BY ORDER OF THE COMMANDER, 15TH AIRLIFT WING

15TH AIRLIFT WING INSTRUCTION 21-111 18 MARCH 2004



Maintenance

AIRCRAFT FLIGHT CONTROL MAINTENANCE PROCEDURES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction establishes local policies, responsibilities, and procedures for Aircraft Flight Control Maintenance Team procedures. It applies to all maintenance personnel assigned to the 15th Aircraft Maintenance Squadron (AMXS). It does not apply to the Air National Guard (ANG) or US Air Force Reserve (USAFR) units and members.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

1. REFERENCES.

- 1.1. AFI 21-101, Maintenance Organizations and Procedures
- 1.2. AFI 91-204, Safety Investigations and Reports
- 1.3. 15 AWI 21-102, Aircraft Impoundment Procedures

2. RESPONSIBILITIES.

- 2.1. Quality Assurance (QA) will:
 - 2.1.1. Monitor the program to ensure team composition adequacy and to evaluate overall program effectiveness.
 - 2.1.2. Follow-up all Flight Control Team (FCT) maintenance actions.
 - 2.1.3. Perform a final review of aircraft forms for proper maintenance actions and documentation.
 - 2.1.4. Be used as technical advisors as requested by the FCT.
- 2.2. 15th Aircraft Maintenance Squadron:

- 2.2.1. Ensure sufficient qualified personnel are available to compose an FCT. They will identify highly qualified proficient technicians for inclusion on an FCT.
- 2.2.2. At the time of the malfunction, select an FCT of highly qualified 7 or 9 level technicians or a civilian equivalent consisting of Repair and Reclamation, Hydraulics, Electric/Environmental and Guidance and Control. Appoint additional specialists when required. Members of the team must be authorized to clear Red X conditions within their specialty.

3. PROCEDURES.

- 3.1. Conditions requiring FCT actions:
 - 3.1.1. Flight control malfunctions resulting in impoundment in accordance with 15 AWI 21-102, to include the following: Flight Control Anomalies exhibited by a lack of response to a controlled input, an uncommanded input resulting in a major change from the intended attitude of flight path or any departure that is identified as not pilot induced. Exceptions will be on a case-by-case basis and approved by the 15 AMXS/CC or designated representative.
 - 3.1.2. When an aircraft experiences chronic, repeat, or recurring malfunctions of the flight control system.
 - 3.1.3. When the autopilot mode fails to disengage.
- 3.2. Impoundment procedures will be followed as outlined in PACAFI 21-101 and 15 AWI 21-102, as necessary.
- 3.3. Upon establishment of the FCT, all team members will report to the aircraft. The senior ranking FCT member will be assigned as the FCT Chief.
- 3.4. If the aircraft is impounded, no work will be performed until the impoundment official releases the aircraft for maintenance.
- 3.5. Aircraft undergoing flight control diagnostic maintenance will be assigned a dedicated work area. Routine maintenance, except for fuel/oil servicing and Joint Oil Analysis Program sampling, will not be performed unless approved by the FCT Chief.
- 3.6. Only one FCT will be used on each problem. FCTs will work a single shift not to exceed 12 hours. Personnel assigned to an FCT will be used exclusively for FCT maintenance.
- 3.7. When requested, the FCT Chief or designated representative will debrief the aircrew.
- 3.8. The FCT Chief will:
 - 3.8.1. Review the aircraft history prior to performing any maintenance actions. AFTO Forms 781, debriefing information and historical data from Core Automated Maintenance System (CAMS), may be used to develop a troubleshooting strategy.
 - 3.8.2. Ensure Fault Isolation Guides (if applicable) are followed and all checklists are accomplished. All troubleshooting and maintenance actions will be documented in the AFTO Forms 781 series and entered into CAMS.
 - 3.8.3. Generate a daily report to document maintenance actions accomplished.

- 3.8.4. Review all documentation of team findings and actions at the end of each day. Prior to starting work each day, meet with the team to review findings, previous work and plan for further action.
- 3.8.5. Upon obtaining a satisfactory fix, ensure all forms documentation is accurate and complete prior to returning the aircraft to normal flying duties.
- 3.9. The 15 AMXS Director of Maintenance, Maintenance Superintendent or designated 9-level supervisor or civilian equivalent will review all corrective actions and sign off the original discrepancy in the "inspected by" block.
- 3.10. When discrepancies cannot be duplicated on the ground and when troubleshooting and diagnostic techniques fail to provide a satisfactory fix, the 15 AMXS/CC may authorize a Functional Check Flight or an Operational Check Flight to verify system performance.

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