BY ORDER OF THE COMMANDER
AIR FORCE MATERIEL COMMAND

AFMC INSTRUCTION 63-510

7 JUNE 2002

Acquisition

DEFICIENCY REPORTING (DR) AND INVESTIGATION PROGRAM

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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Pages: 6
Distribution: F

This instruction implements AFPD 63-5, *Quality Assurance*, and the policy provided in AFI 63-501, *Air Force Acquisition Quality Program*. This instruction provides additional policy relating to AFMC implementing the AF policy and creates the management framework for application of TO 00-35D-54, *The USAF Material Deficiency Reporting and Investigating System*. It is to be used by all AFMC organizations and its contractors. This is the initial publication of this instruction .

1. Objective:

1.1. The objective of the Deficiency Reporting (DR) process is to provide a standard methodology to report, resolve, and provide feedback on deficiencies identified during the development, test, deployment, and sustainment phases for all systems, (including data systems), subsystems or end items.

2. Policy. It is AFMC policy that:

2.1. AFMC will establish a DR program to ensure compliance with 41 CFR Subpart 101-26-8, *Discrepancies or Deficiencies in GSA or DOD Shipments, Material, or Billings* and AFPD 63-5, *Quality Assurance* .

2.1.1. AFMC "single manager" shall be responsible for implementing the DR program as identified in TO 00-35D-54, *USAF Material Deficiency Reporting and Investigating System*.

2.2. Implementation of the DR and investigating system shall be consistent with the preservation of Operational Safety, Suitability, and Effectiveness baselines.

3. Responsibilities :

3.1. HQ AFMC/DR:

3.1.1. Performs system requirements validation, approval, and budgets for funds to ensure sustainment and capital improvement of the Deficiency Reporting and Investigating System (DRIS).

3.1.2. Evaluates single manager support of the DRIS process.

3.2. HQ AFMC/EN:

3.2.1. Serves as the Command OPR for the DR program.

3.2.2. Prepares, coordinates, and issues AFMC DR policy and ensures it is consistent with Air Force and DoD efforts.

3.2.2.1. Prepares and coordinates content for publication of TO 00-35D-54.

3.2.2.1.1. Provides approval/disapproval of AFTO Forms 22 submitted for TO 00-35D-54.

3.2.2.1.2. Provides all approval/disapproval of requests for waiver of TO 00-35D-54

3.2.2.2. Ensures processes and procedures are implemented within AFMC.

3.2.2.2.1. Establish and maintain Unit Compliance Inspection checklist to validate implementation.

3.2.3. Conducts annual workshop and TO 00-35-54 revision meeting to obtain customer feedback on the development of new processes and procedures.

3.2.4. Coordinates DR efforts with other DoD activities, federal agencies, and industry as required.

3.2.5. Develops and maintains training material to facilitate induction of new personnel throughout the Command into program.

3.2.6. Develops and provides trend analysis indicating health of weapon systems and DR program.

3.2.6.1. Data will be evaluated quarterly and appropriate action taken to ensure TO 00-35D-54 timelines are followed.

3.3. HQ AFMC/DO:

3.3.1. Serves as the AFMC OPR for the T&E portion of the DR program.

3.3.2. Works with AFMC/EN to prepare the T&E portion of AFMC DR policy.

3.3.2.1. Prepares chapter 2 of TO 00-35D-54.

3.3.2.1.1. Provides approval/disapproval of AFTO Form 22's submitted for chapter 2 of TO 00-35D-54 or related to T&E.

3.3.2.1.2. Provides approval/disapproval of request for waivers submitted for chapter 2 of TO 00-35D-54 or related to T&E.

3.3.2.2. Ensures T&E DR processes and procedures are implemented within AF.

3.3.3. Evaluates single manager, AFMC Center, and Test Activity support of the T&E portion of the Deficiency Reporting and Investigating System .

3.4. MSG/MM:

3.4.1. Provides administration of the data system.

3.4.1.1. Provides functional management of the GO21 portion of the standard database.

3.4.1.2. Collects and compiles requirements, identifies options, prepares recommendations, and forwards to HQ AFMC/DR for validation and approval.

3.4.1.3. Evaluates and implements data system interfaces approved by HQ AFMC/DR.

3.4.2. Provides support to Command OPR and HQ AFMC/DO.

3.4.2.1. Provides recommendations for policy and procedures

3.4.2.1.1. Drafts inputs and makes recommendations for changes of TO 00-35D-54.

3.4.2.1.2. Provides review of AFTO Forms 22.

3.4.2.1.3. Provides review of waiver request of TO 00-35D-54 for compliance with procedures and makes recommendation for approval/disapproval.

3.4.2.2. Represents Command OPR as requested at meetings, conferences, and workshops.

3.4.2.3. Supports development and use of trend analysis indicating health of weapon systems and DR program.

3.5. AFMC Centers:

3.5.1. Centers shall implement the DR process as described in TO 00-35D-54 on their systems (including data systems) and equipment no later than establishment of the design baseline.

3.5.2. Establishes a point of contact to administer the center DR program.

3.5.3. Designates center originating, screening, action, and support points as necessary to operate the center program within timelines provided in TO 00-35D-54 .

3.5.3.1. Originating points will ensure submittal criteria of TO 00-35D-54 is met, exhibit is available, if applicable, and secure, and submits the DR to the INFOCEN/ASE database. The originating point will monitor the database weekly, as a minimum, to obtain the status of the DR and to coordinate the exhibit shipment or disposition. The originating point must assure that the originator receives all updates and results of the investigations for the originators report. The originating point will monitor the database monthly, as a minimum, to identify trends for weapon systems/subsystems assigned to their organizations .

3.5.3.2. Screening points will monitor the database daily for new DR. Screening points will evaluate the DR to ensure compliance with submission criteria in table 3-1 of TO 00-35D-54, all applicable information is provided in report, and determine the action point to work the DR. The action point will keep the originating point informed of the status of DR via the database.

3.5.3.3. Action points will acknowledge receipt of the DR within timelines provided in TO 00-35D-54, and ensure the single manager with engineering responsibility has received the DR. The action point will determine the course of action required. As required, the action point will request a support point to perform an investigation. If the item is under warranty, the action point will contact the warranty manager to ensure warranty provisions of the contract are complied with. The action point will update the DR status via the INFOCEN/ASE database to keep the originating point and screening point informed within timelines provided in TO 00-35D-54 .

3.5.3.4. Support points will acknowledge receipt of request for assistance within timelines provided in TO 00-35D-54. Support points will then investigate and determine the cause of a

reported condition and provide corrective action, including interim status reports and a final report to the action points.

3.6. Test Centers or Activities:

3.6.1. Establishes a Watch Item Tracking System (WITS) during developmental test and evaluation/operational test and evaluation (DT&E/OT&E) in order to document the condition prior to releasing a DR. Implement the DR process in accordance with TO 00-35D-54.

3.6.2. The Test & Evaluation DR board shall:

3.6.2.1. Review all WITS for submittal as DRs under TO 00-35D-54.

3.6.2.2. Determine the initial prioritization of DR.

3.6.2.3. Review the status of the released DR.

3.7. Single Managers:

3.7.1. The single manager will chair or designate a chair for the Material Improvement Project Review Board, as a minimum, on a quarterly basis to consider ongoing or recommended actions on material improvement projects.

3.7.2. The single manager will review deficiency report data at least annually, using INFOCEN and/or Product Deficiency Quality Product Indicator (PDQPI) statistical based performance data to identify the problem items and initiate improvement actions.

3.8. Chief Engineers/Lead Engineers:

3.8.1. The chief/lead engineer will develop a process that ensures the appropriate review of all deficiency reports and their closing actions and will approve closure for CAT I DRs.

3.8.2. Responsible for providing technical approval of Material Improvement Project Review Board activities described in TO 00-35D-54.

JAMES A. PAPA
Director, Engineering and Technical Management

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

TO 00-35D-54, *The USAF Material Deficiency Reporting and Investigating System* contains procedures to identify, report, and resolve deficiencies on weapon systems.

AFPD 63-5, *Quality Assurance,* requires Air Force establish and use a quality deficiency reporting and corrective system.

AFI 63-501, *Air Force Acquisition Quality Program,* requires the using and acquisition activities to utilze the product quality deficiency reporting and corrective system as described in TO 00-35D-54 to provide visibility of overall product quality.

AFMCI 63-1201, *Assurance of Operational Safety, Suitability, & Effectiveness* provides chief and lead engineer responsibilities including being responsible for system and or end item configuration.

41 CFR Subpart 101-26-8, *Discrepancies or Deficiencies in GSA or DOD Shipments, Material, or Billings* is public law which requires DoD to have a uniform system for reporting discrepancies or deficiencies in material or shipments directed by GSA or DOD activities .

Terms

Action Point—The action point represents the single manager and is responsible for all administrative actions required for the technical investigation of a deficiency report.

Chief Engineer/Lead Engineer—The chief engineer is the designated engineer, in support of the Single Manager who has technical responsibility, accountability and authority for all technical activities throughout the operational life of the program. The lead engineer has the same responsibilities as they pertain to an end item.

Deficiency—Deficiency types are Material, Quality, Software, or Warranty related.

Material Deficiency—The failure of an item or end item, which worked initially, that was not attributable to either the repair or manufacturing process, but was due to an unpredictable failure of a component or subassembly.

Quality Deficiency—The deficiency is attributable to errors in workmanship, nonconformance to specifications, drawing standards, or other technical requirements .

Software Deficiency—An error in the instructions that comprise a computer program used by an embedded computer system. The deficiency may consist of syntax, logic, or other discrepancies that cause the program to fail the intended functions.

Warranty Deficiency—A material, quality, or software deficiency on an item or end item that is under warranty.

Material Improvement Project Review Board—A material improvement project is the planned effort by the action point to investigate and resolve deficiencies or evaluate proposed enhancements. The review board is chaired by the single manager or designated representative and has senior managers of each functional area of the program and representation from the operating and supporting commands. The

chief/lead engineer will be a member of this board to ensure compliance with OSS&E policy. The board reviews the status of deficiency reports and provides concurrence on the proposed action.

Originating Point—The focal point for the submitting organization serves as the communication/ interaction point between the DR originator who identified the deficiency and the screening/action points who will work to resolve the deficiency.

Product Deficiency Quality Performance Indicator (PDQPI)—The statistical based performance indicator generated quarterly from the DR database actions. The data is used to identify inadequate macro-level processes causing product deficiencies.

Screening Point—The Single Manager usually designates the screening point. The screening point evaluates the completeness of the DR and determines the proper action point to work the DR. When more advantageous to the program, the Single Manager may set up the DR system jointly with one or more other Single Managers. If a Center has only one screening point, it is generally referred to as the Single Point of Contact Office (SPOCO).

Single Manager—Single manager is the general integrated weapon system management (IWSM) term used to describe system program directors and product group managers. The single managers are responsible to their customers for all aspects of the planning, development, sustainment, and evolution of the products they acquire and support. Single managers serve as the single-face-to-the-user for their respective systems or products .

Single Point Of Contact Office (SPOCO)—The SPOCO is the single face to the customer for the implementing Center. The SPOCO serves asthe screening point (receipt and processing point) for all Center Drs.

Support Point—The activity that assists the actionpoint as requrested witht he processing, investigating, and resolving of a deficiency.

Watch Item Tracking System (WITS)—The Watch Item Tracking System is the initial phase of the DR process used during the Development Test and Evaluation/Operational Test and Evaluation (DT&E/ OT&E). The WITS is used to monitor and/or observe the condition prior to releasing a DR.