

# TUSKEGEE Aeronautical Engineering, Inc. Business Manual



Prepared by D. A. Stallings

## TUSKEGEE Aeronautical Engineering, Inc. *BUSINESS MANUAL*



This document may contain proprietary information and may only be released to third parties with approval of management.

**RESTRICTED AND CONFIDENTIAL**





**1.0 About Tuskegee Aeronautical Engineering, Inc. (TAE.):** We Pride ourselves in being the solution provider for excellence in manufacturing. Our business has grown from procurement of components to manufacturing and Mil Spec marking, as a Department of Defense (DOD) vendor. Manufacturing state-of-the-art components with a focus of establishing ourselves as a global leader in the technical marketplace. Our products measure and control temperature, humidity, pressure, strain, force, flow, level, pH and conductivity.

Our commitment to quality instrumentation and exceptional customer service has remained the cornerstone of our success. TAE's priority is clear. Our operations exist to facilitate solutions to our customers' needs. We recognize that our commitment to quality is key to customer satisfaction. Therefore, our policy is to provide reliable products at a fair price delivered on-time, with no defects and exceed our customers' expectations.

TAE, Inc. is experienced in manufacturing and distributing temperature, flow, pH, heating, data acquisition, pressure, and environmental instruments and components.

We Strive to maintain the worldwide quality standards set forth by *ISO* (International Organization for Standardization) through employee training, rigorous internal auditing, structured and controlled documents.

Founded on the above principles; we continue to maintain a strong commitment to the ISO 9001-2015 standard and its related requirement and our philosophy to offer quality products.

## **2.0 The Purpose of the Manual**

Is to demonstrate that TAE, INC is compliant to ISO 9001-2015 standard and how we comply to the standard using our key business our key business processes and activities. This manual is a high-level document that demonstrates our compliance to quality objectives using our integrated business systems.

## **3.0 Terms and Definitions**

Our QMS uses the same internationally recognized terms, vocabulary and definitions given in ISO 9000:2015; quality management systems – fundamentals and vocabulary

## **4.0 Context of the Organization**

### **4.1 Understanding the Organization and its Context**

Please refer to exhibit A, for the TAE, INC. SWOT Analysis matrix.

### **4.2 Understanding the needs and Expectations of Interested Parties**

TAE, Inc. utilizes a Total Quality Management (TQM) approach by keeping related interested parties engaged & participating in the improvement processes, products, services, and our culture. Through our planning and Total Quality Management approach we determine the requirements of our interested parties and the appropriate plans to meet customer and applicable statutory and regulatory requirements. This information is used by senior management to determine the company's strategic direction as stated above.

Our on-going strategic planning, Risk reviews, Monthly Operational Reviews and other leadership reviews ensure that the internal & external issues or our stakeholders have been identified and are being monitored periodically as required.



### **4.3 Determining the scope of the Quality Management System**

TAE, Inc. has based the Quality Management System (QMS) summarized in this manual to demonstrate our capability to consistently provide products/services that meet customer and applicable regulatory requirements, and to operate with increased effectiveness and efficiency with the overall aim of enhanced customer satisfaction.

Our QMS utilizes the process approach and quality management principles contained in the international standard ISO 9001:2015 to enhance our ability to satisfy our customers and continuously improve our procurement, manufacturing, and logistics processes.

Our QMS complies with all applicable requirements contained in ISO 9001:2015; it covers the provision of all company products and encompasses all activities at our facility, located at 560 Peoples Plaza #192, Newark, Delaware 19702. TAE, Inc. manages global distribution for temperature flow.

### **4.4 Quality Management System and its Processes**

TAE, Inc. has adopted the process approach by ISO 9001:2015. Our core business processes are listed below and have been mapped out with consideration and integration to our Enterprise Resource Planning (ERP) system as identified in our interactions of our processes. The inputs required; the outputs expected from the processes are the basis for the necessary documentation that support elements of these processes we call were appropriate. These are in place to meet the needs of our interested parties. And to support the achievement of quality compliance for each of the processes related to the ISO 9001:2015 standards. The QMS is maintained and continuously improved using quality policy, policy objectives, risk analysis and opportunities, audit results, analysis of data, corrective, and preventive action, and management review. Our integrated system of interrelated processes and on-going review of these processes and activities ensures system effectiveness is achieved.

## **5.0 Management, Leadership and Commitment**

**Senior Management Team (SMT) Job Descriptions** (This list does not represent the company's hierarchal structure)

### **Founder & CEO (Chief Executive Officer):**

Is the highest-ranking executive manager. Duties include managing the overall resources and operations of the company, making major corporate decisions, and acting as the main point of contact between interested parties both internal and external parties. The CEO has the authority to delegate and direct agendas, hire and terminate executive management, to appoint members of the board of directors and to overrule the board,

### **Vice President of Sales & Marketing:**

Responsibilities include manage domestic and international clients, distribution channels, and deployment of sales for the organization. Responsible for developing the strategic sales plans based on company goals that will promote sales growth and customer satisfaction for the organization. The Vice President of Sales and Marketing has the authority to approve and renew marketing contracts, select sales teams and marketing team.

**CFO (Chief Finance Officer) & Vice President of Operations:**

Responsible for managing records, receipts and assisting in the preparation of budgets. Reconciling daily, monthly and yearly transactions. Preparing balance sheets, processing invoices. Developing an-depth knowledge of organizational products and processes and providing customer service to clients. In addition, Responsible to plan, direct, coordinate, and oversee operations activities in the organization. The CFO / Vice President of Operations has the authority to make banking and financial decisions, to approve/cancel movement of capital flow, to approve funds distributed to company departments, to pay creditors.

**Vice President of Logistics Management:**

Responsible for overseeing the daily logistic operations, which include both MIL SPEC and domestic marking, packing and shipping. Responsible for establishing and maintaining policies, strategies, and goals to ensure customer satisfaction and assuring loss management. The Vice President of Logistics has the authority to create shipping and documents, to create storage allocations on site, approve /disapprove on delivery contracts both domestic and international, to secure shipping's materials.

**Vice President of Manufacturing:**

Responsible for the manufacturing sector of operations within the company. Responsible for overseeing production operations so the manufacturing process precedes efficiently, on time and on budget. The Vice President of Manufacturing has the authority to reject nonconforming raw material, to create mechanical workflow charts, teach technicians, To reject and/or approve finished product fabrication.

**Quality/Value Stream Manger:**

Responsible for supervising the production process to make sure all products meet consistent standards. Duties include developing and implementing quality controls tests, inspecting products at various stages and writing reports documenting production issues. The quality System Manager has the authority to structure a tangible records storage system, to direct the Senior Management Team (SMT) regarding concerns and updates, to creates ISO compliant documentation.

**5.1 Leadership and Commitment**

TAE, Inc Leadership members throughout the year, meet to review metrics and other supporting data gather for monitoring our processes. The Senior Management Team may set goals and adjust for the processes of long-term continuous improvement.

On other supporting process indicators, when a goal is met, or an unexpected problem is encountered the corrective and preventive action process is utilized to investigate and resolve the issue. Corrective and preventive action is taken using accountability board, action tracker, risk register, and other management tools as seen fit by the facilities & stakeholders. In addition, opportunities for improvement are sought and implemented, root cause analysis and other management tools.



Any process performed by a third party is considered an “outsourced process” and is controlled in accordance to the relevant purchasing procedures and capability of achieving the necessary control through the purchasing contract requirements. Any key process indicators needed for monitoring and measuring the purchasing is integrated within management procedures.

To the extent necessary, TAE, Inc. will maintain and retain the appropriate documented information to support the operation of our processes and to have confidence that the processes are being implemented as planned.

### 5.1.1 General

At TAE, Inc. the Senior Management Team is engaged and committed to the excellent execution of our quality systems. The Senior Management Team and the extended leadership provides evidence of its leadership commitment to the development, and continuous improvement of the quality management system by:

- a) Taking accountability of the effectiveness of the management system.
- b) Ensuring that the *Quality Policy* and quality objective are established for the management system and are compatible with the strategic direction and the context of the organization.
- c) Ensuring the integration of the management system requirements into the organization’s other business processes, as deemed appropriate.
- d) Promoting awareness of the process approach.
- e) Enduring that the resources needed for the management system are available.
- f) Communicating the importance of effective quality management and conforming to the management system requirements.
- g) Ensuring that the management system achieves its intended results.
- h) Engaging, directing, and supporting persons to contribute to the effectiveness of the management system.
- i) Promoting continuous improvement and supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.

These activities listed above are evidenced by the activities listed in our management review using the Total Quality Management.

### 5.1.2. Customer Focus

The TAE, Inc Leadership Team believes in putting the customers first. It is ensured that all customer requirements and expectations are clearly defined, understood, and achieved at all levels of the organization. We are committed to achieving 100% customer satisfaction and resolve to accomplish this by understanding and mitigating risks and opportunities that may affect the conformity of products and services. We ensure that Statutory and Regulatory requirements are identified and achieved in accordance with the applicable Sections of the QMS Manual Assurance Procedures, Quality Work Instructions and other applicable forms of documents. The utmost goal is to exceed the expectations of our customers, thereby enhancing customer satisfaction.

Customer complaints and other customers input/feedback are continuously monitored and measured to identify opportunities for improvement for improvement. We continuously look for other ways to interact directly & indirectly



with customers to maintain focus on their unique needs/expectations. The Corrective Action board are a few avenues to capture customer concerns and to have a focused approach to review and resolve issues.

In addition, we have established an interactive web site: [www.tuskegeeus.com](http://www.tuskegeeus.com) to provide customers with quick access to information and points of contact within our organization and to receive customer feedback.

### 5.2 Quality Policy

The Senior Leadership Team has developed the Quality Policy, that governs day-to-day operations to ensure quality products and processes. The Quality Policy is released as a standalone document and is communicated throughout the organization.

The Quality Policy for Tuskegee Aeronautical Engineering, Inc. 560 Peoples Plaza #192, Newark, Delaware 19702: *TAE, INC. is committed to the development of a lean global supply chain that delivers world-class quality and superior service to our customers. We maintain a robust QMS that meets or exceeds regulatory and customer requirements, while striving for zero-defects and on-time delivery.*

The quality policy is communicated on the company intranet, posted in common areas within the organization, distributed through departmental leads and supervisors, and periodically on the media screens within the company.

### 5.3 Organization Roles Responsibilities and Authorities

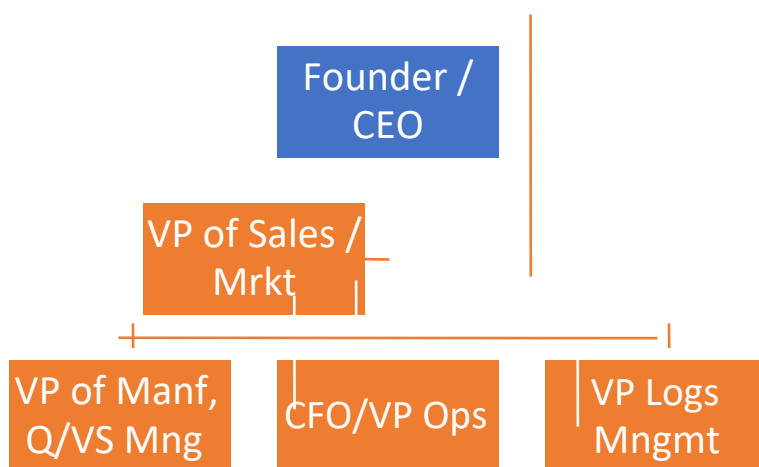


Exhibit B: Organizational chart

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**The Senior Management Team** has assigned responsibilities and authorities for all relevant roles in the company. These are communicated through the combination of the organizational charts & supporting Position Description Titles.

A dedicated Quality Manager is assigned as the main POC for the effective execution and management of the quality system with strong and unflinching support from leadership. The quality manager resolves matters pertaining to the quality Management System as well as serving the company liaison with external parties, including our customers and vendors on all matters relating to the QMS.

Senior Management is, ultimately, responsible for the TAE, Inc's products and services since they control the systems and processes by which work is accomplished. They are responsible for Business Planning, Development, and communication of our quality policy. Also, they are responsible for the QMS Planning, the establishment and development of objectives, the provision of resources needed to implement and improve the QMS, as well as management reviews.

**Management** – All managers are responsible for execution of the Business Plan and implementation of the policy, processes and systems described in this manual. Managers are responsible for planning and controlling QMS processes within their area(s) of responsibility, including the establishment and deployment of operational level objectives and the resources needed to implement and these processes. Managers also conduct employee performance reviews and ensures that production is staffed with personnel in charge of or delegated for product quality.

**Employees**-All employees are responsible for the quality of their work and implementation of the policy and procedures application to the process they perform. Personnel responsible for product quality have the authority to stop production to correct quality problems. Employees are motivated and empowered to identify and report any known or potential problems and recommend related solutions through internal audits, continuous improvement initiatives and corrective/preventive action processes.

Detailed responsibilities and authorities for QMS implementation and improvement and improvement are contained in lower-level documents controlled by the Document Control Team and other QMS documents including procedures, flow charts, job descriptions, work instructions, etc.



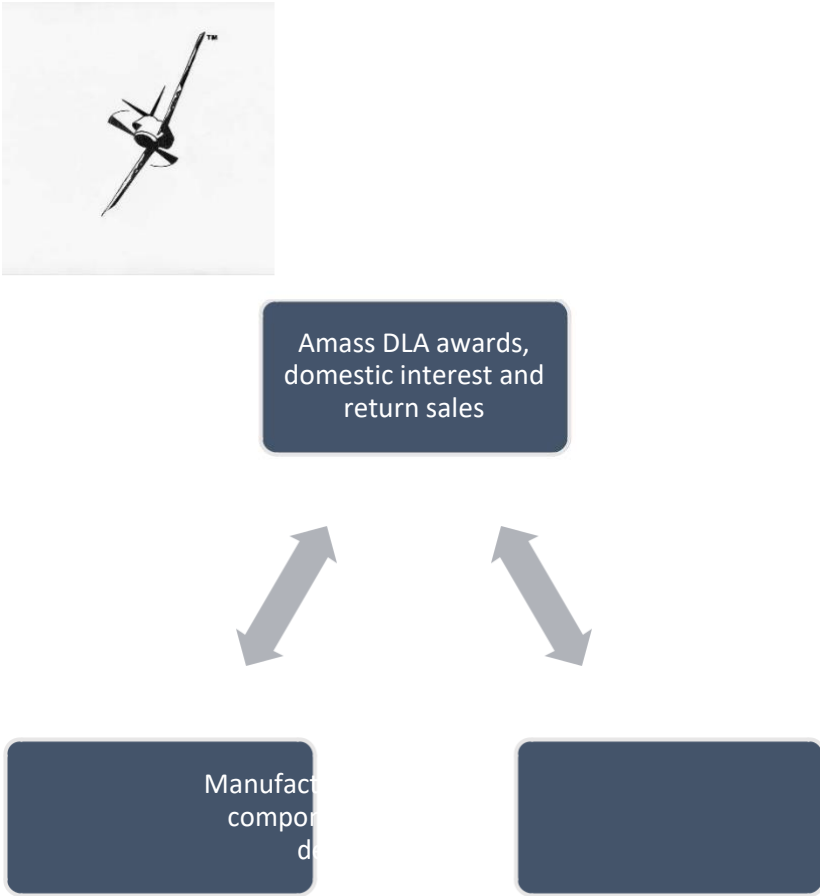


Exhibit C: “Three Part Model” Operational chart, *Multidirectional cycle*

**6.0 Planning**

**6.1 Actions to Address Risks and Opportunities**

TAE, Inc. considers risks and opportunities or improving the improve the management system; likewise considered relative to process, products, and services. Risk and opportunities are identified as part of the “Context of the Organization Exercise” described above, as well as throughout all other activities of the QMS (see section 4.4). Risks and opportunities are managed in accordance with the Spectris Risk Management Guidance. This procedure defines how risks are managed to minimize their likelihood and impact, and how opportunities are managed to improve their likelihood and benefit.

The TAE, Inc. Leadership teams conducts periodic review of risk-register to monitor and review the overall risks to the business as well as the risks to the Quality Management System where applicable. On-going extended leadership reviews as driven by the Hoshin & other reviews identified can achieve its intended result(s).

- **Enhance desirable effects**
- **Prevent, or reduces, undesired effects.**
- **Achieve improvement**

Formal risk management may not be utilized in all instances; instead, the level of risk assessment, analysis, treatment, and record keeping is performed to the level deemed appropriate for each circumstance or application.



## 6.2 Quality Objective and planning to Achieve Them

Our overall quality goal is to achieve the quality policy and to maintain and continuously improve the effectiveness of our Quality Management System in compliance with ISO 9001:2015. The QMS planning process involves the establishment and communication of our and objectives through issuance of this manual and its associated procedures, and through the provision of resources needed for its effective implementations

TAE, Inc. establishes quality objectives of relevant functional levels of our processes needed for the quality Management system. The leadership team through strategic planning and need analysis of our interested parties establishes objectives called 'Target To Improve (TTI)'. These are considered the breakthrough targets set to deliver our strategic goals.

All managers of key QMS processes; monitor and measure performance within their area(s) consistent with our quality policy and corporate improvement initiatives. These corporate level and Operational level indicators objectives are measurable and documented in the bowling chart which are monitored for achievement during the MOR and other management review meeting.

## 6.3 Planning of Changes (See Exhibit G)

When changes to the QMS are deemed necessary, TAE, INC. ensures that change complies with the requirements of ISO 9001:2015 and considers:

- The purpose of the changes and their potential consequences.
- The integrity of QMS
- The availability of resources.
- The allocation or reallocation of responsibilities and authorities.

Accordingly, this manual constitutes our overall plan for establishing, maintaining, and improving an effective QMS. Our management review process, and internal audit process ensure the integrity of our Business Systems are maintained. Where applicable; Managers are relevant functional leaders, functional leaders develop the appropriate quality planning and change documentation for specific products, projects, or contracts when customer requirements exceed the capability or intent of the product/service realization and support processes described in our QMS.

## 7.0 SUPPORT

### 7.1 Resources

#### 7.1.1 General

Tuskegee Aeronautical Engineering is fully committed to providing suitable resources required for the establishment, operation, implement, and maintenance of the. Quality Management System to enhance customer satisfaction and outputs.in Resource allocation is done by considering.

- Management review meeting inputs and outputs



- Capabilities and constraints on existing internal and external resources.
- Requirements and expectations provided by our external providers/vendors

And other avenues where applicable Resources allocation is accessed and addressed during the respective management review meetings. Such resources include trained employees, appropriate equipment, facilities, support services and work environment needed to implement a robust quality system.

### **7.1.2 People**

Senior management ensures that there is provision of sufficient staffing for the effective operation of the management system and its identified processes. TAE, INC. engineering leadership identifies personal training needs, provides required training, and evaluates the effectiveness of the training provided. Personnel assigned to perform specific tasks, operations and processes are qualified based on appropriate education, on the training, experience, and appropriate training. Employees are made aware of the relevance and importance of their activities and how they contribute to the achievement of quality objectives. Records of personnel qualifications and training are maintained.

### **7.1.3 Infrastructure**

Tuskegee Aeronautical Engineering, INC. determines, provides, and maintains needed to achieve conformity to product requirements, our processes and execution of our quality objectives includes, as applicable:

- Environmental Health and Safety (EHS) compliance
- Buildings, workspace, and associated facilities
- Process equipment, hardware and software.
- Transportation resources
- Information and communication technology.

Equipment is validated and maintained in accordance with the appropriate procedures within the information systems department and maintenance department.

The Quality/Value stream Manager or their designee has overall responsibility for planning, providing, and maintaining the resources needed to achieve product conformance, including buildings, workspace, and associated utilities; process equipment; and supporting services (such as communications systems).

The Facilities Manager/Manufacturing Engineering Manager has overall responsibility for managing our maintenance programs in accordance with our corporate safety procedures; these programs include:

- Facility management, maintenance, and repair
- Housekeeping/custodial services management
- Process equipment, maintenance and repair



#### **7.1.4 Environmental for the Operation of Processes**

TAE, INC. provides a clean and safe environment for its employees. Management identifies and manages the human and physical factors of the environment considered to be important to control processes and to achieve conformity to products and services or our QMS.

Specific environmental requirements for products are determined during quality planning and are documented in subordinate procedures, work instructions, or job documentation where applicable.

We provide employee benefits, job and schedule flexibility, motivating work and involvement of our employees in an empowered environment of continuous improvement. We support total participation by involving employees in internal audits and improvement activities. Human Resources have overall responsibility for identifying, implementing and maintain effective employee benefit and workforce. Involvement programs.

Safety controls are identified, implemented, and maintained to assist in product conformance and to meet statutory or regulatory requirements. We monitor and improve workplace safety, and health through adherence to good manufacturing practices, and through safety committee meetings and training. The Safety Manager has overall responsibility of employee environmental health and safety programs in accordance with our safety and regulatory procedures.

#### **7.1.5 Monitoring and Measuring Resources**

##### **7.1.5.1 General**

Where equipment is used for critical measuring activities, such as inspection and testing, these shall be subject to control and either calibration or verification; based on our applicable calibration department procedures and work instructions. TAE, INC. determines which devices will be subject to calibration based on its processes, products and services to comply with specifications or requirements. These decisions are also based on the importance of measurements, and considerations of risk.

The Facilities Manager and Manufacturing Engineering Manager ensures the suitability and availability of all equipment, facilities and tooling used for production and service operations.

The Quality Calibration Team (QCT) Ensures that monitoring and measurement equipment capable of meeting our measurement requirements are available for use during production and service provision. The necessary documented information is retained by the calibration team as evidence of fitness for purpose of monitoring and measurement resources.

Monitoring Activities include Value Stream / Production Manager, Production Supervisors and applicable functional leaders ensuring that production personnel monitor and are accountable for the quality of their own work. They ensure that employees understand the procedures for reporting related problems and / or suspected nonconforming conditions.

The Quality Representatives with assistance of the Values Stream Manager / Production Supervisors are responsible for planning and implementing in-process inspections needed to ensure process control and product quality with zero - defects.



### **7.1.5.2 Measurement Traceability**

Monitoring and measuring, when required, and controlled in a manner that ensures continuing suitability; this includes ensuring that environmental condition suitable for the calibration, inspections, measurements, and tests are being carried out. We also define the processes employed for the on-going calibration, control and maintenance of monitoring and measuring equipment including their identification, location, frequency/method of checks/acceptance criteria and the action to be taken when results are in satisfactory.

All monitoring and measuring equipment that can affect product quality are identified and calibrated at prescribed intervals against certified equipment having a known valid relationship to internationally or domestically known standards. The basis used for calibration is documented where no standards exist.

When monitoring and measuring equipment are found to be out of calibration (or when calibration status is not known,) they are adjusted or re-adjusted as necessary and the validity of previous measuring results is documented. Actions taken are documented, as well. This includes taking the appropriate corrective actions to remedy the situation and prevent its recurrence.

The Quality designee in charge of calibration is responsible for ensuring that the appropriate calibration records are maintained. Documented results of calibration activities and suitable indicators are used to show current calibration status. A number or other indicator is used to prove traceability to the calibration records, where applicable. All monitoring and measuring equipment are safeguarded from adjustment that would invalidate the calibration.

All monitoring and measuring equipment are handled, maintained and stored in a manner that ensures accuracy and fitness for use.

### **7.1.6 Organizational Knowledge**

TAE, INC. determines the knowledge necessary for the operation of its processes and to achieve conformity of products and services. This may include knowledge and information obtained from:

- a) Internal sources, such as lessons learned, feedback from subject matter experts, and/or intellectual property.
- b) External sources such as standards, academia, conferences, and/or gathering from customers or suppliers.

This knowledge is maintained and made available to the extent necessary.

We consider current knowledge and determine how to acquire or access the necessary additional knowledge, when addressing changing needs and trends of our organization.

## **7.2 Competence**

The competency of employees assigned responsibilities defined in the QMS is determined based on documented criteria for appropriate education, training, skills, and experience for each required job function. Human Resources has the overall responsibility for administering TAE, INC's resources processes in accordance with the applicable procedures and company established policies. Activities to ensure employee competence include but are not limited to:

- Ensuring that job descriptions exist including specific competency provisions.



- Measure job performance for each employee, at minimum, annually.
- Provide job and career training programs to the extent necessary.
- Monitor & take actions where necessary to assist employees who exhibit less than desirable performance results.

### 7.3 Awareness

At, TAE, INC., we ensure that our employees are aware of the relevance and importance of their activities and contribution to achievement of our quality and effective QMS. This is accomplished through awareness training and employee participation in our internal audit program and on-going continuous improvement initiative. Through training, multiple communication channels, and respective management review meetings we ensure that employees are made aware of:

- The quality policy
- Relevant quality objectives.
- Their contribution to the effectiveness of the management system, including the benefits of improved performance.
- The implications of not conforming with the management system requirements

### 7.4 Communication

TAE, INC's Senior Management Team ensures internal communications take place regarding the effectiveness of the management system. Communication takes place regarding QMS processes and their effectiveness include but are not limited to:

- The Senior Management Team will host quarterly communication meetings across all sites.
- Information will be available on physical bulletin boards throughout the facility in order to convey quality activities data.
- The safety Manager will present information, through high visibility, on physical boards and the intranet. This data will include Safety, Environmental Management Program and related statutory/regulatory requirements.
- Human Resources will post information on bulletin boards throughout the facility. They will, also, post information pertinent to employee queries: benefits, involvement opportunities, promotion opportunities, committee participation, birthdays, no-work holidays and applicable statutory/regulatory requirements.
- The Quality Manager and/or representatives will ensure effective communication is facilitated by way of quality management personnel.

### 7.5 Documented Information

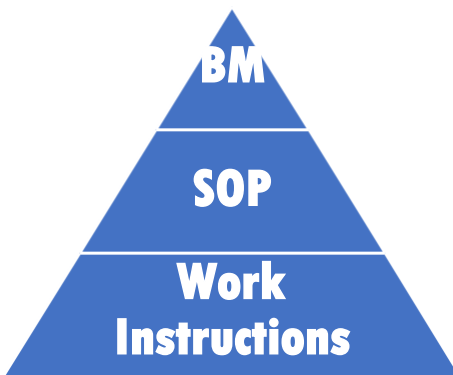
TAE, INC's management system documentation includes both documents and records.

**Document control:** Management system documents are controlled in accordance with our document control procedures. Our users have access to current approved information, and access is restricted to obsolete data. As Documented procedures are established, documented and maintained where applicable. External documents are identified and controlled appropriately.



**Record control:** Define the controls needed for the identification, storage, retrieval, protection, retention time, and disposition of quality records. The controls are applicable to those records which provide evidence of conformance to requirements: Product or Service requirements, contractual requirements, procedural requirements, statutory/regulatory compliance.

### Document Level Structure



#### Exhibit: D

- **Level 1: Quality Manual – approach and responsibility**
  - Quality Policies - key system objectives
  - Other policies
- **Level 2: Quality Procedures - methods where applicable**
  - Who, what, when, where how,
- **Level 3: Work Instructions - Department Specification Instruction, products & Process, documents & Instructions (How)**
- **Level 4: Forms, Data, and Records - Logs, Objectives Evidence conformance**
  - Identification and description (a title, date, author, or reference number)
  - Format (graphics, language, software version) and media
  - Review and approval for suitability

## 8.0 Operation

### 8.1 Operational Planning and control.

During planning Tuskegee Aeronautical Engineering, INC. (TAE, INC) considers the information related to the context of the organization, existing resources and capabilities, as well as Product and Service requirements. Our initial focus is to guarantee the quality of process inputs such as employees, material, facilities, equipment, and methods. We ensure that employees are equipped to perform the process properly through appropriate education, training, and certification.

TAE, INC. uses a process-focused approach to plan and control operations and support services related to production and service provision. Our QMS identifies, plan for, and documents our product and service realization processes. This ensures consistency with customer requirements, related quality objectives for specific products/services, and any/all



applicable statutory/legal requirements. The outputs of product/service realization planning include the specific methods, facilities, equipment, employees, and materials/support services needed to achieve all desired all desired results for a product, service, or contract.

For effective operations, material must need specified requirements and properly identified, stored, and issued. Equipment and facilities must be adequate, accurate, available, and properly utilized. Work instructions and other data is current and accurate. Methods must be appropriate and proven capable of accomplishing desire results. The appropriateness of all

these fundamental process inputs are assured, and processes are measured, monitored, and controlled to assure effectiveness and/or to identify opportunities for improvement where applicable.

The output of operational and control includes documented travelers, resource requirements, processes, equipment requirements, procedures and the data.

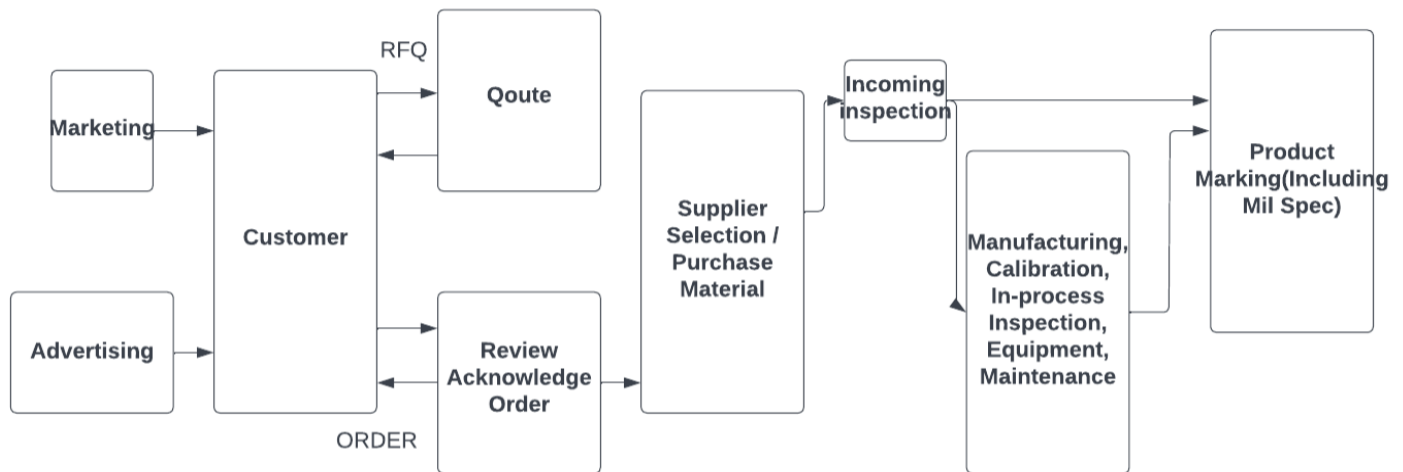
Outsourced processes and how we control them are defined in the supply chain and procurement procedures and work instructions.

When requirements are not adequately addressed in the order documentation, or as required by the customer. The Quality Team Designee, Manufacturing Team Designee, with the assistance of the production area supervisor has overall responsibility for developing and implementing a quality control plan to address additional requirements or controls needed to verify work for the specific process, product, or control in question.

The outputs of quality planning are carried out in accordance with planned monitoring and measurement activities. Please see Exhibit: E for TAE, Inc's Process Approach.



## Tuskegee Aeronautical Engineering, Inc. Process Approach



**Exhibit: E (located on Page 16 of 26)**

## 8.2 Requirements for Products and Services

### 8.2.1 Customer Communication

Tuskegee Aeronautical Engineering, INC. (TAE, INC) ensures that customers are provided information through the Customer Care team, Quality Coordinator, and other pertinent team members. Customer needs and expectations are also met where applicable through the following key functions: Procurement, Manufacturing, Logistics and other relevant areas.

TAE, INC. has implemented effective communication with customers in relation to:

- Customer Care personnel provide product information directly to customers including verbal and printed information on our standard product offerings as well as customized information for unique customer applications.
- Inquiries are handled by our Customer Care personnel depending on the nature of the inquiry or who made initial contact; manufacturing personnel provide technical assistance and related information as needed.
- We are compassionate and attentive to our customers feedback and expectations, including customer complaints. Customer satisfaction is also evaluated on an on-going basis through personal customer care,

- Our web site [www.tuskegeeus.com](http://www.tuskegeeus.com) provides an opportunity for our customers to submit queries through the CONTACT hyper link, by completing a digital form. Ultimately, they will have access to our care personnel in real time.
- Handling enquiries, contracts, or orders, including changes; controlling customer property; establishing specific requirements for contingency actions.

### **8.2.2 Determining the Requirements Related to Products and Services.**

The Procurement team generates Request for Quotes for the Department of Defense / Defense Logistics Agency and the Sales and Marketing generate quotes for domestic industry. A customer order constitutes a contract through the receipt of a written Purchase Order (PO) to ensure that the customers' requirements are clearly identified and confirmed prior to acceptance. Our documented procedures define our process for determining product related requirements as specified by the customer. These requirements include the availability and support, post-sales and/or post-delivery servicing provided as part of the customer contract or purchase order. Customer specific requirements for products and service are clearly defined by the customer including but not limited to:

- 1) Any applicable statutory and regulatory requirements.
- 2) Those considered necessary by the organization

The appropriate review is done to ensure that TAE, INC. meet the claims for the products and services we offer.



### **8.2.3 Review of Requirements Related to Products and Services**

Customer Care personnel review customer requirements identified during the determination process to ensure that they are clearly stated, understood and recorded. Our process for reviewing all applicable requirements is defined in our Customer Care Procedures to ensure the following.

- All applicable product requirements are defined, understood, and confirmed with the customer prior to acceptance.
- The requirements for availability, delivery and support including any post-sales product service and/or post-delivery servicing provided as part of the customer and or contractor purchase order.
- Manufacturing feasibility of proposed products is investigated, confirmed, and documented prior to making a commitment to supply.
- Contracted or order requirements differing from those previously expressed are resolved
- Acknowledge the order through the website, [www.tuskegeeus.com](http://www.tuskegeeus.com).
- Records of the review and actions resulting from the review are maintained., or change an ex
- Meet any requirements not stated by the customer but has been deemed necessary by TAE, INC.
- Meet all related statutory and regulatory requirements.

### **8.2.4 Changes to Requirements for Products and Services**

TAE, INC. ensures that all relevant requirements and documents are updated; and when requirements for products and services are changed; ensures that all appropriate staff are notified.

### **8.3 Design and Development of Products and Services**

TAE, INC. procures and manufactures to customer specified requirements. TAE, INC. does not engage in design practices

#### **8.3.2 Design and Development Planning**

TAE, INC. procures and manufactures to customer specified requirements. TAE, INC. does not engage in design practices

#### **8.3.3 Manufacturing and Development inputs**

The Manufacturing Manager identifies, documents and reviews inputs: and, before finalization documentation of required inputs. resolves:

- Any incomplete, ambiguous, or conflicting requirements.
- Functional and performance requirements derived from customer input, legal and regulatory requirements which apply.
- Statutory and regulatory requirements; standards or codes of practice that TAE, INC. has committed to implement.
- Potential consequences of failure due to the nature of the products and services.



#### **8.3.4 Manufacturing and Development Controls**

The Manufacturing Manager ensures all manufacturing chances are identified, documented, reviewed, approved, and communicated to all organizations and functions, and results and any necessary actions are recorded throughout the products stages of development.

### **8.4 Control of Externally Provided Processes, Products and Services**

#### **8.4.1 General**

The type and extent of control applied to our suppliers and purchased product is dependent upon the type of product: the potential impact of the product on our processes, products, or services; the results of supplier evaluations: and past performance. Other considerations include effect on subsequent operational processes and their output.

Purchase products are verified to ensure conformity to specific purchase requirements.

#### **8.4.2 Type and Extent of Control**

The Logistics Manager and/or their designee defines and documents the supplier approval process, including criteria for selection, the extent of control to be exercised, and periodic evaluation, Suppliers are evaluated and selected based on their ability to supply products or services in accordance with our requirements, where necessary, the Purchasing Team conducts a re-evaluation of external providers performance, based on their ability to provide processes products and services in accordance with requirements.

A master list of approved suppliers is maintained to ensure we only purchase product from Tuskegee Aeronautical Engineering, INC. qualified sources.

### 8.4.3 Information for External Providers

The Logistics Manager and/or designee ensures the adequacy of specific purchase requirements prior to communication to our suppliers as defined in our purchasing procedures and policies:

Purchasing information communicated to our suppliers contains the appropriate data need to describe requirements clearly and fully for purchased materials and services; including, where appropriate; requirements for approval/qualification of product, procedures, processes/systems, equipment; qualification of personnel; and quality management system requirements.

Purchases are made via the release of formal purchase orders and/or contracts which clearly describe what is being purchased. Receiving products or services are then verified against requirements to ensure satisfaction of requirements. Suppliers who do not provide conforming products or services may be requested to conduct formal corrective action.

The Logistics Manager or designee will communicate where necessary to perform verification or validation activities to ensure process and product compliance at the external providers premises; this will extend to our customers where needed, when deemed necessary.



## 8.5 Production and Services Provision

### 8.5.1 Control of Production and Service Provision

We utilize a process-focused approach to plan and control operations and support services related to production and service provision. Our initial focus is to assure the quality of process inputs: employees, materials, facilities, equipment. Employees must be equipped to perform the process properly through appropriate education, training, and certification. Materials must meet specified requirements and be properly identified, stored, and issued. Equipment and facilities must be adequate, accurate, available and properly utilized. Work instruction and other important data must be current and correct. Methods must be appropriate and proven capable of accomplishing the desired results. The Manufacturing team ensures that production/service jobs are planned, scheduled and carried out in accordance with documented procedures.

Receiving inspection is performed per the appropriate procedures and instructions.

All relevant requirements for approval of purchased product and/or supplier procedures, processes, equipment, personnel and/or quality system are reviewed for adequacy to communication with the supplier. TAE, INC. considers where applicable to control its provision of Products and Services in accordance with our procedures.

**Information:** The Value Stream Manger/Production Manger ensures that all appropriate information including final product/service specifications, raw material characteristics and the required product parameters, is provide to production personnel throughout the products/service provision process.

**Work Instructions:** The necessary for and required detail of work instruction is dependent upon the knowledge, skills, and abilities of our employees and the complexity of the work process they are assigned to perform. Supervisors, with assistance of the Quality Team and other personnel, identify critical work instructions in areas where they are needed.

**Equipment:** The Manufacturing Manager ensures the suitability and availability of all equipment, facilities and tooling used for production and service operations.

**Monitoring and Measurement devices:** The Quality Manager and the Manufacturing Manager ensures that the monitoring and measurement equipment capable of meeting our measurement requirements are available for use during production and service provision.

**Monitoring Activities.** The Value Stream Manager and Manufacturing Manger ensures that manufacturing personnel monitor the quality of their own work and understand the procedures for reporting related problems and/or suspected nonconforming conditions. The Quality Manger with assistance of the Value Stream Manager for planning and implementing in-process inspections needed to ensure process and product quality.

**Release, Delivery, and Post-Delivery:** Release of product is dependent on its compliance with all technical specifications and its ability to meet additional customer requirements including packing, shipping, and delivery, as identified in the order. The Manufacturing Manager and Quality Representative secures records of product approval are maintained and clearly indicate the authorizing employee.



### 8.5.2 Identified and Traceability

Tuskegee Aeronautical Engineering, INC. (TAE, INC.) identifies its products, services, or other critical process outputs by suitable means. We establish and maintain product monitoring and measurement status using both physical identification tags/labels and electronics records. Such identification includes the status of the product with respect to monitoring and measurement requirements. Unless otherwise indicated as nonconforming, pending inspection or disposition, or some other similar identifier, product and service shall be considered conforming and suitable for use. The Value Stream Manager, and the Quality Management Team, certify all in-coming, in process and final product are accurately identified.

### 8.5.3 Property Belonging to Customers or External Providers

TAE, INC. exercises care with customer or supplier property while it is our control. Customer property includes customer- owned material, tools (including returnable packaging), tooling (including test/inspection tooling and equipment, and intellectual property.

Upon receipt, such property is identified, verified, protected, and safeguarded. If any such property is lost. Damaged, or otherwise found to be unstable for use, this is reported to the customer or supplier and records maintained.

For customer intellectual property, including customer furnished data used for Manufacturing or inspection, this is identified and maintained and preserved from accidental loss, damage, or inappropriate use.

We identify, verify, protect, by applying the same process controls as we do for purchase product (materials).

Whenever customer-specified requirements for property management are beyond the control or capability of our establishment QMS, the Quality Manager and team has overall responsibility for planning, documenting, and communicating such requirements to all appropriate personnel as a part of product quality planning. The Customer Care Representative ensures that lost, damaged or unsuitable customer property is recorded and immediately reported to the customer.

#### **8.5.4. Preservation**

The Manufacturing and Logistics Manager have overall responsibility for establishing and implementing a material management system. This is to establish product conformity is preserved during internal processing and to the intended destination. The details of this system are defined and includes the handling, storage, packing, delivery, and protection of final product, as well as raw materials and in-process constituents of the final product. The Material Management System also ensures that:

- Components and products are handled and stored in a manner that prevents damage or deterioration.
- Each department safeguard controls are implemented to prevent mixing conforming and non-conforming materials.
- Packing ensures specific or original manufacturing packaging is utilized (Mil-Spec Marking/ Packing).
- All components and products are appropriately packed to prevent deterioration or damages during storage or transport.



The condition of stock is periodically assessed, obsolete product and unidentified or suspect stock is controlled as nonconforming product (including expired and dated materials).

#### **8.5.5 Post-Delivery Activities**

TAE, INC. maintains documented information of relevant products delivered to our customers. The extent of post-delivery activities includes consideration to our customers' requirements and receive feedback. Post-delivery are conducted in compliance with the management quality management system with consideration to statutory and regulatory requirements; potential undesired consequences associated with products/services—customer requirements, warranties and customer feedback.

#### **8.5.6 Control of Changes (See Exhibit G)**

TAE, INC. review and control changes for production or service operations to the extent necessary to ensure continuing conformity of customer or internal requirements. Changes for production may be initiated because of:

- Modernization based on the context of the organization analysis results.
- Needs of interested parties, or customer feedback.
- Manufacturing department when vulnerability and (or) opportunities for improvement are identified.

## 8.6 Release of Products and Services

Acceptance criteria for our products are defined in appropriate subordinate documentation, Reviews, inspections, and tests are conducted at appropriate stages to verify that the requirements have been met. This is done before products are released and /or services are delivered.

The Quality Management Team monitors and measures the characteristics of the in receiving inspection, in-process inspection, and final inspection to verify that requirements have been met. Documented Records and information of inspection include evidence of conformity with the acceptance criteria and traceability to the designee authorizing the release. The Quality Manager Team or designee will maintain the records of inspection. Documents Records and information of inspection include evidence of conformity with the acceptance criteria and traceability to the person authorizing the release. Records of inspection are maintained by the quality supervisor or designee.

## 8.7 Control of Nonconforming Outputs

TAE, INC. ensures that Products and Services or other outputs that does not conform to specific requirements are identified and controlled to prevent their unintended use or delivery.

The Quality Management Team has overall responsibility for implementing an effective process for identifying, documenting, segregating, evaluating, and disposing of nonconforming product. Personnel responsible for product quality have the authority to stop production to correct quality problems: related procedures are summarized below.



**Identification:** Identification of nonconforming product originates from inspection, internal testing, product audits or customer complaints. Employees clearly mark or otherwise identify nonconforming product or suspect status is classified and processed as nonconforming.

**Documentation:** The Quality Analyst processes the nonconformance information into the corrective action system; Identifying the nonconforming product and lot number if applicable. Description of nonconformance and location where the nonconforming product is being held pending further review or disposition.

**Segregation:** Nonconforming product is segregated pending evaluation and disposition.

**Evaluation:** The Quality Manager and QC personnel, perform the initial evaluation of conforming product in accordance with approved test and inspection procedures.

**Disposition:** The results of the evaluation and resulting disposition are documented. Dispositions resulting from the evaluation of nonconforming product may include rework to meet specified requirements. Customer Care personnel will notify the customer immediately upon discovering that nonconforming product has been shipped.

## 9.0 Performance Evaluation:

### 9.1 Monitoring, measurement, analysis and Evaluation

TAE, INC. has determined which aspects of its quality management system must be monitored and measured, as well as the methods to utilize and records to maintain, with the Quality Manual and subordinate documentation.

The Senior Management Team (SMT) evaluates the performance and effectiveness of the quality management system thereby monitoring and measuring key processes for compliance.

The Quality Manager, assisted by, The Value Stream Manager is responsible for establishing and maintaining an effective system for identifying, selecting, and controlling the use of monitoring and measuring used to provide evidence of product conformance to established requirements, compliments, warranty claims, and dealer reports, repeat orders, changing volume orders, trends in on-time delivery, .

Customer complaints are immediately forwarded to the Customer Care personnel for action. Customer complaints are documented and monitored. The complaint will be transferred to the Sales Manager, If personnel are unable to bring closure to a customer's concerns.

The Quality Manager Team and the corrective action board periodically reviews customer complaints data and other customer feedback and works with corrective action board to assigned corrective and preventive action.

### 9.1.3 Analysis and Evaluation

TAE, INC. analyzes and evaluates the data and information arising from monitoring and measurement to evaluate.

- Conformity of products
- the degree of customer satisfaction.
- The performance and effectiveness of the quality management system.
- If planning has been implemented effectively.



- The effectiveness of actions taken to address risks and opportunities.
- The performance of external providers.
- The need for improvements to the quality management system.

The Safety Management Team, functional managers and supervisors collect and analyze data using appropriate techniques to determine the quality and effectiveness of key QMS processes in their area(s) of concern, responsibility. Data is analyzed to assess the achievement of the corporate level quality objectives. Also, this includes operational objectives that are pertinent to key success of the QMS.

## 9.2 Internal Audit

TAE, INC. conducts internal audits at planned intervals to determine whether the Quality Management System (QMS) conforms to the requirements of ISO 9001-2015 QMS. Audits seek to ensure the QMS has been effectively implemented.

Internal audit results are paramount inputs to aid in accessing the effectiveness of our QMS—in identifying opportunities for improving and in promoting awareness of customer requirements and effectiveness of the QMS to our organization. Our QMS effectiveness is, ultimately, measured by the absence of repeat problems and effectively eliminating the cause of the same.



### 9.3 Management review

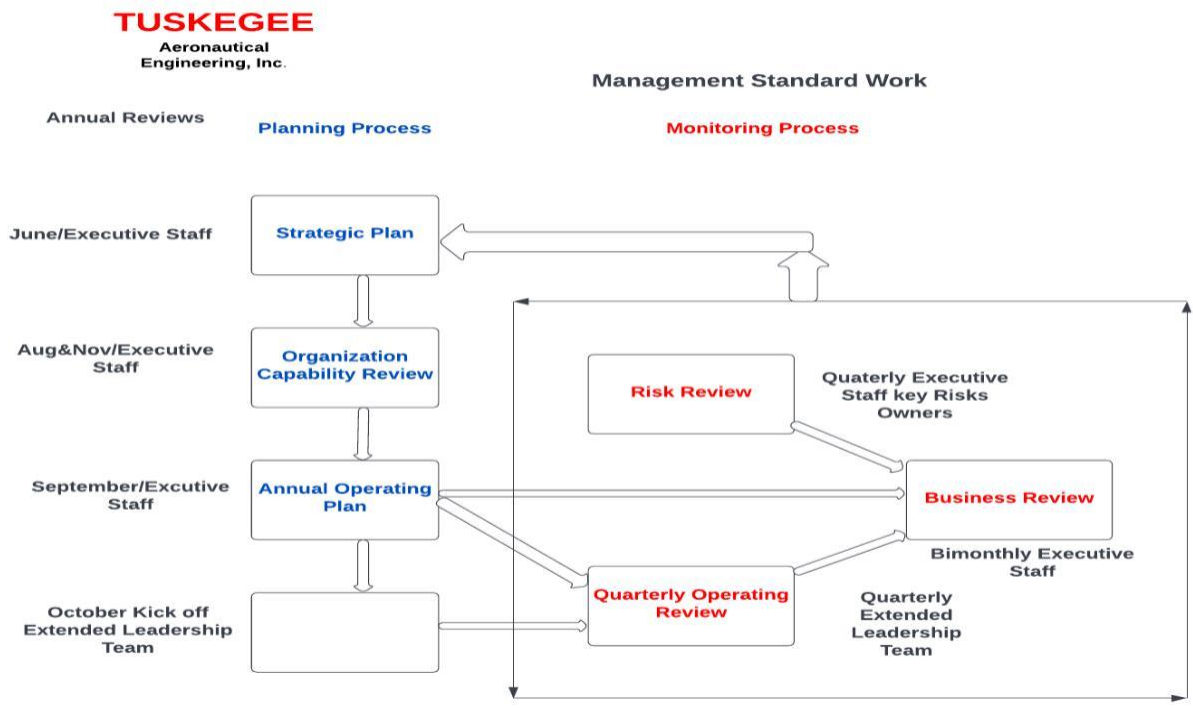


Exhibit: F



#### 9.3.1 General

The Senior Management Team and functional managers reviews the QMS, at planned intervals, to guarantee its continuing effectiveness, adequacy and suitability. The review includes assessing opportunities for improvement, and the need for changes to the QMS.

Manager review frequency, inputs, outputs, required members, actions taken, and other review requirements are defined in the Management Review procedure.

The Quality Management Team or designee maintains records from the Senior Management Reviews. The Quality Manager conducts a management review meeting with Senior Management and relevant stakeholders annually to suitably safeguard adequacy, and effectiveness of our QMS, in accordance with procedures. The primary inputs reviewed includes data that measures the conformance and performance of our QMS and recommendations-based analysis of such data. Conformance is primarily assured through internal audits and demonstration through a review of internal audit results and our determination to correct/prevent problems/concerns.

#### 9.3.2 Management Review Input

The management review meeting includes a review of our quality policy, all applicable requirements of the QMS, related to performance trends and opportunities for improvement, follow-up actions from earlier management reviews, results of self-assessments, and strategic or operational changes that could affect the QMS.

### 9.3.3 Management Review Output

Outputs from management review meetings include related actions required for improvement of our QMS and its business processes, improvement of product related to customer requirements, and provision of resource needs. Results of management review meetings are recorded and maintained by the Senior Management Team of designee.

## 10.0 Improvement

TAE, INC. uses the management system to improve its processes, products, and services. Such improvements aim to address the needs and expectations of customers as well as the other interested parties, to any extent possible.

TAE, INC.'s improvement process commences with the establishment of our quality and objectives for Improvement based on outputs from Management review notes, customer targets/goals, internal and external issues from our interested parties.

Customer satisfaction data, internal audit outputs, process and product performance data are then compared to progress against objectives to identify additional opportunities for improvement, appropriate improvements and executed.

We also consider corrective and preventive actions as a vital part of our continuous improvement program. Corrective actions or lessons learned actions are initiated to prevent the occurrence of problems or to implement other improvement actions.

The Quality Team Manager has overall responsibility for establishing and implementing an effective continuous improvement system which includes improvements actions.



## 10.2 Nonconformity and Corrective Actions

TAE, INC. takes corrective action to eliminate the cause of nonconformity to prevent recurrence. In addition, we take preventive measures to eliminate the causes of potential nonconformities to prevent their recurrence.

Follow-ups are conducted through the internal audit process to ensure that the appropriate corrective to is taken to resolve known complications. Furthermore, the Quality Management Team summarizes and analyzes corrective action data to identify trends needed to assess overall effectiveness of the corrective action system and to develop related recommendations for improvement. The corrective action system is considered effective if specific complications are corrected and data indicates that the complications, in question, are similar or have reoccurred. Results of these analyses and related recommendations are reviewed during Senior Management reviews.

## 10.3 Continues Improvement

TAE, INC. is committed to consciously and effortless improve the suitably, adequacy, and effectiveness of the quality QMS through the effective administrative reviews. This includes fostering opportunities for improvement,

then apply the necessary lean tools to focus and improve, and fervently seek to eliminate processes that are not valuable.

