

BY ORDER OF THE COMMANDER

15TH AIRLIFT WING INSTRUCTION 21-102

13 FEBRUARY 2004

Maintenance

AIRCRAFT/EQUIPMENT IMPOUNDMENT



COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements responsibilities for impounding aircraft and support equipment. Aircraft and equipment impoundment is a method used to thoroughly investigate ground or flight incidents involving safety of flight, other safety incidents, possible maintenance malpractice or to establish a higher than normal degree of direct management involvement and oversight while correcting a discrepancy.

This instruction applies to all 15th Aircraft Maintenance Squadron (AMXS), including contractor personnel, and 15th Operations Group (OG) personnel who maintain base assigned aircraft, ground support equipment or transient aircraft deployed to Hickam AFB under PACAF operational control. This instruction does not apply to Air National Guard/Reserve units or members.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

This revision incorporates significant changes from the previous version. All personnel should read this instruction carefully.

Chapter 1

TERMS

1.1. Impoundment. Intensified aircraft and equipment management due to system or component malfunction or failure of a serious or chronic nature. Impoundment is the immediate isolation and control of access to an aircraft or equipment item and applicable historical records after a serious incident so that an intensified investigation can be completed. Investigative efforts and repair actions are hampered or pertinent evidence destroyed by allowing unrestricted access to the aircraft or equipment involved.

1.2. Impoundment/Release Authority. Both the 15 AMXS and 15 OG Commanders or designated representative(s) have the authority to impound and/or release aircraft/equipment. Designated representatives will be identified in writing to the 15 AMXS Quality Assurance (QA) office and tracked on the Special Certification Roster IAW AFI 21-101, Chapter 11, Paragraph 11-2.4.

1.3. Impoundment Official. The impoundment official will hold the minimum rank of MSgt (or civilian equivalent) and be appointed by the Impoundment Authority. Impoundment officials are designated as the single point of contact for the affected aircraft or equipment item and are responsible for controlling, monitoring, and investigating the impounded aircraft/equipment.

1.4. Authorized Personnel. Individuals directly involved in the management, safing, troubleshooting, or repair of an impounded aircraft or equipment.

1.5. Isolation Area. Area designated by the squadron/group commander or designated representative to locate impounded aircraft/equipment. Aircraft may be isolated on the flightline or in hangars. The isolation area will be marked off using cones, ropes, or placards indicating the impoundment condition.

Chapter 2

IMPOUNDMENT CRITERIA

2.1. Aircraft and/or Aerospace Ground Equipment (AGE) will be impounded:

- 2.1.1. When lost or suspected lost tools, items, or equipment on or in close proximity of an aircraft not found within two hours.
- 2.1.2. Following an aircraft ground or flight related mishap as defined in AFI 91-204, *Safety Investigations and Reports*.
- 2.1.3. Following an uncommanded flight control malfunction IAW AFI 91-204. Special attention is required to completely diagnose and correct flight control malfunctions.
- 2.1.4. When the impoundment authority determines extraordinary measures are required to ensure the safe operating condition of a specific aircraft/equipment or to address any degradation of aircraft airworthiness or serious anomaly.
- 2.1.5. For engine anomalies to include but not limited to:
 - 2.1.5.1. **An aircraft experiences an unselected power reversal.**
 - 2.1.5.2. Engine case penetration, rupture, or burn-through from an internal engine component.
 - 2.1.5.3. When an aircraft experiences a loss of thrust sufficient to prevent maintaining level flight at a safe altitude. This includes all cases of multiple engine power loss or roll back.
 - 2.1.5.4. When an engine has confirmed internal damage due to foreign object damage and is isolated to the engine. Engine will be removed from the aircraft and impounded. Aircraft impoundment is not required.
- 2.1.6. When an in-flight fire occurs.
- 2.1.7. When an aircraft experiences an in-flight loss of all pitot-static system instruments or all gyro stabilized attitude or direction indicators.
- 2.1.8. When there is evidence of intentional damage, tampering, or sabotage.
- 2.1.9. When there are physiological incidents involving aircraft systems or cargo (crew members become ill during flight).
- 2.1.10. Impoundment authorities will determine if impoundment is warranted when:
 - 2.1.10.1. An aircraft landing gear fails to extend or retract.

Chapter 3

IMPOUNDMENT RESPONSIBILITIES AND PROCEDURES

3.1. The Impoundment Authority appoints the Impoundment Official.

3.2. The Impoundment Official will:

3.2.1. Notify the Maintenance Operations Center (MOC) when an impoundment decision has been made.

3.2.2. Enter a Red X in the AFTO Form 781A (or AFTO Form 244) stating, "AIRCRAFT (EQUIPMENT) IMPOUNDED IAW 15 AWI 21-102 FOR (enter discrepancy). Impoundment official is (enter name of designated individual)."

3.2.3. Coordinate with the Impoundment Authority to determine an isolation area.

3.2.4. Ensure the aircraft is cordoned off using high visibility cones, placards, or ropes placed around the aircraft.

3.2.5. Control access to the impounded aircraft/equipment. Establish an Entry Control Point (ECP) if required.

3.2.5.1. If an ECP is established, maintain a log at the entry to track personnel entering/leaving the area for the duration of the impoundment. The log will contain individual's name, rank and employee number, date and time arrived/departed, and reason for entry. Review and initial daily, and keep on record until the aircraft/equipment is successfully repaired and released from impoundment by proper authority.

3.2.6. Control access to aircraft/equipment records, including current aircraft forms and the aircraft jacket file and/or the AFTO Forms 244, Industrial/Support Equipment Record.

3.2.6.1. **If an electronic maintenance database is used (i.e. CAMS), pull 90-day history for the suspect system.**

3.2.6.2. If determined necessary for investigation purposes, request personnel records from the owning/operating units. These may include, but are not limited to, individual training records.

3.2.7. Clarify the write-up justifying impoundment with the flight crew or maintenance personnel who discovered the discrepancy.

3.2.8. Control and limit maintenance on the impounded aircraft/equipment until the cause is determined. Determine what maintenance can be performed in conjunction with maintenance required to release the impoundment, limiting actions to only those required to make the aircraft safe.

3.2.8.1. **Select a team of highly qualified technicians to determine the cause of the problem and set up a work/rest schedule. Impoundment team members will be relieved from all other duties until released by the impoundment official.**

NOTE: For Contractor Logistics Support (CLS) aircraft (C-37A and C-40B), notify the 15 AMXS Quality Assurance Representative(s) for contractual/contractor support and involvement as required.

3.2.8.2. Coordinate any support from 15 AMXS/MXD or other agencies as required.

3.2.9. Maintain an accurate record of all findings and corrective actions, including in-shop work, to determine the cause and ensure adequacy of corrective action. Discrepancies which cannot be duplicated will be thoroughly reviewed to ensure in-depth troubleshooting was accomplished.

3.2.10. Control all parts removed during impoundment investigation. Attach an AFTO Form 350, Repairable Item Processing Tag, or equivalent, clearly marked to show item has been removed from impounded aircraft/equipment. Once a part is confirmed to be the cause of impoundment, it will be available to process as deficiency report exhibit.

NOTE: A breakdown report of suspect parts controlled by CLS aircraft contractors may be requested as contractual obligations do not allow for standard Air Force parts investigation for deficiency reporting.

3.3. The MOC will:

3.3.1. Notify 15 AW Safety Office and the applicable squadron of an impoundment.

3.3.2. Instruct personnel to perform no maintenance, other than installation of required safety devices, until the aircraft has been released for maintenance by the impoundment official.

NOTE: Safety investigations take priority over impoundment maintenance actions. Impoundment maintenance may be done in conjunction with a safety investigation if 15 AW/SE concurs.

Chapter 4

RELEASING AUTHORITY

4.1. The Impoundment Official will brief the Releasing Authority on all findings, corrective actions, and request release of the aircraft or equipment from impoundment.

4.2. If approved, the Release Authority directs the impoundment to be cleared in the forms by entering “Investigation complete. All corrective actions have been reviewed. Aircraft/Equipment released.” referring to original discrepancy in the “Corrective Action” block, sign the “Inspected By” block, and initial over the Red “X” symbol.

Chapter 5

AIRCRAFT AWAY FROM HOME STATION

- 5.1. If a discrepancy is encountered off-station warranting impoundment, 15 AW impoundment procedures will be followed.**
- 5.2. The 15 AMXS/CC may temporarily delegate Impoundment Official duties to the highest ranking Flying Crew Chief (FCC) or Flight Engineer (FE) with the aircraft.**
- 5.3. 15 OG/CC may delegate the aircraft commander as Impoundment/Release Authority.**
- 5.4. Report all investigative and corrective actions back through 15 AMXS/QA for verification all requirements have been met, or if additional support is needed.**

RAYMOND G. TORRES, Colonel, USAF
Commander, 15th Airlift Wing

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

- 1.1. AFI 21-101, Aerospace Equipment Maintenance Management
- 1.2. PACAFI 21-101, Objective Wing Aircraft Maintenance
- 1.3. AFI 91-204, Safety Investigations and Reports
- 1.4. 00-35D-54, USAF Material Deficiency Reporting and Investigating System
- 1.5. 00-25-107, Maintenance Assistance