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**NATIONAL TRANSPORTATION SAFETY BOARD**

**WASHINGTON, D.C.**

**ADVISORY CIRCULAR - AC 120-59**

**AIR CARRIER INTERNAL EVALUATION PROGRAMS**



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

# Advisory Circular

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**Subject:** AIR CARRIER INTERNAL  
EVALUATION PROGRAMS

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1. PURPOSE. This advisory circular (AC) provides information and guidance material that may be used by air carrier certificate holders, operating under Federal Aviation Regulations (FAR) Parts 121 and 135, to design or develop an Internal Evaluation Program. The procedures and practices outlined in this AC can be applied to maintenance, flight operations, and security aspects of an air carrier's organization. Internal evaluation guidance for certificate holders other than those operating under FAR Parts 121 and 135 may be issued separately in the future.

2. RELATED READING MATERIAL. For certificate holders seeking additional guidance on internal evaluation techniques and procedures, an Air Carrier Internal Evaluation - Model Program Guide is available through the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161 (703) 487-4600. Certificate holders that decide to voluntarily disclose any apparent violations discovered by an Internal Evaluation Program should refer to AC 120-56, *Air Carrier Voluntary Disclosure Reporting Procedures*, for additional guidance.

3. BACKGROUND. The Internal Evaluation Program is a voluntary program. Participation is left solely to the discretion of each certificate holder. As a matter of policy, the Federal Aviation Administration (FAA) encourages certificate holders to identify, correct, and disclose instances of noncompliance. Therefore, the development and implementation of an Internal Evaluation Program will benefit both the certificate holder and the flying public.

a. Definitions of key internal evaluation terms and a description of the basic elements of an Internal Evaluation Program are included in this AC. These definitions and program elements are consistent with recognized quality auditing principles. Where appropriate, these terms have been tailored to conform to aviation standards and practices. Suggested procedures for documenting Internal Evaluation Program procedures are also included in this guidance material.

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b. The standards described herein are intended to help certificate holders develop their own Internal Evaluation Program. The FAA shall continue to encourage certificate holders to develop an Internal Evaluation Program as a tool for continuously monitoring and evaluating practices and procedures. Public safety is enhanced if deficiencies are identified and immediately corrected when they are discovered by the certificate holder rather than when they are discovered by the FAA.

c. Section 601(b) of the Federal Aviation Act of 1958 states that "In prescribing standards, rules, and regulations, and in issuing certificates under this title, the Secretary of Transportation shall give full consideration to the duty resting upon air carriers to perform their services with the highest possible degree of safety in the public interest...." In the case of all certificate holders, the Act is clear in stating that the duration of certificate effectivity depends upon the ability to conduct a safe operation in accordance with prescribed rules, regulations, and standards.

d. Through surveillance and oversight, the FAA verifies that certificate holders are upholding their responsibilities. Section 605(b)(2) of the Act states that employed inspectors shall be charged with the duty "...of advising and cooperating with each air carrier in the inspection and maintenance thereof by the air carrier." The Internal Evaluation Program is intended to facilitate the inspector's advisory and cooperative capacity by providing a procedure for identifying and resolving safety-related issues. The Internal Evaluation Program also will help certificate holders develop formal compliance monitoring programs.

4. DEFINITIONS. The following key terms and phrases are defined to ensure a standard interpretation and understanding of the FAA's Internal Evaluation Program. An Airworthiness Directive (AD) compliance system, applicable to certificate holders that own, operate, or maintain aircraft, engines, or appliances, has been used as an example to further clarify some of the following definitions.

a. Evidence. Evidence is a documented statement of fact, prepared by an air carrier, that may be quantitative or qualitative and is based on observations, measurements, or tests that can be verified. For the purpose of internal evaluation, evidence should generally be in the form of written documentation or reports that support an Internal Evaluation Program's analysis and review. These data are necessary to substantiate findings or concerns and to enable management or evaluators to determine the root causes of any reported findings. Objective evidence generally comes from the following four elements:

APPENDIX 1. PROGRAM PLAN SAMPLE OUTLINE (Continued)

certificate holder has the option of limiting internal evaluation to selected systems or functional areas.

**Schedule Process:** The scheduling process should be comprised of the following three elements:

- (1) Scheduled evaluations over a predetermined calendar period.
- (2) Special evaluations when trends are identified or priorities are set by top management.
- (3) Followup evaluations to verify the effectiveness of corrective action plans.

The program plan should include procedures for planning, developing, and coordinating the internal evaluation schedule. The responsibility for planning and developing schedule activities should also be defined.

**Records:** The Internal Evaluation Program should have a defined recordkeeping process. Procedures should specify how records are filed and maintained. Standard forms or formats for filing reports also should be specified. The FAA suggests that Internal Evaluation Program records be comprised of the following:

- (1) Scheduled evaluation reports.
- (2) Special evaluation reports.
- (3) Followup evaluation reports.
- (4) Responses to findings or concerns contained in reports.
- (5) Corrective action plans submitted in response to findings.
- (6) Reports concerning the completed corrective action.

APPENDIX 1. PROGRAM PLAN SAMPLE OUTLINE (Continued)

**Training:** If feasible, the certificate holder should specify that evaluators have some type of training in recognized quality auditing, and evaluation principles and techniques. This training could be any one or combination of the following:

- (1) In-house prepared courses.
- (2) College courses.
- (3) Home study course materials.
- (4) Industry available seminars and workshops.
- (5) Selected FAA courses.

Example - Through the use of its Internal Evaluation Program, a certificate holder found that it had not been scheduling aircraft for AD accomplishment until AD's came within 10 aircraft cycles of being due. While this procedure had not resulted in any findings, a review of scheduling material showed that some aircraft had been flown to within one cycle before performing AD work and that maintenance planners often had to "frantically" reshuffle aircraft schedules to ensure timely AD accomplishment. The internal evaluation team believed these circumstances had the potential of becoming a finding in the future and documented their analysis as a concern in the report to management.

e. Inspection. An inspection is the act of observing a particular event or action to ensure that correct procedures and requirements are followed during the accomplishment of that event or action. The primary purpose of an inspection is to verify that established standards are followed during an observed event or action.

Note: The term inspection is defined in this AC within the context of quality auditing principles. It does not address or define FAA inspections.

f. Audit.

(1) An audit is a methodical, planned review used to determine how business is being conducted and compares results with how business should have been conducted in accordance with established procedures. The various techniques that comprise an effective audit are as follows:

- (i) Interview personnel.
- (ii) Review documents.
- (iii) Observe operations.
- (iv) Select samples.
- (v) Inspect activities.
- (vi) Document results.

(2) As the above techniques show, an audit builds on the principles of inspection. The results of inspections assist in

the audit objective of determining whether business is being conducted in accordance with established policies and procedures. During an audit, qualified personnel look for the existence of a systemic problem, but do not estimate the size of a problem. The results (findings and concerns) of an audit should be documented and presented to management. Management then decides how to address audit results.

g. Evaluation.

(1) An evaluation is an independent review of company policies, procedures, and systems. An evaluation should be a comprehensive and continual process that considers the following:

(i) Results of audits.

(ii) Overall effectiveness of the management organization in achieving stated objectives.

(iii) Ability of management to respond to new technologies, market strategies, and social or environmental conditions.

(2) The evaluation process builds on the concepts of audit and inspection. An evaluation is an anticipatory process, and is designed to identify and correct potential findings before they occur. Conclusions and recommendations made as a result of an evaluation should be submitted in writing to company management for appropriate action.

5. INTERNAL EVALUATION PROGRAM.

a. The Internal Evaluation Program is based on the premise that certificate holders are primarily responsible for continuously monitoring and ensuring that their operations are safe and in compliance with the FAR. The FAA encourages air carriers to establish and conduct internal evaluations that embrace the following four principles:

(1) A continual process that incorporates the techniques of inspections, audits, and evaluations to assess the adequacy of managerial controls in key programs and systems.

(2) A review that extends beyond regulatory compliance to determine the causes of deficiencies and detect needed enhancements to company operating practices before deficiencies occur.

(3) An ongoing process that identifies deficiencies, develops corrective action plans to correct these deficiencies, and performs followup evaluations.

(4) An independent process that organizationally has straightline reporting responsibility to top management.

b. The Internal Evaluation Program should not be misunderstood as a program that replaces existing regulatory auditing requirements, such as continuing analysis and surveillance (FAR §§ 121.373 and 135.431). The internal evaluation concept stresses self-audit responsibilities of individual employees as well as the evaluation responsibility of top management to ensure that company policies and procedures provide for safety compliance and allow individuals to perform work properly. The initiative is voluntary. Accordingly, the decisions of how and to what extent an Internal Evaluation Program should be implemented remain the responsibility of the operator.

#### 6. PROGRAM DESCRIPTION.

a. Air carrier certificate holders operating under FAR Parts 121 and 135 that are interested in developing an Internal Evaluation Program are encouraged to include the following essential elements in their program:

- (1) Independent/defined responsibility.
- (2) Top management review.
- (3) Continual process.
- (4) Internal evaluation schedule.
- (5) Corrective action plans.
- (6) Records.

b. These elements are further described in the following paragraphs. It is also suggested that certificate holders that develop an Internal Evaluation Program should consider preparing a program plan that documents the program's procedures and functional responsibilities. A recommended format for a typical program plan is further explained in appendix 1.



## 7. INDEPENDENCE/DEFINED RESPONSIBILITY.

a. A certificate holder's Internal Evaluation Program should identify the person and/or group within the organization who has the responsibility and authority to:

(1) Perform evaluations, audits, and inspections as a part of an ongoing Internal Evaluation Program.

(2) Identify and record any findings or concerns, and the evidence necessary to substantiate findings or concerns.

(3) Initiate, recommend, or provide solutions to findings or concerns through designated reporting channels.

(4) Verify the implementation of solutions within a specific time.

(5) Communicate and coordinate activities with FAA personnel on a regular basis.

b. A top management representative should be given the responsibility to ensure that an Internal Evaluation Program is properly established, implemented, and maintained. This management position should be above the level that directly supervises work accomplishment or procedural development and should have direct contact with the chief executive officer or equivalent. For certificate holders with smaller operations, this person may be the chief executive officer, president, or equivalent.

c. As a part of identifying internal evaluation responsibility and independence, a certificate holder should identify resources and personnel dedicated to the Internal Evaluation Program and should describe their organizational independence within the company in light of their internal evaluation functions. Individuals conducting internal evaluations should not be responsible for managing work in the areas being evaluated or the tasks being reviewed. This concept may have to be modified for some very small operations.

d. For some certificate holders, operating size may justify the costs associated with the necessity of having full-time, dedicated resources and personnel in a separate Internal Evaluation Department or group. However, when full-time, dedicated resources and personnel are not practical, the certificate holder should develop procedures that preclude persons directly responsible for the areas to be evaluated from participating in the selection of the evaluation team.

e. For very small operations, an appropriate Internal Evaluation Program might consist of developing checklists and a schedule (monthly, quarterly, semiannual, or annual) for accomplishing checklist items. Even in such cases, the review should include a written statement acknowledging the completion of the checklist items and the signature of a top management official. Under these conditions, occasional independent oversight of checklist item development and accomplishment should be considered if possible.

f. Certificate holders using outside resources in support of, or in fulfillment of, an Internal Evaluation Program, should show that use of those outside resources is coordinated through a chain of command that reflects independence and contact with top management.

#### 8. TOP MANAGEMENT REVIEW.

a. As a part of an Internal Evaluation Program, top management should review internal evaluation results to verify that satisfactory corrective actions have been implemented. For the purposes of this program, the term "top management" means a certificate holder's chief executive officer, president, or a person in an equivalent position who has the authority to resolve issues and take action. The FAA believes that top management should be aware of the plans, results (findings and concerns), and followup actions undertaken in an Internal Evaluation Program.

b. The review of internal evaluation information by top management should be documented in reports or other appropriate records generated by the Internal Evaluation Program. The certificate holder should decide the frequency, format, and structure for informing top management of internal evaluation plans, results, and followup actions. The program should include a diagram that depicts the independence of personnel who perform or supervise internal evaluation functions, including some form of straightline reporting authority to top management. It is recommended that the reporting structure be documented by the certificate holder and become a part of its program plan, as discussed in paragraph 13, and demonstrated in appendix 1.

9. CONTINUAL PROCESS.

a. In order to effectively anticipate potential problem areas and correct them before actual findings occur, an Internal Evaluation Program should be a continual program, not merely spot-check inspections of operating practices. Stand alone spot-check inspections will do little more than identify symptoms of potential problems.

b. A continual process is needed to verify whether findings are isolated instances, or actual symptoms of policy, procedural, or managerial problems. A certificate holder's program should continuously monitor policies, procedures, and managerial systems to ensure a continued safe and efficient operation. A continual program should include scheduled evaluations, followup evaluations as necessary, and special evaluations when trends are identified.

10. INTERNAL EVALUATION SCHEDULE.

a. To be properly organized, a continual process should be a structured activity. For this reason, it is essential for a certificate holder's Internal Evaluation Program to include a defined schedule of activities. This planned schedule will serve to verify that the internal evaluation process is:

- (1) Complete and thorough.
- (2) Directed.
- (3) Credible.
- (4) Recognized by top management.

b. A proper internal evaluation schedule should include a planned periodic review cycle for specific areas covered by the certificate holder's Internal Evaluation Program. However, the scheduling process should also be dynamic and allow for special evaluations when trends are identified. In addition, followup evaluations should be scheduled as necessary to verify that corrective action commitments were met and that they were effective in eliminating any reported findings or concerns. Planned, special, and followup evaluations, all of which comprise

an effective internal evaluation schedule, are further defined below.

c. Planned Cycle.

(1) Establish a schedule of events that will be performed during a set calendar period under the Internal Evaluation Program.

(2) Divide the complete schedule into phases.

(3) Schedule evaluations within each phase to allow enough flexibility for resources to be committed as needed to special evaluations or followup evaluations.

d. Special Evaluations.

(1) Conduct special evaluations based on concerns or priorities identified by top management.

(2) Schedule special evaluations based on a review of industry trends, FAA concerns, or identified internal trends.

e. Followup Evaluations.

(1) Schedule followup evaluations to ensure corrective action commitments were met.

(2) Conduct followup evaluations to verify that corrective actions eliminated the reported finding or concern.

(3) Perform followup evaluations in response to FAA surveillance findings.

11. CORRECTIVE ACTION PLANS.

a. An Internal Evaluation Program should include procedures to ensure that corrective action plans are developed in response to findings or concerns, and for monitoring corrective action plans to verify their timely and effective implementation and completion. As an option, internal evaluation personnel may participate in the development of corrective action plans or make suggestions that contribute to the development of corrective action plans. However, organizational responsibility and accountability for the development of corrective action plans should reside with the technical departments cited in the finding or concern.

b. A proper corrective action plan should include the following elements:

- (1) Identification of the finding or concern.
- (2) Analysis of objective evidence to determine the root cause(s) of the finding or concern.
- (3) Identification of planned corrective steps to take to ensure that the apparent violation or concern does not recur.
- (4) Implementation schedule, including a timeframe for putting corrective steps in place.
- (5) Individuals or departments responsible for implementing the corrective steps.

c. The individuals responsible for managing an Internal Evaluation Program should facilitate the corrective action process by performing the following functions:

- (1) Ensuring corrective action plans are developed in response to findings or concerns.
- (2) Verifying corrective action plans include the elements outlined above.
- (3) Monitoring implementation and completion of corrective action plans.
- (4) Providing top management with an independent assessment of corrective action plan development, implementation, and completion.
- (5) Initiating scheduled and/or unannounced followup evaluations to ensure the effectiveness of corrective steps specified in corrective action plans.

## 12. RECORDS.

a. Records documenting the performance and results of an Internal Evaluation Program should be maintained by the certificate holder. Records are considered to be the principal form of evidence. Documented evidence is essential in analyzing and determining the root causes of findings or concerns so that potential areas of noncompliance can be identified by the certificate holder. It is important to maintain accurate, complete, and reliable records that document the activities and results of an internal evaluation.

b. The FAA suggests that Internal Evaluation Program files include the following data:

- (1) Scheduled evaluation reports.
- (2) Special evaluation reports, including the trends or other reasons associated with scheduling a special evaluation.
- (3) Followup evaluation reports.
- (4) Responses to findings or concerns contained in reports.
- (5) Corrective action plans submitted in response to findings.

c. Recognizing that much of the information contained in Internal Evaluation Program records could be proprietary in nature, a certificate holder should maintain and secure these records on their premises. All records related to findings that are voluntarily disclosed to the FAA should be made available to the FAA for review. Proprietary information will be protected in accordance with applicable laws and regulations. Further information on voluntary disclosure reporting procedures is provided in AC 120-56.

13. PROGRAM PLAN OUTLINE. It is recommended that Internal Evaluation Program procedures and responsibilities be documented in a program plan. This paragraph provides suggestions for preparing and structuring a program plan.

a. Preparing a Program Plan.

(1) Preparing a program plan is only a recommended practice and is optional for the certificate holder. Certificate holders should review the size and complexity of their operation to determine whether a program plan will benefit their internal evaluation process.

(2) A program plan should describe the duties, responsibilities, procedures, and organization of a certificate holder's Internal Evaluation Program. Terms and elements defined in program plans should be consistent with those outlined in paragraphs 4 through 12.

(3) Copies of the program plan should be distributed to appropriate company personnel, so they are aware of and are familiar with Internal Evaluation Program procedures. In addition, revisions should be made as necessary to ensure that

the program plan continues to reflect the certificate holder's current internal evaluation procedures and organization.

(4) If a certificate holder elects to prepare a program plan or revise an existing plan, the FAA will not approve or otherwise formally accept program plan contents. Rather, the degree, level, and manner of participation are at the sole discretion of the certificate holder. Documenting the procedures and responsibilities associated with any program is considered a good practice. For certificate holders that choose to prepare a program plan, the FAA will be available to provide assistance if requested.

b. Structuring a Program Plan. As a suggestion, a sample outline of a program plan using the program elements discussed in this AC is provided in appendix 1. The outline provided in appendix 1 should be viewed as a checklist of items that warrant consideration when a certificate holder is designing an Internal Evaluation Program. The number of items addressed and how they are documented will ultimately depend on the complexity of each certificate holder's operation.

14. PROGRAM ACCEPTANCE. The FAA will not approve or accept Internal Evaluation Programs. However, air carrier certificate holders operating under FAR Parts 121 and 135 that develop an Internal Evaluation Program may ask for assistance from their certificate holding Flight Standards District Office (FSDO) or principal inspector. Preparing a program plan, as discussed in paragraph 13, will provide the FAA with an opportunity to review the proposed duties, responsibilities, procedures, and organization of the certificate holder's Internal Evaluation Program. In all cases that involve Internal Evaluation Program development, the FAA will be available to provide advice, assistance, or direction to interested certificate holders.

15. DISCLOSURE TO THE FAA. The FAA encourages certificate holders to openly share the results of their Internal Evaluation Program with their certificate holding FSDO or principal inspector. For certificate holders electing to voluntarily disclose apparent violations discovered by an Internal Evaluation Program, further information is provided in AC 120-56.

16. CONCLUSION. Development of Internal Evaluation Programs, as discussed in this AC, should ensure that company policies and procedures are responsive to growth and change and that certificate holders continually comply with appropriate safety requirements. Furthermore, the FAA strongly encourages certificate holders to make Internal Evaluation Programs an integral part of their everyday management process, so that the full benefits of voluntary disclosure can be realized. Aviation

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safety is best served by programs that allow certificate holders to identify and correct their own instances of noncompliance and invest more resources in efforts to preclude their recurrence.



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APPENDIX 1. PROGRAM PLAN SAMPLE OUTLINE

**Objective and Policy:** The objective should be a statement that clearly defines the purpose and structure of the certificate holder's Internal Evaluation Program. Policy statements following the objective should indicate that internal evaluation is independent, that it actively involves top management, and that it is an ongoing process designed to identify potential problem areas.

**Definition of Terms:** Terms that will be used consistently in the Internal Evaluation Program should be defined. For example, a certificate holder should have a procedure for categorizing results (i.e., a finding or concern). These categories, as well as other terms applicable to the internal evaluation function, should be clearly defined and documented so that company personnel can understand and properly interpret them. Definitions should be similar to those specified in paragraph 4.

**Duties and Responsibilities:** The duties and responsibilities of internal evaluation personnel should be documented. The certificate holder should specify which personnel are responsible for performing the following tasks:

- (1) Supervise the internal evaluation function.
- (2) Perform evaluations, audits, and inspections as a part of internal evaluation.
- (3) Identify and record any findings or concerns.
- (4) Collect the objective evidence necessary to substantiate findings or concerns.
- (5) Initiate, recommend, or provide solutions to findings or concerns through designated reporting channels.
- (6) Monitor the development and implementation of corrective action plans.
- (7) Maintain and update internal evaluation files.

APPENDIX 1. PROGRAM PLAN SAMPLE OUTLINE (Continued)

- (8) Verify the implementation of solutions.
- (9) Communicate and coordinate Internal Evaluation Program activities with FAA personnel on a regular basis.

This section of the program plan should show that personnel responsible for the tasks listed above are not responsible for the accomplishment or management of work in the areas being evaluated or the tasks being revised. The supervisor of the internal evaluation function should either be a top management representative or have straightline reporting authority to top management.

When full-time dedicated resources and personnel are not practical, developed procedures should show that persons having direct responsibility for the areas to be evaluated are not involved in the selection or supervision of the internal evaluation team. In addition, identified personnel should be exempt from their other duties and completely dedicated to the Internal Evaluation Program while they participate on an evaluation team.

**Organization Chart:** An organization chart that clearly shows the position of the Internal Evaluation Program in the certificate holder's organization should be prepared. This position should reflect both the program's independence within the corporate structure and straightline reporting to top management.

**Reporting Procedures:** Reporting procedures should include company requirements that top management reviews internal evaluation information. Top management should be informed, through straightline reporting channels, about the schedules, plans, results, and followup corrective actions of the Internal Evaluation Program. The procedures outlined in this section of the program plan should specify the frequency, format, and structure for reporting information to top management. A procedure explaining how the review by top management will be documented should also be developed.

**Specified Areas Covered:** A certificate holder should specify the areas within the scope of review under the Internal Evaluation Program. The FAA believes that the most effective Internal Evaluation Program will encompass a complete review of the certificate holder's operation. However, a

- (1) Documents or manuals reviewed.
- (2) Equipment examined.
- (3) Activities observed.
- (4) Interview data.

b. Controls.

(1) Controls are the key procedures, responsibilities, and decisionmaking positions within an organization, department, division, or functional area.

Example - The manner in which AD applicability is determined by a certificate holder that owns, operates, or maintains aircraft, engines, or appliances is considered a control of the AD compliance system. The design of this control is critical when developing an effective AD compliance system.

(2) As part of an internal evaluation, the controls of the area being evaluated should be verified and tested. In some instances, personnel performing the internal evaluation may have to first determine the features of a control.

Continuing with the above example, internal evaluation personnel may have to determine first how the certificate holder verifies AD applicability before proceeding with an evaluation of AD accomplishment and records. In particular, the evaluation would focus on procedures that would minimize the risk of a simple human error or oversight.

c. Finding. A finding is a conclusion by air carrier personnel that demonstrates noncompliance with a specific standard.

Example - An evaluation of powerplant AD current status records led air carrier personnel to conclude that inadequate method of compliance information existed for two applicable AD's. Evidence to support the conclusion included copies of the actual AD's and referenced service bulletins to substantiate the conclusion that the method of compliance could not be ascertained from the current status records. This would be an example of a finding that demonstrates noncompliance with the FAR. If disclosed to the FAA in accordance with AC 120-56, it is considered an apparent violation until verified by the appropriate principal inspector.

Example - An internal evaluation can also produce a conclusion that is considered a finding by the air carrier but is not a noncompliance with the FAR. For example, an air carrier may have a procedure that requires AD applicability determination to be reviewed and signed off by quality assurance, engineering, and the vice president of maintenance. A periodic internal evaluation of the AD system discovers that, for five newly applicable AD's, there is neither a record of the review nor a sign off by the vice president of maintenance. This would be an example of a finding that demonstrates noncompliance with a standard other than the FAR (i.e., company procedure).

d. Concern. A concern is a conclusion by air carrier personnel, supported by objective evidence, that does not demonstrate a finding, but rather a condition that may become a finding.