

IAM/FAA AIRCRAFT AND MAINTENANCE SAFETY PROCEDURES AT TRANS WORLD AIRLINES

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IAM/FAA Conformance Committee

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Good afternoon. Today, I am going to share with you the TWA-IAM/FAA Conformance Committee Procedures program. This procedure allows individual maintenance workers to bring to TWA's attention their concerns dealing with FAA and procedural matters that affect the efficient operations of TWA's maintenance plan. IAM Local 1650's leadership felt that members had the right and the obligation as professional aviation maintenance technicians to air their concerns in a structured and orderly manner to protect themselves and the company, and to ensure efficient operations.

As a FAR Part 121 carrier and a Part 145 Repair Station, the corporate manuals TWA uses are approved by the Federal Aviation Administration and have the same effect as Federal Air Regulations.

Our members must perform under the following regulations and rules:

FAR Part 13 - Investigation and Enforcement Procedures: Any personnel involved in aircraft maintenance must report to the administrator or his representatives known violations of the regulations.

FAR Part 21 - Certification Procedures for Products and Parts: Airworthy parts with proper documentation. Mechanics must assure that any part they certify as airworthy, is airworthy and that proper documentation has been presented.

FAR Part 39 - Airworthiness Directives are followed and adhered to as required by the Airworthiness Directive.

FAR Part 43 - Maintenance: Proper procedures are followed and applied during preventative maintenance, rebuilding, and any alterations.

FAR Part 65 - Certification: Airmen Other Than Flight Crewmembers: Certificates and proper application and use thereof are followed.

FAR Part 108 - Airport Security: Responsibilities to adhere to and enforce rules and procedures for the airports at which they are employed.

FAR Part 121 - Certification and Operations of a Domestic, Flag, and Supplemental Air Carrier: Maintenance rules and procedures under which they perform.

FAR Part 183 - Representatives of the Administrator: Response and responsibilities toward these representatives.

Company corporate manuals:

General Policies and Procedures: TWA's Maintenance Program, including any and all maintenance procedures TWA uses.

Administrative Systems and Procedures: Administration of TWA's maintenance program and special procedures employed at the Ground Operations Center.

Parts and Material Handling: The handling and procurement of parts and materials, that all parts and materials are of an airworthy condition when installed on an aircraft, powerplant, or component part.

Manufacturers' Manuals and Drawings: Directions and instructions are followed and do not conflict with any other rule, regulation, or procedure.

Confusion exists as to which of the previous items carries the greatest authority for the technician and what management's involvement is in ensuring adherence to the correct procedures. The Committee's mandate is to find out for the technician, when he or she has a question, what should be observed. My liaison, Tom Mealie, TWA's Manager-Quality Assurance, and I confer to try and decide what is best for the individual and for the company.

The Committee was organized by the International Association of Machinists Local Lodge 1650 early in 1987 to meet these obligations. TWA recognized the Committee in September 1991. The procedures I am presenting today were established in May 1992.

Table 1 lists the Committee's Scope and Objectives from the Union's standpoint. It is to assure that workmanship, methods, and materials used are in compliance with the Federal Regulations, Company specifications, manual procedures, and accepted standards and good practices. As an inspector who is also a member of this Committee, I am quite aware that there is quite a bit of confusion as to what are accepted standards and good practices. There are very few arguments over manual procedures, but quite a few over accepted standards. We are also to assure that all our products, i.e. the airplane, engines, and components, are overhauled, repaired, and maintained in accordance with published specifications. We had gotten into a bad habit where people were doing maintenance tasks by word of mouth. More experienced people would tell younger people that this is the way we have done it, this is the way it should be done, it works. We found through experience that this is not always right. Thus, we have implemented this standard, and these last two words are important to us, "published specifications."

Table 1 Committee Scope and Objectives

SCOPE

To assure that workmanship, methods and materials used are in compliance with Federal Regulations, Company specifications, manual procedures, accepted standards and good practices.

To assure that any airframe, engine or component (appliance) is overhauled and/or repaired and maintained in accordance with published specifications.

OBJECTIVES

Report to this committee, who in turn may report to the Company, IAM, FAA and any other concerned parties any violations of maintenance practices that are not in accordance with Federal Regulations, Company specifications, manual procedures, accepted standards and good practices.

The objectives are pretty much the same. People are to report to the Committee, who in turn may report to the Company, the IAM, or the FAA, any violations in maintenance practices. We invoke this very rarely because we try to solve a problem at the first step between the individual technician or maintenance worker and the front-line supervisor. I think this program is important because it brings about a dialogue between the floor worker who actually does the work and the people who have to make decisions as to how well the system is working. If there are any discrepancies in the procedures we have established, there is a mechanism whereby procedures can be changed in an orderly manner and documented. We do not want to change procedures if they are correct, and we do not want anybody causing havoc.

As a union official, I have a legal obligation to provide representation on matters brought to my attention. Tom, as the company representative, has the obligation to protect and serve the company's interests.

Workplace barriers and apprehension are being overcome. The program is still in an evolving, education process. I am appointed to my position by IAM Local's Executive Board with TWA's concurrence. The Committee covers TWA's Ground Operation Center and Flight Operations in Kansas city with two union members and Tom. The Committee also answers questions and acts as an advisor to our membership during FAA investigative and informal hearings at a member's request.

The union and company leadership decided to appoint Inspectors to this committee because, among other things, inspectors work with regulations, engineering, and maintenance requirements daily. Also, it has been said, "Inspectors have the memory of an elephant, and the skin of a Rhinoceros."

The IAM/FAA Conformance Committee at TWA has been established to help TWA and IAM promote greater efficiency and to develop guidelines for the Ground Operations Center at Kansas City, Missouri. In the future, it may be used throughout TWA's entire maintenance system. [Tables 2](#) and [3](#) present the step-by-step procedures the committee uses. As you can see in the procedures, for the first step ("A"), an individual must first discuss what he or she believes is wrong with the immediate supervisor. The supervisor investigates and takes appropriate corrective action. If the supervisor finds that the finding is not valid, he or she explains the situation to the individual. In a lot of cases, this is not the end. The next step, when the individual does not agree with the immediate supervisor's assessment, is to meet the union steward to discuss the same matter again. I know this sounds repetitive, but for the next step ("C" in [Table 3](#)) there is a form that has to be filled out. Filling out the form creates a written record, so we do not have to rely on hearsay. In this business, one grows tired of relying on hearsay and rumors.

Table 2

TRANS WORLD AIRLINES
GROUND OPERATIONS
ADMINISTRATIVE SYSTEMS AND PROCEDURES MANUAL
PART 2 - GROUND OPERATIONS CENTER SYSTEMS

IAM/FAA Conformance Committee

The Director FAA/ATA/Liaison and Quality Assurance is primarily responsible for the policies and procedures in this section.

I. Purpose

To assure that individuals may bring to the attention of their departmental supervision and the IAM Conformance Committee matters which they feel might be in conflict with Federal Regulations, Company specifications, manual procedures, accepted standards and good practices within their department (area) and to establish procedures for the prompt handling of these findings.

II. Procedure

A. The individual must first discuss the finding with the immediate supervisor. The supervisor will investigate the finding and take appropriate corrective action. If finding is not valid, the supervisor must explain his/her position to the individual.

B. If the finding is not resolved, the individual and his/her Shop Steward will present the finding to the supervisor. The supervisor will investigate and initiate corrective action or explain why corrective action is not necessary.

C. If the finding is still not corrected, the involved individual may request further handling by the IAM/FAA Conformance Committee.

D. The IAM/FAA Conformance Committee, in conjunction with the Office of the Director - FAA/ATA Liaison and Quality Assurance, will process valid findings. Valid findings will be presented at the manager level. If satisfactory corrections are not made, findings will be presented to successive levels of management up to Senior Vice President of Maintenance and Engineering for final determination.

E. The Aircraft and Component Maintenance Procedural Report Form No. ICC001 will be utilized to present findings to departmental managers.

Table 3 Step Procedure for IAM/FAA Committee Complaints

STEP PROCEDURE FOR IAM/FAA COMMITTEE COMPLAINTS

- I. Individuals who observe, suspect and/or believe that workmanship, methods and materials are not being used in compliance with Federal Regulations, Company specifications, manual procedures, accepted standards and good practices will bring to the attention of his/her immediate supervisor by the following means.
 - A. Contact the immediate supervisor first and discuss the matter. If the matter cannot be resolved, then the Steward for the area will be contacted.
 - B. If the finding is not resolved, the individual and his/her Shop Steward will present the finding (complaint) to the supervisor.
 - C. The Steward will record all information provided by the individual on Form IAM/ICC 001 (Aircraft and Maintenance Component Procedural Pre-Investigation Report).
 - II. The Steward will contact the IAM/FAA Committee with this form.
 - III. The IAM/FAA Committee will evaluate the report and investigate the matter.
 - IV. After a thorough investigation, the findings will be recorded and copies presented to the Steward and individual together.
 - V. A determination will be made by all parties to either proceed or drop the matter.
 - A. Present the findings to higher management.
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If an individual reports an extremely serious problem, and the supervisor has not addressed it, the individual should fill out the form, sign it, and present it to the Committee. That way, we at least have a record. We do not intend to point fingers, but we want to be able to back track for ourselves. If the finding is not corrected after filing the form, the individual may return the form to the Committee.

The Committee includes myself and another union member. We get together or we independently assess what is written down to determine if we should take it further, i.e. to Tom. For a lot of cases, we take the written form and go the supervisor ourselves to find out exactly what the problem was and to explain the individual's problem. If the problem cannot be resolved, the Committee will meet with the Office Of Quality Assurance and proceed to validate the findings. [Figure 1](#) is the form the union steward and the individual prepare to present to the Committee before the Committee is involved. It is straightforward; the important parts are for the nature of the complaint and the references they use. Also, the individual provides a brief synopsis of the discussion with the immediate supervisor.



Report No: _____
 Procedural Report No: _____

**AIRCRAFT AND MAINTENANCE COMPONENT
 PROCEDURAL PRE-INVESTIGATION REPORT
 Pre-Investigation and Verbal Handling Report
 (Steward Use Only)**

Aircraft Type: _____ N-NO: _____ SN: _____
 Engine Type: _____ SN: _____
 Component Mfg. No: _____ TWA No: _____ SN: _____
 Type Maintenance: _____
 Date: _____ Local Time(24 hr. clock): _____
 Nature of complaint and/or request: _____

 Reference: (FAA Reg., GP&P, AS&P, M/M, etc.): _____

Describe the verbal discussion with immediate Supervisor, (include with this report all documentation. If available: e.g. n/r's, routines, M/M pages, M.O.'s, E.R.'s, ARA's and any other pertinent information. Copies will suffice.): _____

Steward: _____ Shift _____ Classification: _____
 Shop, Area or Department: _____ Location: _____
 Phone No: _____
 Report Submitted Date: _____ Time: _____ Complaint: _____

Form IAMICC 0001

Figure 1

I am sorry to report that in a lot of cases the individuals do not know the reference material, so the Committee fills this in for them. This is the stumbling block when they are wrong. This is why the form comes to the Committee: it is a learning process on both parts. If an individual does not know the reference material and thinks that he or she has a complaint, they fill this out and bring it to the Committee. The Committee investigates it and finds the reference material. If the complaint is held valid by the Committee and we think we have a valid reason and a valid finding, I take the form shown in [Figure 2](#) and fill out the top part of the form. This is the form Tom and I work with. We fill in almost the same information as for the previous form, except that I have to be more precise. I often have to rewrite the form to satisfy Tom. In any case, we go over the form together to find out if we have a valid finding.

Report No: _____

**AIRCRAFT AND COMPONENT MAINTENANCE
PROCEDURAL REPORT**

TO: _____

COPIES TO: _____

Originator Name: _____ Phone No.: _____

Position: _____ Area: _____

Steward/Committeeman: _____ Shift: _____ Dept.: _____

Location: _____ Bldg. No.: _____

Aircraft Type: _____ N-No.: _____ SN: _____

Engine Type : _____ SN: _____

Component Mfg. No.: _____ TWA No.: _____ SN: _____

Type Maintenance: _____

Date: _____ Local Time (24 hour clock): _____

Originators finding and/or request:

Answer:

(Manager or delegate's reply. Actions taken to correct the problem; or reasons for rejecting the finding.)

Signed: _____ Location: _____ Date: _____

CORRECTIVE ACTION OR STATUS REPORT SHOULD BE FORWARDED TO QUALITY ASSURANCE,
RM 1-465, MCI, WITH 30 DAYS AFTER RECEIPT OF THIS EVALUATION.

FORM ICC-D01(3-92)

Figure 2

While I could present numerous examples, I have picked three. The first example involves engineering instructions and incorrect form usage. Production management requested an engineering approval to revise a repair procedure, as directed by the Component Maintenance Manual. The mechanics thought that the procedure requested was incorrect.

The Committee investigated and assured the mechanics that the engineering department's instructions were correct; the part would be airworthy. But they were using the incorrect form. However, we could not convince the engineers to change the form; this issue was finally resolved after the Quality Assurance Office initiated a change in procedures. The Staff Vice- President, Engineering, confirmed the Committee's position.

The second issue involved a part being removed from the shop area and installed on an aircraft without documentation or procedures being followed. The committee found that the part was unserviceable and that procedures were not followed. In an effort to save time, individuals ignored procedures. The part was located and returned to the shop area. All individuals involved were informed of their mistakes, and the situation did not proceed beyond the hanger supervisor.

The third issue involved unserviceable booster pumps being shipped to another facility and the receiving facility making the pumps serviceable. The receiving facility was not equipped to accomplish this by following the required procedure, and the documentation making the pumps serviceable was at the first facility. Investigation and conversation with the engineer resolved the issue. The questioned pumps were returned to the proper facility, procedures were changed, and the necessary equipment was obtained.

The previous examples show the mechanics' willingness to come to the Committee with problems they observe. The Committee then fully investigates these problems and brings them to the attention of those who can affect corrections. This creates an orderly procedure where decision-makers can make decisions after the *facts* are presented. Communications have been established through *all* levels in the maintenance organization.

The program is working. An informal analysis of issues on file with the committee revealed that the Committee addressed 40 issues before it was recognized; 25 issues have been addressed since recognition, with 12 of them presented at the manager level. One issue has been presented at the director level, and one issue at the vice-president level.

The committee enhances productivity by encouraging awareness of proper procedures. The spirit of our company has taken a turn for the better with the inclusion of direct and greater communication between the decision makers and personnel performing tasks. When workers follow correct procedures, any necessity to do the same job twice is reduced or eliminated. Savings in time and material can release needed capital for other uses. Inadequate and outdated procedures can be identified and eliminated after a complete investigation and discussion with the affected parties. A fast, effective two-way communication system from the floor to the decision level has been established. The IAM/FAA Conformance Safety Committee at TWA fosters Quality Assurance and enhances productivity.

I want to thank you for the opportunity to share this important tool for dealing with Human Factors in Aircraft Maintenance and Inspection that TWA and the IAM have adopted.