance of equipment shall be done IAW CAL-002.

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12.0 GOVERNMENT/CUSTOMER FURNISHED PROPERTY CONTROL

12.1 **Purpose.** This document establishes the methods and assigns the responsibility for the administration and control of government/customer furnished property.

12.2 **Scope.** This document applies to the receipt, control, storage, maintenance, inspection, use and shipment of government/customer furnished property.

12.3 Documents

12.3.1 Applicable

CAL-001	Calibration
CFM-001	Handling of Government/Customer Equipment

12.4 Definitions

12.4.1 Government/Customer Furnished Property (GFP). Material that may be incorporated into or attached to an end item to be delivered to the government/customer, or that may be expended in the performance of the contract. It includes, but is not limited to, raw and process material, parts, components, assemblies, and small tools and supplies that may be consumed during the life of the contract. This also includes returned goods for rework/repair or replacement.

12.4.2 Government/Customer Furnished Equipment (GFE). Machinery, equipment, machines, tools, and other production equipment furnished by the government/customer to be used in the performance of the contract, but which is not to be incorporated into the deliverable product.

12.5 Responsibility

12.5.1 The Production and/or Quality manager(s) shall be responsible for proper handling and control of GFE.

12.5.2 Production control shall be responsible for control of GFP.


12.6 Requirements

12.6.1 GFP shall be handled IAW CFM-001.

12.6.2 GFE shall be controlled by the same calibration and maintenance schedule exercised for equipment as specified in CAL-001.

12.6.3 GFP will not be removed from company premises (except for processing at subcontractors).

12.6.4 Modifications to GFP or GFE will not be made without government/customer approval.

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13.0 PROCESS CONTROL AND TRACEABILITY

13.1 **Purpose.** This document delineates the requirements for process controls and traceability.

13.2 **Scope.** This document applies to all production/test and value added functions.

13.3 **Documents**

- 13.3.1 Applicable
RCD-001 Record Maintenance
PRO-002 Indication of Inspection/Test Status Control Procedure

13.4 **Responsibility**

13.4.1 Production is responsible for process controls and the rates of continuous improvement; sustained and targeted. Manufacturing is responsible for implementing any necessary corrective action or improvement required to bring a production process to acceptable performance levels.

13.5 **Requirements**

13.5.1 Process Control

13.5.1.1 All production areas shall have documented procedures for processes under their control.

13.5.1.2 Statistical process controls and other statistical methodologies shall be utilized in production where it is determined that data could improve the processes and product. Design of experiment and basic engineering statistics are utilized where appropriate for process improvement. Statistical process control records shall be maintained by the area and / or Quality.


13.5.2 Trace ability.

13.5.2.1 Traceability shall be maintained for the following:

- All elements and material to their incoming inspection lots.
- All production amplifiers, pallets, etc to their lot travelers (including rework, dates, operator identification, and all process steps)
- Test data by serial number on units

13.5.3 Records

13.5.3.1 Records shall be retained IAW RCD-001

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14.0 PRODUCTION CONTROL

- 14.1 **Purpose:** This document describes the production control requirements for PMT
- 14.2 **Scope:** This document applies to all Production/ test functions.


14.3 Documents:

- 14.3.1 Applicable (as required):
 - Job Traveler
 - ATP – Accepted Test Procedure
 - Part specific Drawing (s)
 - BOM- Bill of Materials
 - AD – Assembly diagram

- 14.3.2 Reference: M-1 Software

14.4 Procedure:

- 14.4.1 When Production Control schedules production, they will normally create a Job Traveler via the M-1 (MRP System) IAW DOC-002. This will be accompanied by all documentation necessary to produce the product. Typical documentation would include combinations of the following: ATP, SP, Assembly Diagrams as listed in the Bill of Materials (BOM).
- 14.4.2 BOM's are entered into the system per DOC-004
- 14.4.3 The job traveler shall specify materials, procedures and processes to be used and shall be the document to show the product routing.
- 14.4.4 At each step of the job traveler the assembler and/ or test technician shall fill in the required information (quantity in/out, date, assembler initials) and note any irregularities.
- 14.4.5 If a discrepancy occurs, the operator, test technician and/or production manager shall fill out a discrepancy notice per QAP-002 which must be dispositioned and signed prior to moving material to the next step.
- 14.4.6 When the job traveler has been completed, the product shall be forwarded to next stage or shipping, if appropriate, and documentation shall be filed IAW RCD-001

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15.0 **RECEIVING INSPECTION**

15.1 **Purpose.** The purpose of this document is to ensure that materials procured from suppliers conform to the requirements of the procurement documents and the specified drawings and procedures.

15.2 **Scope.** This document applies to all procured items intended for end-item use and to the personnel who receive and/or inspect that material.

15.3 **Documents**

15.3.1 Applicable

QAP-004	Control of Age/Temp Sensitive Material
QAP-001	Receiving Inspection/First Article
QAP-002	Nonconforming Material
CFM-001	Handling of Government/Customer Equipment
QAP-003	Sampling Inspection Plan
RCD-001	Record Maintainance

15.4 **Responsibility.**

15.4.1 The Quality Department is responsible for assuring that all accepted supplies conform to the specified requirements.

15.5 **Requirements.**

15.5.1 All raw materials shall be inspected and/or evaluated and shall show evidence of acceptance IAW QAP-001.

15.5.2 Unless otherwise specified, sampling inspection shall be utilized IAW QAP-003.


15.5.3 Government/Customer furnished property shall be received and inspected IAW-QAP-001. .

15.5.4 First article inspection or test is required upon receipt of items from a new supplier or new product from an approved supplier, and shall be performed IAW QAP-001.

15.5.5 Age and temperature sensitive materials shall be handled, inspected and stored IAW QAP-004.

15.5.6 Nonconforming materials shall be dispositioned IAW QAP-002.

15.5.7 Records of all receiving inspections and tests performed and all received data and certificates shall be maintained IAW RCD-001.

	TITLE Quality Assurance System		
	SIZE A		DRAWING QM0801
			REV A

16.0 INPROCESS AND FINAL INSPECTION

16.1 **Purpose.** This document defines the system which shall be followed when performing in-process inspection, final inspection, and program/quality review.

16.2 **Scope.** This document applies to all shippable products and to the personnel who perform inspections.

16.3 Documents

16.3.1 Applicable

IPC-A-610	Acceptable Workmanship Standard
QAP-002	Nonconforming Material
QAP-005	In process Inspection
QAP-006	Final Inspection

16.4 Responsibilities

16.4.1 Quality and Production is responsible to ensure that all product is acceptable and meets the criteria of QAP-005/QAP-006.

16.4.2 Quality is responsible to ensure that all process steps are completed per the applicable procedure. Quality shall perform inspections as shown on travelers (work instructions, etc.) Quality shall perform audits and additional inspection when required by the contract or quality program plan.

16.5 Requirements


16.5.1 Product shall be inspected per the applicable QAP- listed above.

16.5.2 Manufacturing and quality shall assure that only currently calibrated tools, gages and equipment are in use at each station.

16.5.3 All discrepancies shall be recorded IAW QAP-002.

16.5.4 All final data required by contract, shall be made available to the government or customer quality assurance representative for review, when requested.

16.5.5 When modifications, repairs or replacements are required after assembly and / or test, the affected material shall be reinspected or re-tested for the affected characteristics.

	TITLE Quality Assurance System		
	SIZE A		DRAWING QM0801
			REV A

17.0 INDICATION OF INSPECTION STATUS

17.1 **Purpose.** This document establishes a positive system for identifying the inspection and test status of products.

17.2 **Scope.** This document applies to all methods used to indicate inspection and test acceptance of materials, processes, parts, components, assemblies, and systems.

17.3 Documents

17.3.1 Applicable

RCD-002 Indication of Inspection/Test Status Control Procedure

17.4 Responsibility.

17.4.1 Quality is responsible for assuring conformance with all product and process requirements and shall control the use and issuance of all quality stamps. Production is responsible for assuring conformance by use of initials, employee number or other suitable means.

17.5 Requirements.

17.5.1 All stamps, initials, numbers, etc., shall be controlled IAW RCD-002.

17.5.2 A set of stamps shall be issued to each member of the quality assurance organization and / or designee, as required.

17.5.3 A stamp issuance log shall be maintained and shall identify all issues, re-issues, terminations, and lost stamps.

17.5.4 Quality management will authorize the requisition of new and replacement stamps when required.


17.5.5 Stamps may be issued to production personnel by authorization of the quality manager.

17.5.6 Initials may be used by assemblers and / or test technicians to show completion of steps or acceptance or operations.

17.5.7 The product shall be identified clearly at all times.

17.5.8 Where traceability is required, that information shall be retained.

17.5.9 Product status shall be clear at all times.

	TITLE Quality Assurance System		
	SIZE A		DRAWING QM0801
			REV A

18.0 NONCONFORMING MATERIAL

18.1 **Purpose.** This document defines the methods for identifying, segregating, controlling, reporting, and processing nonconforming material found during manufacturing, inspection, and test operations.

18.2 **Scope.** This document applies to all material, parts, subassemblies, and end item deliverable units that, during manufacturing, inspection, or test, does not conform to drawings, specifications, procedures, or contractual requirements. This also applies to the personnel who manufacture, inspect and handle this material.

18.3 Documents

18.3.1 Applicable

QAP-007	Corrective Action
QAP-002	Nonconforming Material

18.4 Responsibility.

18.4.1 Quality shall be responsible for assuring that identified nonconforming conditions and items are stored, dispositioned and corrected.

18.5 Requirements


18.5.1 All nonconforming material shall be identified via formal documentation and shall be segregated from the normal process and test flow IAW QAP-002.

18.5.2 Material review shall be handled IAW QAP-002.

18.5.3 When defined contractually, nonconforming material with 'Use as is' or 'Repair' dispositions shall be submitted to the customer or government quality representative before the disposition can be implemented.

18.5.4 Corrective action is initiated by Quality to preclude recurrence of nonconforming conditions IAW QAP-007 when required.

18.5.5 Completed nonconforming (discrepancy notices) reports shall be retained by the quality department.

	TITLE Quality Assurance System		
	SIZE A	DRAWING QM0801	REV A

19.0 CORRECTIVE/PREVENTIVE ACTION

19.1 **Purpose.** This document defines the method by which prompt action is initiated to correct known or potential conditions which may result in defective supplies, materials or products.

19.2 **Scope.** This document applies to all products, processes and personnel at PMT.

19.3 Documents

19.3.1 Applicable

QAP-007	Corrective Action
QAP-002	Nonconforming Material

19.4 Responsibilities

19.4.1 Quality is responsible for maintaining inspection records, discrepancy notice records, corrective action, customer corrective actions and preventive action records. Accumulated data shall be reviewed comparing product lines, part numbers, quantity of items inspected, quantity rejected, and reason for rejection. Analysis shall also include scrapped and reworked product, and the determination of the underlying causes of defects. Purchasing is responsible for maintaining supplier performance records. Quality shall issue corrective action requests to suppliers when necessary, and perform follow up to ensure acceptable corrective action response is received.


19.4.2 Production is responsible for identification of areas requiring corrective action within the manufacturing areas and for ensuring corrective and preventive action is timely and complete. Production is responsible for trend analysis with respect to process control.

19.5 Requirements

19.5.1 If the need for corrective action is established, the corrective action shall be defined as 1) correction of the specified deficiency, and 2) correction of the root cause. Corrective action shall be initiated, formally drafted, submitted, and closed IAW QAP-007.

19.5.1.1 Corrective action (as required) for in-house product deviation shall be performed and shall be recorded on the discrepancy notice form IAW QAP-002.

19.5.2 Preventive action shall be performed IAW QAP-007.

	TITLE Quality Assurance System		
	SIZE A	DRAWING QM0801	REV A

20.0 HANDLING, STORAGE, PACKAGING AND PRESERVATION

20.1 **Purpose.** This document defines the method and responsibilities for handling and protection of products.

20.2 **Scope.** This document applies to the handling, storage and preservation of all parts, components, work in process, and stored or finished goods.

20.3 Documents

20.3.1 Applicable

QAP-004	Control of Age/Temperature Sensitive Materials
HST-001	Handling, Storage, Packaging and Preservation
HST-002	ESD Control


20.4 Responsibility

20.4.1 It is the responsibility of all employees to assure that materials and products are handled, stored, packaged and preserved in a manner which protects against degradation, damage or loss.

20.5 Requirements

20.5.2 All products and materials shall be handled, stored and preserved IAW HST-001 and HST-002.

20.5.3 All limited life materials shall be handled IAW QAP-004.

	TITLE Quality Assurance System		
	SIZE A		DRAWING QM0801
			REV A

21.0 Government/Customer Interactions

21.1 **Purpose.** This document establishes the interactions between PMT and the government or customer during visits to PMT.

21.2 **Scope.** This document applies to all end-items produced under contracts imposing government/customer source inspection (GSI or CSI) or surveillance.

21.3 **Documents**

21.3.1 Applicable

CON-004 Source Inspection-Customer/Government

21.4 **Responsibility.**


21.4.1 The quality manager shall be responsible for assuring conformance to these requirements.

21.5 **Requirements.**

21.5.1 During initial quality planning, the requirement for customer/government interaction shall be identified and documented.

21.5.2 Government and customer representatives are authorized to use measuring and test equipment required to verify measurements. Employees shall be made available to operate equipment the government or customer representative is not qualified to operate.

21.5.3 Government/Customer source inspection, as defined by the contract, shall be arranged and coordinated by the quality manager or designee for all required inspections, tests and surveillance functions, IAW CON-004.

	TITLE Quality Assurance System		
	SIZE A		DRAWING QM0801
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22.0 CUSTOMER RETURNS

22.1 **Purpose.** This document establishes the standard method for receiving and handling customer returns.

22.2 **Scope.** This document applies to all returned material, component parts, subassemblies, assemblies, and equipment shipped to customers on purchase orders or contracts.

22.3 Documents

22.3.1 Applicable

QAP-008

Returned Material Procedure

22.4 Responsibility


22.4.1 The Sales manager and Quality are responsible for the customer returns system and will maintain the appropriate data to establish trends and initiate corrective action.

22.4.2 The Quality Manager, Sale and Engineering will provide corrective action when required.

22.5 Requirements

22.5.1 All customer returned items shall be processed as outlined in QAP-008.

22.5.2 Reworked and repaired items shall be tested and inspected from the point of evaluation by production personnel IAW the disposition instructions specified on QAP-008.

	TITLE Quality Assurance System		
	SIZE A		DRAWING QM0801
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23.0 INTERNAL QUALITY AUDITS

23.1 **Purpose.** The purpose of this document is to describe the method used for auditing the internal quality system.

23.2 **Scope.** This document applies to all internal audits performed by quality personnel.

23.3 Documents

23.3.1 Applicable

QAP-008	Internal Quality Audits
QAP-002	Nonconforming Material

23.4 Responsibility.

23.4.1 Quality shall be responsible for the administration of this procedure.

23.5 Requirements.

23.5.1 All production, inspection and engineering areas shall be monitored IAW QAP-008.


23.5.2 When required, quality audits will be performed on major programs which will be audited IAW contractual requirements.

23.5.3 All nonconformance's resulting from the above audits shall be handled IAW QAP-008.

23.5.4 For assessment of the quality system's effectiveness, all audit results shall be reported to the area Manager and at management review meetings.

23.5.5 A summary of internal and external quality audit findings will be issued to management upon completion of the internal audit.

23.5.6 PMT shall perform an internal audit of the quality system yearly.

	TITLE Quality Assurance System		
	SIZE A		DRAWING QM0801
			REV A

24.0 STATISTICAL METHODS

24.1 **Purpose.** This document describes the statistical methods to be used at PMT for statistical sampling and other statistical operations.

24.2 **Scope.** Statistical methods may be used by any department to improve or monitor the processes involved. Sampling can be performed at all inspection points.

24.3 **Documents**

24.3.1 Applicable

QAP-003	Sampling Inspection Plan
SPC-001	Statistical Methods

24.4 **Responsibility.**

24.4.1 The Quality Department shall be responsible for assuring that all sampling plans in use are documented and used correctly. Quality will approve test and inspection sampling plans and will statistically ensure the appropriate confidence level, when used correctly. Quality shall review statistical process control plans submitted by other departments, where appropriate.


24.5 **Requirements**

24.5.1 All sampling plans used shall be IAW QAP-003 and shall contain all necessary conditions to assure effective sampling.

24.5.3 Statistical reports using sampling data can be generated by any area manager for management use in decision and policy making as required.

24.5.4 Statistical data shall be used, where appropriate, by production and / or quality to monitor and improve processes. These plans shall be generated IAW SPC-001.

24.5.4 Statistical methodologies include, but are not limited to Design of Experiments (DOE), Statistical Process Control (SPC), Pareto Charts, Histograms, Cause & Effect Diagrams, Graphs and other tools.

	TITLE Quality Assurance System		
	SIZE A		DRAWING QM0801
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