

**Army Regulation 702-11**

**Product Assurance**

# **Army Quality Program**

**Headquarters  
Department of the Army  
Washington, DC  
2 March 2007**

**UNCLASSIFIED**

# ***SUMMARY of CHANGE***

AR 702-11  
Army Quality Program

This major revision dated 2 March 2007--

- o Updates the principles and concepts within Army Quality Program management (chap 3).
- o Defines the core competencies fundamental to an effective quality program (chap 3).

Effective 2 April 2007

Product Assurance  
Army Quality Program

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By Order of the Secretary of the Army:

PETER J. SCHOOMAKER  
General, United States Army  
Chief of Staff

Official:

  
JOYCE E. MORROW  
Administrative Assistant to the  
Secretary of the Army

**History.** This publication is a major revision.

**Summary.** This regulation prescribes Department of the Army policy and responsibilities for Army quality programs.

**Applicability.** This regulation applies to the Active Army, the Army National Guard/Army National Guard of the United States, and the United States Army Reserve, unless otherwise stated.

**Proponent and exception authority.** The proponent of this regulation is the

Deputy Assistant Secretary of the Army for Acquisition, Logistics, and Technology. The proponent has the authority to approve exceptions or waivers to this regulation that are consistent with controlling law and regulations. The proponent may delegate this approval authority, in writing, to a division chief within the proponent agency or its direct reporting unit or field operating agency, in the grade of colonel or the civilian equivalent. Activities may request a waiver to this regulation by providing justification that includes a full analysis of the expected benefits and must include formal review by the activity's senior legal officer. All waiver requests will be endorsed by the commander or senior leader of the requesting activity and forwarded through higher headquarters to the policy proponent. Refer to AR 25-30 for specific guidance.

**Army management control process.** This regulation contains management control provision and identifies key management controls that must be evaluated (see appendix B).

**Supplementation.** Supplementation of

this regulation and establishment of command or local forms are prohibited without prior approval from the Deputy Assistant Secretary of the Army (Integrated Logistics Support) ATTN: SAAL-ZA, 103 Army Pentagon, Washington, DC 20310-0103.

**Suggested improvements.** Users are invited to send comments and suggested improvements to this regulation on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to the Deputy Assistant Secretary of the Army (Integrated Logistics Support), ATTN: SAAL-ZL, 103 Army Pentagon, Washington, DC 20310-0103.

**Distribution.** This publication is available in electronic media only and is intended for command levels C, D, and E for the Active Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve.

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\*This regulation supersedes AR 702-11, dated 15 April 1979

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### **Glossary**

## **Chapter 1 Introduction**

### **1–1. Purpose**

*a.* This regulation sets forth policies and responsibilities in development, implementation, and sustainment of an Army quality program as an integral component of Department of the Army (hereafter referred to as Army) acquisition, logistics, and technology business areas.

*b.* This publication defines Army policies and responsibilities governing management and operation of a servicewide quality program.

*c.* This regulation applies to all Army activities that acquire products and services in support of acquisition, logistics, and technology missions.

### **1–2. References**

Required and related publications and prescribed and referenced forms are listed in appendix A.

### **1–3. Explanation of abbreviations and terms**

Abbreviations and special terms used in this regulation are explained in the glossary.

### **1–4. General policy**

The Army will manage quality through an integrated process. All Army activities responsible for the business areas of acquiring products and services in support of acquisition, logistics, and technology missions will have quality programs consistent with this regulation, comprised of repeatable, reproducible processes. These programs will be modeled on Government or commercial standards and best practices. Quality will begin early in the life cycle of products and services and continue throughout. Each quality program will institutionalize a corporate business culture that integrates the following guiding principles:

*a.* Mitigation of customer risk through assessment of processes, products, and services against defined requirements for performance.

*b.* Commitment to excellence and continual improvement.

*c.* Adoption of proactive, concurrent, and confirmatory quality measures to assess performance.

*d.* Communication of quality requirements to all stakeholders.

*e.* Independence of authority to affect product and service quality positively.

*f.* Dedicated management for planning, organizing, and directing quality resources for program success.

*g.* Development and training of competent quality professionals.

*h.* Partnering with Government and industry in addressing quality issues.

### **1–5. The Army Quality Program**

The Army Quality Program will be implemented to enable—

*a.* Maximum operational readiness, mission effectiveness, and customer satisfaction with Army products, services, and systems.

*b.* Products and services to conform to performance and technical requirements and satisfy the customer's life cycle needs.

*c.* Quality planning, organization, direction, control, and support in achieving Army objectives.

*d.* Effective implementation of established technical specifications and performance expectations, including but not limited to those pertaining to design, development, acquisition, production, storage, distribution, operations, sustainment, maintenance, and disposal of, by, or for the Army consistent with customer(s) needs.

*e.* Continued review, evaluation, and improvement of Army quality practices.

## **Chapter 2 Responsibilities**

### **2–1. General**

Army quality program implementation, assessment, and improvement are senior-management responsibilities.

### **2–2. Assistant Secretary of the Army (Acquisition, Logistics, and Technology)**

The Assistant Secretary of the Army (Acquisition, Logistics, and Technology) will—

*a.* Establish policies and goals for Army quality programs.

*b.* Determine quality program performance measures consistent with Army strategic objectives.

*c.* Maintain this regulation and revise it when deemed appropriate.

- d. Facilitate identification of resources for servicewide execution of Army quality programs.
- e. Foster quality partnerships with other military services, Federal agencies, industry, and academia.

### **2–3. Commanding General, U.S. Army Materiel Command**

The Commanding General (CG), U.S. Army Materiel Command (AMC) will operationally manage the Army quality programs and will—

- a. Serve as the Army’s primary point of contact for quality matters.
- b. Develop and implement procedures and guidance for effective implementation.
- c. Assess Armywide compliance to the regulation using objective performance measures.
- d. Participate in Government and industry quality forums, where deemed of value to the Army.
- e. Evaluate related career fields to ensure quality competencies are considered and that such fields remain representative of current government and industry quality trends.
- f. Organize the Army’s quality community of practice.
- g. Ensure standardized quality practices throughout the Army.
- h. Meet requirements in paragraph 2–4, below.

### **2–4. All Army staff elements, Army Commands, Direct Reporting Units, and Army Service Component Commands**

All Army staff elements, Army Commands, Direct Reporting Units, and Army Service Component Commands responsible for the business areas identified in paragraph 1–1, above, will—

- a. Implement procedures and guidance to institutionalize the requirements of this regulation.
- b. Identify organizations and points of contact responsible for development and management of their quality programs and ensure their effective implementation and maintenance.
- c. Coordinate their quality programs with the CG, AMC to promote information exchange and standardization across the Army.
- d. Provide evidence to affirm compliance to this regulation and all related policies.

## **Chapter 3 Quality Program Requirements**

Quality programs will satisfy the requirements as stated in this chapter.

### **3–1. Quality management**

Senior management will ensure quality requirements are practical, enforceable, necessary, and verifiable. The program will assign responsibilities and authorities, define policies and requirements, and provide for the performance and assessment of quality activities. It will address the following key principles:

- a. Measurement and verification of conformity to requirements.
- b. Fact-based decision-making.
- c. Reduction in variation.
- d. Use of performance information to foster continuous improvement.
- e. Effective root-cause analysis and corrective action.
- f. Definition, measurement, analysis, improvement, and control processes.
- g. Performance of functions by persons who—
  - (1) Have sufficient, well-defined responsibility, authority, and organizational freedom to identify and evaluate quality issues and concern and to initiate, recommend, or provide solutions.
  - (2) Are not assigned direct responsibility for ensuring that cost or schedule objectives are met.

### **3–2. Life-cycle support**

Quality requirements will be identified as early as practical to reduce program costs and risks associated with design, development, production, deployment, sustainment, and disposal and will be continually assessed throughout the product or service life cycle.

### **3–3. Interface with systems engineering processes**

Quality programs will be established, planned, and staffed to ensure—

- a. Integration of quality disciplines within systems engineering processes.
- b. Independent influence that provides objective performance assessment.
- c. Appropriate management and integration of quality competencies for the product or service life cycle.

### **3-4. Risk-based planning**

Quality programs will be designed and implemented to manage risks associated with nonconformity, giving due consideration to the total (life-cycle) costs of quality. Determination of risk considers the likelihood and consequences of nonconformity, and is influenced by maturity, complexity, criticality, and value of work performed, as well as demonstrated past performance.

### **3-5. Voice of the customer**

Customer quality requirements will be identified, prioritized, documented, and fully disseminated to ensure consistent understanding.

### **3-6. Preventive and corrective action**

Proactive (preventive) measures will be instituted to reduce the probability of nonconformance. Corrective protocols will be established to mitigate risks and prevent recurrence (through root cause elimination) when nonconforming performance is identified.

### **3-7. Core competencies**

Management of a comprehensive quality program requires subject matter practitioners. To ensure appropriate internal quality expertise, a skills development plan will be established that defines and develops quality competencies. Quality competencies are defined as those inherent and fundamental quality disciplines that are vital to ensure that customer requirements for products and services are satisfied. At a minimum, the following quality competencies will be considered, as well as any others commensurate with organizational requirements:

*a. Quality engineering:* The application of mathematical and scientific principles in the analysis of a product's design and manufacturing system to identify, reduce, or manage variation at all life-cycle stages.

*b. Product quality management:* The application of techniques to ensure acquisition quality system provisions and technical product quality requirements, which are sustained throughout the life cycle of the product.

*c. Product verification and validation:* The application of techniques to ensure product meets operational needs and product design and performance meet specified requirements.

*d. Software quality:* The planned and systematic approach to evaluate effectiveness and conformity with software product design requirements, processes, and procedures.

*e. Quality systems management:* The management of a formalized system that controls the structure, responsibilities, and procedures, to achieve maximum customer(s) satisfaction at the lowest overall cost to the organization.

### **3-8. Quality community of practice**

Best quality practices and lessons learned will be exchanged throughout the Army by means of a community of practice. In addition, member organizations to this forum will work to solve common challenges through joint process action teams and other vehicles that facilitate component-wide solutions. Intra-agency initiatives, less than that of the entire community, may be appropriate where domain specificity warrants. This community of practice will serve as subject matter experts on all quality matters impacting upon the Army.

### **3-9. Benchmarks and partnerships**

To ensure quality activities continue to reflect best practices, benchmarking will be performed against all related activities. In addition, quality partnerships will be established with other military services, Federal agencies, industries, suppliers, professional regulatory bodies, and academia to foster an environment of information exchange and to promote collective improvement strategies.

### **3-10. Single-process initiatives**

To the maximum extent possible, quality practices will be standardized throughout the Army to reduce performance variation, increase customer(s) confidence, and minimize associated costs.

### **3-11. Supplier quality management**

Reliance upon the expertise and performance of suppliers is a paramount consideration during product and service acquisition. The selection and evaluation of suppliers will consider quality performance and risk criteria. In addition, appropriate quality requirements will be incorporated into all acquisition documents. Supplier performance will be managed by assessing the application of quality requirements to all vendors within the value chain.

### **3-12. Metrics**

Objective measures will be identified to evaluate the performance and value of quality activities to the Army. Such

measures will be associated with readiness, customer satisfaction, and factors that can adversely affect component and organizational performance.

**3-13. Continual improvement**

All quality activities will be subject to variation reduction and continual process improvement, and will focus on the elimination of nonvalue-added activities. Such streamlining shortens the cycle time in satisfying customer requirements, reduces associated operating costs, and improves the quality of the product or service.

## **Appendix A References**

### **Section I Required Publications**

This section contains no entries.

### **Section II Related Publications**

A related publication is merely a source of additional information. The reader does not have to read it to understand this publication.

#### **AR 70-1**

Army Acquisition Policy

#### **AR 73-1**

Test and Evaluation Policy

#### **AR 672-8**

Manufacture, Sale, Wear, and Quality Control of Heraldic Items

#### **AR 700-70**

Application of Specifications, Standards, and Related Documents in Acquisition Process

#### **AR 700-139**

Army Warranty Program

#### **AR 700-142**

Materiel Release, Fielding, and Transfer

#### **AR 702-6**

Ammunition Stockpile Reliability Program (ASRP)

#### **AR 702-7**

Product Quality Deficiency Report Program

#### **AR 702-7-1**

Reporting of Product Quality Deficiencies Within the U.S. Army

#### **AR 702-16**

Chemical Material Stockpile Reliability Program (CMSRF)

#### **AR 702-17**

Quality Improvement and Product Nonconformance Reduction

#### **AR 702-18**

Materiel Quality Storage Standards Policy for Shelf-Life Materiel

#### **AR 735-11-2**

Reporting of Supply Discrepancies

#### **AR 740-3**

Stock Readiness

#### **AR 750-1**

Army Materiel Maintenance Policy

#### **AR 750-43**

Army Test, Measurement, and Diagnostic Equipment

## **DA Pam 700-142**

Instructions for Materiel Release, Fielding, and Transfer

**Army Federal Acquisition Regulation Supplement (AFARS), Part 5146,**  
Quality Assurance. (Available at <http://farsite.hill.af.mil>.)

### **Section III**

#### **Prescribed Forms**

This section contains no entries.

### **Section IV**

#### **Referenced Forms**

This section contains no entries.

## **Appendix B**

### **Management Control Evaluation Checklist for Army Quality Programs**

#### **B-1. Function**

The function covered in this checklist is for Army quality programs.

#### **B-2. Purpose**

The purpose of this checklist is to assist the Total Life Cycle System Management and supporting Life Cycle Management Commands in evaluating their key management controls. It is not intended to cover all controls.

#### **B-3. Instructions**

Answers to the below evaluation must be based on the actual testing of controls such as document analysis, direct observation, interviewing, sampling, and simulation. Answers that indicate deficiencies must be explained and corrective action indicated in supporting documentation. These management controls must be evaluated at least once every year. Certification that the evaluation has been conducted must be accomplished in accordance with AR 11-2 on DA Form 11-2-R (Management Control Evaluation Certification Statement).

#### **B-4. Test questions**

- a.* Is the Army Quality Program used to reduce program costs and risks associated with design, development, production, deployment, sustainment, and disposal?
- b.* Is the Army Quality Program continually assessed throughout the product or service life cycle?
- c.* Is senior management ensuring quality requirements are practical, enforceable, necessary, and verifiable?
- d.* Have metrics been identified to evaluate the performance and value of quality activities to the Army?

#### **B-5. Supersession**

No previous management control evaluation checklist exists for this program.

#### **B-6. Comments**

Help make this a better tool. Submit comments to HQDA, ASA (ALT) (SAAL-ZL), 103 Army Pentagon, Washington, DC 20310-0103.

## **Glossary**

### **Section I Abbreviations**

#### **AMC**

U.S. Army Materiel Command

#### **CG**

Commanding General

#### **HQDA**

Headquarters, Department of the Army

### **Section II Terms**

#### **Benchmarking**

The continuous process of measuring products, services, and practices against the public or private sector organizations that are recognized as best in class.

#### **Community of Practice**

An affinity group. An informal network or forum where tips are exchanged and ideas generated. A group of professionals informally bound to one another through exposure to a common class of problems, common pursuit of solutions, and thereby themselves embodying a store of knowledge.

#### **Continual Improvement**

Recurring activity to increase the ability to fulfill requirements.

#### **Partnership**

A strategy leading to a relationship with suppliers or customer(s) aimed at reducing costs of ownership, maintenance of minimum stocks, just-in-time deliveries, joint participation in design, exchange of information on materials and technologies, new production methods, quality improvement strategies, and exploitation of market synergy.

#### **Quality**

Degree to which a set of inherent characteristics fulfills requirements.

#### **Quality management system**

Management system to direct and control an organization with regard to quality.

#### **Quality program**

Program, which is developed, planned, and managed to carry out, cost effectively, all efforts to effect the quality of materiel and services from concept through validation, full-scale development, production, deployment, and disposal.

#### **Supplier**

Any provider whose goods and services may be used at any stage in the production, design, delivery, and use of another company's products and services. Suppliers include businesses, such as distributors, dealers, warranty repair, services, transportation contractors, and service suppliers, such as healthcare, training, and education. Internal suppliers provide materials or services to internal customer(s). An external producer, distributor, retailer, vendor, or contractor that provides a product, service, or information.

#### **Validation**

Confirmation, through the provision of objective evidence, that the requirements have been fulfilled.

#### **Verification**

Reviewing, inspecting, testing, checking, measuring, auditing or otherwise establishing and documenting that products, processes, or documents conform to specified requirements.

### **Section III Special Abbreviations and Terms**

This section contains no entries.

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**PIN 041222-000**