

Army Regulation 702-17  
AFR 74-18  
SECNAVINST 4855.8  
DLAR 8200.11

Quality and Reliability Assurance

# Quality Improvement and Product Nonconformance Reduction

Headquarters  
Departments of the Army, Air Force, Navy,  
and Defense Logistics Agency  
Washington, DC  
14 July 1989

**UNCLASSIFIED**

# ***SUMMARY of CHANGE***

AR 702-17/AFR 74-18/SECNAVINST 4855.8/DLAR 8200.11  
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Not applicable.

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### Quality Improvement and Product Nonconformance Reduction

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BY ORDER OF THE DIRECTOR

JAMES J. SINGSANK, Colonel, USA  
Staff Director, Administration  
Defense Logistics Agency

**History.** This publication has been reorganized to make it compatible with the Army electronic publishing database. No content has been changed.

**Summary.** This regulation implements DOD policy on nonconformance reduction and Federal Acquisition Regulation (FAR) Parts 46 and 52 policy on nonconforming material. It establishes policy and requirements to address improving quality through reduction in the cost and incidence of nonconforming products. It complements Total Quality Management (TQM) policy on nonconformance prevention which focuses on those actions that should be taken early in the design, development and production of new systems, subsystems, or equipment to achieve first-pass conformance and prevent repetitive nonconformances throughout the production process.

**Applicability.** This regulation applies to all DOD Contracting Offices (COs) and Contract Administration Offices (CAOs); however, CAOs will not initiate or continue action under paragraphs 5 or 6 when a contractor has demonstrated satisfactory evidence of continuous process improvement and is achieving low levels of nonconformance.

**Proponent and exception authority.**  
Not applicable.

**Army management control process.**  
Not applicable.

**Supplementation.** Supplementation of

this regulation and establishment of command or local forms are prohibited without prior approval of HQDA, ODCSLOG (DALO-TST).

**Suggested Improvements.** Not applicable.

**Distribution.**

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## **1. Background.**

*a.* It is Government policy to reject material and supplies not conforming in all respects to contract requirements (FAR 46.407).

(1) Deviation from this policy is permissible only as authorized in FAR 46.407, when acceptance of such material and supplies is in the best interest of the Government.

(2) The act of offering nonconforming material to the Government by a contractor should be an exception.

(3) The consistent offering of nonconformances is usually an indication of inadequate control over quality or over specification of technical requirements.

*b.* CAOs may reject or accept minor waivers for nonconformances unless authority is withheld by the CO. Federal Acquisition Regulation (FAR) Parts 46 and 52 describe conditions under which a contract will be modified to provide an equitable price reduction or other consideration when supplies or services involving minor nonconformance are accepted.

*c.* This regulation harmonizes CAO approaches and assists the Administrative Contracting Officer (ACO) in determining appropriateness of an equitable price reduction or other consideration for minor nonconformance. The purposes of seeking consideration are:

(1) The Government has a legal right to the products specified in the contract.

(2) Acceptance of nonconformance can relieve financial incentives for improvement and incorrectly communicate to a contractor's management and workforce that it is acceptable to produce nonconforming material.

(3) Consideration serves to focus management attention on the cost and consequences of reprocessing or replacing nonconforming material.

*d.* Contracting Offices are encouraged to:

(1) Require contractors to disclose costs associated with the correction and dispositioning of nonconforming material.

(2) Consider these costs in determining the effectiveness of potential contractors' proposed quality programs. Negotiations should reflect improvement in quality performance and reduction in historical levels of nonconformance costs.

(3) Consider contractual incentives for contractor quality improvement and nonconformance cost reduction beyond that baselined in the negotiated price.

(4) Support nonconformance reduction efforts by CAOs on existing production contracts.

## **2. Objectives.**

The objectives of this regulation are to reduce or eliminate nonconformances and promote continuous quality improvement. Continuous quality improvement is intended to address significant cost drivers that prevent full conformance to contract requirements. Continuous quality improvement involves appropriate action to:

*a.* Establish goals and practices to improve manufacturing process capability.

*b.* Minimize process variability and increase product uniformity.

*c.* Reduce deficiencies during manufacturing, test and inspection.

*d.* Correct unrealistic requirements.

*e.* Improve first-pass acceptance rates.

*f.* Reduce cost associated with scrap, rework and repair.

*g.* Address other criteria and controls that can increase productivity, manufacturing or operational efficiency and product utility.

## **3. Scope.**

This regulation applies to fixed-price type production contracts with higher-level contract quality requirements as defined by FAR 46.202-3. It applies to contracts at prime contractor facilities, material from offsite feeder locations, inter-organizational transfers, and subcontracted or supplier items on which material review is performed by the prime contractor. It may also be applied to other contracts, such as those with incentive or award provisions, that are appropriate for quality improvement.

*a.* This regulation applies to minor waivers and deviations processed by CAOs with authority to approve or concur in classification of class II engineering changes unless otherwise directed by the CO.

*b.* Contracting Offices and CAOs will encourage prime contractors to implement a nonconforming material reduction program meeting the same objectives with their major/critical subcontractors and suppliers.

## **4. Policy:**

*a.* The CAO will evaluate a contractor's product nonconformance history as:

(1) Evidence of the effectiveness of a contractor's engineering, manufacturing, quality assurance or inspection-4 systems to accomplish their objectives.

(2) A measure of the effectiveness of corrective action efforts.

(3) A condition for accepting minor nonconformances submitted by the contractor.

*b.* The CAO will ensure efforts under this regulation to address continuous process improvement and product nonconformance reduction are compatible with contract administration delegations and contract requirements. On prime contracts for major defense acquisition programs the CAO will coordinate with the CO when an agreement with the contractor is planned to address quality improvement for nonconformance reduction. In the event of disagreement between the CAO and the CO, the disagreement will be elevated to higher management as necessary to achieve resolution.

*c.* The CAO will not initiate or continue action under paragraphs 5 or 6 of this regulation for a facility or process for which a contractor has demonstrated to the CAO satisfactory evidence of continuous process improvement and is achieving a low level of nonconformance. CAO action related to obtaining consideration and quality improvement for product nonconformance reduction will be suspended selectively or collectively within a contractor facility when the CAO determines:

(1) The cost to the Government of processing a contract modification will exceed the cost to a contractor in correcting the nonconformance or replacing the product with one fully conforming.

(2) Opportunities for improvement no longer merit CAO attention.

(3) Continuation is otherwise no longer in the Government's interest.

## **5. Procedures for Nonconformance Reduction (Case-by-Case Methods):**

*a.* The CAO will determine what nonconformance level (quantity or monetary threshold) is reasonable for specific contractor products or facilities as a basis for seeking consideration on nonconforming material. The intent is not to condone some level of contractor deficiency, but to determine where limited Government and contractor resources can be used most effectively.

*b.* The ACO, quality assurance personnel and other representatives as determined by the ACO (such as price analysts or engineers) will jointly establish monetary, quantity or other thresholds for a contractor's products.

(1) A threshold must be discussed with the contractor, but the ACO has ultimate decision authority on an appropriate level and when to seek consideration.

(2) A monetary threshold may be based upon the cost to replace the product with a fully conforming item or other basis as determined by the ACO. Replacement cost includes labor, material and overhead costs expended in producing the item prior to submittal for material review.

*c.* When the CAO determines action is warranted for a nonconformance minor waiver (repair, standard repair, or-use-as-is material review disposition) or minor deviation accepted by the Government, the ACO will review the following as factors in determining an equitable price reduction or other consideration due to the Government:

(1) Government expense for, reinspection, retest and the administrative cost of processing a contract modification.

(2) Savings to the contractor in fabricating material with the nonconformance.

(3) Expense avoided if the contractor is not required to:

(a) Replace the product with one fully conforming.

(b) Reprocess the product. These costs avoided include material, labor, and overhead related to repair.

(c) Reinspect and retest. These costs avoided include disassembly and repair.

*d.* The ACO will determine an appropriate approach in accordance with the contract for obtaining consideration such as:

(1) A price reduction implemented through a separate contract modification to the appropriate contract.

(2) Accumulating a number of actions before executing a contract modification.

(3) Including consideration for nonconformance when a contract is being modified for other reasons, rather than preparing a separate modification.

## **6. Joint Contractor and CAO Quality Improvement Agreement Procedures:**

*a.* When the size of the contractor facility, complexity of the contractor organization, or the number of products and nonconformances warrant an approach to minimize the administrative work load on the contractor and Government, a joint contractor and CAO agreement on quality improvement for nonconformance reduction is mutually beneficial. Such agreements are not precluded with smaller contractors.

*b.* The agreement will be tailored to a specific contractor facility or process and designed to focus on elimination of significant causes of nonconformance.

*c.* If such an agreement is warranted under paragraph 4, but cannot be negotiated, the CAO will use case-by-case procedures at paragraph 5.

*d.* Joint contractor and CAO quality improvement agreements will include:

(1) A Product Assurance Council (PAC) or similar joint group composed of top level management from the contractor and CAO. The PAC serves as a senior focal point to integrate product integrity, quality, engineering, manufacturing, and purchasing actions, and to identify and prioritize projects and resources necessary to implement effective action that achieves quality improvement.

- (2) Management commitment to establish priorities and goals.
  - (3) Improvement goals for nonconforming material reduction. Goals to be tracked and addressed as part of the agreement may include nonconformances dispositioned as minor waivers (repair, standard repairs, use-as-is material review dispositions), minor deviations, rework, scrap, return-to-supplier or other agreed to goals that affect overall nonconformance rates.
  - (4) Measurement indicators to provide management visibility of performance against goals.
  - (5) The amount and method of obtaining consideration when improvement goals for minor waivers or deviations have not been met. Positive incentives may also be considered for contractors who perform better than established goals.
- e.* The PAC may also serve multiple functions as a Corrective Action Board (CAB) when MIL-STD-1520, Corrective Action and Disposition of Nonconforming Material, is on contract, or as a Quality and Productivity Improvement Program Advisory Board.
  - f.* Improvement goals should reflect the maturity of a program, past and current performance, and contractor work load volume. Measurement indicators, performance goals, consideration, positive incentive and administrative aspects should complement contractor-initiated quality improvement and be based on existing data systems.
  - g.* Agreements may include contingencies for situations such as strikes, plant shutdowns and unanticipated work loads. The data should be normalized as necessary to anticipate significant changes.
  - h.* Consideration will be obtained when improvement goals identified in the agreement for minor waivers or deviations have not been met. Consideration will be provided to the Government, as determined by the ACO (see paragraph 5c) and stipulated in the agreement.
  - i.* With CO concurrence, agreements may address monetary adjustments of award fees based on quality improvement goals and performance.

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**PIN 066219-000**