



# QUALITY PROCEDURES MANUAL

ISO 9001:2000 Rev. A, 2/15/05

Approved *Bipin Mukherji*

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**TITLE: DOCUMENT AND DATA CONTROL**

**PROCEDURE NUMBER: 4.2.3**

**REV: N/C DATE: 10-01-2003**

**PURPOSE:** This procedure establishes the methods used by AML to control Documents and Data for release, retention, and distribution from customers, suppliers and AML internal, as required. This will include customer furnished electronic, computer formatted, paper documents, and digital data for any purpose in the contracted performance of AML.

**SCOPE:** This procedure covers the control of all documents and data.

**DEFINITION:** Not applicable.

**RESPONSIBILITY:** The Document Control Department managed by the President or his designee will be responsible for the control of all documents and data.

**PROCEDURE:** AML Document Control Department personnel that reports to President, will be responsible for the release, retention, distribution, accountability, revision updating, change implementation and removal of all Documents and Data, as required by purchase order requirements. These functions will be controlled by training and documented job description. Documents will be classified as Company internal control documents (those documents generated by AML), and controlled by the revision form, Customer controlled documents (those documents that are controlled by the customer such as customer Blue Prints or specifications). Customer controlled documents will be placed in the job folder upon job completion, or noted as being reference and customer controlled. Customer controlled documents will not be controlled by AML, and will be issued by revision per P.O. for each job. The control of Public documents such as industry standards, Mil-specs, Ansi, Asme, Ansqc, ISO, etc. will be per contract document service (These documents are controlled by Industry and a contract service that list the current revision level, and will supply the document.)

**Prior to release of any Document,** the AML Quality Department will review and approve the documents. This will be done by signing or stamping a copy of the Document or the master list of documents.

**Master List** of revisions of all documents will be maintained in either the Document Control Database, and or in the Master Log for Internal documents maintained by The Quality Department. It will be updated as required.

**Document Change Incorporation** will be per customer and AML agreed upon timetables. All changes will be documented and agreed upon prior to release. All changes and implementation will be documented in the AML job number file. The document will then be released to the department requiring the document. The document will be reviewed, distributed, implemented (to the extent required), and maintained in a timely manner. This will be defined as review within 7 days, with distribution and implementation per customer schedule.

**Document Accountability:** Open documents such as P.O.'s, quality and customer data will remain on WIP status until all parts on the P.O. are shipped to the Customer. Closed documents will be filed by job number and treated as closed files and retained for seven years per QAP 4.2.4. Only the President, can remove documents from a closed job file, and is responsible for their return.

**4.2.3 Document & Data control continued from Page 3 of 35**

**Customer Affectivity** points will be reviewed by AML on the contract review and documented on the work instructions, and will become effective upon the mutual agreement of date or serial number, or lot as specified by the customer in the Purchase Order. This will assure the same revision level at AML on all its internal documents as required by the customer purchase order.

**Obsolete Documents and Data** will be promptly retrieved by the Quality control department by removing the obsolete documentation from the job file. Obsolete documents and data will be destroyed or archived per customer requirements. Obsolete documents retained for any reason will be stamped with the word “obsolete” or “for reference”, and will be controlled as needed.

**Changes** will be implemented to all customer design media only after AML has agreed to the change release date, or if written authorization is received by AML for those contracts that have been deemed as priority by the Customer. The nature of the changes will be identified and become part of the documentation in the job folder, and where practicable will be attached to the document. AML shall maintain the record of change in the job folder for documents that are controlled and not returned to the customer. Hand amendments shall be clearly marked, initialed and dated. The new document shall be issued as soon as possible.

**Amendments/ Revisions:** Will be reviewed and will go through the same cycle as new documents. All amendments/revisions will be initiated by Contracts and distributed as necessary.

**RECORDS:** All records will be maintained in accordance to procedure 4.2.4 “Control of Quality Records”

**REFERENCES:** Not applicable.

**NATURE OF CHANGES:** New.

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**TITLE: CONTROL OF QUALITY RECORDS**

**PROCEDURE NUMBER: 4.2.4**

**REV: A DATE: 02-15-2005**

**PURPOSE:** This procedure establishes the method used to control issue, maintain, and retain quality records at the AML facility.

**SCOPE:** This procedure covers all departments.

**DEFINITION:** Not applicable

**RESPONSIBILITY:** The Quality Manager will insure the compliance to this procedure.

**PROCEDURE:** All records that verify the integrity of AML service are kept for a minimum of seven years. Records are maintained for a prescribed time according to the applicable record retention schedule. All records are maintained (stored) in a manner to preclude deterioration. All records shall be readily available for review by AML customers or regulatory. All customer records will held in confidence and no third party may access customer information without the customers written authorization.

**Appropriate Controls:** AML will identify and index all quality records by part number, supplier, and or customer. All quality records will be collected in storage boxes or racks and all files will be controlled and maintained by the QA department. All quality records will be reviewed for customer disposition requirements, not to be less than seven years.

**Calibration / Inspection Records (Attributes or Variables)**

Inspection records are maintained within the QA Department for all active part numbers and are filed by job number. Observations and data shall be recorded at the time they are made and be identifiable to a specific task and work order.

**Mistakes:** Mistakes will be single-line crossed out, correct entry made, and signed or initialed by the person making correction. Electronic records shall be backed-up weekly to prevent data loss. All electronic data required to be saved will have a paper back-up, or an electronic back-up. Upon completion of all operations (i.e., either shipped to a customer or sent to stock) the record is maintained in the Quality Assurance files in accordance with the QA record retention schedule.

**Records Retention**

All Records are the property of AML and are maintained through their life cycle in a systematic manner. Pertinent Quality Records are retained (10 years) to comply with governmental, contractual or AML requirements, whichever is longer. Records retention schedules as defined and documented for each department, is maintained and audited by the QA Internal Audit procedure.

**RECORDS:** All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES:**

**NATURE OF CHANGES:** New.

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**TITLE: MANAGEMENT REQUIREMENT**

**PROCEDURE NUMBER: 5.0**

**REV: A DATE: 02-15-2005**

**PURPOSE:** To establish a procedure for the management of AML to define the tasks and the responsibilities of management in the performance of the requirements of ISO9001:2000 and customer requirements.

**SCOPE:** This procedure applies to all company personnel.

**DEFINITION:** N/A

**RESPONSIBILITY:** The President will be responsible for the performance of this procedure.

**PROCEDURE:** Management responsibility at AML will be to define the company objectives, lead in the accomplishment of those objectives while complying with customer, ISO9001:2000 and regulatory and company policies.

**Responsibility and Authority:** The President is responsible for maintaining the quality of AML services and products. Responsibility for implementing the quality procedures of AML is delegated to the Quality Assurance Manager All AML personnel have documented job descriptions that define responsibility, authority, and their relationship within AML. (see organization chart) The Quality Assurance Manager oversees the Quality Assurance Organization of AML Quality Assurance has the responsibility for Quality Planning, internal Audits, The protection of Customer information and proprietary rights. All customer information will be treated as confidential. All request for customer information must be in writing on customer letterhead. No third party can access customer information. All request for information will be verified by AML employees. All customer records will be safely stored, and held in confidence to the client. AML will not allow employees to perform calibration, or inspection, to any current customer, competitor or supplier without written consent of the Quality Manager. Violation of this policy by employees may result in termination. In addition, all employees are to report any possible conflict of interest situation they may have when it occurs to the Quality Manager.

AML will notify customers in writing of any changes to Quality Management that affects any of the above concerns.

- a) The Quality Assurance Manager has the organizational freedom to initiate action to prevent the occurrence of any nonconformities relating to the product, process and quality system;
- b) Identify and record any problem relating to the product process and quality system;
- c) Initiate, recommend or provide solutions through designated channels;
- d) Verify the implementation of solutions;
- e) Control further processing, delivery or installation of nonconforming product until the deficiency has been corrected:

**Resources:** AML shall identify resources needed during the contact review function. All requirements will be addressed and adequate resources will be provided. The assignment of trained personnel, for management, performance of work, all verification activities including quality audits will be provided. Quality Assurance approves personnel performing quality inspections. Receiving Inspection verifies the customer product for count and adherence to customer documentation prior to start of work.

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**Management Requirement continued from Page 6 of 35**

**Management Representative:** The ultimate responsibility for maintaining quality remains with the President. The authority for implementing and maintaining the quality system is delegated to the Quality Manager. Therefore, Quality Assurance has the final derivative authority on all quality matters. Responsibility for implementing the quality procedures that comply with ISO9001:2000 and customer requirements are assigned to the President or his designee.

**Process Performer:** When AML has a quality assurance activity performed by an individual process performer (e.g., operator, buyer, planner) AML shall have procedures that define the specific tasks and responsibilities that are authorized and the corresponding requirements and training necessary to perform those tasks. The requirements will be noted on the work instructions.

**RECORDS:** All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES:** None.

**NATURE OF CHANGES:** New.

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**TITLE: CUSTOMER FOCUS-SERVICE TO CLIENTS**  
**PROCEDURE NUMBER: 5.2**  
**REV: A DATE: 02-15-2005**

**PURPOSE:** To establish a procedure for the documentation, monitoring the performance in relation to the work performed by AML. All monitoring by customer will provide confidentiality of other clients.

**SCOPE:** This procedure applies to all customers

**DEFINITION:** None

**RESPONSIBILITY:** The Quality Manager will be responsible for the documentation and monitoring of the documentation, and the review.

**PROCEDURE:** All customer purchase orders will be reviewed and contract review will be performed to ensure that the customer requirements are determined. To ensure that the customer requirements are determined and customer focus is achieved, AML will review and monitor the quality of our service by means of customer quality data (rejections, corrective actions, and returns) and will review delivery to contract due dates by AML delivery data based on the customer requirements. AML will also monitor customer complaints, feedback and communication to determine customer satisfaction, and focus. All customer complaints will be resolved and corrected, feedback and communications will be addressed, and any request by the customer of an improvement nature in satisfaction will be reviewed and addressed by the President or his designee.

This will be documented and will be used as customer information for the monitoring and review process.

**RECORDS:** All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES:** None.

**NATURE OF CHANGES:** New.

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**TITLE: QUALITY PLANNING & IMPLEMENTATION**

**PROCEDURE NUMBER: 5.4**

**REV: A DATE: 02-15-2005**

**PURPOSE:** This procedure establishes the methods used by AML Quality Assurance to implement and plan for the quality requirements and implementation of the contract or order, and the structure of the quality documentation.

**SCOPE:** This procedure covers the Quality System and Implementation into AML Quality Documentation. There are four levels of Documentation. Level one is the Quality Manual which define the policies and objectives. The second level are the Procedures, which define how a Quality process is performed. The third level of documentation are work instructions that define the task of a particular task. Supporting documentation, records, forms, memos, etc are considered a fourth level of documentation.

**DEFINITION:** Not applicable

**RESPONSIBILITY:** The Quality Department will be responsible for the quality planning, quality documentation structure and department managers will be responsible for the implementation of the quality plan that affects their department. The Quality Manager will assure that quality system procedures are readily accessible to personnel who are responsible for performing work in conformance to requirements, and to customer and/or regulatory authorities representatives.

**PROCEDURE:** AML Quality Department reviews every contract at the earliest phase of contract performance to customer purchase order requirements.

**Quality Policy:** AML will create a Quality Policy that is relevant to their goals and expectations. The Quality Policy will be created by an executive with responsibilities to define and document those goals, and ensure that the quality policy is understood, communicated, implemented and maintained at all levels of the organization. Top management has signed the Quality Policy Statement published and displayed throughout AML. By training, and new employee orientation AML will ensure that all employees understand the Quality Policy.

**Roles and Responsibilities:** AML will have a managerial staff headed by the president that will have the authority and resources needed to discharge their duties. The overall responsibility for the technical operations will be the responsibility of the President who shall ensure compliance to ISO9001:2000. Quality Assurance is managed by the Quality Manager who is directly responsible for ensuring the compliance with ISO9001:2000, the implementation of this Quality Manual, and is responsible for ensuring that all the Quality Requirements of the Manual and the customer's requirements are met: The Quality Manager will have the freedom and authority to:

- a) initiate action to prevent the occurrence of any nonconformities relating to the service, process and quality system;
- b) identify and record any problem relating to service, process and quality system;
- c) initiate, recommend or provide solutions through designated channels;
- d) verify the implementation;
- e) control further processing, delivery, or evaluation of nonconforming service until the deficiency or unsatisfactory condition has been corrected.

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**5.4 Quality Planning & Implementation Management Review continued from Page 9 of 35**

AML is organized to allow the technician the independence of judgment, and with the required training, the confidence and ability to assure that integrity in all phases of service is maintained at all times.

AML will provide supervision for all its technicians. Supervision will be familiar with the service required and the assessment of the results. AML will maintain a supervisory to non supervisory ratio of at least 10 to 1, which shall be adequate to ensure technical and service excellence.

AML in the absence of its Quality Manager or Technical Manager will have the President act as the deputy as an interim until a full time replacement can be appointed.

**RECORDS:** All records will be maintained in accordance to procedure 4.2.4 “Control of Quality Records”

**REFERENCES:** None.

**NATURE OF CHANGES:** New.

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**TITLE: MANAGEMENT REVIEW**

**PROCEDURE NUMBER: 5.6**

**REV: A DATE: 02-15-2005**

**PURPOSE:** To establish a procedure for the management review functions at AML .

**SCOPE:** This procedure applies to any and all management reviews.

**DEFINITION:**

**RESPONSIBILITY:** The President will schedule the review of the quality system and calibration activities to ensure their continued suitability and effectiveness, and to introduce changes or improvements.

**PROCEDURES** The President will review the quality system based on his observations, customer feedback and complaints, supplier, and employee information. In addition the President will review results of audits, process performance and service conformity, status of corrective and preventive actions, changes that could affect the quality management system, and recommendations for improvements. AML will also verify compliance to the AML Quality Manual, and the ISO9001:2000 specification.

**The Review Output:** In addition to the above noted procedure the review shall include any decisions and actions related to improvement of the effectiveness of the quality management system and its processes, improvement of service related to customer requirements, and resources needed. The management review may require action items, improvement goals, continuous improvement plans and both long and short term goals.

**RECORDS:** All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES:** Not applicable

**NATURE OF CHANGES:** New.

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**TITLE: EMPLOYEE COMPETENCE, AWARENESS AND TRAINING**

**PROCEDURE NUMBER: 6.2.2**

**REV: A DATE: 02-15-2005**

**PURPOSE:** This procedure establishes AML's responsibility to provide training, certification, and motivation to new and existing employees attempting to continually improve the work force skill, product performance, and services. AML shall

- a) determine the necessary competence for personnel performing work affecting product quality,
- b) provide training or take other actions to satisfy these needs,
- c) evaluate the effectiveness of the actions taken,
- d) ensure that its personnel are aware of the relevance and importance of their activities and how they contribute to the achievement of the quality objectives, and
- e) maintain appropriate records of education, training, skills and experience .

**SCOPE:** This procedure covers all departments at AML .

**DEFINITION:** Not applicable

**RESPONSIBILITY:** It is the responsibility of President to establish the method, parameter or function and criteria for staff training.

**PROCEDURE:** The method of training may be formal, informal or On-the-Job Training (OJT). All formal training programs are approved by the President and/or the Quality Manager before implementation. Each employee who performs a service, related to the customer, product and/or administration, must be required to meet minimum competence standards that can be achieved by AML training. After the training, a training record is initiated documenting the individual's upgraded skill level. All training records will be maintained in the department that the person works for, the Quality department, or in their personnel file. All specific quality tasks will be assigned on the basis of experience, education or training, and will have documented job descriptions.

**Training Program**

Formal training programs are available and may be required. Where applicable, informal programs may be developed by upper management or department managers. AML training programs are coordinated to maximize efficiency, and develop expertise in essential processes and methods. Training will be documented on the AML Training Outline Form

**Scheduled Agendas:** All training classes (formal or informal) are documented and approved by the President.

**OJT** is a very important aspect of the employee's training and is, therefore, listed on the training record. OJT may be used for developing an employee's productivity and skill until a formal or informal training program is conducted. Once an employee is scheduled for a formal or informal program the training is completed.

**Additional Responsibilities:** Personnel proficiency is periodically assessed to determine requirements for additional training.

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**6.22 Employee Competence, Awareness & Training continued from Page 12 of 35**

**RECORDS:** AML shall maintain records of all training, experience, competence, qualifications, skills and education. All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES:** Not applicable.

**NATURE OF CHANGES:** New.

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**TITLE: CONTRACT REVIEW**

**PROCEDURE NUMBER: 7.2.1**

**REV: A DATE: 02-15-2005**

**PURPOSE:** This procedure establishes the methods used by AML Contracts and Quality Assurance to review a contract and establish the Quality plan for completion of the requirements of the customer's contract.

**SCOPE:** This procedure covers all contracts received by AML.

**DEFINITION:** Not applicable

**RESPONSIBILITY:** Quality, Contracts, or the President will perform the contract review, and the work instructions will be created.

**PROCEDURE:** AML reviews every contract to make sure that the requirements are adequately defined and documented. Where no written statement of requirement is available for an order received by verbal means, AML shall ensure that the order requirements are agreed before their acceptance by AML. Contract reviews also note that any difference between the contract requirements and the tender received by AML must be resolved, AML has the capability to meet the contract requirement, and that all quality requirements are addressed in the quality planning portion of contract review. All risks associated with new technology and/or short delivery time scale will be evaluated when management, prior to quoting a job, has reviewed the "Request for Quote" document from the customer.

**Revision Verification and Distribution:** AML Contracts Department will verify that the work instructions has the agreed upon revision/configuration that is in the latest customer purchase order. This will be done by noting the revision on the "Contract Review" form and distributing the form. to all departments required,

**Quality plan:** AML Quality as an integral part of the contract review will create a quality plan (work instructions). AML Quality will verify that all departments with quality action items are notified, by means of the work instructions. The quality plan will include an audit time schedule for verification of action items. The quality plan will be implemented in the work instructions.

**Amendments:** All amendments will be reviewed and will go through the same cycle as new contracts. All amendments will be reviewed against the original contract to verify changes, and to document amendment implementation. Work instructions will be amended to implement the agreed upon change.

**Tender Review:** All tenders will be reviewed by Quality and or Management to determine if all customer requirements are defined. If any requirement is not clear, the customer will be notified by Quality or Contracts for clarification. When all requirements are clearly defined, Quality and or Management and all required company personnel will review the tender to make certain that AML has the capability to meet the requirements, the capacity to meet the requirements in the time frame required, and obtain the required material, processing, equipment, testing, and inspection required. Tenders will be addressed to the customer by the President or his designee. The tenders may be accepted, rejected, accepted with modifications, or placed on hold until notification by the customer.

**Tender Review Documentation:** Due to the variety of customer tender submittal formats, and the type of tenders received (verbal, fax, email, engineering documents, formal contract request, customer forms for RFQ, partial service, engineering tenders, prototype, etc.) AML will respond in a manner that is acceptable to the customer. AML will document tender review on their contract review form and or on company stationary with "as required data" for retention to be used when the tender is submitted as a contract by the customer.

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**7.2.1 Contract Review continued from Page 14 of 35**

**RECORDS:** All records will be maintained in accordance to procedure 4.2.4 “Control of Quality Records”

**REFERENCES:**

**NATURE OF CHANGES:** New.

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**TITLE: PURCHASING**

**PROCEDURE NUMBER: 7.4**

**REV: A DATE: 02-15-2005**

**PURPOSE:** The purpose of this procedure is to provide a format for the purchasing of services and supplies and the approval of suppliers to AML . AML shall be responsible for the quality of all products purchased from subcontractors, including customer-designated sources.

**SCOPE:** This procedure covers all services and supplies in support of its calibration service.

**DEFINITION:** Not applicable.

**RESPONSIBILITY:** It is the responsibility of the President or his designee to insure compliance to this procedure.

**PROCEDURE:** AML suppliers meet certain basic requirements to qualify for supplying material, processes, and services used by, or supplied to, AML's customers. These requirements encompass technical capability, quality system management and cost constraints. The President and/or Quality Assurance Departments coordinate their efforts to select suppliers who meet or exceed quality requirements. All purchasing documentation shall contain data describing the services or supplies ordered. The purchasing data will be specific by supplier name, item required, specification as required, quality requirements, and certifications required.

**Evaluation of Subcontractors:** AML shall:

- a) Evaluate and select subcontractors on the basis of their ability to meet subcontract requirements including the quality system and any specific quality assurance requirements;
- b) Define the type and extent of control exercised by the supplier over subcontractors. This shall be dependent upon the type of product, the impact of subcontracted product on the quality of final product and, where applicable, on the quality audit reports and/or quality records of the previously demonstrated capability and performance of subcontractors;
- c) Establish and maintain quality records of acceptable subcontractors (see 4.2.4);

**Receiving and Storage.** All items received shall be inspected for acceptance to purchase order requirements. The item will be verified against the supplier certification, or shipping document against the AML purchase order.. Evidence of inspection and acceptance will be documented by signing and dating the supplier shipping document. All items purchased will be stored for use as follows; Equipment will be submitted for calibration if required to verify acceptance.

If acceptable it will be identified and placed on the equipment recall list and placed into service. Consumable products will be inspected for acceptance, and placed in storage in a cabinet that will prevent damage and deterioration. Items purchased as support items (tools, probes, vices, handling, shipping, storage, cleaning) will be accepted and stored as appropriate in the work areas required. AML does not use critical consumables.

**Approval Methods:** QA qualifies each new supplier by one or more of the following:

- \* Analysis of the supplier's product or process
- \* Supplier survey of quality system and/or capabilities
- \* Previous history with the supplier
- \* Customer Approved List



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**Approved Suppliers:** Approved or conditionally approved suppliers are used for all purchased parts, material and services that are part of the inspection process. Quality Assurance (QA) is responsible for approving or conditionally approving suppliers and the maintenance of the ASL.

**7.4 Purchasing continued from Page 16 of 35**

Specifications and/or drawings that list a specific supplier have commodities requisitioned from that supplier only. If specifications and/or drawings do not specify a supplier, any approved supplier capable of producing the required material may be used. AML may source inspect parts at suppliers location as required. Source inspection does not preclude rejection by AML if nonconforming material is found at subsequent operations.

**Supplier Disapproval:** Suppliers are evaluated on a continuous basis using incoming inspection history and application history to assess their performance as a supplier. Any supplier with performance below AML standards must upgrade performance or be disapproved.

**Corrective Action:** All suppliers are subject to corrective action in accordance to procedure 4.14. Any supplier with continuing substandard performance and who is unwilling or unable to correct the conditions causing the problem are removed from the ASL. When necessary, AML assists the supplier with the upgrading of performance through correlation studies, specification clarification, statistical process control, etc.

**RECORDS:** All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES:**

**NATURE OF CHANGES:** New.

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**TITLE: PRODUCT IDENTIFICATION AND TRACEABILITY**

**PROCEDURE NUMBER: 7.5.3**

**REV: A DATE: 02-15-2005**

**PURPOSE:** This procedure establishes the method used by AML to provide control for the identification of product from receipt through delivery, and throughout product life as required by customer contract. This procedure also establishes the methods and responsibilities for AML serialization and labeling of customer products, where so required by contract.

**SCOPE:** This procedure applies to all customer product.

**DEFINITION:** Not applicable.

**RESPONSIBILITY:** It is the responsibility of the Quality Manager to insure compliance to this procedure.

**PROCEDURE:**

**Lot Traceability:** All products received from customers at AML are lot traceable. Lot traceability documents the product through all inspection processes by means of documenting all processing on the work order.

**Sequential Records:** The AML work order sheet shall maintain sequential records for the product being inspected for traceability and in section status.

**Loss of Traceability:** If identification or traceability is Lost, AML will process the product as nonconforming material and will notify the customer. When serial number traceability, product positive identification by design characteristics is maintained by work orders, traceability is not considered lost.

**RECORDS:** All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES:**

**NATURE OF CHANGES:** New.

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**TITLE: CONTROL OF CUSTOMER SUPPLIED PRODUCT**

**PROCEDURE NUMBER: 7.5.4**

**REV: A DATE: 02-15-2005**

**PURPOSE:** This procedure defines the method used by AML in the control of customer-supplied product

**SCOPE:** This procedure applies to all customer-supplied product.

**DEFINITION:** Not applicable.

**RESPONSIBILITY:** It is the responsibility of the Quality Manager to insure compliance to this procedure.

**PROCEDURE:**

**Receiving Inspection:** AML will verify that all customer-supplied products meet the purchase order/blue print/specification requirements by processing all customer-supplied product through the AML receiving inspection department.

All customer supplied products will be inspected, and verified for conformance to customer documents.

**Rejections:** All rejected, or customer supplied product not conforming to customer document will be documented and segregated and the customer will be promptly notified. The disposition of non-conforming customer supplied product will be made by the customer, and will be documented in writing by the customer. AML will not accept any nonconforming customer supplied product unless directed to do so by the customer in writing.

**Identification:** Customer supplied product will be identified for all inspection operations as required. When CSP is to be used for fixturing, set-up or as gauging, it will be identified to the product and customer.

**Storage:** AML will store and maintain all customer-supplied products in the same manner as all other AML controlled customer product. Those items requiring special storage will be stored as required, with the special conditions being addressed in the customer purchase order.

**RECORDS:** All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES:**

**NATURE OF CHANGES:** New.

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**TITLE: PRESERVATION of PRODUCT**  
**PROCEDURE NUMBER: 7.5.5**  
**REV: A DATE: 02-15-2005**

**PURPOSE:** The purpose of this procedure is to define the general requirements and methods for handling, storage, preservation, packaging and delivery of material at AML.

**SCOPE:** This procedure covers all departments.

**DEFINITION:** Not applicable.

**RESPONSIBILITY:** The President will be responsible for implementation of this procedure.

**PROCEDURE:** All items are handled, packaged, stored, delivered in a manner to prevent damage and deterioration. All product for calibration or test is stored in approved locations and handled and packaged to prevent damage or degradation. All products at AML are handled stored, packaged, protected through all phases of calibration receiving, packaging, and shipping.

**Material Protection and Handling:** AML personnel receive, issue and store all material in the received or equivalent container unless special protection or handling is established by Quality Assurance or the customer. All products shall be handled in a manner to prevent damage or deterioration by use of padded or protective material handling units, and methods. Sensitive material shall be handled to prevent damage, and shall be documented on the work instructions as required.

**Material Storage:** All items are counted, measured or weighed to the unit of measure shown on the purchase order. A location is provided for each phase of calibration (receiving, wip, shipping) Incoming material tagged to prevent loss, and reviewed and documented as received condition on the receiving log, and is stored on racks or pallets to prevent contact, damage. Product that has been accepted through the work instructions process can be released to the customer by the Quality department. Product will be shipped per customer requirement and will be final inspected for all customer requirements, documentation and identification prior to shipment.

**Packaging:** Products are packaged to customer procedure, or industry standard commercial packaging.

**Preservation:** AML preserves parts to prevent damage or deterioration.

**Delivery:** The Shipping Department will deliver parts per customer requirements.

**Cleaning:** Shop cleaning shall consist of trash accumulation removal, the cleaning of work areas of general clutter, and the cleaning and maintenance of shop equipment, and facility.

**Prevention, Detection, and Removal of Foreign Objects:** AML shall maintain inspection work areas free of trash, accumulated metal chips, and foreign objects such as staples, paper clips, and items that would be detrimental to the performance of any AML product. AML shall daily perform cleanup of its work areas to remove foreign objects.

**Marking and Labeling including Safety Warnings:** Marking or labeling of product will be per customer requirements. Shop signs will designate areas for authorized personnel, safety warnings, safety equipment placement, and as needed warnings for cleaning, repair, or temporary hazards.

**RECORDS:** All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES:** Not applicable.

**NATURE OF CHANGES:** New.

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Approved Bipin Mukherji

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Date: 2/15/05

**TITLE: CONTROL of INSPECTION, MEASURING and TEST EQUIPMENT**

**PROCEDURE NUMBER: 7.6**

**REV: A DATE: 02-15-2005**

**PURPOSE:** This procedure establishes the methods used to control mechanical instruments that are used for inspection conducted at the AML facility. All inspection equipment used for inspection will be calibrated only by outside facilities compliant to ISO9001:2000 and ISO 17025 or Guide 25.

**SCOPE:** This procedure applies to all inspection equipment used at AML..

**DEFINITION:** Not applicable.

**RESPONSIBILITY:** It is the responsibility of the Quality Manager to insure compliance to this procedure.

**PROCEDURE:**

**Frequency Control:** The frequency of inspection is based on the purpose, degree of usage, equipment type, and stability. Normally, initial frequency is determined from the performance of similar equipment or by the manufacturer's specifications. This is determined from histories, commercial and military guidelines, usage, and environment. Gages such as gage blocks, surface plates and master gages are usually 1 year. Thread gages are controlled by usage. Gages with movable components are usually six-month recall. These frequencies are only a guide and can be adjusted as needed when documented.

**Calibration Due Date:** After the frequency has been established, a specific calibration on due date is established and the calibration label is attached to the equipment. Gauges too small to affix a sticker or equipment in an environment where stickers do not adhere, use an alternate method of marking (i.e., string tag on equipment or label affixed to container, or notation on calibration record). All equipment is re-calibrated by that date.

**Temporary Extensions:** Temporary extensions of calibration intervals may be authorized under certain conditions (i.e., completion of test in progress or no usage of that equipment). The Quality Assurance Manager authorizes these extensions. and are based on favorable (in tolerance) results of past calibration.

This decision is documented. In addition, the instrument must be found to be in tolerance upon calibration or an instrument discrepancy report is prepared.

The extension period may be for the normal calibration interval or for shorter periods of time. All extensions are entered in the measure history database.

**Lengthening Intervals:** Frequency intervals may be lengthened on instruments that have exhibited no out-of-tolerance conditions in 5 consecutive evaluations or as might be expected on plug or pin type gauges with minimum use. The Quality Assurance Manager approves interval adjustments.

**Shortening Intervals:** Intervals are shortened when an out-of-tolerance condition has occurred in 2 out of 5 evaluations. Out of service conditions do not count in this calculation on (Blown fuse, broken meter, etc.).

**NIST Traceability:** All calibration at AML will be traceable to the National Institute of Standards and Technology, or equivalent.

**Calibration System: Inspection and Maintenance Procedures:** Each type of equipment subject to Calibration at AML has an inspection and/or Calibration procedure written which establishes the

## **7.6 Control of Inspection, Measuring & Test Equipment continued from Page 21 of 35**

method of inspection and/or Calibration on for that type of equipment. This information is derived from sources such as instruction books, drawings or tool release and change notices. The instructions derived from manufacturer's specifications need not be rewritten but may be referenced in the equipment database. The Quality Assurance Manager approves inspection procedures

**Disposition of Obsolete or Defective Equipment:** Obsolete or defective equipment is removed from service, and placed in bonded storage. If the equipment is later reused, it is re-inspected as required per this procedure. If the equipment is beyond repair, it is permanently removed from service. If the equipment is repairable it is repaired to manufactures specification.

**Handling of Rejected Equipment:** When, during normal calibration, controlled equipment is found to be out of tolerance or defective, the Quality Manager is notified. It is the responsibility of the Quality Manager to determine the impact on products tested with the defective equipment since the previous

**Initial Inspection:** All new test equipment is routed to the Quality department prior to use for product acceptance. At this time the equipment is evaluated and, as required by this document, be given a control number, inspection and/or maintenance schedule and a calibration label.

**Equipment Recall Database:** This database maintains a record of the items that are to be controlled by this procedure. The database is accessed monthly by QA to identify the equipment due for calibration. QA then retrieves the equipment for calibration.

**Product Recall:** When a measuring device is found to be out of calibration, an evaluation by the QA Manager will take place to determine whether the result may be nonconforming product. If so, the product is recalled by issuing a letter with all the pertinent information to the customer, and arrangements made to reinspect the product.

**Calibration Techniques:** AML will use in-house calibration procedures to calibrate each measuring device. The procedure will be based on manufacturer's specifications, and will include visual, dimensional and operational inspection.

**Calibration Label:** Upon completion of calibration and providing the equipment is found satisfactory, it is tagged with a calibration label. This label indicates the calibration date and the due date of the next inspection. This label is stamped or initialed by the person performing the calibration.

**Equipment Identification:** Each piece of equipment that is used for qualitative measurement is controlled in accordance with this procedure and identified with an asset number. Small hand instruments and tools can be marked by acceptable "best" methods. When it is impractical to apply labels to the equipment (such as pin gauges) they may be applied to the container.

**Control Records Maintained:**

**Measure History Database:** The history database is maintained by recording the transactions of the equipment listed in the equipment database.

**Calibration on Data Sheet:** During the calibration of certain pieces of equipment, a calibration data sheet may be filled out if required. The intended purpose of this data sheet is to establish the necessary corrections to be used when using this equipment. The calibration data sheets may be placed with the equipment to which it pertains.

**ADVANCED MEASUREMENT LABS., INC.**

**7.6 Control of Inspection, Measuring & Test Equipment continued from Page 22 of 35**

**Environmental Controls:** All calibrations at AML will be in the ambient condition of the lab.

**Transportation and Handling:** Equipment is protected from temperature, mechanical or other stresses that may cause damage. Protection to CMMs considers temperature extremes (shock), vibration, handling shock, moisture or other harmful environments.

**Contracted Calibration and/or Measurements:** A calibration certificate is required in cases where calibration is performed by outside sources. This requirement may be met by a data sheet when like items are calibrated such as plug or ring gages by the same calibration source. This certificate includes the following minimum information:

**Identification** of the equipment to which the certificate pertains

**Measurement values** of the equipment

**Proof of traceability to NIST** for the accuracy of equipment used in the calibration

**Date of calibration**

**Qualification of Outside Sources:** It is the responsibility of the AML Quality department to assure that suppliers performing this service are qualified to perform the requirements of or ANSI/NCSL Z540-1-1999 or ISO 10012-1.

**Software Control:** AML will store all N/C tape masters in either the Mfg office, or QA office. A backup tape will be made at least monthly. Copies of master tapes will be stored offsite. All tape characteristics will be verified by QA during the inspection of parts. Any tape change will be verified by QA during part inspection.

**RECORDS:** All records shall include the manufacturers name, type identification and serial number, verification of acceptance, calibration reports and recall data, maintenance records, handling requirements, and will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES:** ISO-10012-1 Quality Assurance requirements for measuring equipment. ANSI/NCSL Z540-1-1999 Calibration Laboratories and Measuring and Test Equipment-General Requirements.

**NATURE OF CHANGES:** New.

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**TITLE: TEST AND INSPECTION METHODS**

**PROCEDURE NUMBER: 8.2**

**REV: A DATE: 02-15-2005**

**PURPOSE:** To establish a procedure for the control of inspection methods and their validation at AML.

**SCOPE:** This procedure applies to any and all product inspected at AML

**DEFINITION:**

**RESPONSIBILITY:** The President or his designee will be responsible for all requirements of this procedure.

**PROCEDURE:** The inspection and/or tests will be performed per work instructions created from the customer's design data, purchase order requirements, and the contract review. No standard industry procedures exist, so all work will be unique. All technicians, inspectors will be trained or have verifiable experience in the use of CMM's. All set-ups must be verified by the technician or the Quality manager, and all results will be reviewed prior to submittal to the customer. AML will not perform non-standard inspection, calibration or testing.

**AML will not perform work outside their intended scope.**

**Control of Data:** All data is reviewed for correctness, calculations and errors of omissions and transposition by the president or his designee. Computers and software are "off the shelf" products. Computer data is password protected, and no customer data is transmitted to a third party without written customer authorization. All computers are properly protected and maintained in office environment to ensure proper functioning.

**RECORDS:** Inspection and test records shall show actual inspection and test result data when required by specification or acceptance plan. Where required to demonstrate product qualification AML shall ensure that quality records provide evidence that the product meets the defined requirements. All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES:**

**NATURE OF CHANGES:** New.

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**TITLE: CUSTOMER SATISFACTION**

**PROCEDURE NUMBER: 8.2.1**

**REV: A DATE: 02-15-2005**

**PURPOSE:** To establish a procedure for the handling of customer complaints, suggestions, rejections, or other satisfaction issues.

**SCOPE:** This procedure applies to all customer satisfaction correspondence.

**DEFINITION:**

**RESPONSIBILITY:** It is the responsibility of the President or his designee to insure compliance to this procedure.

**PROCEDURE:** All customer complaints will be documented on the "Customer Communication Data Sheet." or a trend analysis data sheet. The customer document will be reviewed by the Quality Manager or his designee to gather information about the satisfaction data. The information gathered will be reviewed by the Quality Manager for verification. Based on the verification review by the Quality Manager, corrections as required will be initiated. Complaints requiring corrective action will be controlled per the Corrective Action Procedure. The investigation of the customer complaint will result in the following:

1. Documented corrections using the Corrective Action Procedure.
2. Documented training for complaints that require training of employees.
3. Documented work instructions, certifications, data corrections for minor clerical errors that were not systematic and would not be corrected by additional training or procedure improvement.
4. Documented procedure corrections for customer complaints of noted system rather than specific nonconformance's.
5. All corrections will be reviewed by the Quality Manager for verification that the correction has acceptably corrected the complaint root cause.

**RECORDS:** All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES:** None.

**NATURE OF CHANGES:** New.

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**TITLE: INTERNAL QUALITY AUDIT**

**PROCEDURE NUMBER: 8.2.2**

**REV: A DATE: 02-15-2005**

**PURPOSE:** The purpose of this procedure is to establish an audit function that evaluates the effectiveness of AML'S quality system. This includes, but is not limited to, the quality system (all elements of ISO9001:2000 and ISO 17025 as a minimum), Management control, quality control and workmanship of AML products.

**SCOPE:** All quality operations and documentation, including procedures, inspections, training, process controls and certifications performed in each area within the AML facility are audited at least once per year using AML Audit forms maintained by the QA Manager.

**DEFINITION:** Not applicable.

**RESPONSIBILITY:** The Quality Manager will insure the compliance to this procedure.

**PROCEDURE:** When findings cast doubt on operations or validity of results, AML shall take corrective action (per section 4.2.4) and notify clients in writing if investigations show results may have been affected. Follow-up activity shall verify and record implementation and effectiveness of the corrective action.

**Audit Schedule:** Each procedure is audited a minimum of once every 12 months. A minimum audit schedule and the qualified auditor's list serve as a guide to management in scheduling audits. The audit schedule is also based on the status of importance of the activity to be audited.

**Personnel Qualifications:** Personnel are selected for auditing assignments based on experience or training that establishes their qualifications are adequate regarding the activities to be audited. Audits are carried out by personnel independent of those having direct responsibility for the activity audited. Trained contract auditors may meet the requirement of this section.

**Detailed Check sheets:** Detail internal check sheets will be developed for the working level procedures. The detailed check sheet will incorporate all the requirements of the procedure. The detail check sheets will be developed by QA or the controlling department. All detail check sheets will be revision controlled per section 4.2.4, and the masters will be maintained in the QA office.

**RECORDS:** All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES:** Not applicable.

**NATURE OF CHANGES:** New.

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**TITLE: RECEIVING INSPECTION**

**PROCEDURE NUMBER: 8.2 4**

**REV: A DATE: 02-15-2005**

**PURPOSE:** To establish a procedure for the control of receiving / inspection functions at AML.

**SCOPE:** This procedure applies to any and all parts received at AML from Customers for inspection.

**DEFINITION:** N/A.

**RESPONSIBILITY:** The Quality Manager will insure the compliance to this procedure. The Receiving inspection functions will be performed by trained employees.

**PROCEDURES** **The Receiving Department** will verify that all products received meet the description as noted in the customer purchase order document.

**The Receiving Inspection Department** will inspect the product to verify compliance to documented blue prints, specifications or other purchase order required documents. Receiving inspection acceptance will be documented for the received product on the work instructions or receiving log. The accepted parts will be inspected per customer requirements. Non-acceptable parts will be segregated and controlled per paragraph 8.3. Supplies used for facility, stationary, or maintenance are excluded.

**Inspection Documentation:** Quality plans or work instructions shall include Criteria for acceptance and rejection; inspection and testing sequence operation; documented inspection results; identification of inspection instruments.

**RECORDS:** All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES: ISO 9001-2000**

**NATURE OF CHANGES:** New.

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**TITLE: FIRST ARTICLE INSPECTION**

**PROCEDURE NUMBER: 8.2.4 A**

**REV: A DATE: 02-15-2005**

**PURPOSE:** To establish a procedure for the first article functions at AML.

**SCOPE:** This procedure applies to all parts inspected at AML.

**DEFINITION:** First Article: a verification of the initial set-up or inspection technique prior to completion of inspection..

**RESPONSIBILITY:** The Quality Manager or his designee.

**PROCEDURE:** The Quality inspector, Setup-man or a person designated by the President and with the approval of the Quality department will inspect the initial set-up or the probe check prior to completion of inspection to assure that the set-up and CMM system is acceptable for continuation of the inspection process.

**UNACCEPTABLE FIRST ARTICLE:** When the set-up or probe check is unacceptable, the inspector will re-verify the inspection equipment calibration, the probe check for acceptability, and will re-verify the setup to the design data for acceptable datums, set-up, and/or inspection technique. If the re-verification corrects the unacceptable condition the part will be inspected. If the re-verification does not correct the unacceptable condition, the inspector will notify management, and a determination as to the inspection method/ set-up, disposition will be made, and the part will be re-set-up, transferred to another CMM, or removed and held in a non inspection status until a determination can be made by the Quality Manager as to the next step to be taken. All re-set-up will be made as noted in section 5.0 and this section (5.1).

**RECORDS:** Inspection and test records shall show actual inspection and test result data. All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES:** ISO 9001-2000.

**NATURE OF CHANGES:** New.

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**ADVANCED MEASUREMENT LABS., INC.**

**TITLE: IN-PROCESS INSPECTION**

**PROCEDURE NUMBER: 8.2.4 B**

**REV: A DATE: 02-15-2005**

**PURPOSE:** To establish a procedure for the control of in-process inspection functions at AML.

**SCOPE:** This procedure applies to any and all parts that are in-process at AML

**DEFINITION:** N/A

**RESPONSIBILITY:** The Quality Manager or his designee. will be responsible for all requirements of this procedure.

**PROCEDURE:** The Inspection Department will inspect all parts at AML to the current blue print or work instructions for the operations performed in the order of completion per AML and customer requirements. The inspections are accomplished based on the customer requirements. In-process verification will be accomplished by a review of data that has been inspected for verification that the prior inspections were accurate, and within the inspection equipment tolerance and uncertainty.

**Inspection hold:** The Inspection Department will separate and or hold product until the required inspection or test are completed per customer requirement.

**RECORDS:** Inspection and test records shall show actual inspection and test result data when requires by specification or acceptance plan. Where required to demonstrate product qualification AML shall ensure that quality records provide evidence that the product meets the defined requirements. All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES:** ISO 9001-2000.

**NATURE OF CHANGES:** New.

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**TITLE: FINAL INSPECTION**

**PROCEDURE NUMBER: 8.2.4 C\_**

**REV: A DATE: 02-15-2005**

**PURPOSE:** To establish a procedure for the control of final inspection at AML.

**SCOPE:** This procedure applies to all parts that are Final inspected at AML. All final inspection will be performed with calibrated inspection equipment.

**DEFINITION:** Duties per Documented job description.

**RESPONSIBILITY:** The Quality Manager will be responsible for all requirements of final inspection of this procedure. Final Inspection functions cannot be delegated to other departments.

**PROCEDURE:**

**Inspection;** The Inspection Department will inspect all parts at AML to the current blue print or work instructions for assurance that they meet the customer requirements. The inspection department will verify that all customer-required documentation has been completed and accepted to the latest requirement. Inspection buyoff of the C. of C. and AML shipping document will be accepted as proof of **final inspection**. Final inspection will visually inspect all parts for packaging & acceptance for customer submittal.

**Document Review:** Final Inspection will review all documents to insure that the latest changes, the correct customer instructions, and inspection reports/data have been accomplished and approved by the Quality manager/President or their designee.

**RECORDS:** Inspection and test records shall show actual inspection and test result data when requires by specification or acceptance plan. Where required to demonstrate product qualification AML shall ensure that quality records provide evidence that the product meets the defined requirements. All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES: ISO 9001-2000**

**NATURE OF CHANGES:** New.

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**TITLE: CONTROL OF NONCONFORMING WORK**

**PROCEDURE NUMBER: 8.3**

**REV: A DATE: 02-15-2005**

**PURPOSE:** This procedure establishes the method of review, control and corrective action of nonconforming work.

**SCOPE:** This procedure applies to all departments.

**DEFINITION:** Not applicable.

**RESPONSIBILITY:** It is the responsibility of the Quality Manager to insure compliance to this procedure.

**PROCEDURE:** Work that is nonconforming will be identified and dispositioned by the AML Quality Manager. Work that is nonconforming through the actions of AML will be reworked, corrected and dispositioned per the "Corrective Action Procedure."

**Initial Handling of Nonconforming Work**

**Quality Control Department:** NCW are processed per the following steps:

NCW is **segregated** from the conforming work, and prevented from unintentional use by being tagged, bonded or identified as NCW.

A NCW **Document is initiated** by Quality personnel to document the nonconformance. It includes the following information: date, description, discrepancy, job number, and other customer required data. The Quality Manager will review the nonconformance for significance. Significance will be rated as follows:

- 1) Needs complete rework of the entire job and all documentation.
- 2) Rework of only a portion of the job.
- 3) Rework of only the data.
- 4) No rework needed, only correction of the data.
- 5) No corrections of any kind, just review for future improvement.

If work needs to be recalled, it will be recalled using the "Customer Notification Form".

The Quality Manager or the President are the only employees authorized to allow for the resumption of work after the nonconformance has been corrected.

Items # 1-4 above will require documented and formal corrective action per "Corrective Action Procedure". Item # 5 will require formal documented corrective action when determined by the Quality Manager that such documented corrective action is necessary.

**Notification Required:** AML notifies customers in detail in a timely manner when nonconformity is discovered at AML, or in products that may affect product already delivered. The notification on will include concise description of discrepancy, parts and serial numbers affected, lot number, delivered quantity, delivery dates and a statement of corrective action for the noted discrepancy.

**RECORDS:** All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES:** Not applicable.

**NATURE OF CHANGES:** New.

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**TITLE: CONTROL AND CUSTOMER NOTIFICATION OF SUSPECT PRODUCT**

**PROCEDURE NUMBER: 8.3 A**

**REV: A DATE: 02-15-2005**

**PURPOSE:** To establish a procedure for the notification to customers when work is suspect of having been calibrated/inspected with a piece of equipment that is out of calibration, within calibration but suspect of producing erroneous data, or of errors in inspection or documentation.

**SCOPE:** This procedure applies to all product calibrated/inspected or tested.

**DEFINITION:** Suspect data is the data produces by equipment that may be out of calibration but that equipment is producing accurate data, data that is produced from a piece of equipment that is within the calibration cycle dates, but in the opinion of management the data should be re-measured for confirmation of accuracy, or any data that in the opinion of management should be reviewed for possible error.

**RESPONSIBILITY:** The President is responsible for the implementation of this procedure.

**PROCEDURE:** Every calibration/inspection job will require a confirmation by the inspector that the equipment being used is within the calibration cycle. When equipment is found to be out of calibration, all jobs that were measured with that equipment will be re-measured (if the parts are still in-house). If the parts have been shipped, a notification letter will be sent to the customer that will identify the suspect part number, the reason for the concern, and for the customer to decide if the suspect parts will be sent back for re-measuring with equipment that is in calibration, or if the parts are to be re-measured at the customers facility using customer or company equipment.

If equipment is within calibration, but in the opinion of management the equipment displays performance that may have created inaccurate data, the above noted notification letter will be sent for parts shipped, and parts in-house will be re-measured. When data is suspect of being incorrect for any reason, the part will be re-measured in-house, or submit to the customer a notification letter as noted above.

**REMEASUREMENT OF PARTS:** The suspect parts will be re-measured to the same criteria as if no initial measurement had been performed, when the parts are in-house. For parts already shipped the customer will decide if the parts are to be returned for complete re-measurement, or if inspection at their facility will be performed. When data is suspect of having inaccuracies, the data will be reviewed for disposition. The disposition may include correction of clerical errors, or re-inspection in part or whole.

**SUSPECT PART TRACEABILITY:** All products are tracked daily for inspection status. All jobs will be reviewed to derive the first completed job that was inspected with the suspect equipment under suspect conditions. All jobs from that point will be considered suspect, and will be re-measured if in-house, or the customer will be notified.

**CORRECTIVE ACTION:** All suspect equipment or data will be reviewed by the President for the application of corrective and preventive action per the Corrective Action Procedure.

**RECORDS:** All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES:** None.

**NATURE OF CHANGES:** New.

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**TITLE: CONTINUAL IMPROVEMENT**

**PROCEDURE NUMBER: 8.5.1**

**REV: A DATE: 02-15-2005**

**PURPOSE:** To establish a procedure for the incorporation of Continual Improvement into the AML quality system.

**SCOPE:** This procedure applies to all departments.

**DEFINITION:** None.

**RESPONSIBILITY:** The President will assign a committee to investigate areas for continual Improvement.

**PROCEDURE:** The President his designee or an appointed committee will review quality data, audit results, analysis of data, quality objectives, corrective and preventive action data, customer, supplier, or internal data, and suggestions from internal or external sources to develop documented plans for the improvement of The Company processes.

Continual improvement plans will note the objective, the current process or condition, the tasks required to overcome the current condition and to achieve the suggested objective, and a method of measuring the improvement. The continual Improvement plans may note the cost, time, training and/or equipment required. This will allow for prioritizing and comparison of continual improvement projects.

Continual Improvement plans will note a time frame for completion and a person(s) responsible for the completion and review.

**RECORDS:** All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES:** AS9100 REV A., ISO 9001-2000.

**NATURE OF CHANGES:** New.

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**TITLE: CORRECTIVE ACTION**  
**PROCEDURE NUMBER: 8.5.2**  
**REV: A DATE: 02-15-2005**

**PURPOSE:** This procedure establishes the guidelines for requesting and implementing corrections of matters that affect the AML service. Each individual within AML is responsible to request or take corrective action when a condition exists that is detrimental to customer relations or service performance. Corrective action will be implemented to the degree necessary to eliminate non-conformances.

**SCOPE:** Applies to all departments that require corrective action.

**DEFINITION:** Not applicable.

**RESPONSIBILITY:** The Quality Manager will insure the compliance to this procedure.

**PROCEDURE:** Prompt action is taken to change conditions that could result in unsafe situations, regulatory discrepancy or customer dissatisfaction. Prompt remedial action is always taken to correct nonconformity's following their detection. The decision to initiate corrective action (C/A) is based on an evaluation determining whether it is technically feasible, economically practical or contractually required to correct the cause of the nonconformity's. Quality Assurance controls the issuance and review of all Corrective Actions.

**Corrective Action (Initiation):** A C/A is generated by any employee who judges that a nonconformity or substantial nonconforming condition has an adverse effect on AML 's product quality and that is considered preventable. This refers to a recurring or possible recurring problem. The decision whether an individual nonconformity is worthy of a C/A is usually a subjective one made by the QA Manager.

**Root Cause Analysis:** Corrective action will be based on the results of root cause analysis. The analysis will be conducted by the Quality Manager based on customer, inspection, technical, clerical, and/or laboratory deduction. Quality will document root cause analysis on the corrective action form as part of the total corrective action investigation and implementation.

**Response:** The Quality Manager investigates the nonconformity, determines its cause, and enacts remedial and corrective actions. The corrective action will be appropriate to the magnitude and risk of the problem as determined by the Quality Manager with input from the customer, as required.

**Changes Resulting from the Corrective Action:** Will be documented on the changed process document. Root cause analysis, root cause correction, corrective action verification plan, and follow-up will be documented as required.

**Monitor and Follow-Up:** All corrective action will be monitored by the QA Manager as documented on the Corrective Action Form. The monitoring and follow-up will be to the extent required to verify effectiveness of the correction. The monitoring will be documented on the corrective action form, or the corrected document or on a quality memo, or quality report.

**Auditing:** An audit of the process that created the nonconformance may be required. Were non-conformances or departures cast doubts on compliance with policies, procedures, customer requirements, or ISO9001:2000 and ISO 17025, the area of activity is audited per 4.13 within one working day, and documented on an internal audit form.

**RECORDS:** All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records" C/A logs and open C/A's are stored in the C/A binders or files and are AML **confidential**. External auditors may examine C/A files if they have a contractual "right to access" to our facility.

**REFERENCES:** AS9100 REV A., ISO 9001-2000

**NATURE OF CHANGES:** New.

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Issued To: \_\_\_\_\_      Date:           2/15/05

**TITLE: PREVENTIVE ACTION**

**PROCEDURE NUMBER: 8.5.3**

**REV: A DATE: 02-15-2005**

**PURPOSE:** This procedure establishes the guidelines for requesting and implementing preventive action at AML Preventive action will be implemented to the degree necessary to eliminate non-conformances.

**SCOPE:** Applies to all departments that require preventive action.

**DEFINITION:** Not applicable.

**RESPONSIBILITY:** The Quality Manager will insure the compliance to this procedure.

**PROCEDURE:** Prompt action is taken to change conditions that could result in unsafe situations, regulatory discrepancy or customer dissatisfaction. Improvements and potential non-conformances shall be identified through corrective action, customer data, internal data, quality data, employee suggestion, management review, or observations. Prompt action is always taken to correct nonconformity's following their detection. The decision to initiate preventive action (P/A) is based on an evaluation determining whether it is technically feasible, economically practical or contractually required to correct the cause of the nonconformity's. If action is required plans will be developed implemented and monitored to reduce the likelihood of occurrence by the Quality Manager or his designee. The plans may include training, procedure or work instructions corrections or by adding more descriptive detail, or changing a task, and/or the elimination of a nonconforming task.

**Response:** The Quality Manager investigates the preventive action, determines its cause, and enacts preventive actions. The preventive action will be appropriate to the magnitude and risk of the problem as determined by the Quality Manager with input from the customer, as required.

**Monitor and Follow-Up:** All preventive actions will be monitored by the QA Manager as documented on the Corrective Action Form. The monitoring and follow-up will be to the extent required to verify effectiveness of the preventive action. The monitoring will be documented on the Corrective Action Form, the corrected document, on a quality memo, or quality report.

**RECORDS:** All records will be maintained in accordance to procedure 4.2.4 "Control of Quality Records"

**REFERENCES:** None.

**NATURE OF CHANGES:** New.

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Date: 2/15/05

