



UNITED STATES MARINE CORPS

MARINE CORPS BASE
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05 Jun 13

MARINE CORPS BASE ORDER 5220.1

From: Commander

To: Distribution List

Subj: IMPLEMENTATION AND MANAGEMENT OF INTERNATIONAL
ORGANIZATION OF STANDARDS QUALITY MANAGEMENT SYSTEM

Ref: (a) International Organization of Standards 9001-2008
(b) MCO 5220.12

Encl: (1) ISO 9001-2008 Quality Manual

1. Situation. The Marine Corps Base Quantico (MCBQ), G-4 Logistics Division requires a Quality Management System to achieve sufficiency in quality of service. Accordingly, to reference (a), it is selected to provide the framework for the G-4 Logistics Division's service management.

2. Cancellation. N/A

3. Mission. Effective upon receipt, all activities within the G-4 Logistics Division will adhere to the International Organization of Standards (ISO) 9001-2008 standard for processes and procedures in order to ensure a quality management system.

4. Execution

a. Commander's Intent and Concept of Operations

(1) Commander's Intent. The procedures set forth in the enclosure will be used by all G-4 Logistics Division activities to ensure quality of service and products, safe operation and maintenance, and is applicable to all personnel within the G-4 Logistics Division.

(2) Concept of Operation. The program outlines procedures which are developed, implemented, certified and monitored to insure compliance with applicable Marine Corps

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distribution is unlimited.

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Orders and Directives. The process is ongoing and intended to proceed to full implementation and certification of the ISO 9001-2008. The program will provide a greater level of quality performance of assigned task, customer satisfaction and compliance with applicable Marine Corps Orders and Directives within the functional areas.

b. Tasks

(1) Assistant Chief of Staff (AC/S) G-4, Logistics Division will:

(a) Ensure that an internal program for management of quality services and maintenance is implemented and conducted per the references;

(b) Ensure that required procedures, processes, and certifications are accomplished in accordance with the references;

(c) Appoint a Management Representative in writing in accordance with reference (b);

(d) Maintain documentation, in accordance with references (a) and (b), or as otherwise required, for all standard procedures and work instructions and make documents available upon request for review by the approved personnel G-4 Logistics Division or other cognizant authority; and

(e) Conduct an annual validation audit of all work instructions and create a summary report of standard procedures/work instruction audits with findings, corrective actions, preventative actions and opportunities for continuous improvements. This report will be briefed to Commander, MCBQ during an annual scheduled ISO status update brief.

(2) Management Representative will:

(a) Ensure that processes needed for the quality management system are established, implemented and maintained;

(b) Report to top management on the performance of the quality management system, and any need for improvement;

(c) Ensure the promotion of awareness of customer requirements throughout the organization; and

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(d) Make liaison with external parties on matters relating to the quality management system.

5. Administrative and Logistics. Recommendations concerning the contents of this Manual will be submitted to the Commander, MCBQ via the AC/S G-4, MCBQ via the appropriate chain of command.

6. Command and Signal

a. Command. This Order is applicable to the personnel within G-4, Logistics Division, MCBQ.

b. Signal. This Order is effective the date signed.

/s/

DAVID W. MAXWELL

DISTRIBUTION STATEMENT A:

RECORD OF CHANGES

Log completed change action as indicated.

Change Number	Date of Change	Synopsis of Change

Version 1.0

G-4 Marine Corps Base Quantico

QUALITY MANUAL

G4L QM1000

This Quality Manual is being released for use by G-4, Marine Corps Base Quantico and is hereby released for their use as of the date of this manual. All further changes will be coordinated through the Quality Manager.

**Assistant Chief of Staff G-4
Marine Corps Base Quantico**

ENCLOSURE (1)

PREFACE

This document has been developed to ensure the compliance with Marine Corps Orders and Directives as part of a continuous process improvement program. It implements the G-4, Marine Corps Base Quantico's use of the International Organization for Standardization's ISO 9001:2008 Quality Management System Standards which is endorsed by the G-4, Marine Corps Base Quantico. We believe that the incorporation of this Quality Management System enhances G-4, Marine Corps Base Quantico's strategic plans that encompass our vision, mission, and goals.

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1. SCOPE

1.1 Quality Manual Scope

This Quality Manual (QM) establishes G-4, Marine Corps Base Quantico's Quality Management System (QMS). Its purpose is to ensure consistent delivery of quality products and services that meet customer needs and expectations. The system also validates compliance with applicable Marine Corps Orders and Directives as well as statutory and regulatory requirements. The aim is to enhance customer satisfaction through the effective application of the QMS, including processes for continual improvement of the system and the assurance of conformity to customers and applicable orders, directives, statutory, and regulatory requirements.

This QM is a basic manual providing information about the QMS; management responsibility/commitment, customer focus, resource management, product realization and measurement, analysis, and improvement for the implementation and sustainment of ISO 9001:2008 or ANSI/ASQC Q9001-2000. This manual is organized along the same structure of ISO 9001:2008. The section numbering corresponds to clause numbering of the standard.

For brevity, the International Organization for Standardization ISO 9001:2008 standard or its American equivalent, the ANSI/ASQC Q9001:2008 standard, will be referred to simply as ISO 9001 throughout the remainder of this QM, unless reference to a specific standard is required

The Management Representative is responsible for maintaining the QM. The original controlled version of the QM is in the custody of Management Representative Office. A read-only copy of the controlled version is available electronically on G-4, Marine Corps Base Quantico's website/local area network. By definition, any printed version, other than the one controlled original QM, is uncontrolled. Any proposed revisions to this QM must be submitted to the Management Representative who electronically authorizes approval of all revisions. Approval of any revision shall not be made until internal reviews chaired by the Management Representative are conducted.

The mission of the G-4, Marine Corps Base Quantico is to provide logistics support for organic and tenant organizations, units and activities with respect to Distribution Management, Material Readiness, Ammunition Supply, Bachelor Housing, Transportation Support and Food Services.

1.2 Exclusions

Applicable exemptions, if any, are noted in the corresponding sections of this QM.

2. NORMATIVE REFERENCES/REFERENCE DOCUMENTS

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

- MCO 5220.12
- ISO 9000:2005 or ANSI/ASQC Q9000-2000
- ISO 9001:2008 or ANSI/ASQC Q9001-2000
- ISO 9004:2000 or ANSI/ASQC Q9004-2000
- ISO QE 19011-2002 or BSR/ASQ QE 19011:2002

3. Terms and Definitions

Note 1: For the purposes of this document International Standard, the terms and definitions given in ISO 9000 apply. Throughout the text of this International Standard, wherever the term “product” occurs, it can also mean “service”.

Note 2: For the purposes of this document, the terms and references to Marine Corps Orders and Directives refers to all applicable DOD, SECNAV, Marine Corps Orders, directives, and instructions.

- 3.1 **Customer Furnished Parts or Material (CFP/M)**: parts and/or material furnished by a customer.
- 3.2 **Customer/Purchaser**: the recipient of a product or service provided by G-4, Marine Corps Base Quantico
- 3.3 **Integrated Product Team (IPT)**: a team comprised of process owners, e.g., office, section, shop or cost work center employees, that chart, monitor and manage their performance through team meetings, performance reviews, self-imposed corrective actions and continual improvement of their processes.
- 3.4 **Service**: the result of at least one activity necessarily performed at the interface between the supplier and the customer and is generally intangible.
- 3.5 **G4 Logistics Division**: In this document, G4L refers to commonly numbered quality system documents. For example, standard procedure (SP) 7200 will be annotated in the text of this document as G4L SP7200.
- 3.6 **Management Team**: Is comprised of all branch heads, Division Deputy, Logistics Chief, management representative, Division Director

QUALITY SYSTEM REQUIREMENTS

4. Quality Management System

4.1 General Requirements. G-4, Marine Corps Base Quantico has established, documented, and maintained a QMS and continually improve its effectiveness in accordance with the requirements of ISO 9001. The QMS involves all levels of production processes and those administrative processes in accordance with Marine Corps Orders and Directives that may affect the quality of the products or services. G-4, Marine Corps Base Quantico has:

- a. Determined the processes needed for QMS and their application throughout the organization;
- b. Determined the sequence and interaction of processes;
- c. Determined the criteria and methods needed to ensure that both the operation and control of processes are effective;
- d. Ensured the availability of resources and information necessary to support the operation and monitoring of these processes;
- e. Monitored, measured (where applicable), and analyzed these processes; and
- f. Implemented actions necessary to achieve planned results and continual improvement of these processes.

These processes are managed by G-4, Marine Corps Base Quantico in accordance with the requirements of ISO 9001 in accordance with applicable Marine Corps Orders and Directives. G-4, Marine Corps Base Quantico processes, interactions, and associated controls are documented in various process maps that are referred to in this quality manual.

Note 1: Whenever G-4, Marine Corps Base Quantico chooses to outsource any process that may affect product conformity to the statement of work (SOW) or customer requirements, they exercise sufficient control to ensure that such processes are performed according to the relevant requirements of ISO 9001 and customer requirements. The type and extent of control to be applied to these outsourced processes are defined within the QMS in sections 7.4, 7.5, and 7.6.

Note 2: Processes needed for the QMS referred to above include processes for management activities, provision of resources, product realization and measurement, analysis, and improvement.

Note 3: An outsourced process is identified as one being needed for the G-4, Marine Corps Base Quantico's quality management system, but chosen to be performed by a party external to the organization.

Note 4: Ensuring control over outsourced processes does not absolve G-4, Marine Corps Base Quantico of the responsibility of conformity to all Customer, statutory, and regulatory requirements. The type and extent of control to be applied to the outsourced process can be influenced by factors such as:

- a. The potential impact of the outsourced process on the G-4, Marine Corps Base Quantico's capability to provide product that conforms to requirements,
- b. The degree to which the control for the process is shared;
- c. The capability of achieving the necessary control through the application of clause 7.4.

4.2 Documentation Requirements

4.2.1 General. The G-4, Marine Corps Base Quantico's QMS documentation includes:

- a. A documented statement of the Quality Policy (refer to section 5.3) and the Quality Objectives (refer to G4L-SP5000 Appendix A) provides a focus for the Assistant Chief of Staff (AC/S) G4 Logistics to direct the organization.

- b. Level 1 documentation, comprised of this QM, provides high-level guidance for overall quality policy guidelines. The QM is a controlled document used by G-4, Marine Corps Base Quantico

- c. Level 2 Procedures necessary to comply with the requirements of ISO 9001 consist of:

- Control of Documents (ISO Element 4.2.3)
- Control of Records (ISO Element 4.2.4)
- Internal Audit (ISO Element 8.2.2)
- Control of Nonconforming Product (ISO Element 8.3)
- Corrective Action (ISO Element 8.5.2)
- Preventive Action (ISO Element 8.5.3)

- d. Other Level 2 (G4L-SP) procedures or Level 3 Quality Work Instructions (WI's) ensure the effective planning, operation, and control of processes to meet the requirements for product quality in accordance with applicable Marine Corps Orders and Directives. Level 2 documentation covers who is responsible, what they are responsible for, and when and where it applies. WI's may include process description, work and test instructions, test and inspection plans, process flow charts, and process maps. References to Level 2 or Level 3 documents are made within this QM as applicable.

e. Quality records required by ISO 9001 (see 4.2.4) that demonstrate effective operation of QMS will be legible, readily identifiable and retrievable. Documented procedures, G4L-SP4240, have been established to define the control needed for identification, storage, protection, retrieval, retention time and disposition of records.

Note 1: Where the term “documented procedure” appears within this manual, this means that the procedure is established, documented, approved, implemented and maintained.

Note 2: The documentation at each Branch/Section can be in any form or type of medium.

4.2.2 Quality Manual. G-4, Marine Corps Base Quantico has established and maintains this QM. It includes:

- a. The scope of the QMS, including details of and justification for any exclusion (these exclusions are noted in the corresponding sections of this manual);
- b. The documented procedures established for the QMS are referenced in applicable sections; and
- c. G4L-QM1000 Process Maps describe the interaction between the processes of the QMS at G-4, Marine Corps Base Quantico.

4.2.3 Control of Documents

a. G-4, Marine Corps Base Quantico has established and maintains documented quality procedures to control all documents required by the QMS. Records are a special type of document and are controlled according to requirements given in 4.2.4. A documented procedure has been established and includes the following required controls:

1. To approve documents for adequacy prior to issue.
2. To review and update as necessary and re-approve documents.
3. To ensure that changes and the current revision status of documents are identified and are available at all locations where operations essential to the effective functioning of QMS are performed.
4. To ensure that relevant version of applicable documents are available at the point of issue.
5. To ensure that documents remain legible and readily identifiable.
6. To ensure that documents of external origin such as technical manuals and customer drawings are identified and their distribution controlled.

7. To prevent the unintended use of obsolete documents and to apply suitable identification to them if they are retained for any purpose such as legal and/or knowledge preservation purposes.

b. Procedures (G4L-SP4230 Control of Documents) have been established to conform to the requirements of this section and applicable Marine Corps Orders and Directives.

4.2.4 Control of Records

a. G-4, Logistics Division Marine Corps Base Quantico demonstrates effective operation of the QMS records and has established and maintains documented quality procedures for identifying, storing, protecting, collecting, indexing, accessing, filing, retrieving, retaining, maintaining, and disposing of quality records. Quality records are legible, readily identifiable, and retrievable. Quality records are retained for the minimum period specified in Marine Corps Orders and Directives, and applicable procedures, instructions, and/or contracts.

b. All records required by the ISO 9001:2008 are retained except records for those requirements excluded from the scope of registration such as design and development records. Other records, as necessary, are also retained in accordance with established retention and maintenance requirements.

1. Management Review	(ISO Element 5.6)
2. Competence, Awareness and Training	(ISO Element 6.2.2)
3. Planning of Product Realization	(ISO Element 7.1)
4. Review of Requirements Related to the Product	(ISO Element 7.2.2)
5. Purchasing Process	(ISO Element 7.4.1)
6. Identification and Traceability	(ISO Element 7.5.3)
7. Customer Property	(ISO Element 7.5.4)
8. Control of Monitoring and Measuring Equipment	(ISO Element 7.6)
9. Internal Audit	(ISO Element 8.2.2)
10. Monitoring and Measurement of Product	(ISO Element 8.2.4)
11. Control of Nonconforming Product	(ISO Element 8.3)
12. Corrective Action	(ISO Element 8.5.2)
13. Preventive Action	(ISO Element 8.5.3)

c. Procedures (G4L-SP4240 Control of Records) are established to conform to the requirements of this section.

5. Management Responsibilities

5.1 Management Commitment

a. G-4, Marine Corps Base Quantico's Top Management, supported by supervisors, provides evidence of their commitment to the development and implementation of the QMS and continually improving its effectiveness by:

1. Communicating to the organization the importance of meeting customer as well as statutory and regulatory requirements;
2. Establishing the Quality Policy;
3. Ensuring that Quality Objectives are established and measured;
4. Conducting Management Reviews; and
5. Ensuring the availability of resources for development and implementation of the QMS.

b. Standard procedures, G4L-SP5000 and remaining paragraphs within this section describe how senior management responsibilities are discharged.

5.2 Customer Focus. G-4, Marine Corps Base Quantico's Top Management recognizes that their operational success depends upon their ability to consistently provide low cost, high quality products/services in a time frame that meets or exceeds the needs and expectations of both internal and external customers. Management ensures that customer requirements are determined and met with the aim of enhancing customer satisfaction (refer to sections 7.2.1 and 8.2.1 of this manual) in accordance with applicable Marine Corps Orders and Directives. Furthermore, customer concerns are analyzed and addressed to ensure that requirements not stated by the customer but necessary for specified or intended use are also determined and met. This provides for the current and future needs and expectations of present and potential customers.

5.3 Quality Policy

a. G-4, Marine Corps Base Quantico has defined and established a Quality Policy as a means of leading the organization toward improving performance. It permits Quality Objectives to be understood and pursued throughout G-4, Marine Corps Base Quantico. In establishing the Quality Policy, the Assistant Chief of Staff (AC/S) G4 Logistics has ensured that it:

1. Is appropriate to the purpose of G-4, Marine Corps Base Quantico;

2. Includes a commitment to comply with requirements and to continually improve the effectiveness of the QMS;
3. Provides a framework for establishing and reviewing quality objectives;
4. Is communicated and understood within the organization; and
5. Is reviewed for continual suitability and future improvements needed for G-4, Marine Corps Base Quantico to be successful. This is accomplished during the Management Review meetings.

b. G-4, Marine Corps Base Quantico's Quality Policy is stated below:

WE HEAR THE CUSTOMER, WE SEE THE DETAILS, AND OUR FOCUS IS CLEAR-QUALITY!

G-4, Marine Corps Base Quantico is the preferred provider of materiel and services management. We receive, store, preserve, repair and issue wholesale intermediate materials and services to support our customers.

Our entire team works with our customers to identify and respond to their changing needs. Our dedicated workforce takes pride in supplying quality products and services. We employ continual process improvement to ensure we provide the right product at the right time and at the best value.

G-4, Marine Corps Base Quantico will continue to set the standard in providing material management and services for the United States Marine Corps and other DoD entities.

5.4 Planning

5.4.1 Quality Objectives. Top Management of G-4, Marine Corps Base Quantico ensures that their strategic planning and the Quality Policy provide a framework for the setting of Quality Objectives including those needed to meet product requirements (refer to section 7.1.a). They are established at relevant functions and levels within the organization. G-4, Marine Corps Base Quantico ensures that Quality Objectives are measurable and consistent with the Quality Policy and applicable Marine Corps Orders and Directives.

a. When establishing these objectives, G-4, Marine Corps Base Quantico's Top Management has considered the mission and strategic objectives of Marine Corps Base Quantico, and the organizational and strategic objectives of the G-4, .

b. G-4, Marine Corps Base Quantico's Top Management has established Quality Objectives to ensure that quality requirements are met and maintained. Quality Objectives also

promote customer and employee confidence. The effectiveness of the objectives is periodically monitored and measured by management and objectives are revised as necessary.

c. The current top-level Quality Objectives for G-4, Marine Corps Base Quantico are described in Appendix A of G4L-SP5000.

5.4.2 Quality Management System Planning. G-4, Marine Corps Base Quantico’s Top Management ensures that:

a. The planning of the QMS is carried out in order to meet requirements given in section 4.1, as well as the Quality Objectives. The planning focuses on defining the processes needed to effectively and efficiently meet the Quality Objectives and requirements consistent with the vision of G-4, Marine Corps Base Quantico in accordance with applicable Marine Corps Orders and Directives; and

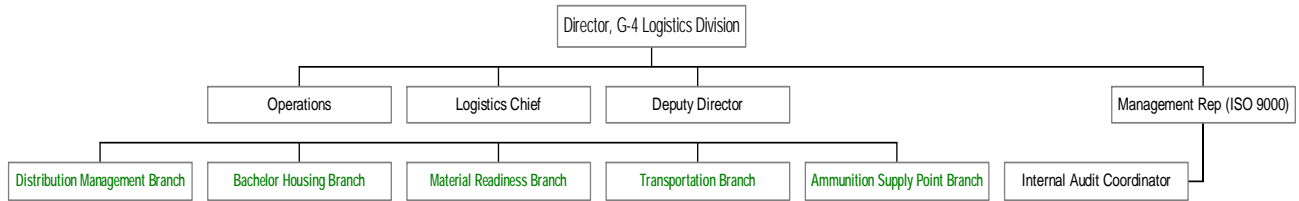
b. The integrity of the QMS is maintained when changes to the QMS are planned and implemented. Changes that may affect the QMS are reviewed during Management Review meetings. In addition, the QMS is revised to reflect any changes discovered during QMS audits.

5.5 Responsibility, Authority and Communication

5.5.1 Responsibility and Authority

G-4, Marine Corps Base Quantico

a. The following organization chart defines the authorities and hierarchy of the functions that manage, perform, and verify work-affecting quality.



The Assistant Chief of Staff (AC/S), G-4 Logistics is committed to managing those key functions of the QMS under his control in accordance with applicable Marine Corps Orders and Directives. The AC/S G-4 Logistics has the ultimate responsibility and final authority for quality. The QMS is the responsibility of all levels of management, but is led through the direction and leadership of top management. Its implementation involves all members and is communicated throughout the organization. The AC/S G-4 Logistics for Marine Corps Base Quantico reports directly to the Commander, Marine Corps Base Quantico. G4L-SP5000 procedures further describe quality responsibilities at G-4, Marine Corps Base Quantico.

5.5.2 Management Representative. G-4, Marine Corps Base Quantico’s top management appoints a member of their management to fulfill the role of the Management Representative.

This is documented in an appointment letter authorized by the AC/S G-4 Logistics. The Management Representative reports to the AC/S G-4 Logistics on matters relating to Quality. The Management Representative, irrespective of other responsibilities, has the authority and responsibility that includes:

- a. Ensuring that processes needed for the QMS are established, implemented, and maintained. This appointment enhances effective and efficient operation and improvement of the QMS;
- b. Reporting to the AC/S G4, Logistics on the adequacy of measures that are used for continual assessment of the performance of QMS and any need for improvement; and
- c. Ensuring the promotion of awareness of customer requirements throughout the organization.

Note: The responsibility of the Management Representative also includes liaison with customers and other external parties on matters relating to the QMS.

5.5.3 Internal Communication. The AC/S G4, Logistics ensures that appropriate communication processes are established within the G-4, Marine Corps Base Quantico and that internal communications take place regarding the effectiveness of the QMS. Activities for communicating include:

- a. Management-led communication in work areas--such as leadership meetings and all-hands meetings;
- b. Team briefings and other meetings--such as the IPT meetings;
- c. Electronic media--such as e-mail and websites;
- d. Employee surveys and beneficial suggestion program; and
- e. News bulletins and bulletin boards displayed throughout G4L.

5.6 Management Review

5.6.1 General.

a. G-4, Marine Corps Base Quantico conducts Management Review meetings at least semiannually to review the status of the QMS to ensure its continuing suitability, adequacy and effectiveness. During the Management Review meetings, G-4 Marine Corps Base Quantico will ensure compliance with all applicable Marine Corps Orders and Directives. This review also assesses opportunities for improvement of the QMS and the need for changes to the Quality Policy and Quality Objectives. Management Review is a platform for the exchange of new ideas with open discussion and evaluation of the inputs by managers, supervisors, and designated personnel.

b. Special or more frequent reviews are scheduled as necessary for activities requiring special attention and /or exhibiting undesirable performance that may change the QMS.

c. Records from Management Reviews are maintained (see 4.2.4).

5.6.2 Management Review Input. Management Review inputs evaluate efficiency as well as effectiveness of the QMS based on the current performance and improvement opportunities as they relate to:

a. Assessment of the results of internal quality audits;

b. Customer complaints and feedback;

c. Process performance and product conformity;

d. Corrective and preventive action processes, and opportunities to improve processes;

e. Follow-up of action items from previous Management Reviews;

f. Recommendations for improvement;

g. Results of external audits and inspections;

h. Potential changes that could affect the QMS; and

i. Any other factors that may impact the organization, such as changes to Marine Corps Orders, directives or relevant statutory and regulatory changes.

5.6.3 Management Review Output.

a. Management Review outputs include decisions and action items related to:

1. Improvement of the effectiveness of the quality management system and its processes;

2. Improvement of product related to customer requirements; and

3. Resource needs.

b. G4L-SP5000 provides further guidance regarding Management Review Meetings.

6. Resource Management

6.1 Provision of Resources

a. G-4, Marine Corps Base Quantico's Top Management ensures that resources essential to implementation of strategy and achievement of the organization's objectives are identified and made available for operations and improvement of the QMS in accordance with applicable Marine Corps Orders and Directives. The resources include employees, infrastructure, work environment, information, suppliers, partners, natural resources, and financial resources to implement and maintain the QMS and continually improve its effectiveness as well as to enhance customer satisfaction by meeting customer requirements.

b. Issues considered in provision of resources may include as applicable:

1. Effective, efficient, and timely provision of resources in relation to opportunities and constraints;
2. Tangible resources such as improved realization and support facilities;
3. Intangible resources such as intellectual property;
4. Resources and mechanisms to encourage innovative improvement;
5. Organization structure, including project and matrix management needs;
6. Information management and technology;
7. Enhancement of competence via focused training, education, and learning;
8. Use of natural resources and the impact of resources on the environment;
9. Planning for future resource needs; and
10. Resources for a safe and secure operating environment,

6.2 Human Resources

6.2.1 General. G-4, Marine Corps Base Quantico ensures that personnel performing work affecting conformity to product requirements shall be competent on the basis of appropriate education, training, skills, and experience. They encourage the involvement and development of employees by:

- a. Providing ongoing training to ensure that competencies are maintained;
- b. Defining responsibilities and authorities;
- c. Forecasting workload to assure that adequate workforce is available;
- d. Facilitating open two-way communication of information; and
- e. Communicating suggestions and opinions.

Note: Conformity to product requirements may be affected directly or indirectly by personnel performing any task within the quality management system.

6.2.2 Competence, Training, and Awareness.

a. G-4, Marine Corps Base Quantico:

1. Determines the necessary competence for personnel performing work affecting conformity to product requirements, including future demands related to strategic and operational plans and objectives and anticipated management and workforce succession needs;
2. Where applicable, provides training or take other actions to achieve the necessary competence;
3. Evaluates the effectiveness of the actions taken;
4. Ensures 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
5. Maintains appropriate records of education; training, skills, and experience (see 4.2.4).
6. Ensures the education and training provided is evaluated in terms of expectations and impact on the effectiveness and efficiency of the organization as a means of improving future training plans.

b. Standard Procedures, G4L- SP6220 describes how competence and awareness is managed at G-4, Marine Corps Base Quantico.

6.3 Infrastructure

a. G-4, Marine Corps Base Quantico's management monitors the progress of on-going activities in accordance with applicable Marine Corps Orders and Directives to ensure that adequate capacity is available. They ensure that product requirements and applicable infrastructure is available to maintain conformity with product requirements. Applicable infrastructure includes:

1. Buildings, work space, and associated utilities;
2. Process equipment (both hardware and software, including material handling equipment); and
3. Supporting services (such as transportation, communication or information systems).

b. Infrastructure is periodically evaluated through internal audits. The associated quality indicators are discussed at the Management Review meetings to ensure that infrastructure meets

the requirements of existing product processes as well as those processes that are anticipated in the near future.

c. Infrastructure management, including facility maintenance, is outsourced. Work performed is closely monitored by G-4, Marine Corps Base Quantico for adequacy and action is taken appropriately when unsatisfactory performance is detected.

6.4 Work Environment

a. G-4, Marine Corps Base Quantico in accordance with applicable Marine Corps Orders and Directives regularly checks the work areas and process equipment to ensure that they are clean, safe, and secure and that they provide a suitable working environment. Management ensures that the work environment has a positive influence on motivation, satisfaction, and performance in order to enhance the performance of the organization.

b. G-4, Marine Corps Base Quantico complies with all applicable DOD, governmental, and environmental regulations, including those concerning handling, recycling, eliminating and/or disposing of hazardous materials to provide a safe working environment.

c. All work areas are periodically inspected and their conditions evaluated for discussion in the Management Review meetings for needed improvement. Work areas are periodically evaluated through internal audits and quality indicators are discussed at Management Review meetings.

Note: The term "work environment" relates to conditions under which work is performed including physical, environmental, and other factors (such as noise, temperature, humidity, lighting, or weather).

7. Product Realization

7.1 Planning of Product Realization. G-4, Marine Corps Base Quantico has defined and developed the processes needed for product realization. Planning of product realization processes is consistent with the requirements of the other processes of the QMS and applicable Marine Corps Orders and Directives. Management ensures that the validation of products demonstrate that they meet the customer needs and expectations.

- a. During planning for product realization the following are considered as appropriate:
1. Quality objectives and requirements for the product;
 2. The need to establish processes, and documents, and to provide resources specific to the product;
 3. Required verification, validation, monitoring, measurement, inspection and test activities specific to the product and the criteria needed for product acceptance; and

4. The records needed to provide evidence that the realization processes and resulting product meet requirements.

b. Requirement definition process, G4L SP7200, further describes methods and processes for product realization planning.

7.2 Customer-Related Processes

7.2.1 Determination of requirements related to the product.

a. G-4, Marine Corps Base Quantico has considered the following in determining product requirements:

1. Requirements specified by the customer, including the requirements for delivery and post delivery activities;

2. Requirements not stated by the customer but necessary for specified or intended use, where known;

3. Marine Corps, statutory, and regulatory requirements applicable to the product; and

4. Any additional requirements considered necessary by G-4, Marine Corps Base Quantico.

b. The planning process, described in G4L SP7200, addresses these requirements.

Note: Post delivery activities include, for example, actions under warranty provisions, contractual obligations such as maintenance services, and supplementary services such as recycling or final disposal.

7.2.2 Review of requirements related to the product

a. G-4, Marine Corps Base Quantico reviews the requirements related to the product. This review is conducted prior to any commitment to supply a product to the customer (e.g. submission of tenders, acceptance of contracts or orders, acceptance of changes to contract or orders). It ensures that:

1. Product requirements are defined;

2. Contract or purchase order requirements differing from those previously expressed are resolved;

3. G-4, Marine Corps Base Quantico has the ability to meet the defined requirements; and

4. Records of the review results and actions arising from the review are maintained (see 4.2.4).

b. G-4, Marine Corps Base Quantico maintains accurate inventory records of available materiel. G-4, Marine Corps Base Quantico's customers use this inventory information to order the materiel needed. Accordingly, at G-4, Marine Corps Base Quantico, the review covers the accuracy of inventory information prior to publication throughout relevant catalogues, computer systems, and web sites.

c. Where the customer provides no documented statement of requirements, requirements are confirmed by G-4, Marine Corps Base Quantico before acceptance. This is usually done by email.

d. Where product requirements are changed, G-4, Marine Corps Base Quantico's ensures that relevant documents are amended and that relevant personnel are made aware of the changed requirements. Changes in product requirements are coordinated with the customer to ensure mutual satisfaction.

e. Procedure G4L SP7200 addresses these requirements.

7.2.3 Customer Communication

a. G-4, Marine Corps Base Quantico determines and implements effective arrangements by communicating with customers in relation to:

1. Product information;
2. Enquires, contracts, or order handling, including amendments; and
3. Customer feedback, including customer complaints.

This process is described in G4L SP8210.

7.3 Design and Development. G-4, Marine Corps Base Quantico is not engaged in the design or development of products they store. Therefore none of the requirements of 7.3 are applicable. The G-4, Marine Corps Base Quantico stores, preserves, and makes available for delivery a large variety of products designed and developed by other organizations.

7.4 Purchasing

7.4.1 Purchasing Process

a. G-4, Marine Corps Base Quantico has defined and documented procedures to ensure that purchased products (hardware, software, processed material, service, or any combination there of) conform to specified requirements. G-4, Marine Corps Base Quantico adheres to a number of DOD policies and directives, as well as Federal acquisition regulations that define type and extent of control on suppliers.

b. G-4, Marine Corps Base Quantico evaluates and selects suppliers based on their ability to provide product in accordance with their organizational requirements. The criteria for selection and re-evaluation are usually established by prevailing regulations and applicable Marine Corps Orders and Directives. G-4, Marine Corps Base Quantico's role is to provide feedback to contracting offices regarding performance of suppliers and to take appropriate action as directed. G-4, Marine Corps Base Quantico establishes and maintains records of results of evaluations and any necessary actions arising from those evaluations (see 4.2.4). This includes documenting lists of acceptable and unacceptable suppliers.

c. All purchasing and procurement is performed in accordance with applicable DoD, Navy, USMC, or local Marine Corps Base policies and regulations.

7.4.2 Purchasing Information

a. G-4, Marine Corps Base Quantico's purchasing documentation contains data clearly describing the product ordered, including where applicable:

1. Requirements for approval of product, procedures, processes and equipment;
2. Requirements for qualification of personnel; and
3. QMS requirements.

b. G-4, Marine Corps Base Quantico ensures the adequacy of specified purchase requirements prior to their communication to the qualified suppliers.

7.4.3 Verification of Purchased Product

a. G-4, Marine Corps Base Quantico's purchased products used in their deliverable products are subject to receiving inspection and other activities necessary for ensuring that purchased products meet specified purchase requirements. Procedure G4L SP7430 describes receipt controls.

b. When G-4, Marine Corps Base Quantico or their customers intend to perform verification at the supplier's premises, the G-4, Marine Corps Base Quantico states the intended verification arrangement and method of product release in the purchasing information. Where specified in the contract, G-4, Marine Corps Base Quantico's customer or the customer's representative is afforded the right to verify the product at the supplier's premises to ensure that the product conforms to specified requirements.

c. Standard Procedure G4L-SP7400 documents the controls over suppliers and purchasing activities. Standard Procedure G4L SP7430 documents the controls over receiving activities.

7.5 Production and Service Provision

7.5.1 Control of Production and Service Provision. It is the policy of G-4, Marine Corps Base Quantico to identify and plan its product realization processes so that work is carried out under controlled conditions.

Note: Effective with the approval of this QM, all current equipment and processes, together with the work environment, are approved for use based on previously demonstrated capability and use.

a. Subsequent to a successful requirement review and analysis, work requirements are finalized and work is planned (refer to G4L-SP7200 procedures). Planned work is released under the following controlled conditions:

1. The availability of information that specifies the service scope;
2. Use of documented work instructions as necessary;
3. Use of suitable equipment in a suitable work environment;
4. Monitoring and control of suitable product characteristics and process parameters and the availability and use of measuring and monitoring equipment and systems measurement equipment as appropriate; and
5. The implementation of defined processes for release and delivery activities.

b. Controlled conditions are further detailed in G4L-SP7510, G4L-SP8240 and applicable process maps.

c. G-4, Marine Corps Base Quantico does not engage in any post-delivery activities at this time. Therefore, those requirements for post-delivery service requirements do not apply.

7.5.2 Validation of Processes for Production and Service Provision

G-4, Marine Corps Base Quantico does not have any processes where the resulting output cannot be verified by subsequent monitoring or measurement. Therefore, this requirement of the standard does not apply.

7.5.3 Identification and Traceability

a. G-4, Marine Corps Base Quantico, in accordance with applicable Marine Corps Orders and Directives, has established and maintains documented procedures for identifying the product from receipt, storage, and during all stages of production, delivery, and/or installation/modification. G-4, Marine Corps Base Quantico identifies the product status with respect to monitoring and measurement requirements throughout product realization.

b. Where and to the extent that traceability is a specified requirement G-4, Marine Corps Base Quantico establishes and maintains documented procedures to control the unique

identification of individual product or batches. This identification is recorded. Records are maintained denoting product configuration and approved changes and serialization, as applicable (see 4.2.4). Controls over identification and traceability are described in G4L SP7530.

7.5.4 Customer Property

a. G-4, Marine Corps Base Quantico exercises great care with customer property while it is under their control. All Customer Furnished Property/Material (CFP/M) are handled in a controlled manner in all phases of receiving, storage, preservation, maintenance, and issue to ensure conformity to specified requirements. G-4, Marine Corps Base Quantico identifies, verifies, protects, and safeguards customer property provided for use or incorporation into the product. If any customer property is lost, damaged or otherwise found to be unsuitable for use, G-4, Marine Corps Base Quantico reports this to the customer and maintains records (see 4.2.4) in accordance with applicable Marine Corps Orders and Directives. Customer owned tools; manufacturing equipment, test equipment, and inspection tooling are permanently marked so that the ownership of each item is visible and can be determined.

b. Customer property includes intellectual property, including customer furnished data used for production and/or inspection.

c. CFP/M controls are further described in procedures G4L- SP7540.

Note: Customer property can include intellectual property and personal data.

7.5.5 Preservation of Product

a. G-4, Marine Corps Base Quantico has documented procedures for handling, storing, packaging, preserving, and delivering their products. Methods and means of handling that prevent product damage and/or deterioration is specified and in accordance with applicable Marine Corps Orders and Directives. Deliveries to and from storage are controlled. The condition of specified products is assessed regularly. Products are protected prior to and during delivery. Proper and specified methods are used to maintain the integrity and preclude degradation of the final product including constituent parts of the product.

b. As applicable, preservation of product at G-4, Marine Corps Base Quantico also includes; where applicable, product specifications and/or customer provided provisions for:

1. Cleaning;
2. Prevention, detection, and removal of foreign objects;
3. Special handling for sensitive products;
4. Marking and labeling including safety warnings;
5. Shelf life control and stock rotation; and

6. Special handling for hazardous materials.

c. In order to detect deterioration, the condition of product in stock is assessed at appropriate planned intervals.

d. G-4, Marine Corps Base Quantico uses a First In, First Out (FIFO) system to assure stock rotation when possible.

e. Obsolete products are controlled in a similar manner to nonconforming product

f. Product preservation controls are further described in procedures G4L-SP7550, and associated Level 2 process maps.

g. G-4, Marine Corps Base Quantico ensures that documents required by the SOW and other requirements that accompany the product are present at delivery and are protected against loss and deterioration.

7.6 Control of Monitoring and Measuring Equipment

G-4, Marine Corps Base Quantico has outsourced control of their monitoring and measuring equipment to certified contract vendors. Our vendors are ANSI/NCSL Z.540-1-1994 compliant organizations. The certified contract vendors define all applicable requirements and G-4, Marine Corps Base Quantico complies with those requirements without exception. G-4, Marine Corps Base Quantico determines the monitoring and measurement to be undertaken and the monitoring and measuring equipment needed to provide evidence of conformity of product to determined requirements. Measurement equipment is used in a manner that ensures that the measurement uncertainty is known and is consistent with the required monitoring and measurement capability in accordance with applicable Marine Corps Orders and Directives.

Where necessary the certified contract vendors and G-4, Marine Corps Base Quantico ensures that (as applicable):

a. All measurement equipment that can affect product quality is calibrated prior to use and recalibrated at prescribed intervals against certified standards. Where no such standards exist, the basis used for calibration is documented and recorded. The basis of such calibration is submitted for review and approval to insure compliance with applicable Marine Corps Instructions and equipment Technical Manuals prior to first use;

b. All measurement equipment is adjusted or readjusted as necessary;

c. All measurement equipment is identified with a calibration label and/or tag to show the calibration status;

d. Precautions are taken to safeguard measurement equipment from adjustment that would invalidate the calibration setting;

e. The handling, maintenance, preservation and storage of measurement equipment are such that the accuracy and fitness for use are maintained; and

f. Records of the results of calibration and verification are maintained. A record keeping system has been established and is maintained that identifies the following applicable information on all gauges, measuring and test equipment, including customer-owned gauges:

1. Serial number;
2. Model number;
3. Responsible custodian;
4. Status of certification;
5. Pertinent calibration data;
6. Mandatory recalibration dates;
7. Equipment identification including the measurement standard against which the equipment is calibrated; and,
8. Revisions following engineering changes.

h. In addition, G-4, Marine Corps Base Quantico, with assistance from certified contract vendors, assesses and records the validity of the previous measuring results when the equipment is found not to be in conformance with requirements. They take appropriate action on the equipment and any product affected. Records maintained include, any out of specification readings as received for calibration/ verification, assessment of the impact of out of specification condition, statements of conformance to specification after calibration/ verification, and notification to the customer if suspect product or material has been shipped.

i. Confirmation of the ability of computer software to satisfy the intended application would typically include its verification and configuration management to maintain its suitability for use. This is executed prior to initial use and reconfirmed as necessary.

j. Calibration for G-4, Marine Corps Base Quantico is performed by certified contract vendors and meets the requirements of the ANSI/NCSL Z.540-1-1994 standard in accordance with applicable Marine Corps Orders and Directives.

k. Applicable measurement equipment controls are further described in G4L-SP8240.

8.0 Measurement, Analysis and Improvement

8.1 General.

a. G-4, Marine Corps Base Quantico plans and implements the monitoring, measurement, analysis and improvement processes needed to:

1. Demonstrate conformity to product requirements;
2. Ensure conformity of the QMS in accordance with applicable Marine Corps Orders and Directives; and
3. Continually improve the effectiveness of the QMS.

b. Statistical techniques are employed, where appropriate, and are described in procedures G4L SP8400.

8.2 Monitoring and Measurement

8.2.1 Customer Satisfaction

a. G-4, Marine Corps Base Quantico takes proactive actions to determine customer perception as to whether customer requirements are being met. Customer concerns and feedback are analyzed and corrective action is taken to eliminate the root cause of a problem and to prevent recurrence. The effectiveness of the QMS is continuously monitored and measured by management.

b. Procedures G4L-SP8210 describe the customer satisfaction processes at G-4, Marine Corps Base Quantico.

NOTE: Monitoring customer perception can include obtaining input from sources such as customer satisfaction surveys, customer data on delivered product quality, user opinion surveys, lost business analysis, compliments, warranty claims, dealer reports.

8.2.2 Internal Audits

a. G-4, Marine Corps Base Quantico conducts comprehensive, planned, systematic, and documented internal audits throughout the year to assess strengths and weaknesses and to verify whether the QMS:

1. Conforms to the planned arrangements (see 7.1), the requirements of G-4, Marine Corps Base Quantico's QMS, and the requirements of ISO 9001:2008; and
2. Is effectively implemented and maintained.

b. G-4, Marine Corps Base Quantico has documented procedures to define the responsibilities and requirements for planning and conducting audits, establishing records and reporting results. Audits are scheduled on the basis of the status and importance of the activity. All audits and audit findings are recorded and reported to G-4, Marine Corps Base Quantico's

management. When nonconforming conditions are identified during an audit, the manager for the responsible activity ensures that any necessary corrections and corrective actions are taken without undue delay to eliminate detected nonconformities and their causes. The implementation and effectiveness of the corrective action is verified by follow-up activities.

c. Only qualified personnel that are independent of the activities being audited are assigned to conduct audits. All audits are performed in an unbiased and objective manner in accordance with applicable audit checklists.

Follow-up activities are carried out to verify the actions taken and for reporting the verification results (see 8.5.2).

d. Internal Audits are conducted per G4L SP8220.

8.2.3 Monitoring and Measurement of Processes

a. G-4, Marine Corps Base Quantico applies suitable methods for monitoring and, where applicable, measurement of the QMS processes. These methods demonstrate the ability of the processes to achieve planned results. Measurements are used for managing daily operations, for evaluation of the processes for continual improvements, and to cover the needs and expectations of interested parties in a balanced manner. When planned results are not achieved, management takes corrective and preventive action, as appropriate. At G-4, Marine Corps Base Quantico, each core process Level 2 document identifies applicable process measures.

Note: When determining suitable methods, G-4, Marine Corps Base Quantico considers the type and extent of monitoring or measurement appropriate to each of its processes in relation to their impact on the conformity to product requirements and on the effectiveness of the QMS.

8.2.4 Monitoring and Measurement of Product

a. G-4, Marine Corps Base Quantico monitors and measures the characteristics of the product to verify that product requirements have been met. This is carried out at appropriate stages of the product realization process in accordance with the planned arrangements (see Section 7.1). Evidence of conformity with the acceptance criteria is maintained.

b. Records indicate the person(s) authorizing the release of product for delivery to the customer (see Section 4.2.4).

c. Release of the product and delivery of the service does not proceed until the planned arrangements (see Section 7.1) have been satisfactorily completed, unless otherwise approved by a relevant authority and, where applicable, by the customer.

d. Procedures G4L -SP8240 describe the product monitoring and measurement controls at G-4, Marine Corps Base Quantico.

8.3 Control of Nonconforming Product

a. G-4, Marine Corps Base Quantico has established and maintains documented procedures (G4L- SP8300) to ensure that a product that does not conform to specified requirements is prevented from unintended use or delivery. The controls and related responsibilities and authorities for dealing with nonconforming product identification, segregation, and disposition in order to prevent misuse are defined in these procedures.

b. Where applicable, G-4, Marine Corps Base Quantico deals with nonconforming product in one or more of the following ways:

1. By taking action (such as repair, rework or replacement) to eliminate the detected nonconformity;

2. By authorizing its use, release or acceptance under concession by a relevant authority and, where applicable, by the customer. The description of the nonconformity that has been accepted is recorded; and

3. By taking action to preclude its original intended use or application.

c. When nonconforming product is corrected, it is subject to re-verification/inspection to demonstrate conformity to the requirements.

d. The responsibility for review and authority for disposition of nonconforming product is defined. Records of the nature of nonconformities and any subsequent actions taken, including concessions obtained are maintained (see Section 4.2.4).

e. When a nonconforming product is detected after delivery or use has started, G-4, Marine Corps Base Quantico takes appropriate action against the effects, or potential effects, of the nonconformity.

8.4 Analysis of Data

a. G-4, Marine Corps Base Quantico determines, collects, and analyzes appropriate data to demonstrate the suitability and effectiveness of the QMS and to evaluate where continual improvement of the effectiveness of the QMS can be made. This includes data generated as a result of monitoring and measurement and from other relevant sources.

b. The analysis of data provides information relating to:

1. Customer satisfaction (see section 8.2.1);

2. Conformity to planned requirements (see Section 8.2.4);

3. Characteristics and trends of processes and products including opportunities for preventive action (see 8.2.3 and 8.2.4); and

4. Suppliers (see 7.4)

c. Procedure G4L-SP8400 describes the analysis process at G-4, Marine Corps Base Quantico.

ENCLOSURE (1)

