### **TECHNICAL MANUAL**

# USAF DEFICIENCY REPORTING, INVESTIGATION, AND RESOLUTION

(ATOS)

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# CHAPTER 1 REPORTING CRITERIA, SYSTEM DESCRIPTION, AND PROGRAM RESPONSIBILITIES

#### 1.1 AUTHORITY.

- 1.1.1 AF/A4LMM is the approval authority for this Technical Order (TO).
- 1.1.2 This Technical Order (TO) implements Air Force Policy Directive (AFPD) 63-1, INTEGRATED LIFE CYCLE MANAGEMENT, Air Force Instruction (AFI) 63-501, AIR FORCE ACQUISITION QUALITY PROGRAM, and Air Force Materiel Command Instruction (AFMCI) 63-510, DEFICIENCY REPORTING, INVESTIGATION AND RESOLUTION. The processes of this TO ensure compliance with federal acquisition requirements in accordance with Title 41, Code of Federal Regulations, Subpart 101-26-8, discrepancies or deficiencies in General Service Administration (GSA) or Department of Defense (DOD) shipments, material, or billings and supports Defense Logistics Agency Regulation (DLAR) 4155.24, PRODUCT QUALITY DEFICIENCY REPORT (PQDR) PROGRAM.

#### 1.2 PURPOSE.

- 1.2.1 The DRI&R process provides the Air Force with a means of identifying deficiencies, resolving those deficiencies within the bounds of program resources and the appropriate acceptance of risk for those deficiencies that cannot be resolved in a timely manner. An equally important purpose of the DRI&R process is to provide feedback to the warfighters and other users in the field on the resolution of DRs originated by their organizations. Thus, the transmittal of system deficiency reports from user Major Commands (MAJCOMs) to the program office provides the Program Manager (PM) with the information needed to assess the operational risk posed by deficiencies identified on their systems and empowers them to account for the operational safety, suitability and effectiveness (OSS&E) of their systems.
- 1.2.2 DRI&R drives the continuous improvement of system quality. Through process standardization, it seeks to reduce waste. It allows investigative findings to be applied to reappearances, e.g., in the occurrence of the same common item deficiency on different systems.
- 1.2.3 DRI&R reduces total ownership costs by identifying a system's deficiencies early in its life cycle. Deficiency reporting is supported during test and evaluation (T&E) activity, and, as a result, promotes the early discovery of defects.
- 1.2.4 Through the use of the Joint Deficiency Reporting System (JDRS), DRI&R improves system safety, particularly on service-common critical safety items. JDRS is used commonly between the Air Force and the aviation communities of the Navy and Coast Guard, providing a platform for robust information sharing, and facilitates process standardization between the services.

#### 1.3 SCOPE.

- 1.3.1 The DRI&R processes promote the ability to identify and correct deficiencies before they impact mission capability. Successful implementation drives resolution decisions, tempered by total ownership cost, to correct, mitigate, and/or accept risk of conditions impacting OSS&E. Success is based upon two premises: 1) the user/operator/maintainer reports deficiencies on their assigned systems; and, 2) the program manager establishes a proactive process to analyze data and act accordingly to implement solutions. Specific objectives include:
- 1.3.1.1 Correction of deficiencies is done within the program's available resources based on risk and in concert with the lead MAJCOM.
- 1.3.1.2 The sharing of information with the joint community enables users to be more proactive when deficiencies are identified and to work towards enterprise level corrections, when appropriate.
- 1.3.1.3 Identify and resolve Test & Evaluation, Product Quality, and Engineering Investigation deficiencies throughout a product or system lifecycle.

- 1.3.1.4 Commence deficiency reporting and resolution processes as early as possible, but no later than system Critical Design Review. Early monitoring and oversight of system anomalies promotes the most effective technical and programmatic decisions for reducing total ownership cost.
- 1.3.1.5 Integrate deficiency analysis and resolution processes within quality, systems engineering, and overall lifecycle management plans to identify root cause and prevent or mitigate recurrence.
- 1.3.1.6 Obtain cost credit, replacement, and/or contractual remedy for procurement, overhaul, or repair-related quality deficiencies resulting from poor workmanship, nonconformance to applicable specifications, drawings, standards, processes or other technical requirements.
- 1.3.1.7 Assess risk to OSS&E and investigate as necessary to resolve Engineering Investigation deficiencies resulting from poor reliability and maintainability.
- 1.3.1.8 Provide historical collection of deficiency data to share knowledge with authorized activities responsible for design, development, safety, purchasing, production, supply, maintenance, contract administration, and other functions.
- 1.3.2 The processes of this TO support AFI 63-101/20-101, INTEGRATED LIFE CYCLE SYSTEMS MANAGEMENT, providing standardized methods, supporting databases, tools, and procedures to identify, investigate, and resolve deficiencies. During Test and Evaluation, deficiency reporting identifies deficiencies or proposed enhancements at a point in development where changes may be made at a significantly reduced cost. Throughout operational deployment and sustainment, this TO provides a method to formally communicate user/operator identified deficiencies or proposed enhancements to managing activities for analysis and resolution.
- 1.3.3 The data captured by deficiency reporting may also be used as a source of information (with analysis), to reflect the past performance history of either a contractor or organic entity. In addition, organizations such as the Air Force Office of Special Investigation and the Defense Criminal Investigation Service may use this data to support or conduct investigations.
- 1.3.4 Prime Contractor Deficiency Reporting. Contractors shall report product quality deficiencies on (USAF) government furnished property (GFP) or equipment (GFE).

#### 1.4 APPLICABILITY.

- 1.4.1 DRI&R processes apply to all USAF and contractor members and organizations who acquire, test, operate, or sustain USAF owned or managed military or weapon systems (Aeronautical, Air Armament, Space, and Command and Control and Information Systems), their sub and support systems; as well as vehicles, clothing, and textiles.
- 1.4.2 Participation in this process is extended to the National Aeronautics and Space Administration (NASA), which operates systems for which the USAF has program management responsibility. Through letter of agreement, NASA Aeronautical organizations are provided capability to perform cross-component deficiency reporting IAW this TO and DLAR 4155.24.
- 1.4.3 NASA will perform originator, originating point and functional manager responsibilities consistent with the requirements identified in this TO.
- 1.4.4 When operations are co-located at a USAF location, the tenant NASA organization will coordinate with the host organization to de-conflict and document exhibit handling support requirements.
- 1.4.5 The procedures of this TO apply regardless of the contracting methodology employed. Contracting clauses such as warranty special provisions or contractor logistics support shall not preclude the implementation of these procedures for a system or component.
- 1.4.6 Prime Contractor Deficiency Reporting. Contractors shall report product quality deficiencies on USAF government furnished property (GFP) or government furnished equipment (GFE). The preferred method of reporting is directly to the USAF JDRS. The DRI&R team offers process training and technical support available at no cost to contractors choosing to use this method of submission. Contractors not using JDRS shall coordinate submissions through the applicable Defense Contract Management Agency (DCMA) representative.
- 1.4.6.1 Prime contractor or prime vendor identified deficiencies for material on non USAF government furnished material procured directly through the Defense Logistics Agency (DLA) or other suppliers.

- 1.4.6.2 These deficiencies shall be reported directly to the DLA or the offending supplier according to contractual or other agreements.
- 1.4.7 These procedures apply to all agencies and contractors involved in USAF test and evaluation on Air Force managed systems, programs, and items.
- 1.4.8 Joint systems under test, operated and/or maintained by the USAF will use these procedures to ensure commonality of reporting and resolution. The individual program office or lead service may establish specific reporting and resolution requirements over and above the requirements of this TO as long as those requirements are seamless to USAF users.
- 1.4.8.1 During acquisition or sustainment, all deficiencies discovered will be entered into JDRS; do not enter classified DRs into JDRS.
- 1.4.8.2 For system managed by another component, assigned Action Points will then forward the DR using the cross-component reporting requirements established in DLAR 4155.24.
- 1.4.9 Countries participating in the Deficiency Reporting program use the procedures under Chapter 5 of this TO and include those involved in the Technical Coordination Program (TCP), International Engine Management Program (IEMP), Foreign Military Sales (FMS), Security Assistance (SA), and European Participating Air Forces (EPAF) governed by Air Force Manual, AFMAN 16-101, INTERNATIONAL AFFAIRS AND SECURITY ASSISTANCE MANAGEMENT, and/or Letters of Offer Acceptance (LOA), and individual FMS case provisions, Multi-National Configuration Management Plan, and IEMP Agreements.
- 1.4.10 This TO aligns with AFI 21-118, IMPROVING AIR AND SPACE EQUIPMENT RELIABILITY AND MAINTAINABILITY; AFI 99-103, CAPABILITIES-BASED TEST AND EVALUATION; AFOTECMAN 99-101, OPERATIONAL TEST PROCESSES AND PROCEDURES; AFI 23-101, AIR FORCE MATERIEL MANAGEMENT; and the Government Industry Data Exchange Program (GIDEP). See SO300-BT-010 for GIDEP information.

#### 1.5 METHODOLOGY.

1.5.1 The JDRS basic system capability is centrally funded and available without cost to all programs and systems. JDRS shall remain under government cognizance in order to realize the benefits derived from commonality of reporting and to remain uninhibited from outside influences.

#### **NOTE**

For users requiring access into JDRS, see the following for additional information: Department of Defense (DoD) Under Secretary of Defense for Personnel and Readiness Memorandum, subject: "Common Access Card Issuance Mandate," September 25, 2003 Department of Defense (DoD) Chief Information Officer Memorandum, subject: "Public Key Infrastructure (PKI) and Public Key Enabling (PKE) Implementation Update," October 7, 2003.

1.5.2 The use of contractor operated and maintained deficiency data systems may augment JDRS capability, if required, but may not replace JDRS as the official USAF deficiency repository. When used to compliment the JDRS capability the program manager shall keep JDRS current and shall provide the same management visibility as established in Chapter 4 of this TO.

#### 1.6 DEFICIENCY REPORTING CRITERIA.

1.6.1 Deficiencies that impact the OSS&E of systems or equipment in development, test, or deployment shall be reported through JDRS to the appropriate managing activity. Table 1-1 provides examples of attributes to consider when identifying deficiencies and/or recommended enhancements. Deficient conditions shall be identified according to criteria and report type and categorized according to their impact to mission and/or safety. See Table 1-2, DR Category (CAT) and Priority Determination.

Table 1-1. Attributes That May Affect Operational Safety, Suitability, and Effectiveness

Compatibility	Malfunction
Design	Quality
Difficulty of operation or maintenance	Reliability
Effectiveness	Repairability
Environmental	Safety
Expense of operation or maintenance	Security
Fidelity/conformity of technical publications	Suitability
Human Factors	Survivability
Integration	Training fidelity
Interoperability	Undocumented features
Logistics supportability	Utility
Maintainability	Vulnerability

- 1.6.2 Although often overlapping in process and similar in workflow, three separate and distinct deficiency types are covered by this technical order. These include: (1) Product Quality, (2) Acceptance Inspection Deficiency, (3) Engineering Investigation, and (4) Test & Evaluation deficiencies Product Quality and Engineering Investigation deficiencies are reported on USAF weapon system or end items, as well as on government owned, managed, or furnished products and equipment. They are also reported against contractor owned and managed assets when those assets are used to support a USAF weapon system or end item. During government conducted or managed Test & Evaluation, deficiencies shall be written when identified against a government stated need, performance parameter, or an impact to safety, suitability or effectiveness. Test &Evaluation procedures apply on an item or system under acquisition, regardless whether it is government or contractor owned. The types of USAF report designations include:
- 1.6.2.1 Product Quality Deficiency Report (PQDR). These are reports of deficiency (on hardware or software) resulting from an initial failure, defect, or nonconforming condition discovered on a new, newly repaired, revised, installed or overhauled product typically when that product is placed in service. PQDRs include failures that result after the item was placed in service that are suspected as latent defects or quality escapes resulting from poor workmanship, nonconformance to applicable specifications, drawings, standards, processes or other technical requirements. PQDRs also include the reporting of failures that occur on contractually prescribed warranted items within the warranty period.
- 1.6.2.2 Acceptance Inspection Deficiency Report (AIDR). This report type is used to identify discrepancies discovered during acceptance inspections performed on aircraft, engines, engine modules and major assemblies and support systems, and equipment. Reportable discrepancies are those that are attributable to non-conformance to applicable specifications during manufacture, repair, modification, or maintenance associated with the general work requirements and contract specifications of the work performed. See Chapter 8 for additional guidance.
- 1.6.2.3 Engineering Investigation (EI). This report type is used to report an unacceptable condition or request failure analysis for conditions such as systems compatibility issues, mishap analysis, component/item failures, anomalous behavior or to provide recommendations for improvements to existing capabilities (enhancement) and software/application failures. EIs may include aging system issues or trends, improvement recommendations or requests for investigation to determine the root cause or condition that induced the failure. An EI should include trending observations and/or other observations to substantiate the condition being reported as well as impacts to the OSS&E of a system, subsystem or component. EIs may also be used as recommendations for inclusion as agenda items in improvement working groups or forums.

#### NOTE

- DULL Sword is a reporting flagword identifying a nuclear weapon safety deficiency, including mishaps not falling into the accident or incident categories but meeting criteria in AFMAN 91-221, WEAPONS SAFETY INVESTIGATIONS AND REPORTS. A DULL SWORD report may be required for some Els. Report DULL SWORDS in accordance with AFMAN 91-221.
- 1.6.2.4 Test and Evaluation Deficiencies (T&E DR). These are reports of deficiency (on AF materiel or product) identified during government or contractor-conducted/managed test and evaluation. T&E DRs are those discovered during developmental test and evaluation (DT&E), or those that fail to meet operational requirements as measured during operational test and evaluation (OT&E). These include, but are not limited to, deficiencies that are the result of incompatibility or failures as measured against government stated need, performance parameter, required capabilities, applicable specifications, procedures, or test equipment and may include recommendations for enhancements or an impact to safety, suitability or effectiveness.

#### 1.7 DEFICIENCY CATEGORIZATION AND PRIORITIZATION.

- 1.7.1 The deficiency category (CAT) and associated risk priority is used to capture the severity of the condition by relative importance and the urgency of response. The submitting organization will be diligent in the categorization of deficiencies, particularly when describing support equipment, subsystems, reliability, and maintainability deficiencies. Each deficiency must be considered for its overall OSS&E impact.
- 1.7.2 Category (CAT) I deficiencies are those which may cause death, severe injury, or severe occupational illness; may cause loss or major damage to a weapon system; critically restricts the combat readiness capabilities of the using organization; or result in a production line stoppage.

#### **NOTE**

The SAF/AQX preferred term of Program Manager is used in place of the Single Manager throughout this TO and is intended to also represent the responsibilities of the System Program Director, and if delegated by the PM, the Supply Chain Manager.

- 1.7.2.1 CAT I deficiencies require the immediate attention and response of the system Program Manager and Chief/Lead Engineer to mitigate risk and/or limit/resolve mission impact, therefore strict application of CAT I criteria is essential. If a CAT I condition is noted or suspect, assess safety, mission, or operational impact and include a detailed statement outlining the safety, mission, or operational impact to the system or end item.
- 1.7.2.2 If any doubt exists concerning the category of a report between CAT I and CAT II, it will be coordinated with the wing safety office and/or other authority to aid in assessment of the deficiency's impact. Any CAT I that may cause death, severe injury, or severe occupational illness or, if uncorrected, may cause major loss or damage to equipment or a system shall be reported to the Safety Office.

#### **NOTE**

To minimize risk and/or limit/resolve mission impact, suspected CAT I deficiencies shall be validated as such by the appropriate authority level within the reporting organization (Chief of Maintenance, Safety Office, or other authority (identified by the Chief of Maintenance or Safety Office, or other authority within the reporting organization and reported within 24 hours of discovery. This will be sent to all applicable organizations (MAJCOM, Program Manager, Safety Offices) by the most expeditious means available.

- 1.7.2.3 Report CAT I deficiencies immediately to applicable organizations (MAJCOM, Program Manager, safety offices) within 24 hours by telephone, facsimile, email or other expedited methods, as required. Due to the critical nature of CAT I DRs, the use of telecommunications facilities are authorized during MINIMIZE (MINIMIZE is the reduction of record and voice telecommunications traffic in an emergency, follow-up documentation to the PM/CE must occur within 2 days).
- 1.7.3 CAT II deficiencies are those that impede or constrain successful mission accomplishment (impacts OSS&E but does not meet the safety or mission impact criteria of a CAT I deficiency).

- 1.7.4 Table 1-2 is provided to assist the Originating activity in determining that the report category and impact are consistent and provide the recommended priority.
- 1.7.5 The PM will consider the DR's initial priority as a statement of the tester and/or operator impact, but the PM is responsible for specifying each DR's final priority in view of existing program factors and budget constraints, and will address programmatic issues and resolution actions accordingly.
- 1.7.6 Conditions that do not meet the criteria of a CAT I or CAT II report should be investigated by the identifying organization to determine if other reporting avenues are available. These may include, but are not limited to, product and component improvement working group action items as well as transportation and supply discrepancy reporting. Refer to Table 1-3, Conditions Not To Be Reported, for deficiencies which are excluded from the provisions of this TO.
- 1.7.7 If an open DR has not been actively investigated within 12 months of the initial deficiency reporting, the reason for delayed actions or not funding the investigation shall be noted in JDRS and the DR closed with the status of "Closed-Acceptable Risk". The risk associated with that DR must be formally accepted by the individual in the chain of command with the authority to accept a risk at that level.

Table 1-2. DR Category (CAT) and Priority Determination

CAT I	Priority	Impact
	Emergency	If uncorrected, may cause death, severe injury, or severe occupational illness and no workaround is known; or, if uncorrected, may cause major loss or damage to equipment or a system and no workaround is known; or, prevents the accomplishment of an essential capability or critically restricts OSS&E, to include required interaction with other mission critical platforms or systems; and no acceptable workaround is known.
	Urgent	Adversely affects an essential capability or negatively impacts operational safety, suitability, or effectiveness and no acceptable workarounds are known or adversely affects technical, cost or schedule risks to the project or to life cycle support of the system, or, results in a production line stoppage and no acceptable workaround is known.
When the condition does not meet the safety or mission impact criteria of a CAT I report, submit a CAT II DR with the corresponding priority when the condition:		
me correspo	onding priority when	
CAT II	Priority when	
		the condition:

#### NOTES:

- 1. Careful consideration should be given in assigning the category and corresponding priority recommendation to accurately define the deficiency's impact.
- 2. Prior to test,the test team and program office shall ensure understanding and consensus of priority definitions. If required, definitions may be further defined to support the individual test program and defined in the local operating procedures.

#### Table 1-2. DR Category (CAT) and Priority Determination - Continued

- 3. T&E deficiency category and priority will be determined by the test director. Subsequent changes may occur only with consensus of primary Materiel Improvement Project Review Board (MIPRB) members (program office, lead operating command, and applicable test director). See AFI 99-103, CAPABILITIES-BASED TEST AND EVALUATION for additional T&E information.
- 4. Originators/Originating Points should consider and document factors such as cost, schedule and performance risks; availability of spares; difficulty of operation or maintenance, repair, or replacement; system redundancy; associated trends; secondary failures or damages; and environmental impacts among other possible factors.
- 5. Workarounds refer to approved/authorized alternate procedures which could include, but are not limited to: manual processes, order of task accomplishment, more restrictive or intensive procedures, and the use of back-up or redundant systems or processes, etc.

Table 1-3. Conditions Not To Be Reported

Do not submit a DR when the following conditions are noted:	Applicable Directive or FORM
1. Unsatisfactory condition is attributable to improper packaging and handling. Items found properly packaged with no apparent damage to the container, but the item is damaged. Condition attributable to or responsibility of the shipper, detected by the receiving activity. This includes conditions such as shortages, overages, erroneous material, unacceptable substitute, duplicate shipments, missing tags or labels, or expired shelf life.	Report IAW SF 364, Supply Discrepancy Report (DLAI 4140.55, SECNAVINST 4355.18A, AFJMAN 23-215, AFI 23-101.
2. Deficiencies in medical supplies and equipment listed in Military Medical Stock List SL-6500.	Report IAW AFI 23-101.
3. Substitute items, these items would meet the fit and function of the original equipment manufacture item (be approved by the AF) when the original item is unavailable.	Report using DD FORM 1608 - Unsatisfactory Material Report - (Subsistence). See DLAR 4155.3.
4. Proposed new allowance documents and changes to existing allowance documents.	Report IAW AFI 23-101.
5. Established administrative systems, procedures, methods, publications, and forms.	Report by letter, through channels to the office of primary responsibility.
6. Real property and real property installed equipment.	Report IAW AFH32-9007.
7. Pricing deficiencies (e.g., zero overpricing).	Report AFPAM 23-117.
8. Processing and handling of civilian and military suggestions.	Report IAW AFI 38-401.
9. Deficiencies in items procured from commercial off-the-shelf local purchase/repair, directly from GSA or a commercial vendor, when such items are designated in a supply catalog or stock list for base procurement. This does not apply to components of special purchase equipment (Air Force or Technical Service designated as those items which are procured through other services.)	Resolve locally through the base contracting officer or if an IMPAC purchase, IAW AFI64-117, AIR FORCE GOVERNMENT-WIDE PURCHASE CARD (GPC) PROGRAM. For items procured directly from GSA, report discrepancies directly to Service Center at 1-800-488-3111 or via the GSA website at <a href="http://www.gsa.gov">http://www.gsa.gov</a> .
10. Specific deficiencies in technical orders. Publication change processes apply to specific change requests against specific procedures. A DR may be submitted to identify systemic TO issues involving the acquisition process of publications or TO fidelity/conformity issues impacting OSS&E.	Report IAW AFTO Form 22, Technical Order Improvement Report and Reply, or AFTO Form 27, Preliminary Technical Order (PTO) Publication Change Request (PCR)/TO Verification Record/Approval (TO 00-5-1, AF TECHNICAL ORDER SYSTEM).
11. Deficiencies in flight manuals.	Report IAW AF Form 847, RECOMMENDATION FOR CHANGE OF PUBLICATION (Flight Publications).
12. Deficiencies in supply catalogs or stock lists.	Report IAWAFI 23-101.
13. Carrier caused transportation type discrepancies for the purpose of adjusting property and inventory records of damaged freight for action by the transportation con tracting officer.	Report IAW SF 361, Transportation Discrepancies Report, (DODM 4140.25).
14. The need for new (not enhancement) operational capabilities.	Submit IAW DODI 5000.2 AF SUP1. AF Form 1067 and AFI 63-131, MODIFICATION MANAGEMENT.
15. CAT II deficiencies concerning tools procured through GSA Tools Commodity Center, including all Standardization and Control of Industrial Quality Tools (SCIT).	Report tool discrepancies directly to the National Customer Service Center at 1-800-488-3111 or via the GSA web site at <a href="http://www.gsa.gov">http://www.gsa.gov</a> .

#### 1.8 KEY DRI&R RESPONSIBILITIES.

- 1.8.1 The following provides a summary of primary DRI&R positions and their key responsibilities.
- 1.8.1.1 Web-based process training for DRI&R is provided on the DRI&R Training SharePoint Site. These courses provide an overview of functional role and process based tasks to include explanations of the program's intent to resolve deficiencies or ensure that risks associated with identified deficiencies are properly identified.
- 1.8.1.2 Participants in the DRI&R process must complete the training found on the DRI&R Training SharePoint Site, which is appropriate to their DRI&R role.
- 1.8.2 Program Manager (PM) at the Systems Group. The program manager is responsible for implementing DRI&R IAW this TO and consistent with the preservation of OSS&E. PMs shall ensure active oversight and awareness of DRI&R status and, depending on the category (CAT) of DRs, the PM shall either accept the risk or recommend the acceptance of risk to the appropriate level of the chain of command prior to closing a DR. The PM shall ensure members, of their assigned units, receive role-based DRI&R training as defined in paragraph 1.8.1.1. PMs are responsible for maintaining visibility of DRs reported against their system regardless of where the DR is assigned for resolution. PMs manage program metrics/trends, program compliance, and advocate DRI&R improvement. The PM may delegate these duties and responsibilities and it shall be in writing and maintained in organization's files. Additionally Action Points representing the PM typically perform and/or oversee the response to, and resolution of DRs.
- 1.8.2.1 Where dissent exists between the originating organization (e.g., MAJCOM or Test & Evaluation organization) and the responsible material management organization (e.g., program office), the following conditions apply:
- If a disagreement exists as to the report category, seek consensus with the Originating Point/DRB prior to changing the report category. If unable to reach agreement, the PM, under advisement of the chief engineer, may establish the report category. During T&E, the report category will not be changed without consultation with the MIPRB.
- Evaluation of risk to operations includes the originating organization's risk statement. Responsible materiel management organization may close the deficiency as "Closed Accepted Risk" subject to Resolution of Disagreements paragraph 4.9.1.
- Evaluation of risk to operations will be added to official engineering documentation.
- 1.8.2.2 Operational risk contributed by deficiencies will be reviewed at acquisition executive reviews, critical design reviews, MAJCOM reviews, and/or T&E reviews.
- 1.8.2.3 Program Managers shall complete the DRI&R Computer Based Training (CBT) Curriculum for Program Managers and Chief Engineers as a minimum.
- 1.8.3 Chief/Lead Engineers. The designated system Chief (in support of the PM) has technical responsibility, accountability and authority for all technical activities throughout the operational life of the program. Chief/Lead Engineers are integral members of the DRI&R process for their system. The Chief/Lead Engineer supports the PM-established DRI&R processes, specifically providing technical oversight and direction for risk mitigation and deficiency resolution. The Chief/Lead Engineer ensures active oversight and awareness of DR status, training, program metrics/trends, program compliance, and advocates DRI&R improvement. The Chief/Lead Engineer ensures that individuals performing investigations understand program intent and the basis of root cause analysis. The Chief/Lead Engineer also ensures that corrective actions are taken to prevent deficiency recurrence, and recommends/approves closing actions.
- 1.8.4 Chief/Lead Engineers. Chief/Lead Engineers shall complete the DRI&R Computer Based Training (CBT) Curriculum for Program Managers and Chief Engineers as a minimum.
- 1.8.5 Originator. The Originator is any individual who identifies conditions that limit or restrict an item or system from fulfilling its intended purpose. The Originator discovers the deficiency, identifies its impact, and initiates reporting and exhibit processes, securing the exhibit, as established within their organization or group.
- 1.8.6 Originating Point. The Originating Point is a function typically located within the organization's quality, safety, or resource management office that has overall DRI&R process management responsibility for the submitting organization.
- 1.8.6.1 Responsibilities include:
- 1.8.6.1.1 Promoting the DRI&R web-based training available, at the DRI&R Training SharePoint Site, to ensure knowledge of criteria and processes.

1.8.6.1.2 Interacting with Originators to ensure that DRs are valid, accurate, and complete, If not, either further substantiate or return to the Originator.

#### NOTE

If the report does not meet submission criteria, determine if additional information is required or if an alternative process should be used (See Table 1-3, Conditions Not To Be Reported).

- 1.8.6.1.3 Validating the deficiency category.
- 1.8.6.1.4 Ensuring applicable exhibits are available, secured, and properly identified.
- 1.8.6.1.5 Submitting the validated report using JDRS and tracking the DR progress and resolution.
- 1.8.6.1.6 Performing trend analysis and providing feedback as necessary.
- 1.8.6.1.7 Actions necessary to ship an exhibit IAW Preliminary Disposition Instructions (PDI). DRs may be accepted by the Originating Point in various methods such as, web, telephone, fax, paper but will be entered into JDRS using the on-line submission form.

#### **NOTE**

Supply activities support the DRI&R process by managing and submitting exhibits on behalf of the Originating Point, and balancing stock accounts within the D035 and Standard Base Supply System (SBSS) stock accounting systems when an exhibit leaves the Originating Point's organization. Because DO35 and SBSS do not account at the item serial number level or associate an exhibit to a DR, DRI&R must employ additional systems and processes to track individual items and associate them with specific Deficiency Reports. JDRS provides workflow for the exhibit holding activities functions in the DR process. Exhibit holding activities are encouraged to use JDRS to properly support DRI&R exhibit management.

- 1.8.6.2 Originating Points should ensure serviceable tag data is input and correct if an "out of box" failure. If not an "out of box" failure, Originating Points should ensure operating hours at failure on the item is input and correct.
- 1.8.7 Screening Point. The Screening Point is the designated focal point for the receipt and processing of DRs. The Screening Point reviews the DR for proper categorization, validity, correctness of entries, accuracy and completion of information addresses; determines and transmits the DR to the proper Action Point within or outside the organization and/or component. These duties may be performed in whole or in part by the program office or the Single Point of Contact Office (SPOCO) or delegated by the SPO or SPOCO to meet the needs of the DRI&R program.
- 1.8.8 Action Point.
- 1.8.8.1 The Action Point is the focal point between the support point and the submitting organization and assigned by the Program Manager. The Action Point is responsible for all technical/administrative actions for resolution of a DR submitted IAW this TO. They evaluate and will initiate a course of action for DR resolution through coordination with engineering, inventory management specialists (IMS), equipment specialists (ES), and quality assurance (QA) specialists. Action Points provide status updates, closing actions, and exhibit disposition instructions. They maintain active oversight of DRs assigned to them; monitor program metrics/trends, program compliance, and advocate improvement within their center and the DRI&R process within JDRS. They ensure validity and accuracy of DR data to include contacting the originating point for additional info as necessary.
- 1.8.8.2 The Action Point performs resolution oversight of DRs by working in conjunction with in-house and Support Point subject matter experts such as Item or Inventory Management Specialist (IMS), equipment and quality specialists, engineers and contractors.
- 1.8.9 Support Point. When requested, the Support Point assists the Action Point by conducting investigations and trend analysis, and by recommending corrective and preventive actions. Support Points maintain active oversight of DRs assigned to them, monitor program metrics/trends, and advocates improvement within their activity and JDRS. Support Points provide exhibit disposition instructions, through the Action Point, as appropriate.

- 1.8.10 Center SPOCO. SPOCOs (ALC, SMC or equivalent) ensure standardized Center processes to the extent practical and provide active DRI&R process and training requirement oversight. The SPOCO is the focal point for resolving issues related to DRI&R status and represents the Center as the Advisory Council member for the USAF DRI&R process.
- 1.8.11 Program enrollment "Authorizing Point Of Contact" (APOC). The APOC manages and controls access to JDRS for their assigned units. When a user requests access into the unit the APOC has the responsibility to approve or disapprove the request. When the APOC approves the user request final approval is completed by the AF Clearing House. APOC should help the users with the required on-line CBT and the security forms as necessary.
- 1.8.12 MAJCOM/NASA Functional Manager. Functional managers, to include those responsible for, but not limited to, aeronautical, air armament, space, C2, and vehicles, must become actively involved when mission objectives or safety warrants. Therefore, using Commands and Activities shall assign DRI&R knowledgeable Functional Managers to represent the Command and/or activities. They ensure system users, operators and maintainers, as applicable, are knowledgeable in fundamental DRI&R processes. As integral members of the dispute resolution process, they represent their organization/directorate/command on DRI&R process and training issues. Functional managers ensure MAJCOM processes are established to provide appropriate oversight of DRI&R status, training, program metrics/trends, program compliance, and improvement within their areas of responsibility.
- 1.8.13 HQ AFMC. HQ AFMC/A4FI is responsible for overall policy, procedures, and obtaining funds via the POM process for funding for the USAF portion of JDRS. HQ AFMC/A4FI has responsibility for this publication and policy formulation, and plans and coordinates policy between the Air Staff, using commands, and AFMC Centers. HQ AFMC/A4FI interacts with other DOD components or agencies to maintain equivalent program standardization and awareness; ensures active oversight of DRI&R metrics/trends, program compliance, and chairs the Advisory Council and user group meetings.
- 1.8.14 The Clearing House. The Clearing House personnel are considered the duty experts and are required to thoroughly understand each JDRS tool's operation and idiosyncrasies. The Clearing House personnel will provide customer service support, enrollment, material management, training, testing, management reporting (metrics), website workflow support, process support, and isolated program support. Technical support covers a broad spectrum of potential products, including but not limited to, providing technical advice to AFMC/A4FI, root cause analysis and resolution of technical issues, specialized process support functions, special data queries and metrics upon request, requirements support for automated metrics, and data correction. Contact the clearing house to discuss differences between regular JDRS and isolated programs.

#### 1.9 JOINT DEFICIENCY REPORT SYSTEM (JDRS) DATABASE.

- 1.9.1 JDRS is centrally funded and available to all programs and systems. It provides a comprehensive and standardized software tool to create, process, and manage deficiency reports. Users will access JDRS via a web-browser interface at: https://jdrs.mil.
- 1.9.2 JDRS Access. Deficiency data is restricted by user access controls. Access will be approved on a need to know basis. Once approved, JDRS users are required to authenticate using the Common Access Card (CAC) card. Users without a CAC card require PKI certification from one of the DoD approved external authorities. (See paragraph 1.5.1)
- 1.9.2.1 Role-specific training must be accomplished prior to requesting a JDRS account.
- 1.9.2.2 Prospective users must apply for JDRS "Site Access" by completing an online "New User Registration" process found at <a href="https://jdrs.mil/">https://jdrs.mil/</a>. Additionally, non-government employees require a completed SAAR-N form also found at <a href="https://jdrs.mil under">https://jdrs.mil under "Site Access"</a>.

#### 1.10 PERFORMANCE METRICS AND COMPLIANCE CHECKLISTS.

- 1.10.1 Performance metrics consists of a number of measures and indicators to assess the health of the DRI&R process. The term performance refers to the results obtained from measurement of processes that permit evaluation and comparison relative to program, standards, objectives, and past results. Measurement is also performed through evaluation of DRI&R compliance checklists during self-inspection and higher headquarters inspections.
- 1.10.2 Originating points, SPOCOs, Program Managers, Action Points, Support Points, and MAJCOM functional managers shall establish and review processes, systems, and functional metrics necessary to assess the health of the DR system within their areas of responsibility. Measures shall be designed to target information that improves the quality of decisions for managing DRI&R process.

1.10.3 Self-inspections are required annually, as a minimum, or more frequent as specified by MAJCOM and/or local policy. Functional area checklists are provided on Management Internal Control Toolset (MICT) web site for guidance and reference. These checklists may be used as a foundation for establishing a DRI&R self-inspection program and should be supplemented to support organization specific requirements. These checklists may also be used during higher headquarters compliance inspections and surveillance visits to evaluate DRI&R compliance. The following URL shows examples of the checklist: https://mict.us.af.mil/searchchecklist.aspx.

#### 1.11 CROSS COMPONENT REPORTING.

- 1.11.1 DLAR 4155.24, Product Quality Deficiency Report Program, provides procedures for submission and support of all cross-component reports on government owned items. The processes for submitting PQDRs across component lines to another service or DOD agency/activity are the same as for any other DR for the Originator or Originating Point. However, the USAF Action Point will act as the service Screening Point and forward deficiencies to the appropriate component Action Point for investigation and resolution. Use the procedures outlined in DLAR 4155.24 for PQDRs that cross component lines.
- 1.11.2 All cross-component originated PQDRs shall be submitted electronically to the USAF via the DoD PQDR Inter-Service Interface. Safety Alerts, requests for stock screening and defective material notifications involving USAF and USAF FMS customers shall be sent to DFSG.SBPDRIS@us.af.mil.

#### 1.12 GOVERNMENT INDUSTRY DATA EXCHANGE PROGRAM (GIDEP).

The relationship between GIDEP and the DRI&R process is overlapping. GIDEP is a partnership between Government and industry participants seeking to reduce or eliminate expenditures of resources by making maximum use of existing information. GIDEP is a Government wide system for exchanging technical information between Government agencies and supporting contractors about non-conforming products. GIDEP is the DOD designated repository for discontinued product notices and obsolescence management information. This description of GIDEP is for reference only.

#### 1.13 MATERIEL SAFETY PROGRAM MANAGER (MSPM).

The MSPM should access JDRS for safety implications on Category I and assign action numbers, where appropriate, for tracking through the Air Force Safety Automated System (AFSAS). In addition, the PM or representative will notify the MSPM of any Category I DRs IAW AFI 91-204, Safety Investigations and Reports, AFMC Supplement 1. When the MSPM and PM determine it is appropriate, the MSPM will assign an Action Item Number for tracking in the Materiel Safety Task Group (MSTG) unless the DR is already being tracked in a mishap report.

#### 1.14 PQDR EXHIBIT CREDIT POLICY.

- 1.14.1 One objective of the DoD Produce Quality Deficiency Report (PQDR) process is to obtain restitution for defects reported on new or newly repaired or overhauled government material. Restitution may be in the form of exchange or obligated price credit or replacement in kind. Although EI exhibits are processed and segregated as a supply condition code Q, they are not authorized to receive exchange or obligated cost credit or replacement.
- 1.14.2 The USAF has multiple, customer dependent processes to provide/obtain restitution for PQDRs.
- 1.14.2.1 USAF customers at field level. Customers using the Standard Base Supply System (SBSS) receive exchange or obligated price credit when they process a PQDR exhibit as a supply condition code "Q" turn-in (TIN). This process provides a credit reimbursement back to the operations and maintenance account that purchased the defective item. To obtain credit, customers must provide a copy of the "credit authorization" received within the PQDR confirmation message when the report was successfully submitted to JDRS. See paragraph 1.14.4 for items covered under the flying hour reimbursement program.
- 1.14.2.2 USAF customers at Depot level. For USAF Logistics Complex customers using the D035 system, exchange cost credit/credit reversal procedures for USAF managed assets are not applicable due to the implementation of Consolidated Asset Management (CAM) procedures. However, credit should be pursued for defective DLA and cross-component managed assets. In these cases, credit or replacement will be provided upon confirmation of the deficiency by the investigating activity.
- 1.14.2.3 For external customers (cross-components/agencies external to the USAF). Credit is not authorized until after the deficient condition has been validated by the USAF Action Point. When the deficient condition is validated, the USAF Action Point should coordinate customer credit or replacement with the appropriate Inventory Management Specialist (IMS).

- 1.14.3 Credit Reversal Procedures. If it is determined that a USAF PQDR did not meet submission criteria, the USAF Screening or Action Point shall initiate a request for credit reversal. This process only applies to USAF customers who were initially provided exchange or obligated cost credit. To recover the credit, the originating organization's servicing exhibit holding activities must perform an exhibit on a reverse-post Turn-In.
- 1.14.4 Credit Reversal and Flying Hour Reimbursement. With the advent of Centralized Asset Management (CAM), funding will no longer be distributed to Active Air Force Major Commands. The Cost per Flying Hour (CPFH) funding will be centrally managed by weapon system Program Element (PE) within CAM (OAC 87). Air National Guard (ANG), Air Force Reserve Command (AFRC), Trans World Capital Funds (TWCF), and AFSOC will centrally manage their CPFH funds as well.

#### 1.15 WAIVER OF JDRS REQUIREMENTS.

- 1.15.1 The requirement to perform product quality deficiency reporting and resolution is mandated by public law and complementary USAF and DOD guidance; this process cannot be waived.
- 1.15.2 When driven by cost, schedule and performance requirements, and/or information assurance requirements dictate, complementary or stand-alone data systems may be necessary to supplement the DRI&R system of record. Examples include, when a contractor is providing partial or complete logistics support where non-stock listed, but USAF owned, components are involved or when sensitive or classified programs require information assurance requirements above that which JDRS database tool is able to provide.
- 1.15.3 The PM shall submit waiver requests through the parent MAJCOM or AFMC Center to HQ AFMC/A4FI, BLDG 262, RM N146, 4375 Chidlaw Road, Wright-Patterson AFB, OH 45433-5006. Waiver requests shall identify the validated needs that DRI&R system of record, does not satisfy and/or the cost, schedule, and performance impact to your program. The waiver request must also state how the program will satisfy the purpose and intent of this T.O, provide visibility to MAJCOM functionals, cross service components, HQ AFMC, and how the process will remain under Government cognizance.

#### 1.16 RECOMMENDING IMPROVEMENTS.

- 1.16.1 HQ AFMC/A4FI has overall responsibility for matters pertaining to policy and procedures within this publication. Staff support for "acquisition cycle" DRI&R policy and procedures is provided by HQ AFMC, SAF/AQXA, and AF/TE. HQ AFMC plans and coordinates this policy between the Air Staff, using commands, and AFMC Centers.
- 1.16.2 For customer support on policy, procedures, training, or tools, please contact the USAF JDRS Help Desk at DSN 787-7164, COM (937) 257-7164 or email DFSG.SBPDRIS@us.af.mil.

#### 1.17 DRI&R ADVISORY COUNCIL.

- 1.17.1 Purpose.
- 1.17.1.1 The DRI&R Advisory Council consists of MAJCOMs and Center representatives responsible for overseeing implementation of DRI&R processes and intent.
- 1.17.1.2 They recommend policy and procedures, assess performance, recommend and advocate for improved information technology business practices, promote process and tools training, and steer the program towards AF Smart Operations and Expeditionary Logistics for the 21st Century (eLog 21) goals to improve performance and reduce cost.
- 1.17.2 Methodology.
- 1.17.2.1 The DRI&R Advisory Council is a working level group that reviews and recommends Air Force policy and procedure changes relating to deficiency reporting. The DRI&R Advisory Council meets annually, as a minimum.
- 1.17.2.2 The Advisory Council charters working groups (WG) to address required issues. WGs prepare minutes of each meeting. The advisory council approves or disapproves WG recommendations.
- 1.17.2.3 DRI&R Action Item Submittal. Any individual or agency that interacts with the DRI&R process may submit suggested action items through their parent MAJCOM Advisory Council representative. Action item submissions will include a statement of the problem or initiative, the suggested corrective action or approach, previous actions taken by the initiator to correct the problem, any anticipated benefits, costs, and effects on DRI&R users and identification of the initiator.

- 1.17.3 Membership. HQ AFMC/A4FI is the DRI&R advisory council chairman; members include MAJCOM Functional representatives and SPOCO representation from each AFMC Center.
- 1.17.3.1 Test and Evaluation DRI&R policy found in Chapter 2 is authored with the concurrence of HQ AFOTEC, HQ AFMC/A3F, AFSPC, and AF/TE. Inputs will be solicited and considered from all AFMC Centers.
- 1.17.3.2 Technical Coordination Group and International Engine Management Program (Chapter 5) include members from: HQ AFSAC and participating Centers.

# CHAPTER 2 REPORTING, INVESTIGATING AND RESOLVING TEST AND EVALUATION DEFICIENCIES

#### 2.1 PURPOSE, SCOPE AND APPLICABILITY.

- 2.1.1 This chapter provides standardized deficiency reporting, investigation, and resolution (DRI&R) procedures to be used throughout USAF conducted or managed Test and Evaluation (T&E). In conjunction with AFI 99-103, CAPABILITIES-BASED TEST AND EVALUATION, these procedures:
- 2.1.1.1 Allow for consideration and resolution of deficiencies and proposed enhancements at a point in development and acquisition where changes may be made at significantly reduced cost and risk.
- 2.1.1.2 Ensure program offices as well as supported and supporting commands are collaboratively planning and executing the acquisition, delivery, and bed down of an operationally safe, suitable, and effective platform/system that is sustainable over its planned lifecycle.
- 2.1.1.3 Provide guidance to meet AF Smart Operations 21 goals to reduce late defect discovery through early tester involvement and to better define test and evaluation deficiency resolution strategies.
- 2.1.2 These procedures, as well as other applicable areas of this T.O., apply to all USAF acquisition program managers and responsible developmental and operational test authorities. They shall be used for all weapon and military systems, products, and materiel in development of procurement, to include commercial off-the-shelf and non-developmental item acquisitions.

#### 2.2 KEY RESPONSIBILITIES.

- 2.2.1 In addition to the roles and responsibilities defined in Chapter 1, paragraph 1.8, the following T&E responsibilities are defined below.
- 2.2.2 Chief Engineer (CE). The CE ensures appropriate deficiency investigation and risk analysis is performed and corrective actions are taken or risks mitigated and/or accepted to sufficiently resolve identified deficiencies to meet user's operational needs.
- 2.2.3 Integrated Test Team (ITT). A cross-functional team of empowered representatives from multiple disciplines and organizations and co-chaired by operational testers and the program manager. The ITT is responsible for developing the T&E strategy, to include defining deficiency reporting, investigation, and resolution processes.
- 2.2.4 Responsible Test Organization (RTO). The lead government developmental test organization on the ITT that is qualified to conduct and responsible to oversee Developmental Test & Evaluation (DT&E). RTO members shall identify and submit deficiencies found during test and evaluation to the PM for resolution. The RTO may delegate responsibilities to applicable participating test organizations.
- 2.2.5 Operational Test Agency (OTA). The Air Force Operational Test and Evaluation Center (AFOTEC) conducts operational tests, reports results, and provides evaluations of effectiveness and suitability and additional information on operational capabilities. The OTA shall identify and submit deficiencies through the JDRS workflow process for resolution. If AFOTEC is not involved in the OT&E, then the MAJCOM operational test organization is responsible for completing these tasks.
- 2.2.6 DT&E/OT&E Test Director. The DT&E/OT&E Test Director is the designated authority with overall test process control of the system under test during the respective phase of testing. The Integrated Test Team (ITT) Charter shall identify this role during combined, joint or other test situations where the responsible test director may be unclear. The designated Test Director is responsible for managing the originating activity processes and shall establish and chair a local Watch Item (WIT)/Deficiency Review Board (DRB), and is a member of the PM DRB or MIPRB. The Test Director ensures all suspect/deficient conditions are identified in a timely manner so that the PM may affect resolution in order to satisfy operational safety, suitability, and effectiveness (OSS&E) criteria. The applicable Test Director is the T&E Originating Point and has responsibility to review, validate, initially prioritize, and submit T&E team member identified deficiencies to the PM for resolution.

- 2.2.6.1 The Test Director with overall control of the system being tested is also the Originating Point and therefore, has management responsibility for the DRB/WIT process within the RTO/OTA. Specific responsibilities include:
- 2.2.6.2 Ensure test team member(s), to include those at alternate test locations, have knowledge of and understand and comply with their responsibility to report suspect/deficient conditions IAW with this TO.

#### **NOTE**

Although administrative tasks may be delegated, the Test Director shall retain responsibilities for the review, validation, and prioritization of deficient conditions submitted for PM resolution.

- 2.2.6.3 Ensure that exhibits have been identified, secured, tagged and processed along with any associated items, equipment, material, or media IAW Chapter 6 of this TO or any local and/or PM established exhibit processing procedures. Refer to the JDRS Exhibit Receipt Handbook for additional information.
- 2.2.6.4 Establish a WIT/DRB to periodically review, prioritize, and status WITs and deficiency reports.
- 2.2.6.4.1 Membership. Any organization within the RTO/OTA with a vested interest should participate and support the meetings. Examples include: operations (both flight and ground), maintenance, logistics, engineering, and project management.
- 2.2.6.4.2 Chair/Facilitator. The chair of the Review Board is the RTO/OTA Test Director or their designated representative.
- 2.2.6.4.3 Contractor Involvement. Contractors who are part of the local test team, at the discretion of the test director, may participate in reviews; however, their attendance should not be viewed as contractual direction to perform work, or deemed as providing the contractor with a voice in determining priorities, impacts, or if a WIT should be a DR or closed.
- 2.2.6.5 Establish procedures to track the progress and resolution of submitted deficiencies to ensure that they satisfy OSS&E requirements. Provide feedback to the pertinent parties within the RTO/OTA.
- 2.2.6.6 Ensure RTO/OTA representation, as a voting member, on the PM DRB process. Attendees should be able to speak and commit their organization.
- 2.2.6.7 Coordinate all safety-related DRs with the local safety office. For mishap and high accident potential (MHAP) related deficiencies, see Chapter 3 procedures for MHAP reporting.
- 2.2.7 Lead Operating Command. The lead operating command, or using commands as appropriate, will participate as an active member of the review board processes managed by the PM and the RTO/OTA. They will arbitrate conflicts between the PM and the RTO/OTA involving resolution of deficiencies and proposed enhancements to satisfy capability requirements. They are responsible for ensuring deficiencies and enhancements recommended for closure as acceptable risk and/or as enhancements are reviewed, prioritized, and considered as candidates for future improvements. At completion of test or test increment, they shall participate in the status review and prioritization to disposition all open deficiencies.
- 2.2.8 Other Stakeholder Organizations. Other support organizations, such as supply chain managers, and participating test organizations (PTO) will support the PM and DRI&R process as described in this chapter, local procedures of agreements, and AFI 99-103.

#### 2.3 DEFINING DEFICIENCY REPORTING PROCEDURES IN THE ITT CHARTER.

- 2.3.1 The ITT is responsible for developing the T&E strategy and the Test and Evaluation Master Plan (TEMP). Within the ITT Charter, a sub-group shall be designated to define and document DRI&R strategy and procedures consistent with this TO and AFI 99-103. This strategy and accompanying procedures shall be established during initial test program planning and documented as an enclosure to the TEMP.
- 2.3.1.1 Establishing the Official DRI&R Repository. The PM, in coordination with the ITT membership, shall establish the deficiency screening point for their particular program, and define training needs by submitting a request to the USAF DRI&R system help desk at: DFSG.SBPDRIS@us.af.mil.
- 2.3.1.2 Contractor Conducted T&E. The PM must ensure, through Statement of Work (SOW) language and Contracts Data Requirements, that the contractor uses the USAF deficiency reporting processes. The prime contractor must flow down deficiency reporting requirements to subcontractors and suppliers. The PM and/or ITT will validate that the contractor process is adequate and task the DCMA to assure that the contractor follows the approved reporting process. The Request for

Proposal (RFP), ITT charter, TEMP and the SOW will describe the contractor's support to government T&E to be employed NLT system-level Critical Design Review.

#### NOTE

The use of contractor operated and maintained deficiency data systems may augment JDRS capability in the early stages of development, if required, but may not replace JDRS as the official USAF deficiency repository after product acceptance. When used to compliment the JDRS capability, JDRS shall be kept current and the contractor system shall provide the same management visibility as established in Chapter 4 of this TO.

- 2.3.1.3 Deficiency Review Board (DRB). Established to manage deficiency resolution processes, the applicable (DT/OT) Test Director chairs a local review board to track watch items (WITs) and generate deficiency reports. The PM chairs the resolution Deficiency Review Board, sometimes referred to as the Materiel Improvement Project Review Board (MIPRB). A key element of a Review Board is documenting key members, roles and specific processes. See paragraph 4.8 for minimum PM DRB responsibilities and paragraph 2.5 for the DT/E/OT&E Test Director managed WIT/DRB responsibilities.
- 2.3.1.4 Understanding Deficiency Criteria. Ensure ITT consensus and documentation of how deficiency reporting criteria will be applied to the system under test. If required, category and priority definitions may be further defined by the ITT to support the individual test program. To minimize conflict, specifically define procedures for timely Category I notifications and responses, how closing resolution will occur IAW Chapter 1 (to include retest), and how disagreements will be resolved.

#### **NOTE**

Deficiency category and priority reporting criteria may be further defined or elaborated upon within the intended meaning through use of specific or tailored examples.

- 2.3.1.5 Performing Critical Design Reviews. Ensure that all deficiencies (and when applicable their resolution response) are briefed and the risk accepted or forwarded to acquisition decision authorities for acceptance at each critical design review.
- 2.3.1.6 Performing Test Phase Transitions. Formally establish a mechanism to ensure that at the completion of T&E, or a T&E phase or increment, the lead operational MAJCOM project officer for each system, with input and support from the ITT, will validate any open DRs and prioritize and resource them for resolution as appropriate.
- 2.3.1.7 Reporting Classified Deficiency Data. The PM will establish and maintain procedures to manage classified and/or sensitive deficiency data IAW DOD and Air Force policies. When classified or sensitive information is required to substantiate a DR, coordinate with the applicable program office representative (typically Screening Point) before handling. Produce, handle, store, transmit and destroy classified documents IAW the applicable program security classification guide and AFI 31-401, Information Security Program Management. Never enter classified data into the Joint Deficiency Reporting System (JDRS). Report instances of classified data in JDRS to the security manager for the affected program immediately, and the USAF JDRS User Support Office immediately afterwards.

#### 2.4 DOCUMENTING AND REPORTING TEST & EVALUATION DEFICIENCIES.

2.4.1 Report T&E deficiencies using the JDRS online submission tool that are the result of incompatibility or failures as measured against desired capabilities, applicable specifications, procedures, operational requirements, or test equipment.

#### NOTE

Product quality, Engineering Investigation, and acceptance inspection deficiency report types are referenced in Chapter 3, Chapter 7, and Chapter 8 of this TO.

2.4.1.1 Categorize reports according to their impact to mission and/or safety using Table 1-2, DR Category and Priority Determination and report to the appropriate managing activity. Provide the draft DR with supporting data to the Originating Point within 24 hours of Category I DRs and within three days for Category II DRs.

#### NOTE

Suspected Category I conditions may significantly impact safety, mission, and/or production and, therefore, they shall be reported to the PM under the most expeditious means available.

- 2.4.1.2 Report recommended materiel/capability enhancements regardless of contract scope. Enhancements, in the context of this chapter, are Category II deficiencies that complement or improve capability of OSS&E attributes listed in Table 1-1.
- 2.4.1.3 Report deficiencies on an item or system under acquisition regardless of whether materiel, property, software, or equipment is government or contractor owned.
- 2.4.1.4 Submit each deficient condition under a separate report to ensure all deficiencies are properly addressed and resolved. For system integration deficiencies or when deficiencies are linked by multiple failures, reports may be against an end item/system and, if applicable, reference subordinate reports.
- 2.4.1.5 Identify impacts to critical elements such as, but not limited to:
- 2.4.1.5.1 Test Conditions and Results. Describe the test conditions, quantitative and qualitative results, and the deficiency, so the problem will be understood by those generally familiar with the weapon system. Drawings, photographs and other media or substantiation enhances the description of the deficiency and increases clarity.
- 2.4.1.5.2 Mission Impact. Clearly define the significance of the deficiency, the effect on system performance, and the potential impact on operational safety, operational suitability, and operational effectiveness with respect to the primary or alternate missions.
- 2.4.1.5.3 Cause Analysis. If known, include information or analysis taken to isolate the problem to a possible cause factor or event. Reference other technical documents, as necessary.

#### NOTE

Requesting cause analysis information is not a request for the test member to specifically perform deficiency cause analysis; it is simply recognizing that cause analysis routinely occurs to accurately define the deficiency.

- 2.4.1.5.4 Remedial Action Taken. If a deficiency has an interim solution or a work around procedure is established to continue testing, describe the remedy. Additionally, state opinion on the suitability of that remedy as a permanent correction to the deficiency. If none, so state.
- 2.4.1.5.5 Capabilities Requirements Document. For each deficiency that failed to meet the documented capabilities requirements, list the threshold value, the actual value, and the impact of the deficiency upon employment or the next phase of testing. If unknown, so state and specify the specific test or event that drove the observation.
- 2.4.2 The RTO/OTA will use the JDRS tools or a locally developed WIT tracking system to manage and track WITs. JDRS submission tools have the advantage of seamless WIT to DR conversion and submission.
- 2.4.2.1 The RTO/OTA should maintain insight into deficiencies identified during contractor-conducted T&E to consider them for further review during government-led T&E. These and/or other conditions may be captured as WITs as a mechanism to ensure a follow-up is considered.
- 2.4.2.2 Conditions involving Flight Manual or Technical Order procedures may initially be identified as a WIT to fully assess the situation. If the condition is subsequently determined to be a deficiency necessitating a Flight Manual or TO improvement report, use the appropriate process in Table 1-3.
- 2.4.2.3 Reconcile WITs that remain open or unresolved at the end of a T&E phase (i.e., completion of DT before dedicated OT). The RTO/OTA will determine if they should be submitted as a DR, closed as WITs, or provided to the testers in the next TE phase. They shall ensure active oversight and awareness of DRI&R status and depending on the category of DRs they shall either accept the risk or recommend the acceptance of risk to the appropriate level of the chain of command prior to DRs remaining open or unresolved.
- 2.4.3 Watch Item (WIT). Watch items are unique to test and evaluation and are used as a method to observe identified conditions which do not fully satisfy deficiency report submission criteria. If used, WITs complement, but do not replace, the official USAF deficiency reporting process.

#### NOTE

- A WIT is not a DR type, but simply documentation of a condition that warrants further study.
- 2.4.3.1 A WIT will be an unsubmitted Deficiency Report. This means that when a WIT is identified, a DR will be drafted stating the particulars of the Watch Item and sent by the drafter to the Originating Point.
- 2.4.3.2 Originating Points will hold, without submitting, DRs identified as WITs pending further evaluation.
- 2.4.3.3 If a WIT is determined to be a Deficiency, then the Originating Point will submit the WIT/DR to the appropriate Screening Point.
- 2.4.4 Exhibit Handling and Processing. Identify, segregate, tag, and secure the applicable exhibits along with any associated items, equipment, material, media or paperwork. Process the exhibit and supporting material IAW Chapter 6, Exhibit Handling and Processing and locally established exhibit processing procedures. When the contractor owns the materiel, the PM and contractor will determine the need for any materiel (exhibits) required for deficiency analysis.

#### 2.5 T&E DEFICIENCY MANAGEMENT.

- 2.5.1 The PM, CE, RTO/OTA, Test Director, and ITT of the system under test shall:
- 2.5.1.1 Establish and manage deficiency resolution processes that include review boards as defined in Chapter 4.
- 2.5.1.2 Designate alternate personnel to perform duties as necessary.
- 2.5.2 The PM will initially respond to the submitted category and priority as determined by the RTO/OTA Test Director.

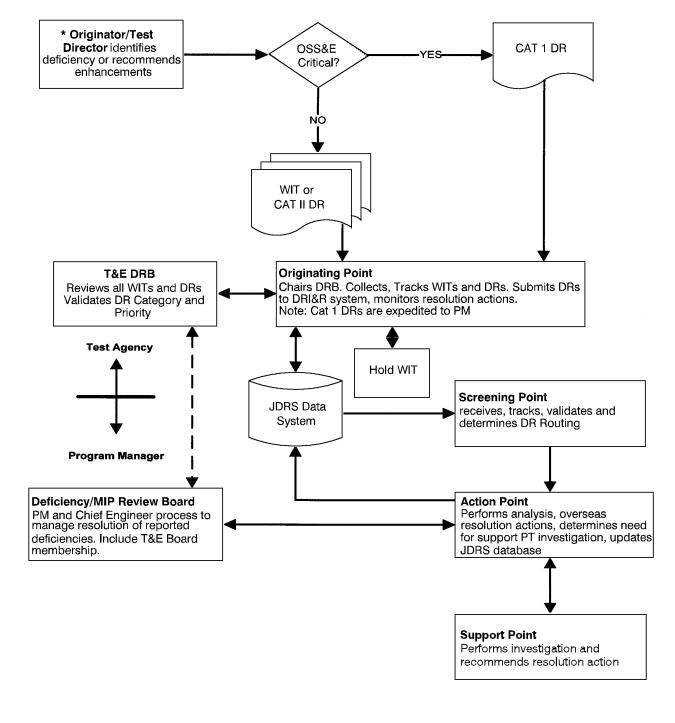
#### NOTE

Do not downgrade Category I T&E deficiencies without coordinating agreement of the RTO/OTA Test Director. The PM may upgrade a category and/or priority at any time without agreement.

- 2.5.2.1 If it is subsequently suspected that the category or priority is incorrect, the PM shall provide rationale and seek agreement with the Test Director before a downgrade occurs.
- 2.5.2.2 If agreement cannot be reached, the lead command weapon system representative shall arbitrate the dispute. If consensus is not obtainable at this level, the situation will be elevated to the next higher level for resolution.
- 2.5.3 The PM/ITT will periodically convene T&E Deficiency and Joint Reliability and Maintainability Evaluation Team (JRMET) Review Boards to status and prioritize all open DRs.
- 2.5.3.1 Prioritized, open DRs discovered during T&E will be considered in preparation for certification of readiness for operational testing. If the PM cannot correct or resolve all Category I and urgent priority Category II DRs before operational testing begins, or defers fixes for these DRs, operational testers and operators must assess the impacts. They shall ensure active oversight and awareness of DRI&R status and depending on the category of DR's they shall either accept the risk or recommend a risk handling plan to the appropriate level of the chain of command prior to DRs remaining open or unresolved.
- 2.5.3.2 The PM and ITT principals must reach agreement prior to certification of readiness for operational testing and develop a plan for open deficiency report resolution. (See AFMAN 63-119 for Certification information).

#### 2.5.3.3 End of DT&E/OT&E:

- 2.5.3.3.1 The applicable test organization shall provide an End of Test Report that includes a prioritized list and status of all open CAT I DRs, and urgent priority CAT II DRs; and an assessment of how each DR affects system operation and potential impact on life cycle costs.
- 2.5.3.3.2 The program office and MAJCOM shall jointly develop and resource an action plan for DR resolution to address impacts to system operation and life cycle cost, thus avoiding the impacts of late defect discovery.



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Figure 2-1. T&E DR Process

# CHAPTER 3 DEFICIENCY IDENTIFICATION AND REPORTING

#### 3.1 PURPOSE.

- 3.1.1 This chapter provides a uniform method to communicate deficiencies that impact OSS&E of systems and their sub and/or support systems; to include trainers, test, and support equipment. Deficiencies shall be reported to the program management activity responsible to determine cause, take corrective action, and prevent recurrence.
- 3.1.2 This chapter also includes responsibilities to establish and manage local DR procedures.
- 3.1.3 For information systems, the Program Manager may elect to use a Help Desk format, where the Help Desk and/or the local database administrator may perform some or all duties as both an Originator and an Originating Point.

#### 3.2 CRITERIA, CATEGORY AND PRIORITY.

Deficiency reports will be submitted for conditions listed in Table 1-1 that impact the OSS&E of systems or equipment, according to the criteria in paragraph 1.6. Deficient conditions are categorized according to the impact to mission and/or safety using Table 1-2, DR Category and Priority Determination and reported through JDRS to the appropriate managing activity.

#### 3.3 ORIGINATOR RESPONSIBILITIES.

- 3.3.1 The Originator is responsible to identify and document deficient conditions and ensure potential exhibits and supporting data are secured and available for evaluation. The Originator will:
- 3.3.1.1 Identify the potential deficiency, assess the impact and recommend the deficiency category and corresponding priority.
- 3.3.1.2 Initiate the appropriate draft PQDR, EI, or AIDR using the JDRS DR Submission Tool, SF 368 (Product Quality Deficiency Report), or equivalent worksheet and provide a detailed problem summary that clearly substantiates the report with the criteria for the deficiency type to the Originating Point.
- 3.3.1.2.1 PQDRs are typically initial failures or defects related to manufacturing and overhaul processes discovered on newly received materiel. They also include failures within a contractually prescribed warranty or specified period of performance (TO 00-20-3, Chapter 5, contains warranty procedures and performance criteria). PQDRs will detail the specifics of the quality related failure or defect and include information such as time in operation prior to failure or deficiency discovery; digital photos of the defect, data plates, markings, and any documentation received with the discrepant part. See paragraph 1.6 for PQDR criteria.
- 3.3.1.2.2 EIs are reliability and maintainability (R&M) issues on mature items and systems. They are typically submitted on items in-use that according to trends, are not meeting the intended Mean Time Between Failure (MTBF). They may also be submitted on unusual or new failure modes that require further evaluation. EIs will reflect impacts to attributes in Table 1-1 and/or trends associated with failure. For systems issues or systems integration deficiencies, identify the highest assembly or system involved. See paragraph 1.6 for EI criteria.
- 3.3.1.2.3 AIDRs report discrepancies discovered during an acceptance inspection on an end-item such as an aircraft, engine, or support equipment. DR submission of deficiencies on items (aircraft, engine etc.) that were not required to be shipped back to depot for investigation (engine deficiencies corrected by owning unit by direction of the ALC) are required and not input as an Info Only report. See Chapter 8 for specific AIDR instructions.
- 3.3.1.3 Exhibit Preparation and Processing.
- **3.3.1.3.1** Identify, segregate, tag, and secure the applicable exhibits IAW Chapter 6, Exhibit Handling and Processing and locally established exhibit processing procedures along with any associated items, equipment, material, media or paperwork.
- **3.3.1.3.2** When an obvious workmanship/manufacturing deficiency exists, identify any additional defective stock on hand and report the exact or suspected number of defective items.

3.3.1.3.3 Ensure the Safety Investigator or Cognizant Official for the Mishap/High Accident Potential (HAP) approves the disposition of exhibits before they are shipped.

#### **NOTE**

Do not turn-in the exhibit to supply prior to receipt of the DR submission acknowledgement from JDRS. The acknowledgement contains specific supply condition code "Q" processing information according to the report submitted. The report also is the official record of the deficiency report and must accompany the exhibit.

- 3.3.1.4 Reporting Software Deficiencies. Although there are no software deficiency categories in the DR system, there is a subcategory, in JDRS, that can be selected for DRs that have software related issues. Report and handle software deficiencies the same as hardware deficiencies when they are discovered on new or newly delivered software or as a result of new software version releases.
- 3.3.1.4.1 If established, first report software problems to a Help Desk function to aid in assessment and potential resolution.
- 3.3.1.4.2 Software deficiencies should be reported in context to their overall OSS&E impact to the system or item with which they operate. A software anomaly may not stand alone as a deficiency unless it can be related to an impact to capability or performance.
- 3.3.1.4.3 Routine software change recommendations and enhancements for automated information systems (AIS) and maintenance information systems (MIS) should be reported to the local database administrator or other designated representative to validate, assist in resolving, or to refer/report the deficiency to a Help Desk function or a software problem reporting database established by the system in question.
- 3.3.1.5 Reporting Deficiencies on Time Compliance Technical Order (TCTO) Kits. Submit PQDRs to the TCTO kit manager when problems are identified during the modification procedure. Do not submit against the TCTO Kit for component failures that occur after the successful accomplishment of the TCTO unless the failure is suspected as being linked to the TCTO procedure, or if failure trends are seen on TCTO modified items. Kit contract number, serial number, and date of manufacture will be added in appropriate blocks.
- **3.3.1.5.1** PQDRs should be submitted when problems are discovered with parts, special tools and test equipment provided. They must fit without force and do the job for which intended. After TCTO completion, the modified system or commodity must perform to the criteria prescribed.
- 3.3.1.5.2 TCTO kit integrity should be maintained; however, if the TCTO is underway, it is not necessary to hold the entire kit as an exhibit, only the deficient item(s) within the kit. If the exhibit is a component of a TCTO kit, the component National Stock Number (NSN) will be listed in the NSN field of the submission tool and the TCTO kit number will be reflected in the report next higher assembly (NHA) Nomenclature block and also referenced in the remarks section of accompanying tags. When obvious quality deficiencies are noted, TCTO kit screening will be accomplished on all issued kits to determine the extent of the condition.
- 3.3.1.5.3 In addition to a detailed problem summary, the PQDR shall also list the NSN of the failed part/parts, Type of TCTO, Command Document Control Number, TCTO Title, TCTO Number, Data Code Number, Kit Data Code Number, System/Commodity Designation and Serial Number on which the TCTO was being accomplished, and state whether the TCTO was verified or if verification was waived.
- 3.3.1.6 Reporting Mishap/High Accident Potential (MHAP) Deficiencies.
- 3.3.1.6.1 Submit MHAP DRs on known or suspected causes of Air Force MHAPs. This includes all mishap event categories as described in AFI 91-204. Submit the report as an EI unless the suspected causal item is known to be an initial failure or related to manufacturing or overhaul quality; if so, submit as a PQDR. Although the extent of secondary damage may be referenced within the MHAP report, do not submit multiple MHAP reports to obtain exchange cost credit for secondary damages not suspected as causal to the mishap.
- 3.3.1.6.2 MHAP deficiency reports shall include the AFSAS report number, mishap class, and Safety Investigating Officer contact information.
- **3.3.1.6.3** Ensure the Safety Investigator or Cognizant Official for the MHAP DR approves the disposition of exhibits before they are shipped/processed from the originating activity.

- **3.3.1.6.4** Do not submit MHAP reports to obtain analysis of electronic media. The Mishap Analysis and Animation Facility (MAAF) at AFMC is the central Air Force activity for recovery, transcription, and analysis of flight data in support of Air Force safety investigations.
- **3.3.1.7** FOD/Mishap Cost Estimates. Do not submit deficiency reports to obtain engine related FOD/Mishap Cost estimates. Instead, submit an OC-ALC/LP FORM 062, NOV 03 obtained from:

 $https://www.my.af.mil/gcss-af/USAF/ep/browse.do?programld=t2D8EB9D62B1319E1012B4051038709ED\&\ channelPageld=s6925EC13428D0FB5E044080020E329A$ 

Or

AF Portal

Aviation Safety Division

Organizations A-Z: FOA: AFSEC - Air Force Safety Center: Aviation Safety Division:

Items of Interest: Engine Mishap Cost Estimate

For situations where a deficiency report is submitted and a request is made in the problem summary of the DR, such as for an internal engine FOD evaluation, cost estimates will be provided in the closing summary of the deficiency report.

3.3.1.8 Air Force Repair Enhancement Program (AFREP) (AFI 21-123) Deficiencies. If a deficiency involves an item that according to the serviceable tag was repaired under AFREP, the originating organization will perform a reverse post procedure and contact the responsible AFREP office to obtain exhibit disposition instructions. Upon receipt of disposition instructions, the Originating Point will submit a DR against the AFREP item and will include the phrase "AFREP DEFICIENCY" in the subject line and exhibit disposition. Refer to AFI 21-123 for additional information.

#### NOTE

Category II deficiency exhibits repaired under AFREP will not be processed as condition code "Q". Credit for these items shall be returned from AFREP by initiating reverse post procedures.

- 3.3.1.8.1 The AFREP activity that originally repaired or obtained repair of the item will determine whether the noted condition matches the DR data, type of additional data needed to evaluate the condition, whether further investigation is needed for resolution, and the course of subsequent investigation/repair/replacement.
- 3.3.1.8.2 The repairing AFREP activity will ensure corrective/preventive actions are implemented if it is determined that workmanship, processes, methods or procedures were at fault. If significant root cause, corrective or preventive actions were noted, the information should be provided to the Action Point for inclusion in the DR record.
- 3.3.1.9 Lateral Support Procedures. Lateral Support is defined as the receipt of an asset that reflects an Organizational or Intermediate level certification on the DD Form 1574-1 Serviceable Tag. Lateral Support, in this context, does not include items such as engines that are repaired through a regional repair center concept.
- 3.3.1.9.1 Do not submit a PQDR against an item repaired by a lateral organization. Instead, report these problems directly to the quality assurance office of the certifying organization through any other means (See paragraph 4.5.2 for additional guidance).

#### NOTE

Lateral support does not include items such as engines that are repaired through regional repair center concept.

- 3.3.1.9.2 Credit may be recouped by submitting a Supply Discrepancy Report (SDR) for deficiencies on items repaired by lateral organizations if the defect is obvious and reported prior to install or use.
- **3.3.2** The Originating Point is typically located within the organizations Quality Assurance or Safety Office. If an Originating Point is not identified within the organization, the Originator will perform Originating Point functions.

#### 3.4 ORIGINATING POINT RESPONSIBILITIES.

3.4.1 The Originating Point shall establish and document local deficiency reporting program procedures, consistent with this TO, for their wing, group or squadron, as appropriate. Ideally, Originating Point processes and management will be

centralized and or standardized within a Wing (maintenance, operations, communications, security forces, supply, etc.) to eliminate redundancy and improve submitting organization tasks. Specific program documentation guidance shall include:

- 3.4.1.1 Establishing digital photo and deficient item documentation criteria to substantiate and support identified deficiencies. Photos should include a readable image of Mfg label, NSN, PN, Cage Code and Contract number when available.
- 3.4.1.2 Reliability & Maintainability (R&M) trends by submitting EIs as appropriate. Further substantiate R&M and or quality trends by querying JDRS for previously reported deficiencies and reference them in new reports as applicable.

#### NOTE

JDRS Tool usage information (handbooks) can be found at https://jdrs.mil/.

- 3.4.1.3 See Chapter 6 for exhibit management, storage and processing procedures.
- 3.4.1.4 Establishing systematic processes to keep Originators informed of the progress, status, and resolution of reported deficiencies.
- 3.4.1.5 Establish self-inspection processes to improve training awareness, report credibility, and resolution of conditions impacting OSS&E.
- **3.4.2** The Originating Point shall perform or ensure compliance of Originator responsibilities defined in paragraph 3.4. Additionally, the Originating Point shall:
- 3.4.2.1 Ensure all pertinent report information is included in the original DR sent to the screening point. Because JDRS is a workflow based system, missing or incorrect data will slowdown or stop the workflow and may induce credit reversal if not promptly provided to the screening, action or support points. Do not put UNK or N/A in a field just to expedite a DR, all data fields need to be reviewed for accurate and complete data as stated above. If the originator cannot provide substantial information, the report should not be submitted.
- 3.4.2.2 Ensure the DR does not contain classified, source selection sensitive, competitive prototype, proprietary, or other sensitive information. If classified or sensitive information is required to substantiate or support the DR, ensure information is provided under the guidelines of the System Program Manager.
- **3.4.2.3** Coordinate safety-related DRs with the local safety office. However, do not delay submitting the DR pending transmission of the AFI 91-204 Mishap message.
- 3.4.2.4 Research historical records (JDRS, DRIS Legacy data, aircraft or system logs, etc.). Add information required to further substantiate the reported condition, to include trend data and previous reports of the same deficiency.
- 3.4.2.5 Ensure exhibit(s) are identified, secured, tagged and held for supply turn-in processing pending receipt of the confirmation of deficiency report submission to JDRS report.
- 3.4.2.6 Determine management authority and proper routing of NSN specific deficiencies by accessing D043A, Master Item Identification Data Base, and/or D086, Workload Mission Assignment System.
- 3.4.2.7 If a deficiency is against a system or non-stock-listed (NSL) item, submit the report against the end item, next higher assembly, or contact the Screening or Action Point responsible for the system for routing instructions.

#### **NOTE**

For engine related items use N/A or UNK in the FSC and NIIN data fields, do not report against the end item or NHA.

- **3.4.2.8** Notify the MAJCOM/Lead Command and program office as listed in AFPD 10-9, LEAD COMMAND DESIGNATION AND RESPONSIBILITIES FOR WEAPON SYSTEMS if a deficiency is against a Time Compliance Technical Oder (TCTO).
- 3.4.2.9 Prepare final DR in appropriate format and assign the Report Control Number (RCN) and submit the completed DR via JDRS in accordance with times prescribed in Appendix A, Table A-1, DR Response/Resolution Timelines.

#### **NOTE**

A RCN consist of three parts. The first part will be the DOD Activity Address Code (DoDAAC). The second part will be the last two digits of the calendar year. The third part will be a 4 digit sequence number that is locally assigned.

3.4.2.10 Once confirmation of successful submission to JDRS is received, process the exhibit turn-in according to instructions provided. Ensure two copies of the DR confirmation accompany the exhibit along with appropriate DD Form 1575 (Figure 6-3) and DD Form 2332 tags (Figure 6-1 and 6-2).

#### **NOTE**

Do not allow shipping or disposal of exhibits until shipping or final exhibit disposition instructions have been provided by the Action or Support Point. Exhibits under warranty with routine failures may be shipped to the warranty repair location without awaiting specific shipping instructions.

- 3.4.2.11 Track progress of the report through resolution. Update the Originator as significant events and status changes occur.
- **3.4.2.12** Expedite requests for further information or supporting data. Use the Tech Dialog tool to provide additional information or supporting information.

#### **NOTE**

Technical Dialogs are used to communicate, address, and resolve technical and DR related issues that arise or are not fully defined in the original DR submission. Technical Dialogs can provide communication at any stage of the DR process and can occur between two individuals or between groups of individuals who have privileges to use the JDRS web site and are unavailable for isolated programs.

3.4.2.13 Follow-up on reports that appear to be languishing without action. If no initial response or update is received by the status due date, the Originating Point will prompt the USAF Screening Point/Action Point to obtain status.

#### **NOTE**

Refer to Chapter 6 of this TO for information concerning holding of exhibits when shipping or disposition instructions are not received in the allotted time period.

- 3.4.2.14 Review closing and final reports for complete and thorough resolution. Ensure the Originator or designated representative has an opportunity to review, and, if appropriate, challenge resolution actions (see paragraph 3.6 for disagreement resolution).
- 3.4.2.15 Provide DRs involving Nuclear Certified Equipment (NCE)/Nuclear Certified Items (NCIs) that potentially meet DULL SWORD criteria IAW AFMAN 91-221 to the local Safety Office for determination and reporting. NCE/NCIs are identified in the Master Nuclear Certification List (MNCL).
- **3.4.3** Credit Reversal Procedures. A request for credit reversal will be initiated by the Action Point if it is determined that an error was made determining performance expectations or for a misapplication of PQDR submittal criteria.

#### **NOTE**

The Credit Reversal process only applies to USAF organizations that requisition items through the standard base supply system (SBSS) and who are not under the Consolidated Asset Management.

- 3.4.3.1 A credit reversal request triggers an automatic email notification to the Originating Point of record.
- 3.4.3.2 Upon notice of credit reversal, the Originating Point must either comply or initiate the dispute resolution process. Failure to take action on a request for credit reversal will trigger an alert to the Originating Point's MAJCOM POC that a credit reversal action is overdue.

- 3.4.3.3 To initiate a credit reversal, the Originating Point will notify the servicing Supply organization to perform the reverse post procedure. Supply should coordinate with the unit resource advisor to ensure funds availability and upon successful credit reversal, provide validation to the Originating Point who will then acknowledge the "Credit Reversal Accomplished" by completing a JDRS workflow step. Credit reversal is appropriate when part was not provided under the Consolidated Asset Management program:
- 3.4.3.3.1 Item failed after designed use or following a reasonable period of service. When this statement is used it should be clarified with expected minimum performance criteria to preclude submission of similar failures.
- 3.4.3.3.2 PQDR exhibit has been altered, e.g., seals broken or items cannibalized. However, this does not include authorized organizational maintenance such as adjustments to settings, fittings, etc., as long as a complete assembly is provided, e.g., no missing components. Units should document any authorized maintenance that was performed in an attempt to correct the deficiency.
- 3.4.3.3.3 Originating organization failed to provide adequate technical data (problem summary details) for proper report analysis within 15 calendar days of a request for additional information. This does not include contract numbers or requisition numbers.
- 3.4.3.3.4 The PQDR exhibit cannot be evaluated because it was not shipped IAW the disposition instructions provided by Screening/Action Point. This does not include items that were shipped according to disposition instructions but the item was not received at the delivery destination.
- 3.4.3.3.5 The deficiency does not meet PQDR submittal criteria.

#### NOTE

Reasons for credit reversal does not include rationale such as "no trend established", "isolated incident", "previously investigated", or "no defect found".

3.4.3.3.6 If the Originating Point disagrees with the request for credit reversal, the dispute resolution process (paragraph 3.6) shall be initiated. Originating points shall investigate and implement corrective actions to prevent recurrence of reports closed due to misapplication of submission criteria, failure to provide adequate data for analysis, or exhibit control issues.

#### 3.5 DISPUTING DR RESOLUTION ACTIONS.

- 3.5.1 When the Originator/Originating Point disagrees with the DR response, resolution, or credit reversal request, the Originating Point will contact the appropriate Screening Point or Action Point within 15 calendar days of the contested action to attempt resolution of the disagreement at the lowest level.
- 3.5.2 If the disagreement cannot be satisfactorily resolved, the Originating Point shall document justification for the disagreement in JDRS Tech Dialog and elevate the disagreement to their command POC for guidance.
- 3.5.3 At the discretion of the command POC (or MIPRB chairman), the report may be placed in a status code "Open In Dispute", through coordination with the SPOCO, Action Point or Screening Point, until the report disagreement has been through final arbitration.
- 3.5.4 When a report is placed in an "Open In Dispute" status, the applicable organization will have 30 calendar days to substantiate their rationale for the disagreement. If resolution does not occur within 60 calendar days after placement in this status, the report will be elevated to the next higher level for resolution. Final resolution of any disagreements will be the responsibility of the MIPRB chairman.

#### 3.6 PROCESS SATISFACTION FEEDBACK.

Informal feedback may be provided at any time. Originating points are encouraged to develop a working rapport with Screening and Action Points; contact information is provided within JDRS and informal communication is encouraged. Communication with the Tech Dialog tool becomes a "memo for the record" attached to the DR.

#### **CHAPTER 4**

## **DEFICIENCY REPORT PROCESSING, INVESTIGATION AND RESOLUTION**

#### 4.1 PURPOSE.

- **4.1.1** This chapter provides policy, responsibilities, methods and procedures to formally establish and communicate, consistent with the requirements of this TO and OSS&E baselines, a systematic method to define, manage, investigate and resolve reported deficiencies.
- 4.1.2 This chapter applies to all USAF systems, to include Joint systems, subsystems, and end items; DRI&R processes shall be established not later than system Critical Design Review (CDR) (or determination of design if no CDR); and will continue throughout the system life cycle.
- 4.1.3 This chapter, in conjunction with Chapter 5 also applies to the resolution of deficiencies reported by participants of the Technical Coordination Program (TCP) and the International Engine Management Program (IEMP) governed by AFMAN 16-101, Letter of Offer and Acceptance (LOA), and/or individual FMS case provisions such as TCP/IEMP agreements, and Multi-National Configuration Management Plan agreements.

#### 4.2 SCOPE AND APPLICABILITY.

- 4.2.1 AFMC and AFSPC Center Commanders and USAF Program Managers, assisted by Program Managers/Directors and their Chief or Lead Engineers, will support and further define where applicable, the processes established by this chapter.
- 4.2.2 Systems and/or programs requiring Service Level Agreements (SLA) will ensure the SLA addresses Deficiency Reporting, Investigating & Resolution System (DRI&R) requirements. DRI&R requirements should be incorporated as integral processes within the system OSS&E and Configuration Management plans.

#### 4.3 DRI&R MANAGEMENT.

- 4.3.1 The administration of DRI&R processes for a particular system, program, or directorate is defined by the PM, consistent with this T.O., other complimentary guidance, and local processes. When more advantageous to the program, the PM may set up their DR system jointly with one or more other PMs. However, such joint systems must provide the same management visibility and control as intended by an individual program.
- 4.3.2 The following key positions provide for the management and oversight of deficiency report processing, investigation, and resolution.
- 4.3.2.1 AFMC/AFSPC Center SPOCO. Each Center shall establish a single point of contact office (SPOCO) to administer the Center DRI&R program. SPOCOs ensure standardized processes to support the center's PMs/PGMs to the extent practical and provide active oversight of the Center DRI&R program.
- 4.3.2.1.1 Define and maintain awareness of key Center-level DRI&R metrics, trends, and processes to include exhibit handling/processing and DR timeliness. Center SPOCOs will perform analysis to monitor overall process and center performance to ensure policy compliance and development of DR process improvements for both organic and Depot Maintenance Inter-service Support Agreement (DMISA) contracted workload.
- 4.3.2.1.2 Provide mediation of MAJCOM POC disputed DR actions.
- 4.3.2.2 Program Manager (PM). The PM shall maintain accountability of the actions and activities affecting the weapon system/end item under their control. The PM shall establish communication plans defining essential transactions between the program office and supporting organizations to enable him/her to assure weapons system OSS&E. Delegation shall be documented to ensure understanding of responsibilities, engineering, and program management authority. Specifically the PM shall:
- 4.3.2.2.1 Manage deficiency reports via the Joint Deficiency Reporting System (JDRS) by government acceptance of the product. Establish traceability between DRs and associated activities in configuration control, business decision and risk management processes, to identify the relationships between DRs and those other activities affecting the resolution of the deficiencies (e.g., when a fix is approved and a change action initiated for the fix, the DR documents the change action;

- additionally the change action documentation identifies the associated DR by its Deficiency Report Unique Identifier (DRUI).
- **4.3.2.2.2** Establish and manage program metrics/trends, measure program compliance, and advocate DRI&R improvement within their area of responsibility.
- 4.3.2.2.3 Ensure active oversight and awareness of DR status impacting their system, regardless of where the DR is assigned for resolution.
- 4.3.2.2.4 Establish recurring Materiel Improvement Project (MIP) Material Improvement Review Boards (MIPRB) and other mechanisms to consider ongoing or recommended actions on DR/MIPs.
- 4.3.2.2.5 Designate Screening or Action Point(s) to provide support for MIPRB processes.
- 4.3.2.2.6 Establish an interface with the Federal Aviation Administration's (FAA) Flight Standard Difficulty Program when a military aircraft or engine system has a civilian counterpart. Contact the Aviation Standards National Field Office, Maintenance Support Branch, AFS-640, P.O. Box 25028, Oklahoma City OK 73125, Com 405-954-6495, to set up procedures for providing relevant DR data to the FAA and for obtaining relevant Service Difficulty Report data from the FAA.
- 4.3.2.2.7 Ensure DRs meeting DULL SWORD criteria have reports submitted IAW AFMAN 91-221.
- 4.3.2.3 Chief/Lead Engineers. Chief/Lead Engineers shall:
- 4.3.2.3.1 Be a permanent member of the DR/MIP Review Board.
- 4.3.2.3.2 Maintain active oversight of all Category I, Mishap (MHAP), and Critical Safety Item (CSI) deficiencies; approve their mitigation actions, ensure timely investigations, and approve final deficiency report resolution.
- 4.3.2.3.3 Ensures the appropriate subject matter experts review and provide timely resolution of all DRs.
- 4.3.2.3.4 Establish valid exhibit investigation criteria in concert with the materiel management team to ensure exhibit investigations provide intended value. Receipt of a DR is not (in and of itself) sufficient reason for an investigation. Restrict investigations to those situations involving new failure modes, suspected safety of flight defects, workmanship, warranty failures on new or newly reworked items, requests by safety investigation authorities, or as required by specific trend analysis conclusions. Once a decision to perform an investigation is made, it is essential to maintain asset visibility to ensure investigations are expeditiously performed and provide the intended value.
- **4.3.2.3.5** Through the action point, monitor the status of deficiency reports exhibits from the time shipment instructions are provided to the exhibit investigation completion.
- 4.3.2.3.6 Ensure DR assessments are adequate to determine if a DULL SWORD report should be or has been submitted.
- 4.3.2.4 Screening Points. Screening Points, assigned to individual program offices, shall:
- **4.3.2.4.1** Review DRs for proper categorization, validity, and correctness of entries, accuracy and completion of information addressed. Expeditiously forward misrouted DRs to the correct Screening Point.
- 4.3.2.4.2 Assign the DR to the proper Action Point within or outside the organization and/or service component, establish routing and tracking mechanisms, and maintain an audit trail for each DR.
- 4.3.2.5 Action Points. Action point(s) are assigned by the Program Manager, and administer the DRI&R process for assigned DRs. They perform resolution oversight of DRs by working in conjunction with in-house and Support Point subject matter experts such as Item or Inventory Management Specialist (IMS), equipment and quality specialists, engineers and contractors. They serve as the Inter-Service Screening Point for DRs transferred for resolution across component lines and must be aware of their requirements IAW DLAR 4155.24.
- 4.3.2.6 The Support Point assists the Action Point by conducting investigations, trend analysis, exhibit processing, and recommending and implementing corrective and/or preventive actions. Support Points maintain active oversight of DRs assigned to them. Once the exhibit is inducted, they provide accurate and timely status updates to Screening and Action Points. Support Points will recommend GIDEP Alerts as required.

#### 4.4 DR RECEIPT, ASSIGNMENT AND ACKNOWLEDGEMENT.

4.4.1 Receiving the Deficiency Report. Upon receipt of a DR, the screening point reviews and routes the DR to the action point responsible for resolution. Validations of DRs (Table 4-1), whether performed by the screening point or the action point, include at a minimum all items in this chapter. Additional Screening Point/Action Point responsibilities may be identified by the appropriate Center SPOCO or PM/PGM (Program Group Manager).

**Table 4-1. DR Validation Actions** 

Condition	Screening/Action Point
Inadequate information on form	Contact Originator/Originating Point to obtain required information and/or enter data form local/in-house sources.
Incorrect category classification	Confer with responsible engineering authority and upgrade or downgrade category classification as appropriate. Attempt to obtain consensus with the Originator/Originating Point. Document justification/explanation within the report record.
Investigation already in progress from prior report	Provide Action/Support with additional information including quantities requiring instruction, create and/or repeat to Master DR/MIP.
Like investigation completed	Provide Action/Support Point any additional information and request disposition instructions for additional quantity.
Deficiency induced by user/operator	Prior to dismissing the DR as invalid, consider possibility of defect in item design, incorrect tech data or handling instructions, or defective packing materials.
No exhibit available	Check available stock for like deficiencies and/or check with Originator to see if any additional data is available to confirm the defect. Credit may or may not be valid dependent upon reason for exhibit unavailability. If initial investigation indicates further study is warranted, determine if the deficient condition can be verified without an exhibit investigation.
Deficiency encountered on material delivered on contracts which records are no longer available	Process DR for possible investigation and screening of assets. Note: Contractor liability, though important, is secondary to preventing recurrence.
Deficiency involves premature failure (other than new or newly overhauled product)	Forward to Action Point for possible engineering investigation and corrective action.
Non-contractor responsible deficiency	Process DR for possible investigation by another activity and consider screening of remaining assets. Note: Contractor liability, though important, is secondary to preventing recurrence.
Involves warranted materiel	Typically, PQDRs submitted on warranted materiel that have routine failures during the warranty period, but do not indicate a quality, mission impacting, or safety deficiency, should be considered as information only. Predetermined warranty exhibit disposition instructions should be sought/obtained to expedite the turn-in and shipment of information only PQDR exhibits unless other instructions exist in the contract. When an initial failure occurs on new or newly repaired warranted products or when evidence of failure indicates a quality, mission impacting, or safety deficiency, the PQDR should be considered as an action DR. Process DR for possible investigation and screening of assets.
Improper storage	When storage problem was at a depot and not a field activity, forward to the Inventory Management Specialist (IMS) for action. When storage damage is caused by the user, close the DR as invalid and suggest the user seek resolution through the SF 364, Supply Discrepancy Report process.

## 4.4.2 Misrouted Reports/Transfer of Action Point Responsibility.

4.4.2.1 Transfer misrouted DRs immediately upon receipt to the responsible Screening Point unit by forwarding, electronic retransmission, or by clearing house reassignment as soon as possible, but not later than two hours for CAT I DRs or one

calendar day for CAT II DRs. CAT I DRs should be coordinated and receipt verified by phone, fax, email, or other effective electronic means.

- 4.4.2.2 DRs correctly routed but incorrectly assigned. If the DR is assigned according to D043A, Master Item Identification Data Base, and/or D086, Workload Mission Assignment System, but management assignment is questionable, obtain consensus of the suspected responsible organization prior to transfer. Regardless of consensus, it is the responsibility of the currently assigned activity to either work the deficiency or to successfully transfer the deficiency and initiate reassignment actions.
- 4.4.2.2.1 Assignment of DR on DLA managed items must be made based on management authority for the NHA. Management of the NHA is necessary for the organization to have engineering authority for the sub-components in the NHA which are managed by the DLA.
- 4.4.2.2.2 Materiel Management Aggregation Code (MMAC) codes should not be assigned to DLA managed items unless the item is only applicable to one NHA. In those cases, the DLA managed item should carry the MMAC of the NHA. If DLA managed items are applicable to multiple NHA, the DR should be routed to the organization with management authority for the NHA identified in the DR to ensure engineering authority.
- 4.4.3 Critical Safety Item (CSI) Deficiencies: Deficiency Reports shall be submitted, investigated, tracked, processed, and recorded where deficiencies are identified or suspected on CSIs.
- 4.4.3.1 Deficiencies relating to critical characteristics or those that potentially impact safety shall be classified as CAT I deficiencies.
- 4.4.3.1.1 Initial mitigation of CAT I CSI deficiencies will be formally addressed through Technical directives (e.g., Technical Notices, Safety of Flight Messages, Airworthiness Directives, Bulletins, etc.) issued and managed in accordance with Service instructions.
- 4.4.3.1.2 The chief engineer will approve resolution actions associated with CSI investigations.
- 4.4.3.2 Technical directives (e.g., Technical Notices, Safety of Flight Messages, Airworthiness Directives, Bulletins, etc.) shall be issued where an investigation indicates that action is required to address a deficiency associated with a CSI.
- **4.4.3.3** If the CSI is common to multiple platforms, a copy of the deficiency report, or other technical notification of the deficiency, shall be sent to all using activities.
- 4.4.3.4 Deficiencies discovered by the contractor: All deficiencies (including repair, maintenance, logistic support, overhaul services, and technical non-conformance of CSIs) discovered by the contractor that potentially affect safety, shall be identified to the Administrative Contracting Officer (ACO), within 72 hours of discovery. Such notifications indicate potential safety implications and will result in a CAT I PQDR, and will be processed according to service PQDR policy and procedures.
- 4.4.4 Mishap/HAP (MHAP) DRs. MHAP DRs require expedited handling and processing to support the efforts of the Safety Investigation Board.
- 4.4.4.1 Program managers and Chief/Lead Engineers shall ensure processes are in-place to meet AFI 91-204 (paragraph 2.5) goals before MHAP DR investigation. When necessary, support agreements shall be arranged with investigative activities such as labs, contractors, regional, and complex repair organizations to support these goals.
- 4.4.4.2 Upon notification of a MHAP deficiency, the assigned action point shall:
- 4.4.4.2.1 Perform initial risk assessment to determine the scope and depth of the MHAP investigation.
- 4.4.4.2.2 Develop and coordinate an investigation strategy approved by the Chief/Lead Engineer and communicate to all stakeholders.
- 4.4.4.2.3 Establish an initial timeline of critical processes and manage the investigation through resolution.
- 4.4.4.2.4 Coordinate with the designated Safety Investigating Officer and Originating Point to keep them apprised of resolution actions and timelines. Do not delay the safety investigation to determine/implement corrective actions. Advise the Safety Investigating Officer as soon as causal information is determined.

The applicable Chief/Lead Engineer shall inform the Safety Investigating Officer when the root cause investigation will exceed 15 calendar days for Cat I MHAPs and 30 calendar days for Cat II MHAPs.

- 4.4.4.3 The Chief/Lead Engineer will approve resolution actions associated with mishap investigations.
- 4.4.5 Manual JDRS Entry. The on-line JDRS submission tool is the preferred method, however, DRs received by mail, message, fax, telephone, etc., may be accepted. Acknowledgments, exhibit disposition instructions, updates etc., to DRs that have been submitted via manual methods will be made by mail, message or other appropriate means back to the Originating Point (and appropriate information addressees). Manually input the DRs on behalf of the submitting unit.
- 4.4.6 Validating the Deficiency Report. Upon receipt, the Action Point reviews the categorization and ensures it meets the requirements of this TO. CAT I reports will include a mission or operational impact statement, validated at the appropriate level within the submitting organization, which outlines the specific impact to safety/mission.

#### **NOTE**

If a disagreement exists as to the report category, seek consensus with the Originating Point/DRB prior to changing the report category. If unable to reach agreement, the PM, under advisement of the chief engineer, may establish the report category. During T&E, the report category will not be changed without coordination of the MIPRB (see Table 4-1).

4.4.6.1 CAT I Deficiencies. The Program Managers shall establish procedures to ensure that an immediate and appropriate response is made to CAT I Deficiencies. If a report is made against a commodity or system level item, the receiving organization shall coordinate all resolution actions with the end item Program Manager (PM) and Chief Engineer (CE). For example, a CAT I deficiency on a Landing Gear may be assigned to the Landing Gear PM, but the impact is against the C-5 Aircraft. In this case, the Landing Gear PM and Lead Engineer (LE) shall inform and obtain consensus from the C-5 PM and CE on mitigation and corrective actions throughout the life of the deficiency.

#### NOTE

Acknowledge CAT I reports within 24 hours through an official medium which may include, but is not limited to a System Advisory Notice (SAN), a Heads-Up Message (HUM), before Safety or Operational Supplement, a Time Compliance Technical Order (TCTO) or JDRS.

- **4.4.6.1.1** The acknowledgement shall provide mitigation of acceptance of risk associated with the mission impact and/or safety issue until a resolution is determined and fielded. Mitigation may include accepting the risk.
- 4.4.6.1.2 Acknowledgement may be acceptance of risk; an approved work-around; restrictions to the usage of the item, such as aircraft grounding or flight envelope restriction; and/or an inspection TCTO to determine the full impact of the CAT I condition.
- 4.4.6.1.3 Ensure all acknowledgement and resulting actions are documented in the JDRS record.
- **4.4.6.1.4** The PM or representative will notify the Material Safety Program Manager (MSPM) of any CAT I DRs (reference AFI 91-204, Safety Investigations and Reports, AFMC Supplement 1).
- 4.4.6.1.4.1 The MSPM will access JDRS for safety implications on CAT I reports and assign action numbers, where appropriate for tracking, through the appropriate Air Force Safety Automated System (AFSAS).
- 4.4.6.1.4.2 When the MSPM and PM determine it is appropriate, the MSPM will assign an action item number for tracking in the Materiel Safety Task Group (MSTG), unless the CAT I DR is already being tracked in a Mishap Report.
- 4.4.6.2 CAT II DR. Acknowledge all CAT II DRs within 10 calendar days of receipt.
- 4.4.6.2.1 Reviewers of CAT II DRs who determine that a particular deficiency is safety related shall immediately alert all concerned by the fastest, most effective means. Those concerned may include, but not be limited to, the MSPM, the PM, the Chief/Lead Engineer, any Support Points involved, the Action Point, the Screening Point/SPOCO, and the Originating Point.

- 4.4.6.2.2 A DR may be upgraded to a CAT I when warranted. This action will be recorded in JDRS and an explanation given in the remarks.
- 4.4.7 Cross-Component Reporting. The USAF Action Point acts as the Inter-Service Screening Point when DRs are forwarded to other DOD components for resolution. In these cases, they will forward the report to the appropriate Action Point through the Inter-Service Report Transfer procedure and monitor status under DLAR 4155.24. Familiarity and compliance with DLAR 4155.24 is required for those performing cross-component reporting tasks.

To obtain cost credit for deficiencies on DLA and DOD Service Component managed items, the PQDR must be transferred to the appropriate managing activity through the inter-service report transfer feature of JDRS with valid requisition number.

- 4.4.7.1 Credit/Replacements for NASA and Cross-Component PQDRs. Non-Air Force organizations do not automatically receive exchange cost or obligated price credit when processing PQDRs. When the deficiency is validated and credit or replacement of the defective item is due, coordinate these actions with the Air Force Action Point to recommend credit or replacement against the original MIL.itary STandard Requisitioning and Issue Procedures (MILSTRIP) or constructed document number according to DLAR 4155.24 and DOD 4000.257-M, Military Standard Billing System (MILSBILLS).
- 4.4.7.2 Ensure the PQDR record closing reflects a credit recommendation statement and that coordination for credit/replacement has occurred and includes the amount to be credited or the item to be replaced.
- 4.4.8 Materiel Improvement Projects (MIP). A MIP identifies a planned effort to investigate and resolve deficiencies or proposed enhancements. It implies an extraordinary effort to monitor and control related actions. It may require an extended effort and/or involve multiple agencies.
- 4.4.8.1 Examples of where a MIP would be applicable are on system integration situations, where a deficiency reported on a single component involves corrective actions on multiple components or items within a system. Another example would be where multiple DRs have been submitted on a single item.
- 4.4.8.2 A Master MIP may be created and all related deficiencies will use the "repeated" status, which allows linking all related reports to the Master MIP.
- 4.4.9 Parent Child relationship in JDRS. This tool allows the Screening/Action Point to associate like deficiencies by assigning one or more Child DR's to a Parent DR which reduces redundancy in the investigation process but still allows for independent processing of each DRs related exhibit(s) as needed. This tool is available after the Screening Point Acknowledge Receipt is approved and is applicable to the PQDRs and EIs assigned to the same Action Point Unit. There can only be one Parent DR, however, a Parent DR can have unlimited Children. There can only be one "Generation" of DRs (you cannot assign a Parent DR to another Parent DR). When the Parent record closes (i.e. Final/Closing Approval), all Children DRs associated with that Parent DR close, except when charge decision is "Pending".

# 4.5 AIR FORCE REPAIR ENHANCEMENT PROGRAM (AFREP) AND LATERAL SUPPORT DEFICIENCIES.

- 4.5.1 The Air Force Repair Enhancement Program (AFREP). AFREP optimizes Air Force resources by increasing the wing-level repair capability of aerospace parts and equipment. AFREP enables the repair of certain items if the repair of the item is cost effective without risk to mission performance. This program encourages innovation, ingenuity and resourcefulness by allowing organizations to identify items for base level or contract repair. AFREP is not intended to replace any formal repair process but to enhance localized repair capability.
- 4.5.1.1 If the reported condition involves a CAT II initial failure of an item, that according to the serviceable tag was repaired under AFREP (AFI 21-123), the Originating organization will contact the responsible AFREP office to obtain exhibit disposition instructions. Upon concurrence from the responsible AFREP Office, the Originating Point will submit a DR against the AFREP item and will include the phrase, "AFREP DEFICIENCY" in the subject line and exhibit disposition.

#### **NOTE**

CAT II deficiencies repaired under AFREP will not be processed as condition code "Q" deficiency report exhibits. Credit for these items shall be returned from AFREP by initiating reverse post procedures.

- 4.5.1.2 The AFREP activity that originally repaired or obtained repair of the item will determine whether the noted condition matches the DR data, type of additional data needed to evaluate the condition, whether further investigation is needed for resolution, and the course of subsequent investigation/repair.
- 4.5.1.3 The AFREP activity is responsible to ensure corrective/preventive actions are implemented if it is determined that workmanship; processes, methods or procedures were at fault. If significant root cause, corrective or preventive actions were noted the information should be provided to the Action Point for inclusion in the DR record.
- 4.5.1.4 The Action Point shall be responsible for CAT I DRs and to identify trends or potential problems indicated by CAT II deficiencies that may require an engineering review of AFREP repair results and repair authorization. For example, if reported problems indicate a safety/mission impact or trend, the Action Point, through coordination with the AFREP office and the repair approval authority, will review processes and procedures to re-validate the repair authorization.
- 4.5.1.4.1 The Action Point may assign investigation (Support Point) responsibilities to the AFREP activity that repaired, overhauled, contracted, or manufactured the item, or may elect to perform an independent investigation.
- 4.5.1.4.2 The Support Point will determine whether the noted condition matches the DR data, type of additional data needed to evaluate the condition, whether further investigation is needed for resolution, and the course of subsequent investigation.
- 4.5.2 Lateral Support Procedures. CAT II "Lateral Support" deficiencies should be troubleshot/repaired by the receiving organization to the extent Organization or Intermediate level capabilities allow. The originating organization should contact the certifying organization to determine the depth of repair and if a deficiency report is determined to be applicable, it should be submitted against the specific component or shop replaceable unit that caused the deficiency.

#### **NOTE**

MAJCOM designated regional/centralized repair centers shall be considered lateral support organizations. In these situations, the action point shall assign Support Point responsibilities to the responsible regional/centralized repair center QA organization.

#### 4.6 WARRANTY MANAGER RESPONSIBILITIES.

- 4.6.1 This responsibility has been assigned to Action Points. Action Points should confirm the existence of any warranty, on an item, with the applicable Program Management, Item Manager (IM), Equipment Specialist (ES), or designated warranty manager personnel but any other responsibilities related to warranties MUST reside with the applicable Program Management Team.
- 4.6.2 Warranty procedures are uniquely tailored to individual programs and systems. The warranty manager, in conjunction with the affected PM, shall establish warranty guidance and communicate the guidance among the appropriate using communities.
- 4.6.3 The warranty managers are responsible for management of warranty property and will ensure warranty provisions are considered to avoid unnecessary duplication or conflict with contractual requirements of warranties.

#### NOTE

Because an item is under warranty does not negate the requirement to satisfactorily resolve an identified deficiency. If an adverse trend or high failure rate develops, an investigation should be performed. When safety issues are identified, correction of the unsafe condition will be the primary concern. This may require disregarding warranty provisions and subsequent voiding of the warranty on the exhibit to perform an investigation.

- 4.6.4 Investigations shall be performed on all CAT I or safety related reports involving warranty items. Warranty deficiencies identified as safety related or involving failures on new or newly reworked material shall be treated as a DR requiring initial investigation.
- 4.6.5 CAT II deficiencies on warranted items other than safety related and new/newly-reworked material shall typically be processed according to the individual item warranty plan. While the information is captured, and may be closed, this type of information can be used for trend analysis. For warranted items indicate the exhibit is not available. Exhibits will be sent back to the manufacturer.

- 4.6.6 The warranty manager shall use JDRS to monitor items for adverse trends or high failures. If an adverse trend or high failure rate develops, the warranty manager should establish a Materiel Improvement Project (MIP), perform a failure analysis, and determine the appropriate course of action.
- 4.6.6.1 The warranty manager shall establish pre-determined exhibit disposition instructions for routine warranty failures when appropriate. An example of when pre-determined instructions are applicable would be when the DR is a CAT II report and is a result of other than safety or an initial failure on a new or newly reworked material. This process allows the immediate disposition of warranted materiel without unnecessarily holding the asset pending Action Point shipping instructions. In these situations, the predetermined instructions should include direction to allow the asset to be processed first as a Q condition to generate the credit, if appropriate, for warranty items (AFI 23-101, Warranty Assets Under Due-In From Maintenance (DIFM) control customers are given credit at exchange price for assets covered by a warranty), and then to change the condition code to the appropriate reparable status.
- 4.6.6.2 When a warranty item is dispositioned in accordance with a pre-determined exhibit disposition instruction, then the DR should indicate that an exhibit is not available.

# 4.7 DEFICIENCY REPORT INVESTIGATIONS, EXHIBIT DISPOSITION, AND ANALYSIS.

- 4.7.1 Action and Support Points ensure valid determinations for exhibit investigations, or other actions as warranted, that timely exhibit shipping instructions are provided, expeditious exhibit inductions occur, meaningful investigations are performed and recommendations are made to prevent deficiency recurrence. The following guidelines provide a summary of key processes required to determine exhibit disposition, investigation, and analysis. Chapter 6 provides additional specific instructions for exhibit handling and processing.
- 4.7.2 The designated Action Point shall perform an initial evaluation of the reported deficiency. If Action points do not have the appropriate subject matter expertise, they may use any government or contractor resources available to complete the initial evaluation and subsequent investigation, if warranted.

#### **NOTE**

- Critical Safety Item (CSI) deficiencies require a stringent engineering review process to validate impact to critical characteristics and the report category.
- Verbal communication with the User/Operator may provide valuable deficiency details and insight that may
  not be elaborated in the written problem summary of the deficiency report. Effective communication is
  essential to understanding the deficiency and improving risk mitigation and resolution.
- 4.7.2.1 The initial evaluation will determine the extent of the reported deficiency and depth of the subsequent investigation, if warranted. Action points will follow-up with the Originating Point if additional information is needed. For Technical Coordination Program or International Engine Management Program (TCP/IEMP) deficiencies, the Action Point shall direct all requests for additional information to the TCP/IEMP Screening Point.
- 4.7.2.2 The initial evaluation will include a review of JDRS and other applicable sources for failure/trend data and if applicable, will also include reviews of test data, problem reports, supply demand, and other reliability and maintainability data.
- 4.7.2.3 Infrequent or first time occurrences should be evaluated thoroughly enough to ensure that the deficiency is not a result of a new failure mode or aging aircraft issue which may have safety or supportability implications.
- 4.7.2.4 If the same deficiency has been reported on a prior deficiency report and investigation actions are pending, or if actions have been taken to resolve the reported condition, an exhibit investigation may not be warranted. However, as a minimum, it should be repeated to the existing DR/MIP to create a Parent DR/MIP.
- 4.7.2.5 Deficiencies that are reported as an initial failure after supply issue or other short duration failures should be evaluated for trends to determine if failure rates are within acceptable standards and if repair/maintenance activity processes are adequate.
- 4.7.2.6 The appropriate DCMA and/or the repair/overhaul activity will be provided a copy of DRs on all items reported as an initial failure after supply issue, regardless of the decision to perform an exhibit investigation.

- 4.7.2.7 When trends indicate, field, organic and/or contractor repair processes may require review to improve reliability. Determine the root cause associated with deficiencies where no defect is found.
- 4.7.2.8 Enhancements are a normal process of requirements evolution. Deficiencies that are determined to be out of scope will not be closed without consideration to the deficiencies' impact to OSS&E. This is especially important during the acquisition cycle to ensure proposed enhancements are considered as early as possible in system development to reduce cost, shorten development cycles, and improve system performance. CAT II deficiencies may also include recommended enhancements that improve or complement successful mission accomplishment but are not absolutely required. If incorporated, the recommendation will enhance a system's OSS&E.
- 4.7.2.9 Deficient items reported through the DRI&R process and meeting AFMAN 91-221 DULL SWORD criteria must also be reported to the owning/reporting Safety Office.
- 4.7.3 Exhibit Disposition. Exhibit disposition instructions are required regardless of the requirement for exhibit investigation. The Action Point will provide exhibit disposition instructions to the Originating Point within 24 hours for a Cat I and within 10 calendar days for a Cat II report. If the deficient item is managed by DLA or another service component, the disposition time period is extended to 60 calendar days from the date the DR was submitted.
- 4.7.3.1 Instructions may initially be to hold the exhibit pending investigation determination, but should not exceed 30 calendardays, unless DLA or another service component, in a hold status without follow-up.
- 4.7.3.2 Carefully consider the true cost of the investigation and the value of return on investment. Do not conduct exhibit investigations simply to validate failures. Consider other options such as digital photos to substantiate the condition without tying up reparable assets.
- 4.7.4 Exhibit Not Requested. If the deficiency is valid, but the exhibit has been determined to be not required for investigation, so indicate using the JDRS Preliminary Disposition Report tool button.
- 4.7.4.1 Examples of when exhibits may not be required include when evaluation reflects a pending or in-work, or recently completed investigation on a like failure; where insufficient data or trends do not support an investigation, where warranties are applicable and the DR is a result of other than an initial failure on a new or newly reworked item; and on invalid reports.
- 4.7.4.2 If the exhibit investigation is not required, instruct the Originating Point to remove all tags and documents identifying the exhibit as a deficiency report exhibit, replace them with the appropriate 1500 series tags, and process the exhibit IAW its true condition by specifying the appropriate condition code.
- 4.7.5 Exhibit Requested. The decision to perform an exhibit investigation should be supported by objective data. Typically, the Action Point should restrict exhibit investigations to those situations where new failure modes appear, safety of flight defects are suspected, workmanship and/or nonconformance issues, warranty failures on new or newly reworked items, MHAP deficiencies, requests by safety investigation authorities, or as required by specific trend analysis conclusions.

# NOTE

MHAP DR exhibits must be released by the Safety Investigating Officer prior to shipping.

- 4.7.5.1 When an exhibit investigation is required, annotate using the JDRS Preliminary Disposition Report tool, and assign an Investigation Control Number.
- 4.7.5.2 The investigation will be used to verify or determine the specific exhibit deficiency, type of additional data needed to evaluate the condition, whether further analysis is needed for resolution, and to recommend the course of the subsequent actions.

#### NOTE

The purpose of the exhibit investigation is not only to identify the root cause, but also to identify materiel, quality, or process improvements to prevent recurrence.

4.7.5.3 As required, the Action Point requests an evaluation of the deficiency and/or the exhibit by a Support Point that may be composed of internal engineering/technical support, contractor, other logistics or product complex, or other DOD component personnel.

- 4.7.5.4 The Action Point shall establish the necessary contract requirements in coordination with the Contract Administration Office (CAO) or organic support agreements and initiate the request for support point assistance as required.
- 4.7.5.5 Ensure the requirement for investigation support includes a current copy of the DR and all pertinent information from the initial evaluation such as Maintenance Data Collection (MDC) system data, previous deficiency reports and resolution actions.
- 4.7.5.6 Investigation results data shall be obtained through the imposition of the appropriate Data Item Description such as DI-ALSS-81534, or through the use of DLA Form 1227 or equivalent worksheet and will include a requirement for the support point to provide the cause of the failure, applicable corrective actions, and recommended preventive actions to preclude recurrence.
- 4.7.5.7 The Action Point shall monitor the status and question situations impacting timely exhibit processing and investigation. Use the JDRS Interim Report tool to capture the current status.
- 4.7.6 The Support Point shall acknowledge receipt of request for support point assistance, will induct and accomplish investigations as requested by the Action Point and will provide an estimated completion date for the investigation.

The exhibit investigation is intended to validate the reported deficiency, identify cause and provide a recommendation to the Action Point to preclude recurrence. Simply stating the failure without causal analysis and/or recommendations for improvement is inadequate.

4.7.6.1 Upon exhibit, receipt the support point will ensure the timely induction of the exhibit for investigation. For programmed workload where quality is suspect, exhibits should be inducted for investigation ahead of like Management of Items Subject to Repair (MISTR) items in order for production to benefit from the identification and resolution of the quality problem.

# **NOTE**

For additional information on induction processes, refer to AFI 21-102 AFMCSUP, DEPOT MAINTENANCE MANAGEMENT.

- 4.7.6.2 Investigations on organic workload will be scheduled and started within 15 calendar days of exhibit receipt. For non-organic workload, funding, contract requirements, and other special provisions may dictate actual investigation timelines. Investigation standards after exhibit induction are specified in Appendix A, Table A-1. DR Response/Resolution Timelines and include:
- **4.7.6.2.1** Investigating activities will provide (or be directed to provide) interim and/or final replies for MHAP CAT I reports within 15 calendar days of induction, all other CAT I reports within 20 calendar days of induction, and CAT II reports within 30 calendar days of induction.
- 4.7.6.2.2 When an interim reply is provided or the investigation is expected to exceed the above timeline standards, the support point shall provide an estimated investigation completion date.
- 4.7.6.2.3 The Support Point will provide justification and the Action Point will annotate the DR record when investigations will exceed timeline standards via the JDRS Interim Report tool. In the case of Mishap or HAP investigations, the Action Point shall also notify the safety-investigating officer identified in the DR record of the interim update and provide an estimated investigation completion date.

# NOTE

For a Mishap related report, sanitize all information gained through official safety messages. This information is privileged and may not be contained in reports that are not marked privileged as prescribed in AFI 91-204. Information relating to the deficiency involved in a Mishap should be phrased to indicate that it is not a direct quote of the mishap investigation report.

4.7.6.3 Notify the Action Point of changes to the status of the investigation as they occur, e.g., scheduled, inducted, completed, etc. Provide a final reply to the Action Point that addresses the following:

- 4.7.6.3.1 Root cause of the reported condition, including a determination as to responsibility for the deficiency. However, liability is secondary to the evaluation of the condition to determine the root cause of the reported deficiency.
- 4.7.6.3.2 Although it is appropriate to comment on the received condition of the deficient asset, investigation of the reported deficiency is the task to be performed. Do not refuse to investigate the reported deficient condition based solely on the concern that the asset is no longer in the same condition as it was when it left the repair/overhaul/manufacturer's facility. Deficiencies are often discovered during maintenance actions that would be otherwise indiscernible.
- 4.7.6.3.3 Corrective action necessary or taken if the investigation reveals a workmanship, nonconformance, or process control issues; including contractor action if applicable.
- 4.7.6.3.4 Preventive actions or recommendations to preclude recurrence. When investigation reveals a deficiency in technical data, the support point will initiate the appropriate change request, e.g., AFTO Form 22, AFMC Form 202, etc., to effect the necessary change.
- 4.7.6.3.5 Evaluation of current assets including recommendation as to repair/replacement of defective material.
- 4.7.7 When the investigation indicates that the defect is not isolated and may exist in a significant number of items, the Action Point will recommend to the Inventory Management Specialist (IMS) that assets be placed in suspended condition code J or L, pending final investigation and analysis. Action Point or IMS will notify all command supply functions of the defect and direct a stock screening for suspect item(s) as appropriate.
- 4.7.8 If the Action and/or Support Point, during the course of a deficiency investigation, determine that an item is a critical or major nonconformance of manufacturing specifications, design, process, or other contract requirements; whereas continued supply or use could adversely affect safety, health, operating performance or could result in significant maintenance cost; and, the deficient product or service is commonly available; then report the nonconformance in accordance with GIDEP Procedures (see paragraph 4.10.5). The DR will be continued to be worked as per the instructions in this TO. Reporting of this information to the GIDEP community is in addition to the DR process. If the Action and/or Support Point, during the course of a deficiency investigation, suspect that an item nonconformance is due to counterfeit part substitution, refer to AFI 23-101, for detailed processing instructions.
- 4.7.9 The Action/Support point shall complete analysis, act upon recommendations, and distribute investigation results. If the investigation indicates the need for an operational restriction or grounding action, the PM will immediately inform the applicable operating commands.
- 4.7.10 Upon completion of investigation, the Support Point shall process the exhibit in accordance with Action Point direction and/or condition and dollar value. This includes replacing the DD FORM 1575 (Figure 6-3) tag with the appropriate 1500 series form.

#### 4.8 MIP REVIEW BOARDS (MIPRB).

4.8.1 The MIPRB is the Program Manager's key process for management and oversight of the deficiency reporting and resolution process. The review board provides management oversight and visibility of all open reports, their status, and when necessary, energizes resources to ensure timely resolution. It is intended to be a management level, not working level review of DRI&R process status. Working level actions should occur prior to convening the MIPRB. The PM may delegate responsibility to lateral organizations such as Supply Chain Managers to hold review boards on items managed by them but shall maintain visibility of their actions and activities affecting the weapon system/end item. Delegation shall be documented, in writing, to ensure understanding of responsibilities, engineering, and program management authority. Additionally, the PM may consolidate these activities with other meetings/IPTs to assist in the collection, analysis, verification, and categorization of Reliability, Maintainability, and Availability (RMA) data. An example for Test programs may include Joint Reliability and Maintainability Evaluation Team (JRMET), or similar IPT. The JRMET may also review applicable DRs and recommend whether or not the DR should be closed. The Program Manager and the Chief Engineer/Lead Engineer shall develop a local process/documentation to review all DRs and the closing actions.

#### NOTE

For programs and projects where the MIPRB is not appropriate similar processes, such as Software Configuration Control Boards, and other configuration management activities may be established to replace the MIPRB process as long as a charter or guidelines are documented and the intent and oversight provided by these efforts are maintained consistent with the intent of this TO.

- 4.8.2 MIPRB Membership. The PM or the designated, in writing, PM representative chairs the review board and the program Chief Engineer/Lead Engineer shall be a primary member. This ensures PM and Chief/Lead Engineer involvement and awareness of DR resolution status and progress. Membership shall also include, but not be limited to, managers of applicable functional areas within the program office or product group, representatives of the operating and supporting commands, and supply chain managers as appropriate. During the test phase, membership shall also include a representative of the applicable test agency. Representatives of the contractor(s) involved in the development and/or testing may also be invited to attend as necessary.
- **4.8.3** MIPRB Frequency. The MIPRB shall be held quarterly as a minimum, but may be performed as often as necessary to satisfy MIPRB member concerns.
- 4.8.4 MIPRB Responsibilities. The PM shall approve the documented review board charter to include meeting frequency and format, board membership, and performance measures.
- 4.8.4.1 The designated Screening/Action point will develop an agenda and distribute it to each board member at least one week before the MIPRB. As a minimum, the agenda shall include:
- 4.8.4.1.1 A review of previous minutes/action items.
- 4.8.4.1.2 A review of all open CAT I and MHAP DRs by status, schedule and impact. Special emphasis shall be placed upon ensuring risk and impact mitigation efforts of CAT I and MHAP DRs throughout resolution.
- 4.8.4.1.3 For aviation systems: Perform a status review and trending of CSI deficiencies.
- 4.8.4.1.4 A summary review of all open "Urgent Priority" CAT II DRs.
- 4.8.4.1.5 A summary review of all open DRs exceeding the resolution timeline goal and the establishment of a revised resolution timeline.
- 4.8.4.1.6 A summary review of all DRs/MIPs resolved since the previous review board. This review is an administrative review only to affirm concurrence with the recommended action. If no objections are noted, the review shall result in formal concurrence of the resolution action. If a non-concurrence is noted, the board will reopen the DR; refer to paragraph 4.9 for resolution of disagreements.
- 4.8.4.1.7 A status review of all open DRs/MIPs awaiting funds, fix verification and engineering change proposal to ensure operating command visibility and intended course of action is on track. This review may be limited to ensuring intended actions are on schedule and not overdue.
- 4.8.4.1.8 Factors suggesting review consideration might include a review of all open DRs/MIPs where new or significant information becomes available, changes to the DR/MIP priority, completed actions/status changes, need for further MIPRB direction, periodic progress updates, etc. However, individual CAT II routine DRs do not require MIPRB consideration if resolution is on track and if there are no issues requiring board member discussion.
- 4.8.4.1.9 A review of any DR trend data indicating potential systemic causes.
- **4.8.4.2** The review board shall use minutes to document attendance, DRs/MIPs reviewed, completed actions/status changes and other significant events.
- 4.8.4.3 The appropriate Action Point will provide an update of actions to the affected JDRS record within 14 calendar days of the review board.

#### 4.9 RESOLUTION OF DISAGREEMENTS.

- 4.9.1 Any board member may non-concur with the closure recommendation of any DR/MIP during the MIPRB. If the disagreement is not resolved during the meeting, the DR/MIP shall be reopened if closed/remain open and placed in a "dispute" status. The non-concurring organization will then have 30 calendar days to present complete rationale and supporting documentation for reconsideration by the MIPRB chairman. If the non-concurring rationale and supporting documentation is not received within 30 calendar days, the DR/MIP will be closed.
- 4.9.2 Every effort shall be made to resolve disagreements at the lowest possible level. When significant disagreements cannot be resolved, the DR/MIP will remain in the dispute status and be elevated, as necessary, to final arbitration for resolution.

4.9.3 Disagreement and resolution actions shall be documented within the disputed record of JDRS. Final resolution of any disagreements will be the responsibility of the MIPRB chairman.

# 4.10 DR STATUS, RESOLUTION AND CLOSING.

4.10.1 The MIPRB member reviews the resolution actions and places the DR/MIP in a status category. The Action Point annotates the status in the DR record AFTER concurrence of MIPRB membership into one of the status categories.

#### NOTE

Open DRs shall be managed to ensure investigation and resolution actions are appropriate and timely.

- 4.10.1.1 Open DRs awaiting Engineering Change Proposal (ECP) or fix verification shall be reviewed quarterly to ensure they are on schedule.
- 4.10.1.2 Open Awaiting Funds DRs that have a corrective action determined and verified, but due to funding or schedule constraints are not planned for correction, must be tracked on the program's unfunded priorities list and not in JDRS, the DR should be Closed AR Acceptable Risk. Include an annotation in the remarks section indicating that the corrective action is now being tracked on the program's unfunded priorities list. The risk associated with that DR must be formally accepted by the individual in the chain of command with the authority to accept a risk at that level.
- 4.10.2 DRs must be recommended to the MIPRB for status change. All of the identified conditions should be used to validate the Engineer's recommendation to close the DR.
- 4.10.3 Finalize the DR/MIP investigation report and update the JDRS record with closing action accordingly. When closing the report, provide an explanation to the Originating Point and close the report within 10 calendar days after receipt of final investigation results or conclusion of MIPRB. The closing action shall include a response indicating:
- 4.10.3.1 Responsibility for the deficiency. Indicate who was responsible for the deficiency, e.g., Contractor, Procurement Activity, etc., as determined by the Action Point and supported by investigation/support point findings.
- **4.10.3.2** The Severity of Defects Noted. State the defect severity as one of the following: Critical, Major, Minor, unknown, or no defect found and annotate the corresponding code in the final report.
- 4.10.3.3 Broad and Detailed Cause of Defect Codes. Document the cause of the reported deficiency and annotate in the final report. As an example: A report stated that fluid was leaking from a landing gear because the seal was distorted. Upon further investigation, it was determined that the fluid itself was contaminated during its manufacture causing the distortion to the seal. The root cause was contaminated fluid, which is reflected as a Broad Cause of Defect Code "N", Contractor Noncompliance and a Detailed Cause Code "1AH" Manufacturing process. Codes can be found in DLAR 4155.24 and internal in JDRS.
- 4.10.3.4 Corrective action taken. State what was done to correct the root cause of the reported or discernible deficiency and actions taken to prevent recurrence.
- **4.10.3.5** Results of stock screening. Annotate the results of, or necessity for stock screening in the final report. Submit a stock screening alert to all appropriate organizations when applicable, if not applicable, so state in the final report.
- 4.10.3.6 Materiel disposition. Determine and annotate the disposition of the defective materiel at the completion of exhibit investigation using the JDRS Material Disposition Tool.

#### **NOTE**

Final Materiel disposition is required whenever an exhibit is identified as available, regardless of the subsequent investigation.

- **4.10.4** Closed Investigation Completed. The deficient condition has been investigation and it has been determined that no further action needs to be accomplished.
- 4.10.4.1 Closed CV Corrected and Verified. The corrective action has been implemented and verification through retest, analysis or inspection has shown that the corrective measure was effective in removing the deficiency.

- 4.10.4.2 Closed AR -Acceptable Risk. The deficient condition, reported failure or recommended enhancement is valid, accepted, or recognized; but corrective action cannot be justified or will not be pursued. Determination will be made using objective criteria and supported by engineering through analysis, risk management, and/or acceptable levels of quality determination. Factors may include, but are not limited to:
- 4.10.4.2.1 Deficiency or recommended enhancement is low risk and investigation or correction will have limited or negative impact to cost, schedule and/or performance.
- 4.10.4.2.2 Reported deficiency is for information only, such as a routine warranty failure; further evaluation will not be pursued as it is low risk and investigation or correction will have limited or negative impact to cost, schedule and/or performance.
- 4.10.4.2.3 Deficiency is inherent in the design and acceptable workarounds are available.
- 4.10.4.2.4 Could not duplicate deficiency. The corrective action has been implemented and verification though retest, analysis or
- 4.10.4.2.5 Deficiency or recommended enhancement not warranted due to life cycle or operational constraints.

Deficiencies closed under this criterion may be reviewed by program offices and lead commands to be considered for improvement programs or inclusion in future requirement definition.

- 4.10.4.3 Closed E Enhancement. This status is used as a requirements enhancement that has been analyzed and determined to have little or no impact to OSS&E under current requirements. The desired enhancement has been transferred to the appropriate requirements determination authority for potential consideration/adoption.
- 4.10.4.3.1 Condition is inherent in the design and acceptable workarounds are available.
- 4.10.4.3.2 Recommended enhancement not warranted due to life cycle or operational constraints.

#### **NOTE**

Recommended enhancements closed under this criterion are formally transferred to program offices and lead commands to be considered for inclusion in future requirement definition. Transfer actions will be completed and documented in the DR closing summary prior to closing.

- 4.10.4.4 Closed A Administratively Closed. This status is used when the reported deficiency is no longer applicable. No further administration required for DRs in this status. Reasons may include:
- 4.10.4.4.1 Invalid submissions;
- 4.10.4.4.2 Elimination of requirements or conditions which drove the deficiency or reports erroneously received and subsequently transferred to the correct reporting system.
- 4.10.5 GIDEP Reporting. Report critical and major nonconformance defects on commonly available supplies and services to GIDEP through the Center GIDEP Representative. The Department of Defense GIDEP Operations Manual SO300-BTPRO-010, is located at <a href="http://members.gidep.org/mgmt/opmanual/index.htm">http://members.gidep.org/mgmt/opmanual/index.htm</a>. Submit a GIDEP alert when applicable; if not applicable, so state in the final report.

# 4.11 CREDIT REVERSAL PROCEDURES.

**4.11.1** The Material Support Division process provides instant credit to customers returning a defective part with a valid deficiency report (PQDR). However, if it is determined that a customer has made an error in either performance expectations or application of DR submittal criteria, a credit reversal is appropriate.

Investigation results such as no trend established, isolated case, item previously investigated, known condition, or no defect found will not be used to support a request for credit reversal. Before any credit reversals are approved the Originating Point will check with the issuing supply unit to see if the part is part of the CPFH program and funded through the Air Force Cost Analysis Improvement Group (AFCAIG). If this part was paid for by this program then no credit reversal will be issued.

- **4.11.2** When a credit reversal is justified, Action Point will annotate the rationale for the request for credit reversal in the closing report.
- **4.11.2.1** The Originating Point will use the JDRS Technical Dialog tool to notify the Action Point of their concurrence or non-concurrence with the credit reversal request and any information to support a non-concurrence reply.
- 4.11.2.2 If it is agreed that a credit reversal is warranted, the Originating Point will notify Base/Depot Supply to initiate reverse post procedures to effect the credit reversal and shall complete the JDRS Credit Reversal workflow step.
- 4.11.2.3 When a request for additional data has been made to the Originating Point (use e-mail, FAX, or phone in addition to documenting in the database record) and adequate data for proper report analysis is not provided within 15 calendar days of the request. However, this does not include closing of a report for lack of contract or requisition numbers related to USAF procured DLA items.

#### **NOTE**

The contract number or requisition number may not be available to the Originating Point; excluding this information does not justify a credit reversal.

- 4.11.2.4 The exhibit cannot be evaluated because it was not shipped IAW the disposition instructions.
- **4.11.3** A credit reversal should be requested whenever a DR is found to be invalid. The following are examples of when a credit reversal is appropriate:
- **4.11.3.1** Item failed after designed use or following a reasonable period of service. When possible, attempt to quantify the performance expectations to eliminate further inappropriate reporting.
- 4.11.3.2 DR exhibit has been altered, e.g., seals broken or items cannibalized. However, this does not include authorized organizational maintenance such as adjustments to settings, fittings, etc. Units will document any authorized maintenance performed in an attempt to verify the deficiency.
- 4.11.3.3 When a request for additional data has been made to the Originating Point (use e-mail, FAX, or phone in addition to the JDRS Technical Dialog tool) and adequate data for proper report analysis is not provided within 15 calendar days of the request. However, this does not include closing of a report for lack of contract or requisition numbers related to USAF procured DLA items.
- 4.11.3.4 The exhibit cannot be evaluated because it was not shipped IAW the disposition instructions.
- 4.11.3.5 The DR does not meet the submittal criteria noted in Chapter 1 and Table 1-3 of this TO.

# 4.12 DR/MIP RESPONSE/RESOLUTION PERFORMANCE METRICS.

- 4.12.1 Performance measurements are necessary to measure the health of the USAF Deficiency Reporting Investigating and Resolution processes. In addition to the metrics and indicators available in Appendix A, organizations should consider specific measures of performance to evaluate potential constraints, weapon system health, and the effectiveness of their implementation of the TO procedures.
- 4.12.2 Center SPOCOs and Program Managers will develop and use local checklists and metrics to establish performance measures for responding to and resolving deficiencies. Measures should include a review of the results of the ALC organic and DMISA contacting workload and the Program Managers to verify that results of investigation and actions taken are actually driving improved system/component reliability.

- 4.12.3 Appendix A Timeline standards are used to assist in determining if DR investigations are on schedule. The category, priority, and complexity of the deficiency, among other requirements, impact the timeliness of the investigation. It is understood that individual investigation and resolution actions may exceed timeline standards; however, these situations should be monitored to ensure that the investigation remains active and that realistic suspense's are established based upon necessary actions.
- 4.12.4 Performance measures allow the identification and correction of problems found working the process flow for deficiency reporting. They allow users to reach a logical resolution, analysis of the timelines and a determination of constraints. Process flow(s) may include, but are not limited to: initial evaluation, exhibit disposition, in-depth analysis/tear-down investigation, review boards, recommendations, engineering action, engineering change proposal, prioritization, funding, fix verification, and closing.
- **4.12.5** The impact of the deficiency on OSS&E assurance will be the primary driver of investigation/resolution processes. It is understood that existing contractual issues, funding, etc., may affect recommended standards/guidelines, thus increasing the time required to reach successful closure/resolution. However, DRs should be prioritized by the PM and using Command according to risk and impact.

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# **CHAPTER 5**

# TECHNICAL COORDINATION PROGRAM (TCP) AND INTERNATIONAL ENGINE MANAGEMENT PROGRAM (IEMP) PARTICIPANTS DEFICIENCY REPORTING AND INVESTIGATING PROCEDURES

# 5.1 PURPOSE.

The purpose of this chapter is to provide specific guidance, beyond that contained in Chapter 1, for management of DRs submitted by TCP/IEMP Participants. Foreign Military Sales (FMS), Security Assistance (SA), and European Participating Air Force (EPAF) countries can be participants. Current participants can take action to resolve deficiencies or discrepancies on hardware, software, mission critical computer systems, vehicle, clothing, and textiles.

#### 5.2 SCOPE AND APPLICABILITY.

- 5.2.1 The procedures of this chapter are applicable to participants of the TCP/IEMP governed by AFMAN 16-101 INTERNATIONAL AFFAIRS AND SECURITYASSISTANCE MANAGEMENT, Letters of Offer and Acceptance (LOA), and/or individual FMS case provisions such as TCP/IEMP agreements, and Multi-National Configuration Management Plan agreements. The intent is to allow countries (Table 5-4) that operate US manufactured systems to report conditions affecting OSS&E according to specific criteria.
- 5.2.1.1 International Engine Management Program (IEMP): The IEMP is the single point of contact for members on all applicable engine follow-on logistics and engineering/technical issues and is responsible for managing and monitoring the follow-on logistics and engineering/technical services for Component Improvement Program (CIP) participating countries.
- 5.2.1.2 Technical Coordination Program (TCP): The USAF manages aircraft and missile TCPs for eligible Security Assistance countries. The TCPs are the single point of contact for the participant countries for all logistics and engineering/technical issues. TCPs provide follow-on support to continue improving serviceability, maintainability, and reliability (improved parts, maintenance techniques, increased inspection and overhaul intervals, modifications, etc.). Separate TCPs are conducted for different types of aircraft and missiles. All USAF managed TCPs are conducted under a Letter of Agreement (LOA) with the prime Air Logistics Complex (ALC).
- 5.2.2 Countries not participating in either the TCP or IEMP must file a Supply Discrepancy Report (SF364) for deficiency resolution, IAW AFMAN 16-101, para 5-10.
- 5.2.3 Deficiency Reporting Tools. TCP/IEMP program offices and participants are encouraged to use electronic means to submit deficiency reports and digitized supporting information. The USAF DRI&R program office will assist in the implementation and training on the use of these processes upon request.
- 5.2.3.1 Support programs or organizations, other than TCPs and IEMPs, available to countries involved in the purchase and sustainment of USAF defense articles may submit deficiency reports on a FMS originator's behalf when direct submittal is unavailable. FMS originators may submit a SF 368 to support programs or organizations associated with the management of the discrepant article if an appropriate TCP or IEMP is unavailable. The receiving organization will confirm receipt of the SF 368 and input the information into JDRS. The receiving organization is responsible for closing deficiencies in JDRS and reporting resolutions to the originator.
- 5.2.3.2 Supporting Data Technical Data. Originating members are encouraged to provide digital supporting data to the screening point for inclusion with the deficiency report to substantiate the report and aid in the resolution process. JDRS allows supporting data to be added to the deficiency report record by the TCG/IEMP Screening Point.

#### 5.3 SECURITY CLASSIFICATION.

DRs are subject to the appropriate security classification and Encrypt For Transmission Only (EFTO) procedures of AFI 31-401. INFORMATION SECURITY PROGRAM MANAGEMENT.

#### 5.4 DEFICIENCY REPORTING CRITERIA.

- 5.4.1 Deficiencies will be reported to the appropriate TCP/IEMP (Reference Table 5-2 and Table 5-3). Only items procured through FMS/EPAF cases are to be reported as a DR.
- 5.4.1.1 To accommodate return instructions and logistical/financial adjustment tracking, participants will use the SF 364, SDR process to report quality deficiencies.
- 5.4.1.2 Specific criteria for these situations are defined in AFMAN 16-101 and AFI 23-101, containing Air Force policy and procedures for SDRs.
- 5.4.2 Conditions to be reported include:
- 5.4.2.1 Deficiencies that may be attributable to errors in workmanship, nonconformance to applicable specifications, drawings, standards, processes or other technical requirements during design, manufacture, repair, modification, or maintenance.
- 5.4.2.2 Deficiencies, i.e., failure of parts or components prior to a reasonable period of service (See paragraph 3.4.1.2.2). These deficiencies shall be identified according to their impact to mission and/or safety and overall performance trends.

#### **NOTE**

If the sole purpose in submitting a DR is to obtain a replacement item or credit, submit a SDR to the Air Force Security Assistance Center (AFSAC) using the SF 364 process IAW AFMAN 16-101, para 5.10.

- 5.4.2.3 Deficiencies resulting in a report of an error, omission, or enhancement in the statements or instructions that comprises a computer program for a system or component. The deficiency may consist of syntax, logic, or other discrepancies that cause the program to fail or inadequately perform the intended functions.
- 5.4.2.4 Known or suspected causes of mishaps or safety incidents. All mishap/safety-related DRs shall be coordinated with the local safety office.
- 5.4.2.5 Acceptance inspection discrepancies discovered during acceptance inspections performed on aircraft, engines, engine modules/major assemblies, support systems, and equipment. Reportable discrepancies are those that are attributed to non-conformance to applicable specifications, drawings, standards, agreements, technical orders, work packages, etc., resulting from workmanship or incomplete/incorrect processes during manufacture, repair, modification, or maintenance.
- 5.4.2.6 Recommendations to correct a condition that will improve a system's operational effectiveness or suitability, but is not required for successful mission accomplishment. To ensure thorough consideration, enhancements that improve operational effectiveness and suitability shall be fully justified by the Originating Point.
- 5.4.2.7 See Chapter 1 for attributes that may affect OSS&E, category and priority determination as well as conditions not to be reported.

#### 5.5 KEY RESPONSIBILITIES.

- 5.5.1 Chapter 1 defines the key responsibilities for users, additional processes further defined as necessary below.
- 5.5.2 Originating Point. The Originating Point submits the validated report to the TCP/IEMP Screening Point (reference timelines in Appendix A) within the prescribed time tracking DR progress/resolution; and acts as the focal point for communications/interaction with the TCP/IEMP Screening Point.
- 5.5.3 Screening Point. The Screening Point is the designated TCP/IEMP focal point for the receipt and processing of DRs.
- 5.5.4 Action Point. The Action Point performs Materiel Improvement Project Review Board (MIPRB) duties as assigned, involving Screening Point in all actions.

#### 5.6 SUBMITTING ORGANIZATION TASKS.

5.6.1 This section provides a uniform method to identify and report deficiencies to the responsible TCP or IEMP organization responsible for determining the cause, taking corrective action, and preventing recurrence. The technical

coordinator will input DRs into JDRs for foreign military, and due to the dynamic nature of the IT security environment access to the JDRS will be granted on the prevailing DoD and service regulations in affect at the time of application. In addition to the information found in Chapter 3 of this TO the Originator and Originating point include:

- 5.6.2 Originator Responsibilities: The Originator is a function within the submitting organization that discovers the deficiency, identifies its impact, and initiates reporting and exhibit processes. Specifically the Originator shall:
- 5.6.2.1 Ammunition items will be placed in condition code "J"

#### **NOTE**

For Test Measurement and Diagnostic Equipment (TMDE) deficiencies (formerly PME), if the discoverer of the deficiency is not the owner of the equipment, the Originator (discoverer) will prepare a draft report, tag the exhibit with a completed DD Form 1575 (Figure 6-3) and DD Form 2332 (Table 6-1 and 6-2). The equipment and documents will be returned to the owning organization who will in turn submit the report to the Originating Point.

- 5.6.2.2 Reporting Deficiencies on TCTO Kits. When a deficiency is noted against a TCTO kit, the deficiency will be reported against the individual TCTO and kit number and reference the NSN of the individual deficient item being processed as the exhibit. Unless specifically directed by the TCP/IEMP, it is not necessary to have the entire kit as an exhibit, only the deficient item within the kit.
- 5.6.2.2.1 In addition to a detailed problem summary, the DR shall list the Type of TCTO, Command Document Control Number, TCTO Title, TCTO Number, Data Code Number, Kit Data Code Number, System/Commodity Designation and Serial Number on which the TCTO was being accomplished, and state whether the TCTO was verified or if verification was waived.

#### **NOTE**

Deficiencies shall only be reported on TCTO kits; the AFTO FORM 22 will be used to report all other TCTO deficiencies.

- 5.6.2.2.2 All parts furnished must fit properly without force, except where noted.
- 5.6.2.2.3 All special tools and test equipment provided must do the job for which intended.
- 5.6.2.2.4 After completion of the TCTO, the modified system or commodity must perform to the criteria prescribed.
- 5.6.2.2.5 DRs will not be submitted against the TCTO Kit for component failures that occur after the successful accomplishment of the TCTO, instead, a DR may be submitted against the failed item. Reference the TCTO information in the problem summary.
- 5.6.3 Originating Point Responsibilities. The Originating Point is a function within the originating country. The Originating Point should be knowledgeable of all Originator responsibilities, manage the locally established deficiency reporting program, serve as the focal point for all submitting organization tasks, and ensure exhibit handling and processing according to this TO, local procedures, and TCP/IEMP instructions.

#### **NOTE**

If the report does not meet DR submission criteria, determine if additional information is required or if an alternative process should be used.

5.6.4 Verify the Security Classification of the DR and handle IAW established procedures. DRs are subject to the appropriate security classification and Encrypt For Transmission Only (EFTO) procedures. Further information on classified information can be found in paragraph 2.3.1.7.

#### **NOTE**

Failure to make all the required entries on DD Form 1348-1A or -2 may result in the loss of the exhibit and subsequent denial of any reimbursement request resulting from the loss of the exhibit.

- 5.6.5 Determine if the deficient item will be locally repaired. Do not attempt to repair DR exhibits unless authorized by the TCP/IEMP Screening Point. If the deficient item is locally repaired and the failure meets the DR submission criteria in Table 1-2, a DR may be submitted for historical purposes.
- 5.6.5.1 If an obvious workmanship/manufacturing deficiency exists, the Originating Point, with the assistance of the Installation Supply Support Activity should forward the report to the TCP/IEMP Screening Point by the appropriate means and within the prescribed time.
- 5.6.6 Transmitting DR. CAT I and Mishap DRs will be submitted by priority precedence. CAT II DRs shall be submitted by routine precedence. DRs that contain classified information must be transmitted by secure communications network. Handle reports containing such information IAW AFH 31-401. The following information is provided to assist the Originating Point in determining receiving addresses:
- 5.6.6.1 The DR will be addressed to the applicable TCP/IEMP as identified in Table 5-1 and Table 5-2.
- 5.6.6.2 Information copies of the DR will be as an information addressee to the PD, IM, or EIM of the end item or system on which the deficient item is installed.
- 5.6.6.3 Mishap CAT I DR. The Mishap CAT I DR will be routed to the applicable TCP/IEMP as identified in Table 5-1 and Table 5-2.

#### **NOTE**

The PM is responsible for the resolution of a Mishap CAT I DR and the necessary collaboration with the IM/ES who is responsible for the deficient item and other support agencies.

- 5.6.6.4 Repeat Deficiency Report Routing. Repeat reports will be routed to the same addressees that received the original report and to any addressees that are later identified as requiring the report information. A new report control number will be assigned to the report and it will be identified as a "Repeat DR" in the subject of the DR correspondence. If the circumstances of the deficiency were significantly different from previous reports or, if additional facts or details have been revealed during local investigation, include all available information (i.e., photos, inspection results) of the facts.
- 5.6.6.5 Status Inquiries. The Originating Point will establish a process to query and follow-up on the progress, status, and resolution of the DR after submittal to the TCP/IEMP Screening Point.
- 5.6.6.5.1 The Originating Point will hold the exhibit in a secure area until the disposition instructions have been provided by the appropriate TCP/IEMP Screening Point. Follow-up with the TCP/IEMP Screening Point if exhibit disposition instructions are not received within 60 calendar days.
- 5.6.6.5.2 When Exhibits are Requested. A copy of the completed forms must be forwarded to the screening/Action Point for tracking purposes. The DD Form 1348-1A or -2 will be clearly marked "FMS EXHIBIT DO NOT PLACE IN USAF SUPPLY", CONDITION CODE "Q". Stencil in letters at least one inch high on two sides. Mark the shipping container with the name, address, special instructions provided in the disposition instructions and extension of the individual in the investigating organization to be contacted upon receipt of the exhibit. Also, include the document number of the original requisition, case numbers for the exhibit being returned to a contractor. Ensure that the DD Form 1348-1A or -2 contains the words "OPEN IN THE PRESENCE OF A US GOVERNMENT REPRESENTATIVE."

# NOTE

When an exhibit investigation is requested, the originating country will specify the desired final exhibit disposition instructions after the completion of the investigation, for example: return as-is, replace, repair, or condemn. Document the instructions on DD Form 1348-1A or -2, block DD, and on the DD Form 2332.

- 5.6.6.5.2.1 Package, Tag and Process the Exhibit. When releasing or shipping the exhibit, the holding activity will ensure that one copy of the completed DD Form 2332 (Figure 6-1 and 6-2) is attached to the exhibit according to the disposition instructions. Attach an envelope containing a printed copy of the DR to the DD Form 2332 (Figure 6-1 and 6-2). This copy of the DD Form 2332 (Figure 6-1 and 6-2) will be packed with the DR. Assure that all tags, markings and other documentations not related to the present condition of the exhibit are removed.
- 5.6.6.5.2.2 Attach a second completed copy of the DD Form 2332 (Figure 6-1 and 6-2) to the shipping container near the identification markings along with a copy of the DR. When the exhibit is stored outside, the DD form 2332 (Figure 6-1 and

- 6-2) should be enclosed in a clear plastic envelope with the front of the form visible. In the "REMARKS" block of the release (shipping) document, enter "DR EXHIBIT", followed by the RCN from block 1 of the DD Form 2332 (Figure 6-1 and 6-2) and the MIP number provided in the disposition instructions, if applicable.
- 5.6.6.5.3 If no initial response or update is received from the TCP/IEMP Screening Point by the status due date, the Originating Point will contact the Screening Point to receive updated status.
- 5.6.7 Resolution of Disagreements. Countries may non-concur with DR Closure. The non-concurring country shall provide complete rationale and supporting documentation to the TCP/IEMP within 30 calendar days of the DR closing. Every effort will be made by the TCP/IEMP to resolve the contested closing action at the lowest possible level. When significant disagreement remains after the rebuttal, the DR will remain open and be elevated to the next management level of the TCP/IEMP for resolution.

#### 5.7 DEFICIENCY REPORT PROCESSING, INVESTIGATION AND RESOLUTION.

- 5.7.1 This section establishes responsibilities and procedures for TCP/IEMP deficiency report (DR) processing, investigation, management, and resolution. Screening Points ensure systematic processes are established consistent with the requirements of this TO and OSS&E baselines, to investigate and resolve TCP/IEMP reported deficiencies.
- 5.7.2 The TCP/IEMP Screening Point. The Screening Point for TCP/IEMP participants will be assigned within the applicable TCP/IEMP. The Screening Point receives the report from the participant country, inputs the data into JDRS, monitors and performs follow-up through deficiency resolution. The SPOCO determines the responsible organization that will investigate the deficiency.
- 5.7.2.1 The Screening Point will acknowledge receipt of the DR and, through coordination with the assigned Action Point, will provide exhibit disposition instructions to the Originating Point. Disposition instructions will be provided within five calendar days for a CAT I DR and 15 calendar days for a CAT II DR. The Screening Point will put a comment in the DR submittal referencing that this is a "FMS Exhibit DO NOT Place in USAF Supply". If interim exhibit disposition instructions are furnished, the holding activity will be given a projected date for receiving updated instructions.

#### **NOTE**

To facilitate the tracking of TCP/IEMP exhibits, the AFSAC Supply Discrepancy Report (SDR) Office will be furnished a copy of the exhibit request message and be an INFO addressee on correspondence until completion of the investigation and the final disposition of the exhibit.

Table 5-1. HQ AFSAC Supply Discrepancy Report (SDR) Office Addresses

MAIL ADDRESS:	Email ADDRESS for Customer Service:
AFLMC/WFALB	Air.Force.FMS.SDR.Automation@us.af.mil
5454 Buckner Road	
Wright Patterson AFB OH 45433-5332	

- 5.7.2.2 When misrouted DRs are received, transfer the DR to the responsible TCP/IEMP Screening Point as soon as possible, but not later than one calendar day for CAT I DRs and five calendar days for CAT II DRs. Ensure Originating Point and other applicable addressees are notified of the transfer.
- 5.7.2.3 Monitor the deficiency investigation through closure. Request information as required from the Action Point and update the Originating Point as status changes occur. As a minimum, provide the Originating Point a status update for all open DRs each quarter.
- 5.7.2.4 Be sensitive to other deficiencies uncovered during the investigation and initiate further action as required. Advise the Originating Point to screen for suspect material when applicable.
- 5.7.3 Action and Support Points. Responsibilities of Action and Support points are specified in Chapter 1. The following is provided as additional emphasis or as an exception to existing procedures.

- 5.7.3.1 The Action Point shall direct all requests for additional information and or clarification to the TCP/IEMP Screening Point.
- 5.7.3.2 If a disagreement exists as to the report category, seek consensus with the TCP/IEMP Screening Point prior to changing the report category. If the Screening Point is unable to reach agreement with the Originating Point, the PM will establish the report category.
- 5.7.3.3 CAT I DR. All CAT I DRs will be acknowledged as soon as possible, but not to exceed 1 calendar day of receipt. The Program Manager of the deficient system/item shall establish procedures to ensure that an immediate response is made to a CAT I DR; that the Chief/Lead Engineer approves the action: and that the response ensures the safe operation of the system/item.
- 5.7.3.3.1 Acknowledgement will be in an official medium with the appropriate urgency to provide notification to the Screening Point and other affected organizations. The Screening Point in turn will notify the Originating Point.
- 5.7.3.3.2 Acknowledgement may be provided in a work-around for a maintenance activity; restrictions to the usage of the item, such as aircraft grounding or flight envelope restriction; and/or an inspection TCTO to determine the full impact of the CAT I condition.
- 5.7.3.4 The Support Point performs the investigation of the report if requested by the Action Point and provides exhibit disposition instructions, updates, and investigation results to the Action/Screening Points.
- 5.7.4 Exhibit Disposition, Technical Investigation and Analysis. Disposition instructions are required for all DR exhibits whether they are required for the evaluation of the problem involved or to be processed according to their condition. The following guidelines provide unique TCP/IEMP processes required to determine exhibit disposition, investigation funding, analysis and closing. All stakeholders, i.e., Originators, Originating Points, Screening Points, Action and Support Points shall use these procedures to identify and determine exhibit disposition, investigation funding, analysis and closing actions.

#### **NOTE**

For Action and Screening Points, these processes are in addition to, or when conflicting, replace those outlined in Chapter 4.

- 5.7.4.1 Criticality/Payback Potential of the Investigation. Receipt of a DR is not (of itself) sufficient reason for establishing an investigation project. The determination criteria should take into consideration such things as DR category, the criticality of the item, weapon system degradation, usage trend, historical computer system data, previous DR, etc.
- 5.7.4.1.1 Each TCP/IEMP organization will formulate criteria for the establishment/continuation of an investigation project. This criterion may include the action/support point.
- 5.7.4.1.2 An investigation should be established when there is a high payback potential for the country, such as when there is increased usage trend of an item, decreased Mean Time Between Maintenance (MTBM), decreased mission capability, etc.
- 5.7.4.1.3 Normally, items with a low payback potential should not be investigated.
- 5.7.4.2 Funding of the DR Investigation. The appropriate USAF technical and engineering activity will make a determination as to the funding of the investigation. DR investigations will be funded based on the following criteria:
- 5.7.4.2.1 If the investigation/analysis will benefit the United States Air Force (USAF), the USAF will fund one investigation.
- 5.7.4.2.2 If the investigation/analysis determines the deficiency applies to parts or components still under warranty (or covered under latent defects clause) by the manufacturer, claims will be processed through the appropriate Air Force contracting office to the manufacturer.
- 5.7.4.2.3 If the investigation/analysis is determined to be of no benefit to the USAF, the Action Point provides estimated cost of the investigation/analysis and exhibit shipping/disposition instructions to the Screening Point as funding must be provided by the country(ies) receiving the benefits.
- 5.7.4.2.4 The TCP/IEMP for the applicable equipment on which the DR is submitted, may request funds from the countries AFSAC country case manager.

- 5.7.4.2.5 When AFSAC agrees to fund the effort and provides a fund citation, authorization to conduct analysis will be provided to the investigative activity. Funding will only be provided for the actual number of hours spent on the DR. The TCP/IEMP will also indicate in the authorization document (letter or message) the appropriate fund citation that must be reflected on the billing document.
- 5.7.4.2.6 The country and the applicable AFSAC country case manager will be advised that funds (estimated amount) are required before further action on the DR can be taken. Normally, a "G" case will be used for funding this effort. When case funds are made available, the investigative activity will process the DR according to this chapter, and standard USAF procedures, and will advise the TCP/IEMP of the investigation results.
- 5.7.4.2.7 For exhibit requests pertaining to DRs of an emergency/urgent nature (loss of life, injury to personnel, aircraft fleet grounding, etc.), Teardown Deficiency Report (TDR), funding approval, and funds cite should be obtained by telephone (confirmed by message or letter) to facilitate the expeditious processing, shipping, and analysis of the exhibit.
- 5.7.4.3 Exhibit Disposition. When a country is requested to submit an exhibit to be used for deficiency analysis, charges for transportation of the exhibit will be paid by the submitting country. Disposition instructions for the exhibit (return as-is, repair, or condemn) will be recorded on DD Form 1348-1A or -2 in block DD, and on DD Form 2332. Failure to provide timely disposition instructions may delay the investigation process.
- 5.7.4.4 The Originating Point will notify the Screening Point as to when the exhibit will ship and send the Screening Point a copy of the exhibit shipping document for exhibit tracking. Failure to comply may result in the loss of the exhibit and subsequent denial of any reimbursement.
- 5.7.4.4.1 The Screening Point will initiate follow-up action of the Originating Point's notice of shipment/shipping document, if the exhibit is not received in 25 calendar days of the first request.
- 5.7.4.4.2 The Screening Point will initiate a second follow-up action of the Originating Point's notice of shipment/shipping document, if the exhibit is not received in 25 calendar days of the second request.
- 5.7.4.4.3 3 If the exhibit is not received within 25 calendar days of the second follow-up, the DR will be closed due to lack of exhibit and retained as historical data.
- 5.7.4.4.4 Upon notification of exhibit receipt by the Defense Distribution Center (DDC) receiving and storage activity the action/support point will obtain the exhibit from the exhibit storage organization and ensure the exhibit remains in an "as received" condition (crated and boxed) until released for investigation. The investigator will ensure that a copy of the DD Form 1348-1A or -2, signed by a USG representative, is forwarded to the TCP/IEMP Screening Point and AFSAC/SDR. USAF liability for the material begins when an authorized DoD representative signs for the exhibit. The DD Form 1348-1A or -2, 1575 (Figure 6-3), and DD Form 2332 (Figure 6-1 and 6-2) must remain with the exhibit throughout the entire investigation process and until final exhibit disposition.
- 5.7.4.4.5 Upon completion of analysis, the Support Point shall process the exhibit according to instructions on DD Form 2332 (Figure 6-1 and 6-2), i.e., repair, return, or condemn and the Action Point shall inform the TCP/IEMP Screening Point as to the status of the exhibit through final disposition by documenting the appropriate fields within JDRS.
- 5.7.4.4.6 If an exhibit (non-consumable) is in a condemned condition after completion of the investigation, and the country has not previously provided specific disposition instructions, the country will be contacted for disposition instructions. If other than routine disposition of the condemned exhibit is requested by the country, transportation charges will be funded by the country. Exhibits that are serviceable or reparable after analysis will be processed in accordance with the country(ies) instructions as specified in their message and on DD Form 1348-1A or -2 and DD Form 2332.
- 5.7.4.4.7 If as a result of the investigation, the USAF or contractor accepts responsibility for a deficiency, the action/support point will pursue actions to have the materiel repaired/replaced.
- 5.7.4.5 Closing Report.
- 5.7.4.5.1 A DR is considered closed if not involved in resolution of disagreement proceedings and any of the following conditions are met:
- 5.7.4.5.1.1 When the results of DR investigation cause a configuration change (either hardware or software), the DR will be closed when the proposed solution has been approved and a determination has been made that verification is not required.

- 5.7.4.5.1.2 If the DR investigation results only require a change to technical data, the DR will be closed when the Publication Change Request has been approved and forwarded to the Publication Functional Office.
- 5.7.4.5.1.3 When the DR investigation results in a quality problem being identified, corrective action has been initiated and stock screening and/or removal and replacement action has been started, if required.
- 5.7.4.5.1.4 Corrective action cannot be justified (due to cost restraints, life cycle, low risk or operational constraints) or if not required.
- 5.7.4.5.1.5 When the investigation depends upon the availability of an exhibit and it is not received or is unavailable.
- 5.7.4.5.1.6 When a contractor change has been initiated and the change is approved.

# 5.8 DR/MIP RESPONSE/RESOLUTION PERFORMANCE.

TCG/IEMP Screening Points shall establish performance measures for responding to and resolving deficiencies. Performance measures should allow identification and correction of bottlenecks associated with the process flow of the deficiency. As all deficiencies go through some or similar steps to reach a logical resolution, analysis of the timelines associated with these steps will allow a determination of constraints. These steps may include, but are not limited to: initial evaluation, exhibit disposition, in-depth analysis/tear-down investigation, review boards, recommendations, engineering action, engineering change proposal, prioritization, funding, fix verification, and closing.

Table 5-2. Deficiency Report Action Point Addresses for TCP Participants Only

Weapon System	TCP Office:			
If the country is a TCP Participant and the condition or defect involves the aircraft, systems, or support equipment (excluding engines) on:				
F-4, F-5A, B, E, F Aircraft TCT A-37B, T38B, Aircraft TCG	MAIL ADDRESS: AFLCMC/WLDNB 6064 Dogwood Ave., Bldg 1254 Hill AFB UT 80456			
F-15 Aircraft TCG	MAIL ADDRESS: AFLCMC/WWQTB 235 Byron St, Suite 19A Robins AFB GA 31098-1670 Commercial Fax: (478) 929-0171 Email Address: aflcmc.wwqi.f-15fmsfrontof-fice@us.af.mil			
F-16 Aircraft TCG	MAIL ADDRESS: F-16 TCG AFLCMC/WWMSG 6089 Wardleigh Road Bldg 1201 Hill AFB, 84056-5838			
E-3 Aircraft TCG	MAIL ADDRESS: AFLCMC/HBSID 3001 Staff Dr, Ste 2AE1-99A Tinker AFB OK 73145-3022			
C-130 Aircraft TCG	MAIL ADDRESS: AFLCMC/WLNIA 235 Byron St, Ste 19A Robins AFB GA 31098 Commercial FAX: 478-328-1257			

Table 5-2. Deficiency Report Action Point Addresses for TCP Participants Only - Continued

Weapon System	TCP Office:
Tactical Missile Technical Coordination Group (TMTCG) AIM 7, AIM 9, AGM 88	MAIL ADDRESS: AFLCMC/EBRME 235 Byron St, Suite 19A Robins AFB GA 31098-1670
Precision Guided Munitions TCG AGM 65 Paveway I, II, & III	MAIL ADDRESS: AFLCMC/EBHGB 6034 Dogwood Ave Bldg 1257 Hill AFB UT 84056-5816
KC-135 TCG	MAIL ADDRESS: AFLCMC/WKDI 3001 Staff Dr, Ste 2AE87A Tinker AFB, OK 731450-3019
LANTIRN Precision Attack TCG	MAIL ADDRESS: AFLCMC/WNYBAI 235 Byron St, Ste 19A Robins AFB, GA 31098-1670

Table 5-3. Deficiency Report POC Addresses for IEMP Participants Only

Engine	IEMP Office:	
If the country is a IEMP Participant, and the condition or defect involves the engine, (excluding APU, GTE, QE starters) submit the report to:		
J69, J85, T56, J79, F108, TF30, TF33, & CFM56 Engines	MAIL ADDRESS: 539 ACSS/GFIC 3001 Staff Dr Ste 2AG1 108B Tinker AFB OK 73145-3031	
F-100 & F-110 Engine IEMP	MAIL ADDRESS: AFLCMC/LPSIA 3001 Staff Drive 2AE1 108B Tinker AFB, OK 73145-3031 Commercial Fax (405) 734-4013	
NOTE: The following should be included as information addressee on all correspondence pertaining to CFM56, TF-30, TF-33, P100A, J-79, J85, F-100, and F-110 engine DRs.		
MAIL ADDRESS: OC-ALC/LG 3001 Staff Dr, Ste 2AG1102D Tinker AFB, OK 73145-3001	MESSAGE ADDRESS: None	

Table 5-4. Countries Supported by TCP/IEMP

Code	Country	Code	Country	Code	Country	
AR	ARGENTINA	ID	INDONESIA	PI	PHILIPPINES	
AT	AUSTRALIA	IS	ISRAEL	SA/ SR	SAUDI ARABIA	
AU	AUSTRIA	IT	ITALY	SN	SINGAPORE	
BA	BAHRAIN	JA	JAPAN	UA	SOUTH AFRICA	
BC	BOTSWANA	JO	JORDAN	SP	SPAIN	
BE	BELGIUM	KE	KENYA	SW	SWEDEN	
BR	BRAZIL	KS	KOREA	SZ	SWITZERLAND	
CN	CANADA	MF	MALAYSIA	TW	TAIWAN	
CI	CHILE	MX	MEXICO	TH	THAILAND	
CO	COLUMBIA	MO	MOROCCO	TU	TUNISIA	
DE	DENMARK	N2	NATO	TK	TURKEY	
DR	DOMINICAN REPUBLIC	NE	NETHERLANDS	TC	UAE	
EC	EQUADOR	NO	NORWAY	UK	UNITED KINGDOM	
EG	EGYPT	NZ	NEW ZEALAND	VE	VENEZUELA	
FR	FRANCE	MU	OMAN	PL	POLAND	
FY	GERMANY	PK	PAKISTAN			
GR	GREECE	PE	PERU			
НО	HONDURAS	PT	PORTUGAL			
IQ	IRAQ					

# CHAPTER 6 EXHIBIT HANDLING AND PROCESSING

#### 6.1 PURPOSE.

This chapter provides instructions for establishing the exhibit storage and handling system and provides processing of deficiency report exhibits.

# 6.2 APPLICABILITY.

- 6.2.1 This chapter applies to Air Force bases and activities, agencies, and contractors who perform exhibit handling and processing of USAF owned or managed deficiency report (DR) exhibits.
- 6.2.2 These procedures apply regardless of whether these services are contracted or performed by USAF members/employees.
- 6.2.3 This chapter does not apply to: munitions that are too dangerous or hazardous to retain. Photograph those items prior to their disposal and submit the photographs with the DR for use in lieu of an exhibit. For Air Force organizations, the Munitions Stock Record Account will dispose of conventional munitions according to AFI 23-101 and AFI 21-201, MANAGEMENT AND MAINTENANCE OF NON-NUCLEAR MUNITIONS.

# 6.3 ESTABLISHING THE EXHIBIT PROCESSING SYSTEM.

- **6.3.1** All organizations that process DR exhibits shall develop and document exhibit handling and processing procedures to ensure that they meet local requirements, this T.O., AFI 21-101 and AFI 23-101.
- **6.3.2** The AFMC Center DRI&R Single Point of Contact Office (SPOCO) has responsibility to ensure processes are consistent across the Center to the extent practical.
- **6.3.3** Originating points shall perform local exhibit-processing oversight and ensure proper exhibit control and handling. They will ensure that exhibit processes are established and documented.
- **6.3.4** The contractor shall establish and maintain a system in accordance with Federal Acquisition Regulation part 45, Government Property, to control, protect, preserve, and maintain all Government property. Contractor's shall document their exhibit handling procedures in the government property control system established IAW the Federal Acquisition Regulation.
- 6.3.5 AFMC Centers will ensure contractors managing exhibit holding areas are meeting the requirements of this TO through statements of work outlining the requirements of this TO, AFI 23-101, and local procedures.

# 6.4 EXHIBIT CONTROL, MARKING, AND HANDLING.

- 6.4.1 Activities that handle or process DR exhibits shall ensure exhibits are conspicuously marked, tagged, and controlled to preclude their use. If size or configuration allows, the exhibits shall be moved from the inspection, production, maintenance, or operation area to a secure, minimum access area designated for storage of defective products.
- **6.4.2** The designated area shall be protected to preclude unauthorized return of the exhibits to the production, maintenance, or operations area.
- 6.4.2.1 Permanent Forward Controlled Exhibit Storage Point. This option may be established at the organization to hold exhibits pending final disposition instructions when conditions warrant (lack of adequate and appropriate storage space or physical separation between maintenance and exhibit holding activities).
- 6.4.2.2 The establishment of a permanent forward controlled exhibit storage activity must be approved by HQ USAF/A4MM before it is established. Major command POC should forward request for approval and justification to HQ USAF/A4MM, Washington DC 20330, with info to HQ AFMC/A4FI.

#### **NOTE**

Exhibits will not be released for shipment or transport prior to the receipt of disposition instructions.

- 6.4.3 Originating Points, Screening Points, Action Points, and Support Points, will use the DR record within JDRS to track and document the progress on each exhibit. The DR record will show exhibit status from initial disposition instructions through exhibit analysis to final exhibit processing IAW its condition.
- **6.4.3.1** When directed, the exhibit shall be forwarded to the Action or Support Point, in the exact condition it was found, including no cannibalization.
- 6.4.3.2 It is essential that exhibits with failed metal parts receive exceptional care in handling and packaging to preserve failure evidence. Mishandling will prevent accurate metallurgical failure analysis. The following rules apply:
- 6.4.3.2.1 Exhibits shipped from overseas installations must be cleaned of dirt, vegetable matter, contaminated water, and other waste matter only to the extent necessary to satisfy necessary transportation and environmental shipping requirements. Care must be taken to assure that valuable evidence is not destroyed during cleaning. Do not apply acid to clean exhibits.
- **6.4.3.2.2** Other than exhibits shipped from overseas, do not attempt to clean the fracture. Foreign products on the fracture may aid analysis.
- 6.4.3.2.3 Do not attempt to fit or mate the broken surface by physical contact. This could damage the fracture face.
- 6.4.3.2.4 Do not touch the fracture face with fingers, tools, or instruments.
- **6.4.3.2.5** Protect the fracture from the environment, particularly where corrosion could occur. Do not apply preservatives to the fracture face since preservatives could interfere with the analysis process.
- 6.4.3.2.6 Store the item in a water and vapor proof barrier bag containing prepackaged desiccant and ensure the bag is sealed airtight to prevent the accumulation of moisture. Only one item is to be included in each bag or wrapping. Additional guidance on this method of preservation may be found in MIL-STD-2703-1, method 50 preservation procedures or by contacting your packaging organization.
- 6.4.3.2.7 If the item is whole, use the original packaging or a dedicated shipping container, if applicable.
- **6.4.3.2.8** If the item is bent or broken, use an appropriately sized shipping container to avoid inducing further damage to these areas.
- 6.4.3.2.9 The item will be packed to prevent damage to the exhibit evidence during shipping. Failure to properly package the exhibit may result in damage, potentially eliminating investigation opportunities and resulting in a credit reversal. If more than one exhibit is packed in a single container, caution will be used to ensure that the items remain separated during shipment.
- 6.4.3.2.10 When the exhibit is a reciprocating engine that was removed due to internal failure, ship the spark plugs with the engine to the overhaul depot. Each spark plug accompanying the engine will be marked to show the cylinder from which it was removed and whether the plug was removed from the intake or exhaust side, or front or rear of the cylinder. Spark plugs will be secured to the engine container to prevent damage during shipment. Engines will not be pickled IAW TO 2R-1-11. When an engine failure is suspected to be caused by fuel, samples of the fuel will be analyzed and a copy of the findings forwarded with the engine.
- 6.4.3.2.11 When a new or overhauled jet engine, engine module, gearbox, government test equipment (GTE), or Auxiliary Power Unit (APU) fails within 100 operating hours and will require more than 100 labor hours to repair, hold it as an exhibit.

#### 6.5 ORIGINATOR EXHIBIT PROCESSING.

6.5.1 Once an item is determined to be a deficiency, do not attempt repair or further disassembly/reassembly of the exhibit. When practical, document the deficient condition with digital photos. Ensure that the Exhibit Holding Activity unit is identified in Block 21a of the DR. If the condition was discovered while performing maintenance or inspection, document the events that led to the discovery of the deficient condition.

Do not turn in the exhibit to exhibit holding activities without the validated copy of the official deficiency report confirmation of submission that includes instructions to process as a suspended asset condition code "Q" TIN.

6.5.2 Tag and secure the exhibit according to this established TO and local procedure. Provide the draft DR to the Originating Point along with all supporting data: i.e., digital photos, serviceable tags, repair tags, NSN labels, original packaging documents with information related to the contents, etc.

#### NOTE

Contractors may use an equivalent contractor form provided the contractor form is replaced by a completed DD Form 1575 Figure 6-3) when the exhibit is returned to the government.

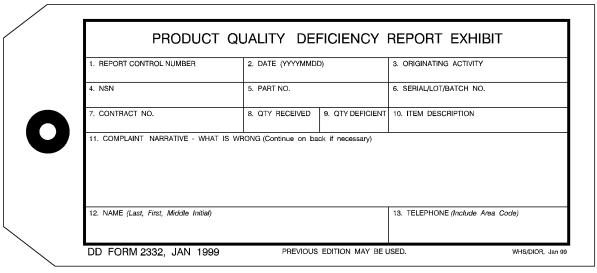
#### NOTE

Data contained in exhibit documentation is critical to the validity of the DR. Organizations shall establish local processes to ensure exhibit holding activities issue documentation is maintained to eliminate exhibit documentation shortfalls. Legible electronic versions of these documents are encouraged when deficiency reports are submitted.

- 6.5.2.1 The Originator will fill out two copies of the DD Form 1575 (Figure 6-3) by legibly completing the entries as required in Table 6-2. One copy will be physically attached to the exhibit and the other copy forwarded to the Originating Point with the other DR documentation.
- 6.5.2.2 Ensure SN and NSN listed on the Deficiency Report and associated tag matches the exhibit SN and NSN. If the exhibit is a component of a TCTO kit, the TCTO kit number should be reflected in the report NHA block and also referenced in the remarks section of accompanying tags. Process the exhibit as a Q condition turn-in, and move the exhibit to a controlled area as established by local procedures.
- 6.5.2.3 When adequate and appropriate storage is not available in the exhibit holding activities, the originating organization may hold the exhibit pending final disposition. Exceptions are:
- 6.5.2.3.1 Nuclear Ordnance or Conventional Munitions. Return such exhibits to the munitions stock record account and retain them in segregated storage in condition code "J" until shipment or disposal instructions are received.
- 6.5.2.3.2 Reparable Engines at an AMC Enroute Station. The Forward Supply Location (FSL) will identify the appropriate primary support point (PSP) as the exhibit holding activity and immediately ship the engine to the PSP. Prior to the shipment, the FSL will identify the engine as an exhibit item. After receipt at the PSP, the FSL will identify the exhibit according AFI 23-101, and complete the release and shipping document. Upon engine shipment, the PSP will inform the Action Point by phone or email.

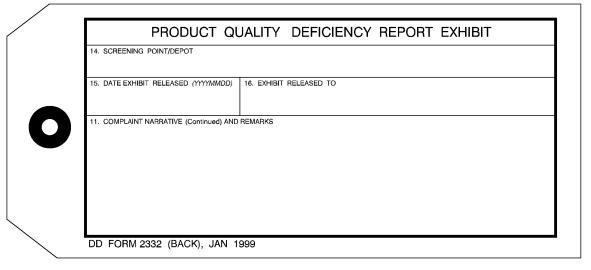
Table 6-1. How to Complete a DD Form 2332 for Exhibits

IN BLOCK	ENTER
1. REPORT CONTROL NUMBER &DEFICIENCY REPORT UNIQUE IDENTIFIER (DRUI)	Both numbers in block 3 of the associated DR.
2. DATE (YYYYMMDD)	The DR submission date. This will be the date of the message establishing the DR.
3. ORIGINATING ACTIVITY	The name and address of the Originating Point (owning organization for TMDE).
4. NSN	The NSN from block 5 of the DR.
5. PART NO.	The manufacturer's part number of the failed item from block 8 of the DR.
6. SERIAL/LOT/BATCH NO.	The SN of the failed item from block 9 of the DR.
7. CONTRACT NO.	Contract number under which part was procured.
8. QTY RECEIVED	Self Explanatory
9. QTY DEFICIENT	Self Explanatory
10. ITEM DESCRIPTION	The nomenclature of the failed item.
11. COMPLAINT NARRATIVE - WHAT IS WRONG	Information, such as the MIP number, that was not included in the other blocks and that will assist in identifying the exhibits. Indicate whether the DR is a CAT I or II by entering "CAT I" or "CAT II", as appropriate. If the item is a mishap exhibit, enter the word "MISHAP" and the mishap control number in this block. Exhibits subject to warranty correction will include the word "WARRANTY" in this block. When exhibit is requested by the TCP/IEMP Screening Point, action or support activity, include "Ship-to- instructions".
12. NAME (Last, First, Middle Initial)	The name of the originating point representative.
13. TELEPHONE (Include Area Code)	The commercial (including area code) telephone number of the originating point.
14. SCREENING POINT/DEPOT	Screening Point/Depot DOD Activity Address Code (DODAAC)
15. DATE EXHIBIT RELEASED (YYYYMMDD)	The date that the exhibit was released to the TCP/IEMP Screening Point, Action Point, or support point.
16. EXHIBIT RELEASED TO	The name, address, and telephone number of the TCP/IEMP Screening Point, Action Point, or support point to whom the exhibit was released.



H8800067

Figure 6-1. DD Form 2332, Product Quality Deficiency Report Exhibit (Front)



H9104180

Figure 6-2. DD Form 2332, Product Quality Deficiency Report Exhibit (Back)

#### 6.6 ORIGINATING POINT EXHIBIT PROCESSING.

- 6.6.1 The Originating Point has the responsibility to ensure that exhibit processes are established and documented, especially local processes not covered by this TO, AFI 23-101 or AFI 21-101. Originating points must perform exhibit-processing oversight and ensure proper exhibit control and handling. Tenant organizations should ensure procedures are addressed in agreements with applicable host organizations.
- 6.6.2 The Originating Point will ensure no attempts are made to repair the exhibit unless authorized by the appropriate engineering or equipment specialist authority. If the repair is within the normal capability of the organization originating the DR, and if a critical need exists, a repair request should be considered. Once repair is attempted the end-item may no longer qualify as an exhibit. However, the failed or damaged subcomponents may still qualify.

#### NOTE

- Authorized maintenance, such as cutting safety wire to perform adjustments or other repairs made before the
  item was determined to be a reported deficiency exhibit are exempt. However, Originators should ensure these
  actions are addressed in the problem summary.
- Do not turn in the exhibit to the exhibit holding activity without the validated copy of the official deficiency report and confirmation of submission that includes instructions to process as a suspended asset condition code "Q" TIN.
- 6.6.3 Complete blocks 1 through 13 of the DD Form 2332 IAW Table 6-1. (Contractors may use an equivalent contractor form provided the contractor form is replaced by a completed DD Form 2332 (Figure 6-1 and 6-2) when the exhibit is returned to the government.) Ensure that two copies of the DD Form 2332, two copies of the DD 1575 (Figure 6-3), and two copies of the printed Deficiency Report (not disposition instructions) are turned in with the exhibit to the exhibit holding/shipping processing activity (base level).
- 6.6.4 The Originating Point and Supply Exhibit Holding Activity will be notified by JDRS email when disposition instructions are provided.

#### **NOTE**

To expedite exhibit movement, the base level exhibit holding activity personnel may enroll in JDRS for shipping instructions and shipping status updates but Originating Point personnel must enroll in the JDRS exhibit holding activity unit that services their Originating Point.

- 6.6.4.1 If no disposition instructions are received within 30 calendar days of the DR input date, contact the Action Point to determine status. Every effort should be made to determine DR status and receive disposition instructions to include involving unit command structure and MAJCOM Functional Managers.
- 6.6.4.2 If disposition instructions are not received within 15 calendar days after follow-up, the credit is allowed and exhibit may be processed according to its condition; however, the ability to investigate the deficiency will be minimal and may result in the DR being closed without correction. Update JDRS to reflect the turn in of the exhibit due to no response to the request for disposition.
- 6.6.5 If the DR is closed without an exhibit investigation and the submitting organization does not concur, the Originating Point should attempt to resolve the disagreement with the Action Point. If consensus cannot be obtained, the Originating organization may hold the exhibit for an additional 30 calendar days while the non-concurrence is resolved (see Resolution of Disagreements, paragraph 3.6).

# 6.7 EXHIBIT HOLDING AND SHIPPING ACTIVITY PROCESSING - BASE LEVEL.

6.7.1 The activity will hold the exhibit until disposition instructions have been placed into the JDRS record. The Originating Point may provide this information to the holding activity or the holding activity may enroll in JDRS to receive the instructions directly.

- DO NOT ship deficiency report exhibits until disposition instructions have been provided via JDRS or received via email from the support/Action Point.
- DO NOT allow exhibits to be shipped via Reparable Item Movement and Control System (RIMCS) or other automated material movement systems.
- Ensure disposition of exhibits related to Air Force Mishaps are approved by the investigating officer or investigation board.
- 6.7.2 The unserviceable due-in from maintenance (DIFM) detail list (D-23 and GV905) may be used as a management tool to monitor exhibit items (AFI 23-101) by standard base supply system (SBSS) activities at base level.
- 6.7.3 If disposition instructions are not received within 30 calendar days of the DR date (60 calendar days for cross-component reports) (block 2 of the DD Form 2332), request instructions from the Originating Point. Exhibits will not be processed without direction from the originating, action or support point.
- 6.7.4 If direction is to process the exhibit in other than a suspended code condition Q status, coordinate with the Originating Point for them to replace the DD Form 1575 (Figure 6-3) and DD Form 2332 (Figure 6-1 and 6-2) with the appropriate condition.
- 6.7.5 When disposition instructions direct shipment of the exhibit, ensure that printed copies of the DR, along with legible DD Form 2332 (Figure 6-1 and 6-2) and DD Form 1575 (Figure 6-3), are packed both inside the exhibit container and securely attached and protected on the outside of the container. Make every attempt to ensure that the Report Control Number and DRUI (block 3 of the DR) are visible.
- 6.7.5.1 Mark the shipping container with the address and any special instructions provided in the disposition instructions and ensure that all tags, markings, and other documentation not related to the present condition of the exhibit are removed.

#### **NOTE**

For exhibits being returned to Canadian contractors, it is critical that the container be marked "United States Military Goods Returned for Investigation: Free Entry Under Tariff Item 70800-1, Product Quality I Deficiency Report Exhibits." Upon shipment, mail two copies of the shipping document to Defense Contract Management Agency Office (DCMAO) Ottawa ONTARIO, CANADA.

- 6.7.5.2 Complete a second DD Forms 2332 (Figure 6-1 and 6-2) and 1575 (Figure 6-3) and attach it to the shipping container near the identification markings, with a copy of the DR. When the exhibit is to be stored outside, the DD Forms 2332 (Figure 6-1 and 6-2) and 1575 (Figure 6-3) will be enclosed in a clear plastic envelope with the front of the form visible. Make every attempt to ensure that the Report Control Number and DRUI (block 3 of the DR) are visible.
- 6.7.5.3 In the "Remarks" block of the release (shipping) document, enter "DR Exhibit." Following the phrase, enter the DR RCN and DRUI (block 1 of the DD Form 2332) and if applicable, the MIP number provided in the disposition instructions.

#### NOTE

Special marking and shipping instructions and a special project code are required for CAT I exhibits. The DD Form 1348-1A or -2 shall have "PQR" in card column (i) 57-59. Block D of the DD Form 1348-1A or -2 shall contain "Pacer Push." Block DD of the DD Form 1348-1A or -2 shall contain "CAT I exhibit." The outside of the shipping container shall have the words "Pacer Push" stenciled IAW AFI 23-101.

- 6.7.5.4 For Air Force activities, the release (shipping) document will be a DD Form 1348-1A or -2.
- 6.7.6 Ship the exhibit within two calendar days (CAT I DR) or five calendar days (CAT II DR) after receipt of exhibit disposition instructions.

Exhibit holding activities accessing the JDRS record directly for disposition instructions will document exhibit shipment in the JDRS record. Notify the Originating Point of all shipping actions. For exhibit holding activities not accessing JDRS directly, the Originating Point will notify the holding activity of shipping disposition. The exhibit holding activity, will in turn provide the Originating Point with the name of the courier, date shipped, Transportation Control Number (TCN), and the carrier tracking number. Originating Points will then input this data into the JDRS Shipping Tool.

6.7.7 Ship Exhibit by Expedited Methods.

#### NOTE

If the exhibit has an immediate/urgent shipping requirement the originating, action or support point may request shipping of the exhibit by commercial transportation.

- 6.7.7.1 CAT I DR exhibits are shipped using supply priority 03, with a "999" denoting expedite transportation in the required delivery date (RDD) (card column 62-64) field.
- 6.7.7.2 For CAT II DR exhibits, the urgency of need for the exhibit should be considered. If the exhibit requires expedited transportation, assign supply priority 06, with a "777" in the RDD field. If routine transportation is acceptable, assign a supply priority 06, with the RDD field blank (routine transportation).
- 6.7.7.3 When releasing an exhibit to a contractor, Air Force exhibit holding activities (to include ALC exhibit holding activity points acting as base level exhibit holding activities) will use the procedures prescribed by AFI 23-101.
- 6.7.8 After exhibit has been shipped:
- 6.7.8.1 Update the JDRS record directly or provide the Originating Point, Action Point or Screening Point with shipment information within one calendar day for CAT I DRs and two calendar days for CAT II DRs. Maintain a file copy of the release (shipping) document DD Form 1348-1A or -2.
- 6.7.8.2 When the exhibit is an AMC forward supply support spare, provide information copies to HQ AMC/A4S, A4A and A4F; include the DR RCN, DRUI, NSN, part number, serial number, nomenclature, TCN, method of shipment, mission number, manifest number, and MIP number if applicable.
- 6.7.8.3 Initiate appropriate tracer action when requested by the originating, action or support point. Reasonable efforts shall be made to ensure the exhibit arrives at the location identified in the disposition instructions. Reports closed due to exhibit not received shall be investigated to determine why the exhibit was not received and actions taken to preclude recurrence. The Originating Point is responsible for review and investigation on lost exhibits.

# 6.8 ACTION POINT EXHIBIT RESPONSIBILITIES.

6.8.1 The Action point is responsible for providing timely and valid exhibit disposition instructions to the Originating Point through the DR record in JDRS. Instructions may include direction to process the exhibit per its true condition or to ship the exhibit for investigation and tear down analysis. When the decision is made to investigate the condition through exhibit analysis, the Action Point is required to obtain or ensure necessary investigation funding is available. Concurrently, they will initiate action through the appropriate contract management or maintenance support organization to schedule the exhibit for investigation and tear down analysis, or other support point assistance as required. Although the support point is responsible for the induction and investigation of the exhibit upon arrival at the ALC or contractor holding facility, the Action Point remains responsible to ensure support points perform requested investigation tasks.

"Hold" is not an exhibit disposition and does not satisfy the intent of the exhibit disposition goal.

- 6.8.1.1 Initial exhibit disposition instructions will be provided to the Originating Point/Supply Holding Activity as soon as possible, but NLT 30 calendar days (60 calendar days for cross-component reporting) after input of the DR. The standards for disposition instructions are within one calendar day for a CAT I DR and within 10 calendar days for a CAT II DR. Instructions may include direction to ship for investigation, or to return the exhibit to reparable channels if the exhibit is not required for investigation.
- 6.8.1.2 For CAT II DRs, the instructions may advise to continue holding the exhibit when additional time is required to perform initial analysis, to coordinate an investigation, or obtain funding. Provide rationale for choosing this option and project a date for disposition instructions.
- 6.8.1.3 When the DR is forwarded to another DOD component or agency for action, interim instructions will be to hold the exhibit for 60 calendar days pending response from the DOD Action Point (DLAR 4155.24).

#### NOTE

When the DR is submitted by manual means (SF 368 or message), disposition or other instructions will be provided to the Originating Point and the exhibit holding activity identified in block 22 of the DR. When the exhibit is an AMC Forward Supply Point spare, provide a copy to HQ AMC/A4R.

6.8.2 When disposition instructions require the exhibit to be released or shipped to the screening, action or support point, provide the name of the organization to receive the exhibit (the complete address, point of contact), special marking and shipping instructions, and if appropriate, assign a special project code.

#### **NOTE**

The responsibilities for assignment of a destination shipping address may be found in AFI 24-230, AFI 24-230, MAINTAINING AIR FORCE DOD ACTIVITY ADDRESS CODES (DODAAC).

- 6.8.3 When Mishap exhibits are required faster than the Uniform Material Movement and Issue Priority System (UMMIPS) standards allow, the screening, action, or support point may request the exhibit be hand carried, escorted or may request the exhibit be expedited through a commercial carrier. The exhibit disposition instructions must request that the DD Form 13481A or -2 contain the Julian date the exhibit is required to be delivered in card column (ii) 62-64.
- **6.8.4** Ensure critical items and engines are processed quickly and IAW designated special handling procedures, if applicable.
- 6.8.5 Request the status if exhibit release or shipment has not been confirmed within:
- 6.8.5.1 Three calendar days for CAT I and CAT II MHAP DR exhibits.
- 6.8.5.2 Thirteen calendar days for a CAT II DR exhibit.
- 6.8.6 Monitor JDRS for shipment status and coordinate with the support point upon receipt to request that the exhibit be scheduled and inducted for investigation as soon as possible.
- 6.8.7 Upon completion of exhibit investigation actions, request that the investigating organization determine the condition of the exhibit and have it processed IAW condition.

# NOTE

Action Points shall ensure final exhibit disposition is provided to the holding activity. This is especially important when exhibits remain in the ALC Q warehouse upon completion of the investigation and closing action. In this case, the Action Point will provide the ALC Q warehouse final material disposition instructions via appropriate means. To reconcile the DLA Distribution Standard System (DSS) listing which indicates a warehouse location and the JDRS database which indicates investigation is closed, final disposition instructions must be provided to the storage activity and documented in Exhibit Final Disposition Instructions.

- **6.8.8** The Screening/Action Point will provide the final disposition instructions to the Support Point and will be the point of contact after the investigation is completed.
- 6.8.8.1 Final disposition instructions will request that the contractor provide the Screening/Action Point with email notification of shipment of exhibit back to the Air Force within 24 hours after the exhibit has been placed on board the carrier including the date of shipment, shipping number, previous MIP (if applicable), and DR RCN, DRUI, and the method of transportation. The screening/Action Point will then use this information to update the JDRS record.
- 6.8.8.2 Disposition instructions provided to contractors will request that contractors replace the DD Form 1575 (Figure 6-3) tag with the appropriate 1500 series form at the completion of the TDR and analysis. When contractors are instructed to ship exhibits back to the Air Force inventory after completing their investigation, they will annotate the MIP and/or DR RCN/DRUI in the "Remarks" block of the new DD Form 1348-1A or -2 or any other type of shipping document used.
- 6.8.9 Ship to contractor. Exhibits will not be released or shipped to a contractor until Disposition has been received from an Action Point. Release and receipt documents for exhibits to be shipped to a contractor will be prepared as prescribed for automatic shipments in AFI 23-101. Copy number 4 of the release and receipt document, regardless of the type of control number assigned (MIP or DR RCN), will be furnished to the applicable screening/Action Point activity. In addition, the following information will be entered in the remarks block of the DD Form 1348-1A or -2:
- **6.8.9.1** The statement, "DR exhibit. For evaluation and study at no cost to the government without contractual coverage. Authority: (Insert the DR RCN/DRUI and/or MIP number as appropriate)."
- **6.8.9.2** The appropriate DODAAC of the contractor.
- 6.8.9.3 The exhibit serial number as it appears on the physical item and in the DR.
- 6.8.9.4 The name, organizational symbol, and telephone number of the individual designated by the screening/Action Point as POC when the exhibit is delivered to the receiving destination. This information will be furnished in the shipping instructions under ATTENTION OF.
- 6.8.9.5 The Action Point will perform a tracking inquiry using the (TCN) or shipping number to confirm the date, time and place of asset receipt. Initiate follow up action to the contractor through contracting channels if the exhibit has not been received within 30 calendar days after notification of shipment.
- 6.8.9.6 When an exhibit is shipped to a contractor for investigation at contractor expense, and the defect was not caused by the contractor or wrong exhibit shipped, the Screening/Action Point shall provide a funding source for exhibit return and, if necessary, reimburse the contractor for shipping expenses.
- 6.8.10 Issue exhibit disposition instructions to the Support Point when the exhibit is no longer needed for analysis. The exhibit should be processed according to its condition and dollar value. This includes replacing the DD Form 2332 (Figure 6-1 and 6.3) and DD Form 1575 (Figure 6-3) tags with the appropriate DD Form 1570-series tag.

# NOTE

Do not dispose of Mishap related exhibits without the written approval of the Mishap investigating commander (AFI 91-204, Safety Investigations and Reports).

6.8.11 Ship from contractor. When final disposition instructions are provided to return the exhibit to the Air Force inventory, the Screening/Action Point will inform the ALC and base exhibit receiving activity of the anticipated delivery date of the returned exhibit and its condition (serviceable and unserviceable) and request they advise upon receipt. The returned exhibit will contain markings or forms identifying it back to a MIP and/or DR RCN/DRUI. Immediately upon receipt, the ALC and base exhibit receiving activity will process the material into storage according to condition and advise receipt to the Screening/Action Point.

# 6.9 ALC RECEIVING AND STORAGE ACTIVITY EXHIBIT PROCESSING.

6.9.1 ALC receiving and storage activity exhibit processing according to this section is applicable whether the facility is contractor or DLA managed. Processes shall be established to ensure personnel in Central Receiving identify and expedite handling and processing of suspended asset code Q condition exhibits according to their status. Metrics and self-inspection shall be established to periodically measure the performance of exhibit processing and handling. Typically, the ALC receiving and storage activity provides:

- 6.9.1.1 Originating Point Holding. Deficiency report exhibits from local Tenant and ALC Originating Points require storage until the Action Point determines exhibit disposition. Refer to paragraph 6.7 for these procedures.
- 6.9.1.2 Action Point Holding. Exhibit storage is a result of the Action Point determining a need for an exhibit investigation. Exhibits are ordered into the ALC Q warehouse to segregate them from other like items until they are inducted for investigation or shipped to an investigating organization.
- 6.9.2 Screen receipt documents to determine exhibit status. Ensure critical items and engines are processed quickly and IAW designated special handling procedures, if applicable.
- 6.9.2.1 Special handling will be performed to ensure immediate entry and receipt notification for expedite CAT I "999" and CAT II "777" shipments. Perform the following actions immediately upon exhibit receipt.
- 6.9.2.2 Process all receipt documentation to the Distribution Standard System (DSS) to include annotating the RCN and DRUI number into the lot number field of DSS.
- 6.9.3 Store exhibit in a designated exhibit storage area according to its classification. The designated area will be protected to preclude the unauthorized return of the exhibits to the production, maintenance, or operational areas.
- 6.9.3.1 If the exhibit is not inducted for investigation or if other disposition instructions are not received within 30 calendar days after placement in the exhibit holding area, contact the Action Point/Support Point to determine the exhibit disposition.
- 6.9.3.2 If disposition instructions are to hold the exhibit then a specific time period for induction or other disposition shall be specified. Exhibits will not be kept in a hold status for longer than 45 days after exhibit receipt without specific rationale and approval from the Action Point.
- 6.9.4 Release exhibits only on authorized documents for local issue and DD Form 1348-1A or -2 for off-base shipments.
- 6.9.5 Inspect and attach the proper condition status code tags to the exhibit as requested by the packaging and transportation support function or when instructed by the Screening/Action Point.
- 6.9.6 Periodically perform exhibit status reconciliation to ensure expeditious exhibit handling and processing occurs.

# 6.10 SUPPORT POINT EXHIBIT PROCESSING.

- **6.10.1** Upon receipt of notification from the receiving activity that an exhibit is available, the support point will take necessary action to induct the exhibit and perform the investigation according to Action Point direction.
- 6.10.1.1 Schedule the exhibit for investigation. AFMC organic repair activities performing exhibit investigations shall induct exhibits ahead of like Management of Items Subject to Repair (MISTR) items (AFMC 21-130).
- **6.10.1.2** Ensure exhibits are secured during investigation to prevent it from being lost, altered, cannibalized, or routed through a production, maintenance or operational function prior to analysis.
- 6.10.1.3 Upon completion of investigation, the support point shall process the exhibit in accordance with Action Point direction and/or condition and dollar value. This includes replacing the DD FORM 1575 (Figure 6-3) tag with the appropriate 1500 series form.
- 6.10.1.4 If the exhibit is not to be repaired locally, immediately determine the condition and process the exhibit according to condition. If necessary, request exhibit disposition instructions from the screening/Action Point activity. Upon determination of condition and disposition:
- 6.10.1.4.1 Process and tag the exhibit according to its condition and dollar value. This includes replacing the DD Form 2332 (Figure 6-1 and 6-2) and DD Form 1575 (Figure 6-3) with the appropriate DD Form 1570 series tag.
- **6.10.1.4.2** If the end item does not fit the condition code specified in AFI 23-101, and is not condemned IAW AFI 23-101, the disassembled exhibit will be turned in with condition code "K".
- **6.10.1.4.2.1** Condition code K will only be used for disassembled exhibits and will not be used for reassembled exhibits or if the exhibit meets the requirements of another condition code.
- **6.10.1.4.2.2** Condition code K is for intra-Air Force use only and is designed to get reparable assets back to the applicable Technological Repair Center (TRC).

- 6.10.1.4.2.3 Identify all exhibits by NSN(s) or part number(s).
- 6.10.1.4.2.4 Reassemble the end item(s) and exhibit(s) after TDR to maximum extent practical within the capabilities of the organization(s) performing the analysis.

#### **NOTE**

When directed by Screening/Action Point on final disposition, destroy defective material at local level to prevent reentry into Air Force or local system.

- 6.10.1.4.2.5 Separate usable and reparable parts from those that were destroyed and broken during investigation.
- **6.10.1.4.2.6** If the exhibit is reparable and in material condition code "K", the organization performing the analysis will accomplish the following:
- 6.10.1.4.2.6.1 Segregate the disassembled components and identify them to their appropriate end item and exhibit for packaging into separate containers, as required, to afford adequate protection against further deterioration due to rust, corrosion, or physical damage regardless of how they were received.
- 6.10.1.4.2.6.2 Initiate two DD FORM 1575 (Figure 6-3) for each end item and exhibit. In addition to the other required entries, the "Remarks" block of each DD Form 1575 (Figure 6-3) will be annotated in the following manner: "Disassembled property, formerly (enter DR RCN), item number (if applicable), piece 1 of 3, analysis complete (regardless of the number of pieces)." The item number is a locally assigned number used to distinguish between multiples of the same end item being returned in a disassembled manner (i.e., two F-16 Fuel Controls, etc.). The notation "piece 1 of 3," is only required if more than one shipping container is necessary to package the disassembled exhibit.
- 6.10.1.4.2.6.3 Initiate a list of components not being returned with the end item and exhibit which will include their NSNs, quantities, and descriptions. This list will be stapled to the DD Form 1575 (Figure 6-3) that is to be attached to the end item and exhibit inside the container. The remaining DD Form 1575 (Figure 6-3) will be placed on the outside of the shipping container to identify its contents. If multiple shipping containers are necessary to package the disassembled exhibit, the list of missing components is only required for the first container. See MIL-STD-20731E and MIL-STD-129P for a more in-depth explanation of the packaging and marking procedures.
- 6.10.1.4.2.6.4 Contact the Action Point if problems occur because of the disassembled configuration of the end item to ensure that end items and exhibits and their components are properly packed to maintain end item integrity.

#### NOTE

Any broken parts which have been separated from the serviceable parts and are tagged as condemned condition code "H" must be signed, dated, and tagged with the appropriate 1500 series form.

**6.10.1.4.2.6.5** Deliver the properly labeled reparable to depot exhibit holding activities receiving function after completion of the investigation.

Table 6-2.	Required	Entries	For	DΩ	FORM	1575	Condition	Tags
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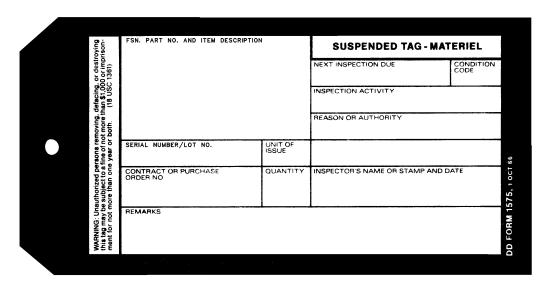
Block Title	Entry Notes
NSN, part no., and item description	Self Explanatory
Serial number/lot No.	Self Explanatory
Quantity	Self Explanatory
Unit of issue	Self Explanatory
Condition code	Enter condition code "Q" unless directed by the Action Point to use another condition code. Ammunition items use code "J".
Inspection activity	Originators Organizational address
Inspectors name or stamp and date	Block letters with last name, first name initial and date; or stamp and date
Contract or purchase order no.	Enter if available. See Note 1

Table 6-2. Required Entries For DD FORM 1575 Condition Tags - Continued

Block Title	Entry Notes
Next inspection due	Enter if applicable
Reason or authority	Enter "TO 00-35D-54" and RCN
Remarks	Enter DR Exhibit and the Database Accession Number. See Notes 2, 3, 4 & 5

# NOTES:

- 1. Required only when item is still under warranty and contract number is available.
- 2. For classified components a stamp will be used that states "This item is classified and will be handled in accordance with AFI 31-401 For classified components under COMSEC Control (i.e., those using the TSEC nomenclature system) a stamp will be used that states "This item is classified and will be handled in accordance with AFKAG-1". Bold black lettering will be used if no stamp is available. Only the DD FORM 1575 attached to the item will be completed and stamped. The DD FORM 1575 attached to the outside of the item's container will be completed except for the classified stamp. See DOD 5220.22-R, AFI 31-401, and AFI 24-201 for additional guidance on packaging classified components for shipment.
- 3. If the item is a Mishap exhibit, enter the word "Mishap" and the Mishap event control number in this block.
- 4. If the exhibit is under warranty include the word "WARRANTY" in this block.
- 5. If the item is a component of a TCTO kit, list the TCTO kit number



H8800068

Figure 6-3. DD Form 1575, Suspended Tag - Materiel

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# CHAPTER 7 AIR FORCE BAD ACTOR PROGRAM

#### 7.1 BACKGROUND.

- 7.1.1 The purpose of the Air Force Bad Actor Program is to identify serial-numbered items that enter the repair cycle at an abnormally high rate when compared to the total population of like assets and to repair them or remove them from the exhibit holding activity.
- 7.1.2 These procedures are written to compensate for the different maintenance philosophies of weapon systems and using commands. This provides both the using commands and AFMC the maximum amount of flexibility in running an effective Bad Actor Program for their weapon systems. The Program Managers (PM) and Product Group Managers (PGMs) are encouraged to develop Memorandums of Agreements (MOAs) with their using commands to cover any specific weapon system, engine, and/or commodity program requirements. Due to the variety of disciplines required for a successful program (inventory management, and distribution or supply) the PM/PGM and the using commands are encouraged to organize meetings with all team members to develop local procedures. PGM support the PM in their effort in the DRI&R process.
- 7.1.3 Included this chapter are several guidelines that may be used by the PM/PGM, and/or using command. These guidelines were developed from lessons learned during the prototype program and form the process flows defined by the Bad Actor Program Action Team (PAT).

#### 7.2 BAD ACTOR SELECTION PROCEDURES.

- 7.2.1 The PM/PGM engineering organization and the user select part numbers or work unit codes (WUC) for Bad Actor management. The Product Improvement Working Group (PIWG) meeting is the forum where the field and depot identify part numbers or WUCs for Bad Actor management. Candidates should include all major Line Replaceable Units (LRU), Shop Replaceable Units (SRU) and systems.
- 7.2.2 The using command and PM/PGM shall review the Reliability and Maintainability Maintenance Information System (REMIS), Maintenance Information System (MIS) for aircraft maintenance portals, Material Improvement Projects (MIP), and Deficiency reports in JDRS, the USAF Deficiency Reports Archive Database (formerly RO21) can be found in the Logistics Information Center (LIC), and the GO54 Core Automated Maintenance System (CAMS) database to identify part numbers or WUCs for systems suspected of containing a high number of Bad Actor LRU/SRUs.
- 7.2.3 Ninety calendar days prior to the PIWG, the PM/PGM shall submit to the using command a list of part numbers and engineering failure analysis capability. The PM/PGM will use the failure analysis capability he/she determines to be the most appropriate for the situation.
- 7.2.4 The using command will use this 90-calendar day period to evaluate the list of part numbers from the PM/PGM and their own repair data to identify part numbers to serially track. The using command may recommend additional part numbers to be addressed by the PM/PGM engineering support team. The PM/PGM shall provide engineering status at the PIWG so that engineering analysis requirements can be prioritized.
- 7.2.5 Document selected part numbers or WUCs in the weapon system -6 TO, Section II, Part D, in accordance with TO 00-20-2 (Maintenance Data Documentation) and MIL PERF-5095E, Preparation of Inspection and Maintenance Requirements; Acceptance and Functional Check Flight Procedures and Checklists; Inspection Workcards; and Checklists.
- 7.2.6 If an LRU/SRU being considered for Bad Actor management contains subassemblies that do not have serial numbers, the selection of that LRU/SRU should not be excluded if it is cost effective to inscribe or affix a serial number on each subassembly. The PM/PGM engineering staff shall provide depot maintenance organizations with detailed instructions for inscribing or affixing serial numbers.

# 7.3 IDENTIFICATION PROCEDURES.

7.3.1 Maintenance activities at all levels shall document maintenance actions by serial number for the selected part numbers or WUCs. Maintenance organizations retain all repair information required by the weapon system MOA.

- 7.3.2 Maintenance activities at all levels use the selection criteria coupled with the historical serialized repair information to identify a Bad Actor.
- 7.3.3 If a Bad Actor is identified on the flight line, and is coded for limited off-equipment repair, the flight line activity forwards the Bad Actor and its technical fault information to the off-equipment activity.
- 7.3.4 Field maintenance activities use the appropriate maintenance data collection system to document maintenance history by serial number and to perform research to identify bad actors.
- 7.3.5 PMs/PGMs shall develop a process to identify Bad Actors through data analysis. All sources of repair should be notified of the results of the analysis (Figure 7-1).
- 7.3.6 Avionic Components shall be identified if one of the following occurs:
- 7.3.6.1 Three Can Not Duplicate (CND)/Retest OK (RTOK) actions in a six month period.
- 7.3.6.2 Three repair actions for the same recurring reported aircraft discrepancy in a six month period.
- 7.3.6.3 The LRU/SRU shall be installed in more than one aircraft to ensure the problem exists within the LRU/SRU and not the aircraft (LRU/SRU installed into more than one aircraft, fails for same, and CND at the shop).

### 7.4 DEPOT MAINTENANCE DATA DOCUMENTATION SYSTEMS.

Depot maintenance activities input all maintenance actions into the appropriate maintenance data documentation system. The PM/PGM determines if contractor repair activities require data documentation in the contracts.

# 7.5 ACCOUNTABILITY AND/OR SUPPLY PROCEDURES.

- 7.5.1 Bad Actor accountability and/or supply procedures start when a serial numbered asset has been identified as a Bad Actor.
- 7.5.2 When a Bad Actor has been identified, maintenance activities submit a DR in accordance with TO 00-35D-54, Chapter 7. The subject of the DR will include the words "BAD ACTOR." The DR will include the serial number(s) in the appropriate field. Depot maintenance activities may request the PM/PGM approval of a tailored version of the DR (see Figure 7-3 and Figure 7-4).
- 7.5.3 Maintenance activities shall treat an identified Bad Actor as an exhibit in accordance with TO 00-35D-54, Chapter 6. Tag the exhibit with the words "BAD ACTOR" and "PROJECT CODE: 366." Do not label or mark the exhibit itself as a Bad Actor. Provide a report on all the facts that led to the identification of the Bad Actor; faults detected, test equipment used, TO and procedure number, attempted corrective actions, etc., will be provided with the exhibit.
- 7.5.4 Upon shipment of the exhibit, shipping information will be provided to the PM/PGM. The information provided shall include the date, method of shipment, transportation control number.

# 7.6 ENGINEERING ANALYSIS ACTIVITY TO MAINTENANCE.

- 7.6.1 If an engineering analysis facility is able to repair the Bad Actor, the engineering analysis activity will contact the equipment specialist (ES) for the disposition instructions. The engineering analysis activity will not forward the repaired Bad Actor to a depot exhibit holding activity warehouse without disposition instructions from the ES.
- 7.6.2 The PM/PGM shall ensure that contractors performing Bad Actor engineering analysis abide by the requirements of the above paragraph.

# 7.7 ENGINEERING FAILURE ANALYSIS PROCEDURES.

7.7.1 The PM/PGM, or contractor responsible for conducting the engineering analysis, shall attempt to identify variability design problems that would expose the symptom of a larger, more universal, problem. The engineering analysis will take into consideration the economics of conducting a full investigation of the Bad Actor. At the same time, during the analysis it may be more economical to scrap the Bad Actor rather than repair it. The PM/PGM engineering organization may contact the Originating Point if additional data is required for the evaluation (see Figure 7-5).

- 7.7.2 The PM/PGM engineering organization will develop local procedures that go beyond the routine depot maintenance for accomplishing the engineering analysis. The engineering organization shall also develop disposition criteria, to assist in determining whether to repair or scrap a Bad Actor. The PM/PGM engineering organization may use engineering tools available to their activity to perform an engineering analysis.
- 7.7.3 If no organic engineering analysis capability exists, the PM/PGM engineering organization shall accomplish a cost and/or benefits analysis for establishing an organic analysis capability. If an organic capability proves to be economically beneficial, the PM/PGM will submit their requirements via a weapon system Program Decision Package. This capability will be established within the responsible PM/PGM. The PM/PGM is authorized to use Sustaining Engineering Funds when available. In addition, to prevent a backlog of Bad Actor projects, the PM/PGM may use Sustaining Engineering Funds to assist in their evaluation.
- 7.7.4 Any Test Program Set (TPS) deficiencies or design changes to LRUs/SRUs shall be corrected by the PM/PGM as delegated by the PM.

#### 7.8 ENGINEERING ANALYSIS GUIDELINES.

- 7.8.1 Recommended depot engineering failure analysis equipment and/or resources:
- 7.8.1.1 Hot Bench Mock-Up. A mock-up of the weapon system LRU/SRU capable of exercising all LRUs/SRUs in the system configuration.
- 7.8.1.2 Environmental Test Chamber. A chamber that can vibrate and temperature cycle weapon systems LRUs/SRUs. The ideal test arrangement allows the suspect Bad Actor LRU/SRU to undergo environmental cycling while connected to the hot bench mock-up to simulate actual flight conditions.
- 7.8.1.3 Additional Test Equipment. Spectrum analyzers, oscilloscopes, power meters, and any other equipment necessary to perform Bad Actor analysis.
- 7.8.1.4 Engineers and technicians familiar with the design and operation of the weapon systems and its test equipment.

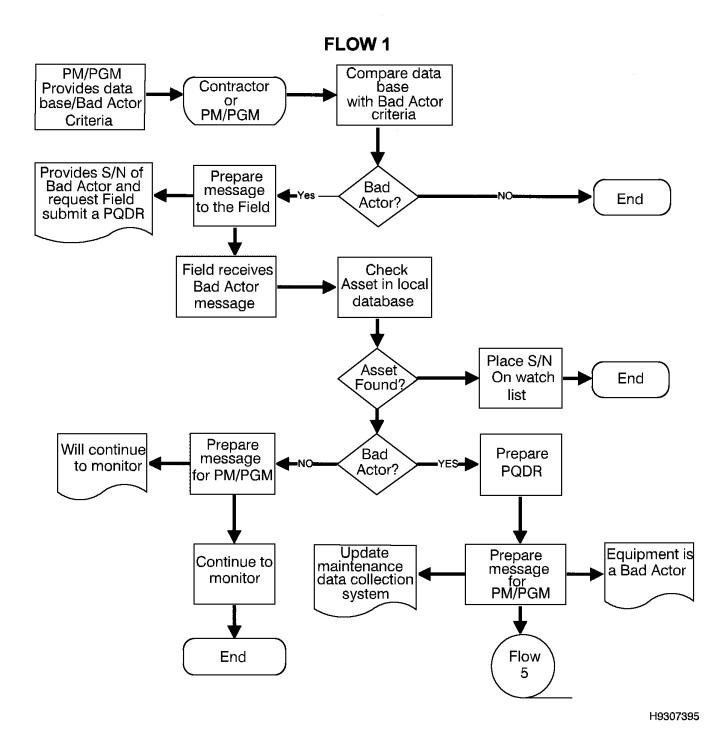


Figure 7-1. Tracking of Bad Actors Through Data Analysis (Flow 1)

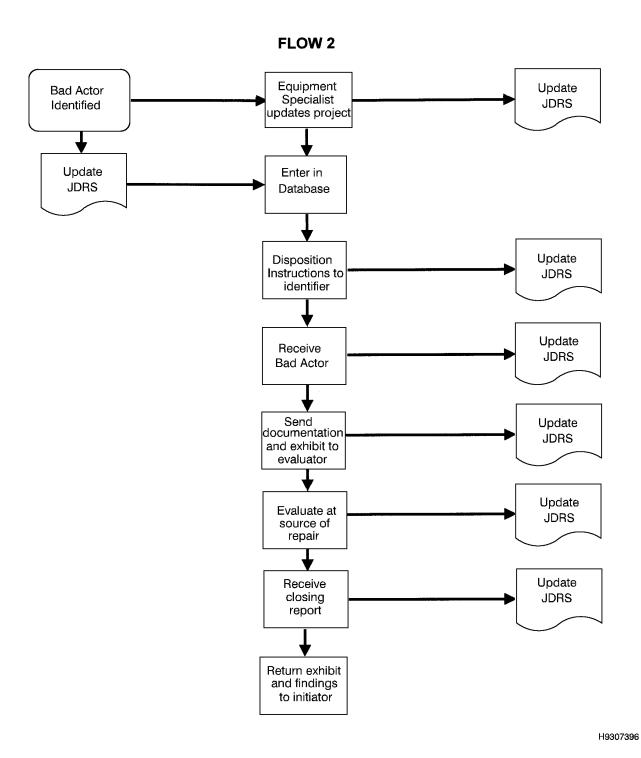


Figure 7-2. Tracking of Bad Actors (Flow 2)

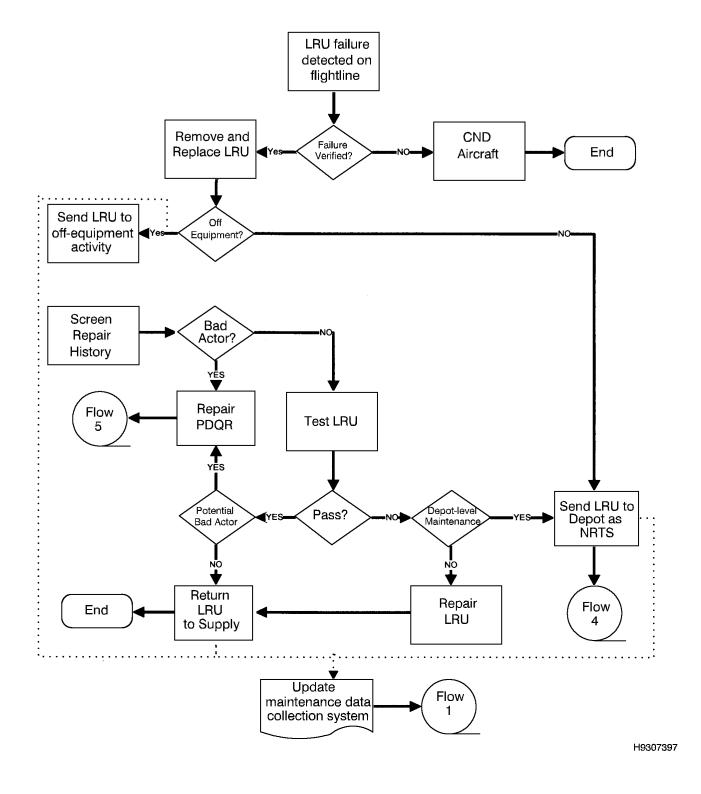


Figure 7-3. Unit-level Identification of Bad Actors (Flow 3)

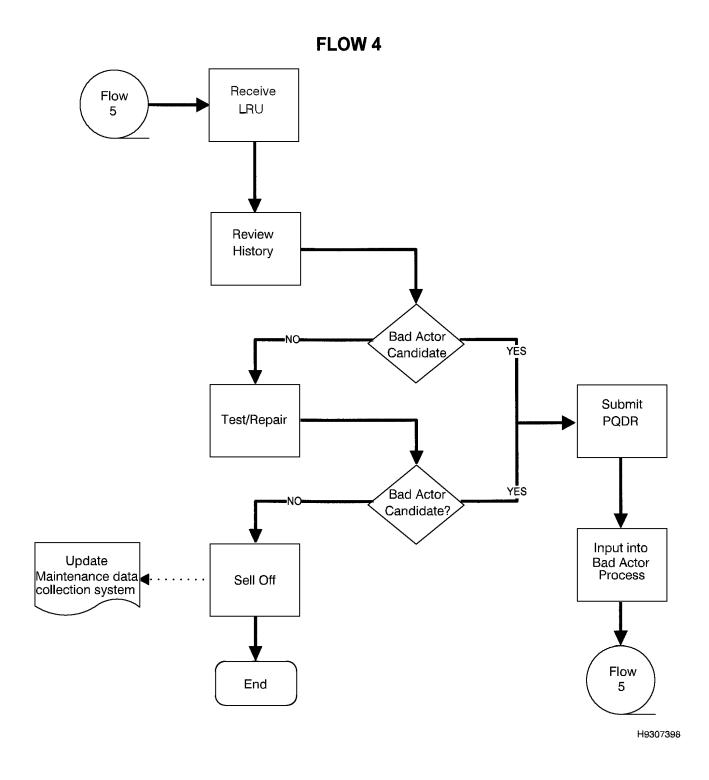


Figure 7-4. Depot Identification of Bad Actors (Flow 4)

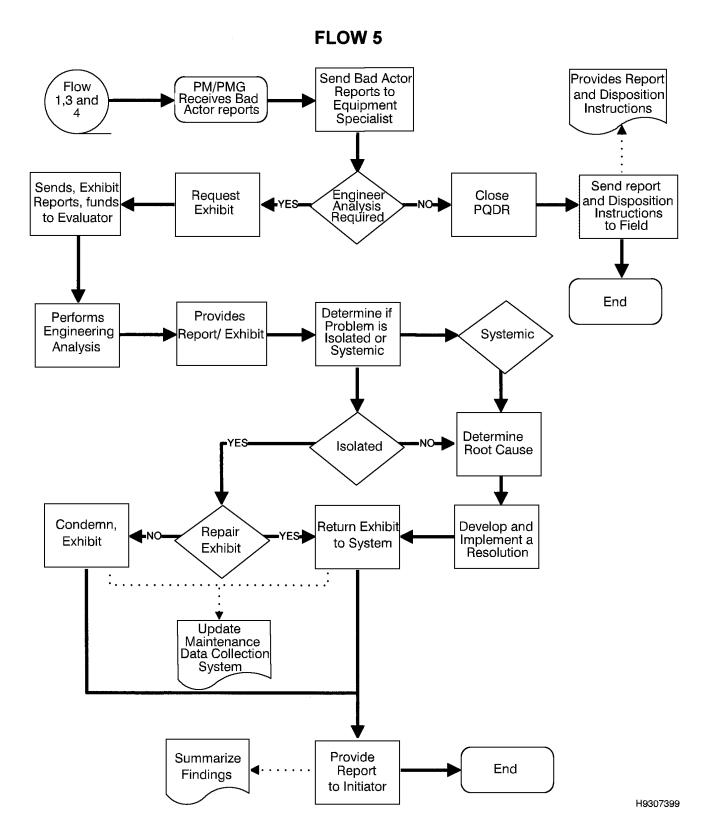


Figure 7-5. Resolution of Bad Actors (Flow 5)

# **CHAPTER 8**

# ACCEPTANCE INSPECTION DEFICIENCY REPORTING AND RESOLUTION

#### 8.1 PURPOSE.

- 8.1.1 This chapter establishes the policy, responsibility, and procedures for submitting, processing, and resolving discrepancies discovered during acceptance inspections on aerospace equipment (aircraft; engines, engine modules, and engine major assemblies; support systems, and equipment). Acceptance inspections validate whether acceptable levels of quality have been met and determine the serviceability of the item to perform its designed function. In the case of completed depot and contractor maintenance, they provide feedback on the quality of maintenance accomplished from a customer perspective.
- 8.1.2 The submitted Acceptance Inspection Deficiency Report (AIDR) report allows the responsible organization to investigate and resolve workmanship and process related deficiencies to prevent recurrence. Reportable discrepancies are those that are attributed to non-conformance to applicable specifications, drawings, standards, agreements, technical orders, work packages, etc., resulting from workmanship or incomplete/incorrect processes during manufacture, repair, modification, or maintenance.
- **8.1.3** Other feedback methods shall not replace formal deficiency reporting as required by this chapter. If complimentary methods are used, they must clearly state that deficiency data provided is informational only and does not fulfill the requirements of this chapter.

#### 8.2 SCOPE AND APPLICABILITY.

- **8.2.1** The Lead Command Director of Logistics (A4) shall define acceptance inspection requirements, scope and depth for applicable weapon systems.
- **8.2.2** Unless otherwise directed, this chapter provides methods and procedures to report and resolve quality deficiencies on aircraft, engines, or equipment (trainers, simulators, consoles, terminals, ground support equipment, etc.) resulting from manufacturing, overhaul, and/or repair processes.

#### 8.3 PERFORMING ACCEPTANCE INSPECTIONS.

- **8.3.1** When established by the Lead Command, USAF organizations shall determine equipment condition of newly received, assigned or acquired aircraft, engines, or equipment (trainers, simulators, consoles, terminals, ground support equipment, etc.) prior to placing the item into service or on a spare line.
- 8.3.2 The accepting activity will complete the inspection as soon as possible, but not later than 30 calendar days after receipt of the aircraft, engine, or equipment item and prior to placing the item in service. If, after 30 calendar days, the acceptance inspection has not been accomplished, the aircraft, engine, shall be placed in Red X status (TO 00-5-1, Air Force Technical Order System). Reports should be submitted within 15 calendar days of completing the inspection. However, regardless of when the inspection is performed, it will not preclude the later submission of deficiency reports identifying suspected latent defects related to the work requirements package or contract specifications. In these cases, submit an AIDR and reference the original report control number, if applicable. Within the report body, identify the suspected latent defect, fully describe how it was found, how it is related to the work requirements package or contract specifications, and any other pertinent information. Latent defects will be investigated and tracked in the same manner as non-latent defects.
- 8.3.3 Personnel who perform acceptance inspections on completed depot and contractor maintenance should be familiar with the general work requirements and knowledgeable of the contract specifications of the work performed. Use the completed AFTO FORM 103 and applicable work specifications, as applicable, as a guide to develop inspection checklists.
- **8.3.4** For Depot-level overhaul or repair, the Lead Command, Program Office, and production activity will jointly develop a baseline acceptance checklist using the Work Requirements Package or other appropriate technical data requirements. The checklist may be appended to focus on specific problem areas or tailored according to work performed, but shall be standardized throughout using communities to the extent practical.
- 8.3.5 Work Requirements Packages used by the depot or contractor maintenance activity and the corresponding acceptance checklists should be available through the lead command MAJCOM Functional Manager or System Program Office. The PM

will furnish to each owning activity, by 1 September of each year or as soon as possible thereafter, a copy of the respective work specification that includes standards for acceptable level of product quality, for the fiscal year beginning 1 October of that year. Owning activities will provide copies of the work specification to their respective operating units (Reference TO 00-25-4, Depot Maintenance of Aerospace Vehicles and Training Equipment).

# 8.4 REPORTING ACCEPTANCE INSPECTION RESULTS.

8.4.1 Originator Responsibilities. Inspect for, identify, and document deficient conditions on aircraft, engines, or equipment. Prepare the draft Acceptance Inspection (AI) DR using the JDRS DR Submission Tool or equivalent worksheet. The draft DR shall provide a detailed description of discrepancies, references to the applicable Work Requirements Package, how malfunction codes, part numbers, and work unit codes, along with recommendations for correction or suspected cause.

#### NOTE

Organizations shall coordinate with the appropriate Action Point when situations arise which prevent completing the AI within the recommended timeframe.

- **8.4.1.1** Report AI discrepancies regardless of where the inspection is performed, to include those performed at the repair/manufacturer facility, even if immediately corrected. If discrepancy is corrected immediately, provide corrective action performed. Discrepancies discovered by pre-inspection teams prior to the completion of contracted workload are not reported as AI discrepancies and should be reported directly to the depot maintenance/government activity for immediate correction.
- 8.4.1.2 Reportable discrepancies shall be classified as Critical, Major, or Minor according to the seriousness of the condition and the impact to the organization for correcting the condition. See Table 8-1 for discrepancy criteria.
- 8.4.1.3 Clear descriptions of defects and corrective actions are necessary for the AIDR to be effective in initiating corrective or preventive action. Remarks must be of sufficient detail to identify the problem, the parts involved, and to permit objective analysis of each discrepancy. Equipment shortages, ferry or shipping damages, deterioration during storage, or other discrepancies not directly pertaining to the quality of rework or manufacture are not reported on an AIDR. Discrepancies shall not be reported that are not covered in the negotiated work package or rework specification, unless they can be substantiated as induced by the work performed.

#### **NOTE**

Report Critical discrepancies (see Table 8-1) immediately by telephone, facsimile or E-mail (ensure confirmation of receipt). All safety-related AIDRs should be coordinated with the local safety office. All originating units or organizations shall submit an AIDR on all acceptance deficiencies (major, critical, and minor) found on assigned aircraft, engines, and equipment.

- 8.4.1.4 The reporting of all Critical and Major discrepancies is mandatory (see Table 8-1).
- **8.4.1.5** Reporting of minor discrepancies related to work requirements is mandatory. Though no formal Action Point reply is required, these discrepancies will be reviewed for trends, and if multiple occurrences of the same minor discrepancy are found it shall be reported with explanation citing the trend and a request for corrective action.

#### **NOTE**

If the acceptance inspection results in no defects being found, do not submit an AIDR for positive feedback. Feedback may be submitted via official letter or message.

- **8.4.1.6** Ferry flight and later component failures may not be reported under the provisions of this chapter unless the failure is suspected as being caused by non-conformance to depot work requirements or specifications. Failures that fall into this category require substantiation to support the non-conformance conclusions. Although they may be reported if applicable, they also require reporting under separate procedures of Chapter 3 to obtain investigation consideration.
- **8.4.1.7** Digital data (photos, audio, etc.) are recommended to support noted defects and are specifically required for Major and Critical defects. This type of data assists in providing a thorough understanding of the reported condition and may be used as training aids to help eliminate defect recurrence. Discrepancy Technical Data reference will be listed for each individually reported defect to include applicable TO number, Chapter, Paragraph, Sub-Paragraph, Figure, Table and Step number.

- **8.4.1.8** The Originator shall identify, secure, segregate, and tag any associated item, equipment, material, or media on the system, product, or material being reported IAW Chapter 6.
- **8.4.1.9** Forward the draft AIDR with supporting data to the Originating Point within five calendar days of completing the inspection.
- 8.4.1.10 Inspecting activities shall report all Critical and Major discrepancies and are encouraged to report Minor discrepancies. Reportable discrepancies are those that are attributed to non-conformance to applicable specifications, drawings, standards, agreements, technical orders, work packages, etc., resulting from workmanship or incomplete/incorrect processes during manufacture, repair, modification, or maintenance. Use the following definitions of critical/major/minor findings, experience and best judgment to determine discrepancy classification.
- **8.4.1.10.1** A critical finding is defined as a condition that will endanger personnel, jeopardize equipment or system reliability, effect safety of flight or warrant discontinuing the process or equipment operation.
- **8.4.1.10.2** A major finding is defined as a condition that may endanger personnel, jeopardize equipment or system reliability, affect safety of flight or warrant discontinuing the process or equipment operation.
- **8.4.1.10.3** A minor finding is defined as an unsatisfactory condition that requires repair or correction but does not endanger personnel, affect safety of flight, jeopardize equipment reliability or warrant discontinuing a process or equipment operation.

#### **Table 8-1.** Discrepancy Classification Guide

Inspecting activities shall report all Critical and Major discrepancies and are encouraged to report Minor discrepancies. Reportable discrepancies are those that are attributed to non-conformance to applicable specifications, drawings, standards, agreements, technical orders, work packages, etc., resulting from workmanship or incomplete/incorrect processes during manufacture, repair, modification, or maintenance. Use the following to guide and TO 00-20-1 to determine discrepancy classification.

Report as a **Critical** discrepancy when a **Red X** discrepancy is noted that impacts:

- Safety of flight or could result in loss of life or serious injury
- Airworthiness/Mission Impact
- Other CAT I criteria

#### NOTE

When a Critical discrepancy is discovered, immediately alert applicable organizations (MAJCOM, Program Manager, Safety offices, chief/lead engineer) by telephone, facsimile, email or other expedited methods.

Report as a Major discrepancy when a Red X discrepancy is noted that involves:

- Safety of operation or potential for minor injury
- Foreign Objects
- Inoperable systems, defective, or damaged components or other discrepancies that are suspected as non-conformance to applicable specifications, drawings, standards, agreements, technical orders, work packages, etc., resulting from workmanship or incomplete/incorrect processes.

Report as a **Major** discrepancy when a **Red**/(diagonal) discrepancy is noted that involves:

- Inoperable systems or other mission limiting discrepancies that are suspected as non-conformance to applicable specifications, drawings, standards, agreements, technical orders, work packages, etc., resulting from workmanship or incomplete/incorrect processes.
- Paint or corrosion discrepancies involving greater than 25 man hours to correct.

Report as a Major discrepancy when incomplete, missing or incorrect historical documents are noted.

# Table 8-1. Discrepancy Classification Guide - Continued

(Optional) Report as a **Minor** discrepancy when: A Red/(diagonal) discrepancy is noted that is not sufficiently urgent or dangerous to warrant its grounding or discontinued use and corrective action is less than 25 man hours to correct (excluding time to facilitate other maintenance). These may include but are not limited to:

- Loose/missing hardware
- Paint or corrosion discrepancies
- Damaged, but serviceable components
- Equipment document discrepancies (not minor administrative errors or those involving historical documents).

Do not report component failures noted during Acceptance Inspections unless the failure is suspected as caused by non- conformance to depot work requirements or specifications. Failures that fall into this category require substantiation to support the non-conformance conclusions.

- 8.4.2 ORIGINATING POINT RESPONSIBILITIES. The Originating Point verifies, certifies, and processes the AI report and associated exhibits and performs follow-up actions and status inquiries as outlined in Chapter 3 and Chapter 6. Additional criteria required for AI DRs include ensuring the defects are categorized against the appropriate Work Requirements Package or acceptance agreement, if applicable.
- **8.4.2.1** Verify the completeness and accuracy of noted discrepancies (e.g., sequence of events, details of the problem, recommendations, etc.) and ensure they are associated with the appropriate Work Requirements Package if applicable.
- **8.4.2.2** Originating Points will validate the classification of all discrepancies as Critical, Major, or Minor according to the seriousness of the condition and mission impact. See Table 8-1 for discrepancy criteria.
- **8.4.2.3** Classification of the AIDR. Ensure AIDRs does not contain classified, source selection sensitive, competitive prototype, proprietary, or other sensitive information.
- 8.4.2.4 Prepare final AIDR in appropriate format and assign the Report Control Number (RCN).
- **8.4.2.5** Status Inquiries. The Originating Point will establish a systematic process to query and follow-up on the progress, status, and resolution of the AIDR after submittal.
- **8.4.2.5.1** Queries should be made consistent with requirements for reviewing the status of Open DRs and are required at least weekly.
- **8.4.2.5.2** If no initial response or update is received from the Screening Point/Action Point by the status due date, the Originating Point will contact the Screening Point/Action Point to receive status.
- 8.4.2.5.2.1 Initial response time is 10 calendar days for an AIDR.
- **8.4.2.5.2.2** Updates beyond the initial response shall be made as indicated by Action Point response or whenever significant events occur, e.g., status changes, review boards, etc., but should occur quarterly as a minimum (annually for those in Open Awaiting Funds status).
- **8.4.2.5.3** The Originating Point will update the Originator as significant events, such as status changes, investigation results, etc., occur.
- **8.4.2.6** Trend analysis. The Originating Point shall establish a process for screening JDRS entries at least monthly to identify trends associated with the weapons systems/subsystems within their organization.
- 8.4.2.7 Discrepancy Findings Review. Originator/Originating Points will review discrepancy findings/remarks for acceptance and results of subsequent investigations as determined by the program office. If the response/resolution of AI discrepancies is unacceptable, the Originating Point will attempt resolution of the disagreement at the lowest level before formally initiating dispute resolution.
- **8.4.2.8** Resolution of Disagreements. The Originating Point will contact the appropriate Screening point or Action Point within 15 calendar days of the contested action and document justification for the disagreement. If the disagreement cannot be resolved, the Originating Point should elevate the disagreement to their command POC for resolution.

#### 8.5 RESOLVING ACCEPTANCE INSPECTION DISCREPANCIES.

- 8.5.1 The Action Point oversees the resolution of reported discrepancies. Technical evaluations will be performed as required to validate applicability, identify cause, ensure prompt and lasting corrective actions, and that follow-on measures or process changes are implemented to prevent recurrence. Action points retain internal Air Force Screening Point responsibility for those AIDRs forwarded across component lines for investigation under DLAR 4155.24.
- 8.5.1.1 The Action Point shall report type (QA1, QAKA, QAKE etc.) within 10 calendar days of the report submission. Using the A030D Aircraft Maintenance Production/Compression Report (AMREP) system, validate Aircraft serial number and output or DD 250 date IAW AFMCI 21-118, AIRCRAFT MAINTENANCE PRODUCTION COMPRESSION REPORT (AMREP). The Action Point ensure discrepancies are reported IAW Table 8-1. If required, the Action Point will clarify discrepancies by requesting additional information from the Originating Point.
- 8.5.1.2 Action/Support Points will accept all reported discrepancies unless there is specific credible evidence that the source of manufacture, repair, or maintenance was not responsible. Be sensitive to other deficiencies uncovered during the investigation and initiate further reporting action under this technical order for those deficiencies. Review all deficiency reports for potential trends.
- 8.5.1.3 If it is determined the reported discrepancy does not meet AI submission criteria, notify the Originating Point before either changing or not accepting the discrepancy. The Action point will not change report type. If the action point determines the report type needs to be changed (i.e., QAKA to a QA1), notify the Originating Point; indicate rationale for the change to the report. The Originating Point will then input the change into JDRS. When significant disagreements cannot be resolved at the lowest possible level, the disagreement will be elevated, as necessary, to the next management level for resolution.

#### **NOTE**

The AIDR would have to be closed "Administrative" and a new DR would have to be opened with the proper designator.

- **8.5.1.4** AIDRs will be considered to be PQDRs for cross-component reporting IAW DLAR 4155.24. Interservice report transfer shall be made electronically if available. If electronic transfer is not available, the PQDR will be submitted to the appropriate service POC via email or facsimile.
- 8.5.2 Action points may perform or request that the appropriate Support Point perform a technical evaluation to determine whether the noted condition is within the Work Requirements Package, types of additional data needed to evaluate the condition, whether further investigation is needed for resolution, and the course of subsequent investigation. The Support Point may be composed of Program Office engineering/technical support or other support provided as a result of a contractual agreement or interservice or organizational agreement.
- **8.5.3** The Support Point shall acknowledge receipt of the Action Point request and provide a forecast of the expected investigation completion date. If additional information is required from the Originating Point to support the investigation, it should be requested through the Action Point.
- **8.5.3.1** The Support Point goal is to provide resolution to the Action Point within 30 calendar days of the request for AI evaluation. Later suspense data may be negotiated between the action and Support Point for systemic or complex issues.
- 8.5.3.2 The investigation will focus on identifying root causes, ensuring prompt and lasting corrective actions, and identification of follow-on measures or process changes to prevent recurrence for each reported critical/major discrepancy.
- 8.5.3.3 The Support Point will ensure corrective measures are incorporated on the production line and that appropriate actions are documented. Corrective actions for repeat/recurring discrepancies will be specifically addressed and will have necessary follow-ups to ensure a lasting corrective action has been implemented.
- **8.5.3.4** The Support Point reply shall include a response to each reported discrepancy indicating:
- 8.5.3.4.1 Responsibility for the discrepancy (e.g., contractor error, maintenance error, technical data, etc.).
- 8.5.3.4.2 The recommended severity of defects noted (Critical, Major, Minor, unknown, no defect found). The severity of the defect will be determined by the Action Point through coordination with the appropriate engineering and Program Management authority.

- 8.5.3.4.3 Cause of the reported discrepancy: Define the root cause of the reported discrepancy. For example, an AI report stated that fluid was leaking from the landing gear strut. Initial investigation shows the leak was due to a distorted strut seal, but it was determined that the fluid was contaminated prior to strut servicing and caused distortion to the seal. The root cause was contaminated hydraulic fluid.
- 8.5.3.4.4 Action taken to correct the root cause and prevent recurrence of the reported or discernible discrepancy/deficiency.
- 8.5.3.4.5 Provide position with respect to repair, replacement costs as applicable.
- **8.5.4** Although formal response to minor discrepancies is optional, the organization shall have a process to review minor discrepancies for trends and to prevent recurrence.

#### 8.6 FINAL RESOLUTION AND AI REPORT CLOSING.

- 8.6.1 The Action Point will review and validate the Support Point investigation to ensure that the Support Point identified root causes and applicable corrective/preventative actions. Indicate if the defect was corrected and if so, indicate if repair action should have been accomplished at unit by unit, at unit by Depot Field Team (DFT) or returned to Depot for repair.
- 8.6.2 The Action Point may accept or reject and challenge Support Point responses. If responses are deemed insufficient or are otherwise unacceptable, notify the Support Point, indicate rationale for rejection or change to the report, and provide an opportunity for Support Point correction/response.
- 8.6.3 The Action Point may need to refer a deficiency report case to the contracting authority for situations such as:
- 8.6.3.1 The deficiency resulted from contractual requirements that are ambiguous, dubious, or otherwise questionable.
- 8.6.3.2 The contractor refuses responsibility for, or will not cooperate in, the investigation. When the contractor will not conduct an investigation, a Contract Administration Office (CAO) investigation will be performed which will include a review of Quality Assurance Representative (QAR) and contractor test/inspection records and an examination of like items/equipment for similar deficiencies.
- **8.6.4** Depending upon the extent of the defect, the Action Point may need to coordinate site visits, depot field team repairs, and/or other actions to satisfactorily resolve/correct confirmed defects.
- **8.6.5** Upon finalization of resolution actions, provide an update to the record and close the report within 10 calendar days after receipt of final investigation results or conclusion of MIPRB, as applicable.

# APPENDIX A METRICS AND COMPLIANCE CHECKLISTS

#### A.1 PERFORMANCE MANAGEMENT.

The processes of this Technical Order promote the goal to identify and correct deficiencies before they impact mission capability. Successful process implementation drives resolution decisions, tempered by total ownership cost, to correct, mitigate, and/or accept the risk of conditions impacting operational safety, suitability and effectiveness (OSS&E). Success is based upon two premises:

- 1. That the user/operator/maintainer reports deficiencies on their assigned systems and,
- 2. That program, supply and support system managers establish proactive processes to analyze data and act accordingly to implement solutions.

To help us manage standards to support deficiency resolution, we will baseline existing and future state measures of efficiency and effectiveness that include process, learning & growth, cost, and warfighter satisfaction. This balanced scorecard strategy supports eLog21 goals to increase equipment availability and reduce costs. We will pursue these standards by reducing DRI&R cycle time, eliminating unnecessary teardown investigations, and focusing on root cause correction to prevent recurrence.

- A.1.1 **Why Measure?** To ensure controls and processes are in place to identify, resolve and prevent the stagnation of JDRS processes, which impede timely deficiency resolution while meeting Air Staff objectives to provide operationally safe, suitable, and effective weapons systems.
- A.1.2 To provide a management review process for senior leaders at AF, MAJCOM, and Center levels that supports DR resolution. Management oversight of the quality of Weapon Systems is established in AFI 63-501, AIR FORCE ACQUISITION QUALITY PROGRAM; AFMCI 63-1201, OSS&E LIFE CYCLE SYSTEMS ENGINEERING; and AFI 21-118, IMPROVING AIR AND SPACE EQUIPMENT RELIABILITY AND MAINTAINABILITY.
- A.1.3 **What We Will Measure.** Includes, but is not limited to process, learning & growth, cost, and warfighter satisfaction. These measures will be viewed from the strategic, operational and tactical levels through and across organizations, Centers and complex's to allow a thorough assessment of DRI&R program health. Measures shall be adjusted and refocused to derive the intended behavior in support of eLog21 goals.

<ul> <li>Process-Our ability to effectively identify and quickly resolve deficiencies</li> <li>Resolution timeliness</li> <li>Quality (QDRs) by Source of Supply</li> </ul>	Cost-Minimize exhibit investigation costs and eliminate languishing  • Timely Exhibit Investigation  • Reduce Exhibit Teardown investigations exhibit
Learning & Growth-Satisfaction of available training and understanding of intent  Training feedback/satisfaction  Reduce invalid submissions	<ul> <li>Warfighter Satisfaction-Process satisfaction</li> <li>Status updates</li> <li>Disposition instructions</li> </ul>
	<ul><li>Results of investigation</li><li>Corrective actions</li><li>Timeliness</li></ul>

A.1.4 **Data Source**: Data pertaining to DRI&R is maintained in a data system known as JDRS. To reduce the metric burden, ensure consistency in reporting, and to encourage the correct use of applicable data fields, automated metric reporting will be presented through the AFMC Logistics Information Center linked through the DRI&R website at https://ooport.hill.af.mil (isolated program data is excluded).

### Table A-1. DR Response/Resolution Timelines

# Originators:

- Report CAT I DR as soon as possible, but NLT 24 hours of discovery.
- Report CAT II DR as soon as possible, but not later than three days of discovery.
- Perform acceptance inspection as soon as possible, but not later than 30 days after aircraft receipt; forward AI DR within five days of AI completion if discrepancies are noted.

# **Originating Point:**

- Submit CAT I DR as soon as possible, preferably within 24 hours of receipt.
- Submit CAT II DR as soon as possible, but NLT 10 days of receipt.
- Submit an AI DR as soon as possible, but NLT 10 days of receipt.
- Update (or ensure update) JDRS record with exhibit shipment date as soon as possible, but NLT one day for a CAT I and two days for a CAT II.
- Credit Reversals as soon as possible, but NLT 15 calendar days of notification unless dispute resolution is ongoing. Disputes should be resolved within 30 calendar days. Note: check with supply to see if the component is part of the Cost per Flying Hour (CPFH) program and funded through the Air Force Cost Analysis Improvement Group (AFCAIG). If this part was paid for by this program, then no credit reversal will be issued.
- Customer Feedback as soon as possible, but NLT 45 days of report closure.
- Dispute process will be initiated within 15 days of disputed action.

# **Exhibit Holding and Shipping Activity (Base level):**

- Ship exhibit after receipt of disposition instructions within two days for a CAT I and five days for a CAT II Exhibits.
- Request instructions from the Originating Point when disposition instructions are not received within 30 days.
- When credit is authorized but exhibit is not required for investigation, perform Force condition code (FCC) change to true condition, i.e., change suspended asset code from Q to F using FCC transaction.
- When a credit reversal is requested, perform a reverse post procedure to change the suspended asset code to the true condition and charge the obligated price back to the originating activity.

#### **Exhibit Holding and Shipping Activity (ALC level):**

- Process exhibit and annotate receipt and storage information within 24 hours of receipt.
- Perform follow-up exhibits that have not been inducted within 30 days of receipt.
- Process exhibits for induction or according to their condition within 24 hours of notification.

#### **Action Point:**

- Initial response to CAT I DR as soon as possible, but NLT: 24 hours of receipt.
- Initial response to CAT II DR as soon as possible, but NLT: 10 days of receipt.
- Initial response to an AI DR as soon as possible, but NLT 10 days of receipt.
- Shipping Instructions as soon as possible (goals are 24 hours for a CAT I and 10 days for a CAT II, but NLT 30 days.
- NOTE: "Hold" does not satisfy requirements for shipping instructions beyond the NLT date.
- Resolution standards for CAT I reports within 60 days of deficiency receipt.
- Resolution standards for Routine CAT II reports within 120 days of deficiency receipt.
- Status Updates are required as often as necessary to maintain currency of DR status. As a minimum, DRs shall be reviewed quarterly while in an Open, Open Awaiting Engineering Change Proposal (ECP), Open Awaiting Fix Verification (AFV) status. Revalidation and updates for Open Awaiting Funds (AF) should not exceed one year and shall include command funding status.

# **Support Point:**

- Investigating activities will provide (or be directed to provide) interim or final replies for MHAP CAT I reports
  within 15 days of induction, all other CAT I reports within 20 days of induction, and CAT II reports within 30 days of
  induction.
- Updates are required as status changes occur.

# Table A-1. DR Response/Resolution Timelines - Continued

# **NOTES:**

- 1. All days are calendar days and all response/update times begin with the input of the action in the database, or for investigation of exhibits, upon exhibit receipt.
- 2. Investigation goals include completing all investigation actions and providing resolution or recommending course of action for correction.
- 3. DR response/processing times are goals. It is recognized that varying work schedules and time-zone differences, that these goals may be periodically exceeded. However, due to their criticality, every effort shall be taken to ensure CAT I and Mishap deficiencies are reported, investigated, and initial risk mitigation provided within the applicable time periods.

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# APPENDIX B MATERIEL CONDITION CODE Q

B.1 **Processing Materiel in Condition Codes** "Q". Materiel is placed in condition codes "Q" so that assets bearing the same national stock number (NSN) can be differentiated in storage from other assets carrying that same NSN or to indicate what additional special handling is required to determine their true condition.

Roles and Responsibilities. There are a number of activities involved in the management and control of materiel in condition codes. All of these activities must coordinate actions to ensure that everyone is aware of all such material in storage and that action is expeditiously initiated to return materiel to a serviceable condition.

- At the storage activity, receiving and warehousing personnel are responsible for identifying or validating these items in storage. For example, this action is accomplished by the Defense Logistics Agency (DLA) when DLA provides storage service. Receiving personnel are required to provide to the appropriate wholesale Inventory Management Specialist (IMS) or the wholesale Materiel Manager (MM) copies of all paperwork received with/generated because of the receipt of materiel in these condition codes.
- At the inventory control point (ICP), the following individuals are engaged in processing material in these condition codes:
  - o The wholesale IMS or MM shall determine if an analytical evaluation of wholesale materiel is warranted prior to maintenance induction.
  - o The IMS/MM may become aware that materiel has been received in these condition codes in varying ways: notification from receiving personnel, notification online in the Item Manager Wholesale Requisition Process (IMWRP) D035A system via receipt notices for materiel in condition codes "Q" (reference AFI 23-101).

Funds shall not be expended for an analytical evaluation, nor shall one be requested unless there is a valid requirement for the item.

Action initiated by the wholesale IMS/MM should ultimately result in materiel being reclassified as serviceable, unserviceable or condemned.

The Equipment Specialist (ES) shall provide engineering and/or technical support to the IMS/MM within 15 days of having received a written request for assistance.

The Suspended Assets Manager (SAM) serves as the ICP focal point for materiel in storage in a suspended materiel condition "Q".

Documentation Requirement. Materiel will not be placed in condition codes "Q" until a Deficiency Report (DR) has been entered and accepted to JDRS. Two copies of the DR containing the accession number will be attached to the materiel. Materiel condition code "Q". This condition code identifies materiel/quality deficient exhibits returned by customers/users as directed by the IMS/MM due to technical deficiencies reported in a quality deficiency report. The exhibit requires technical or engineering analysis to determine cause of failure to perform in accordance with specifications. For ALC processing procedures and time frames, refer to AFI 23-101 and TO 00-35D-54, Chapter 6. This is a "suspended" condition code.

Timeframes for Review. No more than 30 calendar days should pass from the time that materiel is processed as "Q" condition at the DLA holding activity to when that same materiel is reclassified to another materiel condition code. It should be noted that DoD standards for processing of assets in these condition codes exist and compliance with these standards has been the subject of multiple audits in recent years. In light of the use of the Execution and Prioritization of Repair Support System (EXPRESS) to determine repair induction requirements, and of known manpower/fiscal constraints, however, it is recognized that it may not always be the wisest use of resources and does not always result in optimal customer support to apply blanket timeframes for the review and reclassification of assets from materiel condition codes "Q". Individuals involved in processing materiel in condition code "Q" should comply as closely as possible to the DoD guidelines, keeping in view that optimal customer support is their ultimate objective.

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# APPENDIX C ABBREVIATIONS AND DEFINITIONS

#### C.1 ABBREVIATIONS.

This appendix lists abbreviations and definitions that are used frequently in this technical order without their description. Abbreviations used after a single description or in the same paragraph in which they first appear may be excluded from this listing.

ACC Air Combat Command

ACO Administrative Contracting Officer
AETC Air Education and Training Command

AF Air Force

AFH Air Force Handbook
AFI Air Force Instruction
AFJMAN Air Force Joint Manual

AFKAG Air Force Cryptographic Aid General

AFMAN Air Force Manual

AFMC Air Force Materiel Command

AFMCI Air Force Materiel Command Instruction
AFOTEC Air Force Operational Test Evaluation Center

AFPAM Air Force Pamphlet
AFPD Air Force Policy Directive
AFRC Air Force Reserve Command

AFREP Air Force Repair Enhancement Program
AFSAC Air Force Security Assistance Center

AFSO21 Air Force Smart Operations for the 21st Century

AFSPC Air Force Space Command
AFTO Air Force Technical Order
AFV Awaiting Fix Verification

AHLSTRIP Acquisition Regulations and Military Standard Requisitioning and Issue Procedure

AI Acceptance Inspection

AIDR Acceptance Inspection Deficiency Report

ALC Air Logistics Complex AMC Air Mobility Command

AMREP Aircraft Maintenance Production/Compression Report (A030D)

APOC Authorizing Point of Contact

APU Auxiliary Power Unit
CAC Common Access Card

CAO Contract Administration Office

CAT Category

CAGE Commercial and Government Entity
CAMS Core Automated Maintenance System

CE Chief Engineer

CIP Component Improvement Program

CM Commodity Manager
COTS Commercial-Off-The-Shelf

CSCI Computer Software Configuration Item

CSI Critical Safety Item

DDC Defense Distribution Center

DCMA Defense Contract Management Agency
DCMAO Defense Contract Management Agency Office

DIFM Due-In From Maintenance
DLA Defense Logistics Agency

DLAI DLA Instruction

DMISA Depot Maintenance Interservice Support Agreement

DOD Department of Defense

DODAAC Department of Defense Address Activity Code

DR Deficiency Report

DRUI Deficiency Report Unique Identifier

DR Deficiency Report

DSN Defense Service Network
DSS Distribution Standard System
DT&E Development Test & Evaluation

DT&E/IOT&E Development Test & Evaluation/Initial Operational Test & Evaluation

ECP Engineering Change Proposal
EFTO Encrypt for Transmission Only
EI Engineering Investigation
EIM Engine Item Manager

eLOG 21 Expeditionary Logistics for the 21st Century

E-MAIL Electronic Mail

EPAF European Participating Air Force

ES Equipment Specialist

FAA Federal Aviation Administration

FCC Force condition code
FMS Foreign Military Sales
FOD Foreign Object Damage
FSL Forward Supply Location

GFE Government Furnished Equipment

HAP High Accident Potential

HQ Headquarters

HHQ Higher Headquarters IAW In Accordance With

IEMP Intentional Engine Management Program

IM Item Manager

IMS Item Manager Specialist

IOT&E Initial Operational Test and Evaluation

IPT Integrated Product Team

JDRS Joint Deficiency Reporting System

JRMET Joint Reliability and Maintainability Evaluation Team

LOA Letters of Offer and Acceptance

LRU Line Replacement Unit

MAJCOM Major Command

MDC Maintenance Data Collection

MDS Mission, Design, Series

MICAP Mission Capable

MILSBILLS Military Standard Billing System

MIL-STD Military Standard

MILSTRIP Military Standard Requisitioning and Issue Procedure

MIP Materiel Improvement Project

MIPRB Materiel Improvement Project Review Board
MISTR Management of Items Subject to Repair
MMAC Materiel Management Aggregation Code
MMHE Munitions Materiel Handling Equipment

MNCL Master Nuclear Certification List
MOA Memorandum of Agreement

MRB MIP Review Board

MSPM Materiel Safety Program Manager
MSTG Materiel Safety Task Group
MTBF Meantime Between Failure
MTBM Meantime Between Maintenance

NASA National Aeronautics and Space Administration

**NAVAIR** Naval Air Systems Command NCE Nuclear Certified Equipment NHA Next Higher Assembly **NSL** Not Stock Listed **NSN** National Stock Number OAF Open Awaiting Funds OI Operating Instruction OPCOM Operating Command

OSS&E Operational Safety, Suitability, & Effectiveness

OT Operational Transition
OTA Operating Test Agency
OTF Operating Time at Failure
OT&E Operational Test & Evaluation

PACAF Pacific Air Forces
PAT Process Action Team
PCR Publication Change Request

PD Program Director

PGM Product Group Manager

PIWG Product Improvement Working Group

PKI Public Key Infrastructure

PM Program Manager

PME Precision Measurement Equipment

POC Point of Contact

PQDR Product Quality Deficiency Report

PSP Primary Support Point
QEC Quick Engine Change
RCN Report Control Number
RDD Required Delivery Date

REMIS Reliability and Maintainability Information System

RTO Responsible Test Organization

SA Security Assistance SAM Special Air Mission

SBSS Standard Base Supply System

SCIT Standardization and Control of Industrial Quality Tools

SDR Supply Discrepancy Report

SN Serial Number
SOS Source of Supply
SOW Statement of Work
SP Support Point

SPOCO Single Point of Contact Office

SRU Shop Replaceable Unit T&E Test and Evaluation

TCG Technical Coordination Group
TCP Technical Coordination Program
TCN Transportation Control Number
TCTO Time Compliance Technical Order
TDR Teardown Deficiency Report

TIN Turn-In

TMDE Test Measurement and Diagnostic Equipment

TMS Type Model and Series

TO Technical Order
TPS Test Program set

TRC Technological Repair Center

UMMIPS Uniform Material Movement and Issue Priority System

USAF United States Air Force

USAFE United States Air Forces Europe

WIT Watch Item
WUC Work Unit Code

#### C.2 DEFINITIONS.

For the purpose of this publication, the following definitions apply:

**Acceptance Inspection** - This is an inspection performed by the accepting organization to determine equipment condition of newly received, assigned or acquired aircraft, engines, or equipment (trainers, simulators, consoles, terminals, ground support equipment, etc.) prior to placing the item into service. These inspections will be of sufficient depth to determine the ability of the item to perform its designed function. In the case of completed depot and contractor maintenance, they are required to validate the adequacy of maintenance accomplished. IAW work requirements package or contract specifications.

**Action Point** - A focal point(s), identified within each Component, responsible for receiving PQDRs from other components and for resolution of a reported product quality deficiency including necessary collaboration with Support Points. Action points other than the above, however, may be specifically designated. Only an Action Point is authorized to transmit a deficiency report across Component lines to a Support Point in another Component.

**Baseline** - A description of the operational safety, suitability, and effectiveness characteristics and limitations of any system or end-item that must be understood, acknowledged and maintained during operational deployment, use, experimentation, exercises, training, and maintenance of the system or end-item. The operational safety, suitability, and effectiveness baseline is established in development and updated as changes (threat, operational usage, aging, etc.) and improvements are made to the system or end-item. The operational safety, suitability, and effectiveness baseline may include the configuration baseline (specifications, drawings, and software code listings), Mission Need Statements, Operational Requirements Documents, TOs, Time Compliance Technical Orders, certifications, training, maintenance facilities, spare parts, threat scenarios, etc.

**Category (CAT) I Deficiency** - CAT I deficiencies are those which may cause death, severe injury, or severe occupational illness; may cause loss or major damage to a weapon system; critically restricts the combat readiness capabilities of the using organization; or which would result in a production line stoppage.

**Category (CAT) II Deficiency** - CAT II deficiencies are those that impede or constrain successful mission accomplishment (system does not meet minimum operational requirements but does not meet the safety or mission impact criteria of a CAT I deficiency). It may also be a condition that complements, but is not absolutely required for, successful mission accomplishment. The recommended enhancement, if incorporated, will improve a system's operational effectiveness or suitability.

**Chief Engineer** - The individual responsible for all system technical activities, including engineering and configuration changes, in support of the Program Manager.

**Closed Deficiency Report** - DRs may be considered closed when an investigation into the assignable cause has been completed; corrective actions to preclude recurrence of the deficiency have been initiated; credit and disposition information for the materiel have been provided; and exhibit disposition has been initiated.

**Component** - A Military Department or Defense Agency (e.g., Army, Navy, Marine Corps, Air Force, DLA, Defense Mapping Agency, Coast Guard, etc.). GSA may be considered as a separate Component within the definition of this regulation.

Credit - An exchange or obligated cost credit provided back to the customer upon reporting of deficient assets.

Credit Reversal - The reversal of a credit issued when it is determined the reason for the credit was invalid.

**Critical Defect** - A defect that judgment and experience indicate is likely to result in hazardous or unsafe conditions for individuals using, maintaining, or depending upon the product; or a defect that judgment and experience indicate is likely to prevent performance of the tactical function of a major end item such as an aircraft, communication system, land vehicle, missile, ship, space vehicle, surveillance system, or major part thereof.

**Critical Safety Item (CSI)** - A part, subassembly, assembly, subsystem, installation equipment, or support equipment for a system that contains a characteristic, where any failure, malfunction, or absence of which could cause a catastrophic or critical failure resulting in the loss of, or serious damage to, the system or an unacceptable risk of personal injury or loss of life.

**Defect** - Any nonconformance of a characteristic with specified requirements. Defects are classified as critical, major, or minor. (Also see Severity Classification; Critical, Major, and Minor Defect)

**Deficiency Report** - The generic term used within the USAF to record, submit and transmit deficiency data which may include, but is not limited to a Deficiency Report involving quality, materiel, software, warranty, or informational deficiency data submitted using the SF 368 or equivalent format.

**Design Deficiency** - Any condition that limits or prevents the use of materiel for the purpose intended or required, where the materiel meets all other specifications or contractual requirements. These deficiencies cannot be corrected except through a design or specification change.

**DULL SWORD** - A reporting flagword identifying a nuclear weapon safety deficiency. This includes mishaps not falling into the accident or incident categories, but meeting any of the criteria as defined in AFMAN 91-221.

**End-Item** - Equipment that can be used by itself to perform a military function.

Engineering Investigation - A report of a material deficiency or request for enhancement.

**Enhancement** - A condition that improves or complements successful mission accomplishment but is not absolutely required. The recommendation, if incorporated, will enhance a system's operational safety, suitability and/or effectiveness (OSS&E). An enhancement report should not be designated as such solely due to an "out-of-scope" condition as described in contractual requirements.

**Exhibit** - The item reported as being deficient, or a sample item which represents the reported deficient condition, which can be analyzed to determine the possible cause of the defect.

**Government-Furnished Property (GFE)** - Property in the possession of, or acquired directly by, the Government and subsequently delivered to or otherwise made available to a contractor.

**Government-Owned Product** - A product which is owned by or leased to the Government or acquired by the Government under the terms of a contract.

**Information Only Report** - A Deficiency Report sent to an Activity as a "copy furnished," "information only copy," or via a transmittal letter stating the report is furnished for information only. A written response to the sending Activity is not required. However, local action may be required by the recipient, such as assuring corrective action, verifying contractor compliance, etc.

**Latent Defects** - Latent defects are those that are not discoverable during a reasonable inspection, but may become evident after the end-item has been placed in service. Latent defects are typically attributable to errors in workmanship, or nonconformance to specifications, drawing standards or other technical specifications (see quality escape).

**Lead Engineer** - The individual responsible for all end-item technical activities, including engineering and configuration changes in support of the end-item Program Manager.

**Letter of Offer and Acceptance (LOA)** - The document by which the US Government offers to sell to an eligible foreign country or international organization defense articles and defense services pursuant to the Arms Export Control Act, as amended. The LOA lists the items and/or services, estimated costs, and the terms and conditions of sale, and provides for the foreign customer's signature to indicate acceptance.

**Material Deficiency** - An unacceptable condition or recommendation for an enhancement that impacts the operational safety, suitability, and/or effectiveness of a system, subsystem or component. It does not include deficiencies related to workmanship or non-conformance of processes. (See Quality Deficiency)

**Master Nuclear Certification List (MNCL)** - Identifies equipment, hardware, facilities and software that are certified IAW AFI 63-125. The MNCL is the sole source for verifying the nuclear certification status of nuclear certified equipment (system, hardware, software).

**Major Defect** - A defect, other than critical, that is likely to result in failure, or to reduce materially the usability of the unit of product for its intended purpose.

**Minimize** - Minimize is the reduction of record and voice telecommunications traffic in an emergency.

**Minor Defect** - A defect that is not likely to reduce materially the usability of the unit of product for its intended purpose, or is a departure from established standards having little bearing on the effective use or operation of the unit.

**New Material** - Material procured under contract from commercial or Government sources or manufactured by an in-house facility. Such material will be considered new until it has been proven during actual system operation. (See reworked material.)

**Non-Government Personnel** - Anyone who is not a Federal employee. Thus, all contractors (support, prime, etc.) are non-government personnel.

**Nuclear Certified Equipment (NCE)** - Peculiar (i.e., system specific) and common specialized or non-specialized support equipment whose design meets applicable design criteria and is nuclear certified IAW AFI 63-125, *Nuclear Certification Program* and identified in the MNCL.

Objective Evidence - Evidence based upon the results of test or examination that a deficiency exists.

**Operating Command (OPCOM)** - The USAF using command that operates the weapon system (e.g., ACC, AETC, AMC, AFRC, PACAF, USAFE)

**Operational Effectiveness** - The overall degree of mission accomplishment of a system used by representative personnel in the environment planned or expected (e.g., natural, electronic, threat) for operational employment of the system considering organization, doctrine, tactics, survivability, vulnerability, and threat (including countermeasures, initial nuclear effects, and nuclear, biological, and chemical contamination threats).

**Operational Risk Management (ORM)** - The systematic process of identifying hazards, assessing risk, analyzing risk control options and measures, making control decisions, implementing control decisions, accepting residual risks, and supervising and reviewing the activity for effectiveness of the implemented controls. The application of ORM in the acquisition and sustainment of systems and end-items includes System Safety (AFPAM 90-902)

**Operational Safety** - The condition of having acceptable risk to life, health, property, or environment caused by a system or subsystem when employing that system or subsystem in an operational environment. This requires the identification of hazards, assessment of risk, determination of mitigating measures, and acceptance of residual risk.

**Operational Suitability** - The degree to which a system can be placed satisfactorily in field use, with consideration given to availability, compatibility, transportability, interoperability, reliability, wartime use rates, maintainability, safety, human factors, architectural and infrastructure compliance, manpower supportability, logistics supportability, natural environmental effects and impacts, and documentation and training requirements.

**Originating Point** - An Activity within a Component that finds a deficiency and reports it to the designated Component Screening Point. A contractor that receives defective Government material and reports it is also considered to be an Originating Point.

Originator - The individual who discovers the deficiency and initiates the deficiency report.

**Procurement Deficiency** - Any unsatisfactory material condition which is attributable to improper, incorrect, ambiguous, omitted, or conflicting contractual requirements including the procurement document it references, or any combination which describes technical requirements of material.

**Product** - Item, materiel, data, software, supplies, system, assembly, subassembly, or portion thereof which is produced, purchased, developed, or otherwise used by the Government.

**Product Group Manager (PGM)** - The Program Manager who is charged with all cost, schedule, and performance aspects of a product group which is a compilation of several specific products and is in direct support of one or more weapon system or military system program director.

**Product Quality Deficiency** - A deficiency detected on new or newly reworked government-owned products that do not fulfill their expected purpose, or service due to deficiencies in design, specification, materiel, software, manufacturing process, and/or workmanship. This includes the initial failure of the item after installation or placement in service, as well as pre- mature failure within an identified warranty period or specified period of performance.

**Product Quality Deficiency Report (PQDR)** - A report of deficiency detected on new or newly reworked government-owned products that do not fulfill their expected purpose, operation, or service due to deficiencies in design, specification, materiel, software, manufacturing process, and/or workmanship. This includes the initial failure of the item after installation of placement in service, as well as premature failure with an identified warranty period or specified period of performance.

**Program Manager (PM)** - The single individual specifically designated, under the integrated weapon system management architecture, to be responsible for the life cycle management of a system or end-item. The Program Manager is vested with full authority, responsibility, and resources to execute and support an approved Air Force program.

**Quality Escape** - A latent quality deficiency attributable to errors in workmanship, or nonconformance to specifications, drawings standards or other technical specifications which has escaped detection and is later discovered through an inspection, TCTO, or other maintenance performed to validate the condition of an item or an end item received from contracted or organic manufacturing and repair activities.

Quality Deficiency - See Product Quality Deficiency.

**Quality Investigation** - A comprehensive investigation conducted by the Quality Assurance organization within the Action/Support activity to determine whether the reported unsatisfactory material was repaired, manufactured, or tested in conformance with required specifications, standards, or contractual requirements and that applicable quality controls are adequate to ensure conformance. Corrective action will be initiated when inadequacies are identified.

**Report Control Number** - The control number assigned by the Originating Point in accordance with a prescribed format containing the Originating Point's DODAAC, calendar year, and sequential number and for USAF reports. This may be followed by a space and originating unit activity designator.

**Reworked Materiel** - Materiel which has been overhauled, rebuilt, repaired, reworked, or modified by a military facility or commercial facility and proven during actual system operation. Such materiel will be considered newly reworked until it has been proven during actual system operation.

**Screening Point** - A designated activity(ies) identified within each Component that: reviews the DR for proper categorization, validity, correctness of entries, accuracy, and completion of information addresses; determines and transmits the DR to the proper Action Point within or outside the Component; maintains an audit trail for each DR; reviews closeout responses from Action Points; and collects, maintains, and exchanges DR data.

Severity Classification - The classification of a defect by its severity: critical, major, or minor. (See Defect)

**System** - A specific grouping of components or elements designed and integrated to perform a military function.

**System Safety** - The application of engineering and management principles, criteria, and techniques to achieve acceptable mishap risk, within the constraints of operational effectiveness and suitability, time, and cost, throughout all phases of the system life cycle. (Military Standard (882D)

**Support Point** - Any Activity that assists the Action Point, as requested, by conducting and providing results of a special analysis or investigation pertinent to the correction and prevention of a reported product quality deficiency.

**Technical Dialog Tool** - Are used to communicate, address, and resolve technical and DR related issues that arise or are not fully defined in the original DR submission. Technical Dialogs can provide communication at any stage of the DR process and can occur between two individuals or between groups of individuals who have privileges to use the JDRS web site. There are two Technical Dialog classifications: "DR" Technical Dialog and a "generic" Technical Dialog.

**Test Deficiencies** - Any incompatibility or failure of materiel as measured against the applicable test specifications, procedures, or test equipment between Government or contractor activities.