ORDER

8300.12

CORROSION PREVENTION AND CONTROL PROGRAMS



November 29, 1993

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

RECORD OF CHANGES

DIRECTIVE NO.

6

8300.12

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FOREWORD

This order establishes the criteria and requirements for approval and surveillance of Corrosion Prevention and Control Programs (CPCP), as directed by Airworthiness Directives (AD). The CPCP's are both complex and technically demanding for the responsible Federal Aviation Administration (FAA) officials. This order will establish the working and regulatory relationship between Aircraft Certification Offices (ACO), Flight Standards District Offices (FSDO), and the airworthiness inspector (AI) responsible for oversight of operator maintenance. Due to the unique nature of the CPCP's, a clear understanding of the roles and responsibilities of the ACO engineers and AI's is critical. The successful CPCP will incorporate comprehensive technical guidance from the manufacturer, sound and diligent surveillance from the principal maintenance inspector (PMI) (see Federal Aviation Regulations (FAR) Parts 121, 125, and 129 operators) and the assigned AI's (see FAR Section 125.3, Deviation Authority, to operate under certain, or all, parts of FAR Part 91), and engineering advice and decision from the ACO. For current available data regarding identification and treatment of corrosive attack on aircraft structure and engine materials, see the latest revision of Advisory Circular 43-4, Corrosion Control for Aircraft.

This order is written to address the current corrosion AD format. Existing corrosion AD's will be revised to reflect this format.

This order currently applies to the three AD's listed below:

92-22-07 Douglas DC-8 92-22-08 DC-9 92-22-09 DC-10

The four existing AD's which will be revised are as follows:

90-25-07 Boeing 707/720 90-25-03 727 90-25-01 737 90-25-05 747

AD's are currently being drafted for the Lockheed L-1011, BAC 1-11, Fokker F-28, and Airbus A-300. This order will be updated to include these AD's as they are published.

Any deficiencies found, clarifications needed, or improvements to be suggested regarding the content of this order should be forwarded to the originating office, Attention: Directives Management Officer, AFS-13, for consideration. Your assistance is welcome. FAA Form 1320-19, Directive Feedback Information, is included as the last page of this order.

If an interpretation is urgently needed, you may call the originating office for guidance, but you should also use the tearout sheet as a followup to verbal conversation.

Anthony J. Broderick

Associate Administrator for Regulation and Certification

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CHAPTER 1. GENERAL

1-1. PURPOSE. This order provides guidance and direction to FAA personnel regarding the implementation and surveillance of CPCP AD's. It also sets forth and clarifies the responsibilities and procedures for all affected FAA offices.

1-2. DISTRIBUTION. This order is distributed to the Associate Administrator for Regulation and Certification; to the division level in the Flight Standards Service and the Aircraft Certification Service; to the regional administrators; to the regional Flight Standards Divisions and the Aircraft Certification Directorates; and to all Flight Standards and Aircraft Certification field offices.

1-3. DEFINITIONS. The following definitions are offered as general terms for reference in this order. The manufacturer's document may offer more specific definitions of corrosion and Baseline Programs.

a. Airworthiness Inspector (AI) refers to the representative of the FAA Flight Standards Service who is the primary point of contact for an operator. This individual is responsible for approving and surveilling the operator's maintenance/inspection program. For operations under FAR Parts 121, 125, or 129, the AI refers to the PMI. For operations under a deviation from FAR Section 125.3 (to operate under certain, or all, parts of FAR Part 91), the AI refers to the assigned maintenance inspector.

b. A Baseline Program includes the Basic Task, numbered Corrosion Tasks, and a schedule for implementation and repeat accomplishment of the numbered Corrosion Tasks. The Baseline Program also contains reporting requirements and provisions for program adjustment. This Baseline Program is contained in section four of the manufacturer's document.

c. Certification Office (CO) refers to the ACO responsible for the type certificate for an airplane model manufactured in the U.S. The term CO for foreign-manufactured airplanes refers to the Standardization Branch of the FAA Transport Airplane Directorate (ANM-113).

d. Corrosion Level is a means of determining the effectiveness of a CPCP relative to a given corrosion finding in terms of the severity of corrosion and the potential consequences to continuing airworthiness in the operator's fleet. For terms of reference in this order, the following definitions are given; however, for the precise definition for a model type, refer to the manufacturer's document.

(1) Level 1 Corrosion is damage occurring between successive inspections that is local and can be reworked/blended-out within allowable limits as defined by the manufacturer in a structural repair manual (SRM), service bulletin, etc.

(2) Level 2 Corrosion is damage occurring between successive inspections that requires rework or blend-out that then exceeds the manufacturer's allowable limits, requiring a repair or complete/partial replacement of a principal structural element (as defined by the original equipment manufacturer's SRM).

(3) Level 3 Corrosion is damage found during the first or subsequent inspection(s) which is determined by the operator to be a potential airworthiness concern requiring expeditious action.

NOTE: The manufacturer will normally participate in the determination of Level 3 Corrosion. It should be noted that while the AD, in general, requires CPCP adjustments for corrosion exceeding Level 1, Level 3 Corrosion is especially severe and requires other expeditious actions as specified in the AD.

e. The operator's CPCP refers to the specific operator's program for inspection, treatment, and repair of corrosion on airplanes, as developed using the manufacturer's Baseline Program. Although the operator's CPCP is referred to as a "program," the term applies equally to Corrosion Tasks accomplished individually in accordance with paragraph (a) of the appropriate AD, and to those Corrosion Tasks accomplished under an approved maintenance/inspection program in accordance with paragraph (b) of the appropriate AD.

f. Numbered Corrosion Tasks are inspection and other maintenance actions that are accomplished in each decided aircraft area as part of the operator's CPCP. These tasks may either cover a wide range of aircraft areas and zones or be area specific. Area specific tasks are dictated largely by aircraft design features.

g. The Basic Task (also referred to as the Inspection Task by some manufacturers) is accomplished in all areas of the aircraft. Elements of the Basic Task are not accomplished in certain areas of the aircraft. These areas are stated in the "Notes" section of the numbered Corrosion Task. Accomplishing the Basic Task generally involves the following:

(1) Removal of all systems, equipment, and interior furnishings to allow access to the

area.

(2) Cleaning of the area, as required.

(3) Visual inspection of all zones and areas listed in the Baseline Program. Additional nondestructive inspection (NDI) or visual inspection may be necessary for indications of hidden corrosion. Examples of hidden corrosion would be bulging or blistered skin panels.

(4) Removal of all corrosion, damage evaluation, and repair of discrepant structure, as necessary.

(5) Unblocking holes or gaps that may hinder drainage.

- (6) Application of corrosion protective compound(s).
- (7) Reinstallation of dry insulation blankets.

h. Implementation Age is the airplane age (years since initial manufacturer's delivery) at which the CPCP should begin to be implemented in the affected area. The Baseline Program specifies an Implementation Age for each numbered Corrosion Task.

i. Repeat Interval is the calendar time period in years between successive numbered Corrosion Task accomplishments as stated in the Baseline Program.

j. Unanticipated scheduling requirements are those necessitated by short term, unforeseen circumstances, such as airplane availability (see paragraph 3-6 on page 3-4).

1-4. BACKGROUND. In April 1988, a commercial transport airplane experienced an in-flight decompression attributed to fuselage structural failure. The National Transportation Safety Board (NTSB) determined that the probable cause of this accident was the disbonding and subsequent fatigue damage of a lap joint. During the investigation, the NTSB found that pilots and line maintenance personnel came to accept the classic signs of on-going corrosion damage as a normal operating condition. A programmatic approach to corrosion prevention and control of the entire airplane was not evident. Corrective action of corrosion findings was often deferred with no record of the basis for deferral. Subsequently, the NTSB determined that an operator's comprehensive CPCP, fully supported by the manufacturer and enforced by the FAA, is a critical and necessary step in continued airworthiness of older airplanes. The NTSB recommended that the FAA develop a model for a comprehensive CPCP that would be included in each operator's approved maintenance program (NTSB Safety Recommendation A-89-59). The aviation industry and civil aviation authorities formed the Airworthiness Assurance Task Force (AATF) to address airworthiness issues relating to aging aircraft. Among the issues addressed by the task force was the need for corrosion programs. The AATF developed a Baseline Program applicable to each aging major transport airplane model. The FAA is mandating those CPCP's on each aging major transport airplane model by AD.

1-5. SCOPE. This order applies to FAA approval and surveillance of the CPCP's implemented by operators of FAR Parts 121, 125, and FAR Section 125.3, Deviation Authority, to operate under certain, or all, parts of FAR Parts 91 and 129 (U.S.-registered airplanes). The FAA has mandated, through AD's, CPCP's which must contain the Basic Task, Corrosion Tasks, implementation schedules, and Repeat Intervals. These mandated tasks appear in section four of the manufacturers' documents referenced in the AD's. Notes appearing in the AD's are advisory in nature and are not mandatory. Section five, the reporting section of the manufacturers' documents, is also mandated by the AD's. The other sections do not contain mandatory task requirements.

1-6. GENERAL DISCUSSION OF THE BASELINE CPCP.

a. The problem of corrosion and its prevention and control is one of the most serious maintenance challenges that the aviation industry faces. The Baseline Programs are published in the

manufacturer's document for each airplane model. These Baseline Programs are a starting point from which successful programs may safely evolve based on the operator's own service experience.

b. The Baseline Programs recognize three levels of corrosion that are used to assess CPCP effectiveness. Level 1 Corrosion found during the accomplishment of the numbered Corrosion Tasks indicates an effective program. Level 2 Corrosion indicates that program adjustments are necessary. Level 3 Corrosion is an urgent airworthiness concern requiring expeditious action on the part of the operator to protect its entire model fleet. The FAA must be notified immediately upon determination of Level 3 Corrosion. Level 2 and Level 3 Corrosion findings must be reported to the manufacturer for evaluation and possible Baseline Program adjustment. Corrective fleet actions resulting from Level 3 Corrosion findings must be reported to the FAA.

c. Operators may either develop CPCP's tailored to their operations based on the manufacturer's Baseline Program or adopt the manufacturer's program in total. Early implementation, especially on older airplanes, of a CPCP is necessary to ensure that pre-existing unsafe levels of corrosion are removed from an operator's fleet.

d. During the first inspection on a given airplane, corrosion detected may exceed Level 1. This is because the structure may have never been the subject of a comprehensive corrosion program. No CPCP adjustments are necessary as a result of this first inspection. However, any determination of Level 3 Corrosion during this inspection requires that the operator take expeditious measures to find and correct this serious condition in its fleet.

e. Once implemented, an effective CPCP should consistently find corrosion no greater than Level 1 during Repeat Intervals. Occurrences of corrosion that exceed Level 1 indicate a need to reevaluate the CPCP for possible adjustments. Regardless of the corrosion level determined in each finding, the operator must accomplish the Basic Task, including removal of corrosion, to ensure that the corrosion does not reach an unsafe level before the task is repeated.

f. An operator that has demonstrated an effective CPCP (one which consistently finds corrosion no greater than Level 1 during Repeat Intervals) may be allowed to extend Repeat Intervals as defined in this order.

g. Extensions of Repeat Intervals may not be appropriate in all cases where the current program is effective. One might expect Level 2 Corrosion to develop if an interval is either extended in an area where the CPCP has been only marginally effective in the past or if the extension requested is excessively large. Such extensions should not be approved. Each proposed Repeat Interval extension should be evaluated with the expectation that future corrosion findings continue to be limited to Level 1.

1-7. GENERAL DISCUSSION OF THE CPCP AD'S.

a. General. Corrosion, a time dependant and operating environment sensitive phenomenon, can degrade the structural integrity of an airplane, thereby reducing its inherent ability to sustain design loads. For this reason, each manufacturer has published a corrosion prevention and control

document, each of which contains the Baseline Program for certain airplane models (see the Foreword on page i for a listing of those models). The purpose of this document is to ensure timely detection of corrosion damage and to prevent unacceptable combinations of corrosion and fatigue in aging airplanes.

(1) Although manufacturers' documents may vary somewhat in format, each contains a Baseline Program, guidelines for implementing that program, a mandatory reporting system, and general program information. The Baseline Program includes a Basic Task, numbered Corrosion Tasks, Implementation Ages, and Repeat Intervals. Section five, the reporting section, contains procedures for documenting and reporting the results of the inspections required by the AD. Although this section does not address documentation of Level 1 Corrosion determinations, such documentation is recommended in order to justify Repeat Interval adjustments.

(2) The FAA is publishing AD's which require that operators develop CPCP's using either the Baseline Program in the manufacturer's document or an equivalent program. These AD's provide for two acceptable methods of compliance, and operators must implement a CPCP by using one of these methods. The two acceptable methods of compliance are as follows:

(a) Task-By-Task Compliance. A task-by-task approach, which accomplishes all tasks in the Baseline Program in accordance with section four of the manufacturer's document and paragraph (a) of the AD, is intended for those operators who do not have; (1) an FAA-approved maintenance program; (2) an approved inspection program; or (3) a manufacturer's recommended inspection program. These are generally FAR Part 125 operators issued a deviation authority under FAR Section 125.3 to operate under certain parts of FAR Part 91. This method also provides a program for implementation by foreign civil aviation authorities.

(b) Incorporation into Maintenance/Inspection Program. The second method is to incorporate the numbered Corrosion Tasks of the Baseline Program into their maintenance/inspection program in accordance with paragraph (b) of the AD. This method affects the vast majority of U.S.- registered airplanes operating under FAA-approved maintenance/inspection programs. The FAA expects that most of the operators will elect to comply with the AD by modifying their maintenance/inspection programs.

b. CPCP'S. Compliance with paragraph (a) or (b) establishes an operator's AD-mandated CPCP. AD paragraphs (c) through (h) are separate and independent requirements that may be invoked, regardless of the method selected (AD paragraph (a) or (b)) by the operator to implement the CPCP. The operators' CPCP established in accordance with AD paragraph (b) should include maintenance/ inspection program procedures which ensure that the requirements of paragraphs (c) through (h) are satisfied when invoked, and that a status record of compliance with each requirement is made. For example, AD paragraph (c) allows the operator to make a Repeat Interval adjustment of up to 10 percent in order to accommodate unanticipated scheduling requirements. The operator's CPCP should include procedures for making these adjustments within the limits authorized in the AD and for making an individual record of compliance with paragraph (c) of the AD each time an adjustment is made.

1-8. RESPONSIBLE OFFICES.

a. AI's. Two FAA organizations are involved in administering the CPCP AD's. The first is the Flight Standards Service, represented by the FSDO, Certificate Management Office, or International Field Office responsible for the oversight of an operator's maintenance. In this order, the FAA Flight Standards representative responsible for oversight will be referred to as the AI. For operations under FAR Parts 121, 125, and 129, the AI refers to the PMI. For operations under the deviation authority of FAR Section 125.3 to operate under certain parts of FAR Part 91, the AI refers to the assigned maintenance inspector. The AI should evaluate the CPCP based on the operator's prior service experience. The AI has knowledge of an operator's capabilities and can determine the CPCP's effect on the overall maintenance program and can also ensure that the FAA has the ability to monitor and enforce the program.

b. CO's. The second organization involved is the Aircraft Certification Service. For a U.S.-manufactured airplane, this organization is represented by the CO responsible for the manufacturer. For a non U.S.-manufactured airplane, this organization is represented by the Standardization Branch of the FAA Transport Airplane Directorate. In this order, the responsible office of the Aircraft Certification Service is referred to simply as the CO. The CO provides a resource to the AI in evaluating the operator's CPCP. CO's are aware of the service experience of the entire model fleet and have access to the manufacturer's data. The CO has the ability to enforce a uniform level of safety throughout the model fleet.

NOTE: The roles and responsibilities of these organizations, with respect to the CPCP AD's, differ depending on whether an operator elects to comply with paragraph (a) or paragraph (b) of the AD.

c. Task-by-Task Compliance. If an operator elects to comply with paragraph (a), "the FAA," as used in the CPCP AD's, is represented by the CO. Paragraph (a) of the AD gives an operator the option of complying with the AD in a task-by-task manner. Each CPCP numbered Corrosion Task specified in the manufacturer's document is treated as a separate AD requirement in the same manner as other AD's. The CO is the FAA office responsible for approving program adjustments. In this case, the responsibilities of the AI and CO are as follows:

(1) AI Responsibilities:

(a) To perform surveillance of an operator's task completion and to monitor corrosion findings to ensure that this method of compliance is effective in controlling corrosion. The AI's surveillance activities should include visual inspection of the numbered Corrosion Task areas on individual airplanes. The AI should also observe the operator's performance of selected corrosion activities and review records and reports.

(b) To notify the CO of any findings which indicate that the CPCP is ineffective in controlling corrosion to Level 1. For example, the AI should report repeat findings of Level 2 Corrosion, even though the operator appears diligent in accomplishing its CPCP.

(c) To forward operator-proposed program adjustments to the CO for approval.

(d) To provide information to the CO, as requested, about an operator and its fleet(s) so that the CO may fulfill its responsibilities for administration of the AD.

(2) CO Responsibilities:

(a) To evaluate and execute approvals on behalf of the FAA, when justified, in cases where the AD indicates that approval by "the FAA" is required.

(b) To evaluate and approve justified requests for alternative methods of compliance or adjustments to compliance times for the AD, as provided for in paragraph (h) of the AD.

(c) To coordinate such approvals with the AI.

(d) To receive information on behalf of the FAA in cases where the AD indicates that information is required to be submitted to "the FAA."

(e) To monitor the effectiveness of the manufacturer's Baseline Corrosion Program for which the CO is responsible and to require changes in the program, as necessary. This includes monitoring reports of corrosion submitted to the manufacturer, AI reports of problems with control of corrosion, and participation in annual Structural Working Group review meetings. These reviews are convened by the airplane manufacturer so that industry and civil airworthiness authority representatives may assess the effectiveness of the baseline corrosion program and make recommendations.

(f) To revise the CPCP AD's, as necessary, and to make changes in the manufacturer's Baseline Program effective on all airplanes of the affected model.

(g) To provide guidance to the AI concerning the AD.

(h) To act as the focal point between the FAA and other civil airworthiness authorities concerning the intent of the AD's.

d. Maintenance/Inspection Programs. If an operator elects to comply with paragraph (b) of the AD, "the FAA," as used in the CPCP AD's, is represented by the AI. Paragraph (b) of the AD gives an operator the option of complying with the AD in a programmatic way. Each CPCP task is incorporated into an operator's existing FAA-approved maintenance/inspection program, and the AI is the FAA's primary point of contact. The guidance contained in this order is directed primarily at the relationship between the AI and the CO necessitated by this approach. In this case, the responsibilities of the AI and CO are as follows:

(1) AI Responsibilities:

(a) To make approvals on behalf of the FAA in cases where the AD states that "the FAA's" approval is required. Such approvals may consist of approval of the revised maintenance inspection program (to include the CPCP), extension of Repeat Intervals, schedule adjustments for findings of Levels 2 or 3, schedules for placing a newly acquired airplane into service, approval of alternative recordkeeping methods, and approval of schedules for inspection of the remainder of the fleet in the event of a Level 3 finding.

(b) To coordinate such approvals with the CO in accordance with this order.

(c) To direct the operator to submit a request for an alternative method of compliance or adjustment to the CO in cases where the AD does not specifically state that "the FAA's" approval is required.

(d) To receive information on behalf of the FAA in cases where the AD indicates that information is required to be submitted to "the FAA." All reports of Level 3 Corrosion should be immediately transmitted to the CO.

(e) To perform surveillance of an operator's CPCP and to monitor corrosion findings to ensure that this method of compliance is effective in controlling corrosion. The AI's surveillance activities should include visual inspection of the numbered Corrosion Task areas and the performance of the Basic Task on individual airplanes. The AI should also observe the operator's performance of selected corrosion activities and review records and reports.

(f) To provide information to the CO, as requested, about an operator and its fleet(s) so that the CO may fulfill its responsibilities for administration of the AD.

(2) CO Responsibilities:

(a) To evaluate and execute approvals of justified requests for alternative methods of compliance or adjustments to initial inspection compliance times for the AD, as provided in paragraph (h) of the AD.

order.

(b) To coordinate such approvals with the AI as discussed in the AD or this

(c) To monitor the effectiveness of the manufacturer's Baseline Program for which the CO is responsible and to require changes in the program, as necessary. This includes monitoring reports of corrosion submitted to the manufacturer, and participation in periodic Structural Working Group review meetings. These reviews are convened by the airplane manufacturer so that industry and civil airworthiness authority representatives may assess the effectiveness of the baseline corrosion program and make recommendations.

(d) To revise the CPCP AD's, as necessary, to make changes in the manufacturer's Baseline Program effective on all airplanes of the affected airplane model.

(e) To provide engineering assistance and advice to the AI's so that they may evaluate and approve justified requests for operator program adjustments as provided for in the AD.

(f) To act as the focal point between the FAA and other civil airworthiness authorities concerning the intent of the AD's.

CHAPTER 2. OPERATOR CERTIFICATION

2-1. TASK-BY-TASK COMPLIANCE. Operators who elect to comply with paragraph (a) of the AD are not required to seek program approval from either the AI or the CO. These operators will accomplish the tasks identified in the manufacturer's published Baseline Program as individual AD requirements. In this case, the Baseline Program is the operator's CPCP.

2-2. INCORPORATION INTO MAINTENANCE/INSPECTION PROGRAM

a. Operators who elect to comply with paragraph (b) of the AD will develop their own CPCP using the manufacturer's document. This CPCP must be incorporated into their maintenance/inspection program.

b. The AI should review the operator's proposed program against the Baseline Program established by the manufacturer. The AI may approve, without further evaluation, an operator's program that is identical to the Baseline Program specified in the manufacturer's document and provides for the implementation schedule of paragraph (a)(1) of the AD. If the operator incorporates either a variation of the Baseline Program or a different program altogether, then the AI should evaluate that program. The following criteria must be included in the AI's evaluation:

(1) Any variation in a task Implementation Age or Repeat Interval that is more restrictive than the Baseline Program (as given in the manufacturer's document revision specified in the AD) may be accepted.

(2) Any changes to the Basic Task or the numbered Corrosion Task should be coordinated with the CO. Examples of such changes include deviation from inspection methods and application of corrosion inhibitors and other treatments.

(3) Procedures which ensure that the initial numbered Corrosion Tasks are accomplished according to the compliance times specified in paragraph (a)(1) of the AD.

(4) The CPCP should not include provisions for deferral of the numbered Corrosion Tasks or parts of the Basic Task, such as repairs and inhibitor applications.

(5) Where the operator's CPCP proposes Repeat Intervals that are less restrictive than those published in the manufacturer's Baseline Program, the AI should request substantiating information and coordinate evaluation of that change with the CO prior to approval of the CPCP. An alternative means of compliance may be required in these instances.

(6) The operator may propose alternative recordkeeping methods to those currently required in FAR Sections 91.417 and 121.380. This alternative system would eliminate the dual recordkeeping burden that would normally be required. When the CPCP is incorporated into the maintenance program, the individual Corrosion Tasks will be identified and accomplished during maintenance checks. By recording the current inspection status of each airplane, and by maintaining a cross-reference system in the maintenance program between the Corrosion Tasks and the operator's CPCP, it will be possible to determine the current inspection and AD status of each airplane. Alternative methods should be evaluated to ensure that there is an audit trail to the specific requirements of the AD, that records are retained, and that those records accompany an airplane when transferred.

(a) Audit Trail. The proposed recordkeeping system must enable the AI to trace each Corrosion Task back to an individual requirement of the AD. Each task identified in the manufacturer's document is an AD requirement. The operator's CPCP should allow the AI to determine the date of compliance and the method of compliance for any individual task. For example, the operator may propose to use its airworthiness release record (job/task card or equivalent) to satisfy the status record requirements. The job/task card should contain the AD number and manufacturer's task number in order to provide the required audit trail. Another method of providing an audit trail is for the job/task card to reference a number in a CPCP table to identify the corrosion AD and manufacturer's task number. The AI may want to suggest to the operator that it establish a matrix/document that will provide a cross-reference to the job/task card for the CPCP task number, interval, and AD.

(b) Record Retention. To ensure that current status records are available, the CPCP must contain provisions which require each job/task card to be retained until one of the following situations occur:

- 1. The Corrosion task is repeated.
- 2. The Corrosion task is superseded.
- 3. The job/task card is transferred with the airplane.

(c) Record Transfer. In the event that an airplane is transferred, the losing operator must provide the gaining operator with all records that show status of AD compliance.

(7) Sampling Programs. The AI will not approve any CPCP which contains sampling. All areas of all airplanes must be inspected.

(8) Paragraphs (c thru i). Any CPCP should contain procedures to ensure that paragraphs (c thru i) of the AD are complied with when invoked. Among these procedures are the following:

(a) Procedures for AI notification of 10 percent increase to Repeat Interval as described in paragraph (c) of the AD.

(b) Procedures to ensure that a determination of Level 3 Corrosion is acted upon within days of such determination and that reports, schedules, or data are filed as described in paragraph (d)(1) of the AD.

(c) Procedures to ensure that such reports required by paragraph (d)(1)(i) of the AD are submitted.

(d) Procedures to ensure that the Corrosion Tasks in the affected areas are accomplished in accordance with paragraph (d)(1)(i) of the AD. The AI should be notified when the numbered Corrosion Task has been completed for the affected areas on all airplanes in the model fleet.

(e) Procedures to ensure that the proposed schedule and its substantiating data for performing the Corrosion Task in the affected areas on the remaining airplanes in the operator's model fleet is accomplished IAW paragraph (d)(1)(ii)(A) of the AD.

(f) Procedures to notify the AI when the operator determines that Level 3 Corrosion is an isolated occurrence and for submission of data acceptable to the FAA. Procedures to accomplish either paragraph (d)(1)(i) or (d)(1)(i)(A) of the AD expeditiously upon notification from the AI that the isolated occurrence is not approved.

(g) Procedures to ensure that changes to correct a CPCP are submitted to the FAA for approval within 60 days after the determination of corrosion exceeding Level 1 is made IAW paragraph (e) of the AD.

(h) Procedures to ensure a schedule for the accomplishment of the numbered Corrosion Tasks required by paragraphs (f)(1) and (f)(2) of this AD.

(i) Procedures to ensure that reports of Levels 2 and 3 Corrosion are submitted at least quarterly to the manufacturer in accordance with paragraph (g) of the AD.

(9) The operator's procedures should contain all requirements of the Basic Task, and implementation and Repeat Intervals as specified in the manufacturer's document.

(10) The operator may submit an existing CPCP for approval. The FAA must find that this program is equivalent to the manufacturer's Baseline Program. The AI has the approval authority for the program, however the AI should coordinate approval with the cognizant CO. Before approving an equivalent program, the AI must determine that the operator's substantiating documentation proves that the program controls corrosion to Level 1.

(11) CPCP Approval. Once the AI is satisfied that the operator's continuous airworthiness maintenance program (CAMP) complies with the CPCP AD requirements, the AI can then issue operations specifications containing new paragraph D72f, which authorizes the use of a CAMP that incorporates an approved CPCP. Paragraph F of Operations Specifications D72 only applies to an airplane that has a CPCP which has been mandated by an airworthiness directive.

(a) The CPCP is now governed by Operations Specifications D72, Aircraft Maintenance - General Requirements (see Appendix 2 for a sample). Permanent changes should be in accordance with the following provisions:

(b) The following circumstances necessitate a CPCP revision to paragraph (f) of Operations Specifications D72:

(1) A change to a Repeat Interval.

(2) A change to an Implementation Age.

(3) A change to the affected fleet (for example, the addition of airplanes in accordance with paragraph (f) of the AD).

(4) A revision to the CPCP AD affecting the model fleet.

(5) A change in a Basic Task definition (for example, a changeover to the use of a new corrosion inhibiting compound).

(c) The operator should make a FAR Section 121.380(a)(v) status record showing that it has complied with the requirement of AD XX-XX-XX, paragraph (a), using the alternative method of recordkeeping within an approved CPCP authorized in paragraph (b) of the AD.

(12) An operator may determine that within its aggregate fleet of a given airplane model (such as a B-727), there are two or more groups of airplanes which must be maintained from a corrosion standpoint in a uniquely different manner. For example, the operator may have 18 727-100's which it operates in a salt-laden environment such as that between islands in the Pacific. It also operates 13 727-100's which are only flown between dry, salt-free destinations where the environment is essentially benign. In this case, the operator may designate two 727 fleets and submit individual CPCP's for each one. The AI should review each CPCP individually in accordance with the preceding criteria and should also ensure that the following occurs:

(a) The one airplane per year implementation rate requirement of the AD (paragraph (a)(1)(iv)) represents one airplane or equivalent a year from each fleet.

(b) The operator has established the identity of each airplane in each fleet and has procedures in place to track movement of airplanes from fleet to fleet and apply the appropriate CPCP. Transfer of airplanes from one fleet to another should be handled as they would for transfer from a previous operator to a new operator (paragraph f of the AD).

(13) The CPCP should contain procedures to evaluate the corrosion findings and to document the levels determined, or to make a record (photograph, drawing, detailed measurements, etc.) of the conditions found which are adequate to make a later determination. It is not acceptable to have potentially serious corrosion repaired without evaluation of the corrosion level, since

information about the success of the CPCP is obtained from the evaluation of corrosion detected, and reports of levels determined.

(14) If the CPCP contains NDI/nondestructive testing (NDT) methods the operator intends to use for detecting corrosion, and these methods deviate from methods specified in the manufacturer's corrosion document, the AI should evaluate them in coordination with the CO.

(15) The manufacturer's job/task cards for the Baseline Program are not approved by the FAA and are not mandatory. The operator may elect to either use these job/task cards or develop their own job/task card. In this case, the AI should review every job/task card to ensure that the following information matches the document requirements in detail:

(a) Corrosion Task number, subtask number, and AD number.

(b) Detailed description of work to be done, including work required by referenced service bulletins.

- (c) Inclusion of the elements of the Basic Task.
- (d) Task Areas.
- (e) Airplane.
- (f) Date of accomplishment, which may include a "Check" designator.

2-3. RECORDKEEPING AND RETENTION. The AI should check the operator's records and recordkeeping system to ensure that the current compliance status of the airplane can be identified from these records and that these data are available when an airplane is transferred. The AI should determine whether the operator has an alternative recordkeeping system and is maintaining records in accordance with it.

2-4. REQUIRED REPORTS. The AD requires that Levels 2 and 3 Corrosion findings be reported to the manufacturer at least quarterly. Actions necessitated by reports of Level 3 determination are also required to be reported to the FAA within 7 days of such determination. These AD reports do not negate FAR Section 121.703 which requires that these findings be reported to the AI within 72 hours.

CHAPTER 3. SURVEILLANCE

3-1. SURVEILLANCE OF AN OPERATOR'S CPCP. Once the operator has begun to implement its CPCP, the AI may use the following items to monitor compliance.

a. Does the operator have the manufacturer's corrosion control and prevention document or the operator's FAA approved CPCP? Is the revision cited in the latest AD? Do job/task cards contain instructions from the document?

b. Is the operator meeting the implementation and repeat inspection schedule requirements of the AD (paragraphs (a)(1) and (a)(2))? Any repeat inspection interval can be adjusted up to 10 percent of the Repeat Interval, or 6 months, whichever is less, to meet unanticipated scheduling requirements, as cited in paragraph (c) of the AD.

c. Does the operator accomplish all parts of the Basic Task, including application of corrosion inhibiting compounds when accomplishing each of the numbered Corrosion Tasks? Are these compounds the same type recommended by the manufacturer? Are corrosion inhibiting compounds adequately stocked?

d. Does the operator record Levels 2 and 3 Corrosion found?

e. Are those operator personnel who are accomplishing Corrosion Tasks adequately trained to recognize corrosion and to determine corrosion levels? Where NDI/NDT procedures are required, are operator personnel trained in the use of these procedures in detecting corrosion?

f. Do the job/task cards contain the same level of detail identified in the manufacturer's document?

g. If the operator's CPCP is being performed by a contract facility, is it being accomplished in accordance with the operator's program?

h. Is the operator evaluating and making adjustments to its CPCP based on Levels 2 and 3 Corrosion findings?

i. Is the operator reporting Levels 2 and 3 Corrosion to the manufacturer?

j. Is the operator accomplishing repairs at the time corrosion is found?

k. Are operator personnel conducting NDI/NDT inspections for corrosion using methods which conform to the manufacturer's corrosion document or approved CPCP?

1. Are the insulation blankets removed and dried prior to reinstallation? It is suggested that any dry blankets found damaged be repaired prior to reuse. The insulation material itself has been found to act as a wick which attracts and retains moisture.

3-2. DETERMINATION OF CORROSION LEVELS. If corrosion is detected during the accomplishment of a numbered Corrosion Task, its level must be determined. Appendices are supplied in the manufacturer's document to aid the operator in making this determination. The following guidelines will apply to most CPCP's:

a. The determination of the corrosion level is the responsibility of the operator.

b. After the operator has found corrosion which is potentially an urgent airworthiness concern, the manufacturer should be contacted for concurrence prior to classification as Level 3. This is necessary because the determination of Level 3 Corrosion is dependent on the structural design, and the manufacturer has the greatest knowledge of this design.

c. Once severe corrosion has been determined, it should be reported in an expeditious manner since the determination of Level 3 Corrosion has serious implications. These implications may apply not only to the airplane involved or the operator's fleet, but also to the entire model fleet.

d. Reports of corrosion exceeding Level 1 are required to be submitted to the manufacturer in accordance with paragraph (g) of the AD so that the manufacturer can evaluate the effectiveness of the Baseline Program.

3-3. ACTIONS REQUIRED FOR GREATER THAN LEVEL 1 CORROSION

a. Initial Task Finding. If corrosion exceeding Level 1 is found during the accomplishment of the initial corrosion inspection, it is required to be reported to the manufacturer in accordance with paragraph (g) of the AD. Reports to the manufacturer are necessary so that it can evaluate the adequacy of the Baseline Program. The operator is not required to change its CPCP under paragraph (e). The adequacy of the CPCP cannot be assessed until at least one Repeat Interval has transpired.

b. Repetitive Task Finding. If corrosion exceeding Level 1 is found during the accomplishment of repetitive inspections, then there is generally some need for change in the operator's CPCP. A single occurrence of corrosion exceeding Level 1 does not necessarily warrant a change to the operator's CPCP. The operator should determine, through inspection of additional airplanes, whether there are multiple occurrences. If there are multiple occurrences, the operator is required to implement an FAA-approved change to its CPCP. The AI is responsible for approving the change within 60 days after the determination is made. Typical adjustment actions may include one or more of the following:

(1) Multiple applications of corrosion inhibitor or coatings.

- (2) A reduction in the Implementation Age (for additional airplanes entering the program).
 - (3) A reduction in the Repeat Interval.
 - (4) Additional drainage.

c. Level 3 Corrosion Finding. The determination that Level 3 Corrosion exists on an airplane requires expeditious action. The purpose of the action is to locate and correct any Level 3 Corrosion that may exist in the remainder of an operator's fleet. Unless the operator shows that the finding is an isolated occurrence, the AD requires the operator to inspect the affected areas on all airplanes in the operator's model fleet within 7 days of the determination or, in cases where an operator requires more time, the AD allows the operator to present a schedule for accomplishing this fleet campaign. The AI is responsible for reviewing and approving the operator's schedule. The AI may require the assistance of the CO in evaluating the operator's rationale and schedule. In addition, the CO and the manufacturer must be made aware of the determination as soon as possible because it may have implications for other operators as well. Some things to consider in this evaluation are as follows:

(1) If the condition was discovered on the initial inspection, it is possible that this area was not adequately inspected in the past. Other airplanes in the operator's fleet may be in similar condition.

(2) Does the fleet campaign include the entire model fleet? If not, has the operator submitted substantiating information to justify their proposed fleet campaign? For example, Level 3 Corrosion found during the first CPCP inspection on an airplane which was acquired from another operator may have been caused by operation in a particularly corrosive environment which were unknown to the present operator. Other such airplanes in the present operator's fleet may have been operated in this environment. Such airplanes may have Level 3 Corrosion even though they have not reached the Implementation Age, and therefore should be included in the fleet campaign.

(3) Is there anything that will allow a limited fleet campaign of other airplanes in the operator's fleet?

- (a) What was the past maintenance history of the airplane?
- (b) What was the operating environment of the airplane?
- (c) What was the production build standard?
- (d) Was the airplane acquired from another operator?
- (e) Years in service of the airplane.

(4) Paragraph (d)(2) of the AD allows the AI to impose schedules other than that proposed by the operator if the FAA determines that this is necessary for timely detection of other Level 3 Corrosion. This should be a joint decision between the AI and the CO. The CO should communicate concurrence with the action, by letter or memo, to the AI as soon as possible, but not later than 10 working days. The AI should endorse this letter and forward it to the operator as soon as possible after this decision is made.

(5) Once the fleet campaign schedule has been approved, the AI should monitor the results of the inspections and follow up on the corrosion level determinations. The AI should ensure that the operator addresses additional findings of Levels 2 and 3 Corrosion and makes submittals in accordance with paragraphs (d) and (g) of the AD.

(6) Additional Level 3 findings indicate that an even more aggressive fleet campaign is necessary. For example, if the subsequent Level 3 finding is even more severe or more widespread than the first, the safety problem may be greater than originally thought and even more expeditious action may be necessary. The AI should consider this possibility before approving an operator's revised or new fleet campaign resulting from additional Level 3 corrosion findings.

3-4. DEFERRAL OF CORROSION ACTIONS. In general, the deferral of any inspection within the numbered Corrosion Tasks or parts of the Basic Task, such as corrosion removal, repairs, and inhibitor application, is not allowed. The intent of a CPCP is that a complete numbered Corrosion Task should be performed on the structure at predetermined intervals. It is the completion of the entire numbered Corrosion Task and the Basic Task that makes the Repeat Interval valid. If corrosion is left on the structure, it will likely exceed an acceptable level before that particular task is repeated. In some instances, an operator may request the deferral of corrosion removal and repair. In these instances, an engineering evaluation of the deferral is essential. Deferrals should be requested as an alternative method of compliance in accordance with procedures in paragraph (h) of the applicable AD. The substantiating data should include the reason why the corrosion will not be an airworthiness concern prior to repair at a specified time.

3-5. ACCEPTABLE METHODS OF REPAIR. Corroded items are to be reworked, blended, or replaced in accordance with either approved methods in the manufacturer's SRM or other FAA-approved methods. The CPCP AD's do not address acceptable methods of repair. Operators should continue to make repairs in accordance with the FAR.

3-6. TEN PERCENT INTERVAL ADJUSTMENTS. The FAA recognizes the need for flexibility in the scheduling of the Repeat Intervals. Paragraph (c) of the appropriate AD accommodates unanticipated scheduling difficulties. However, it is not intended that this allowance be used to extend all specified Repeat Intervals by 10 percent. The AI should ensure that the operator is conforming with the written notification procedures of paragraph (c).

3-7. DETERMINING THE AIRPLANE AGE AT WHICH THE FIRST TASK IS REQUIRED TO BE ACCOMPLISHED

a. In order to determine the first time a task is required to be accomplished on an airplane, the following information must be available:

- (1) Implementation Age for the task.
- (2) Repeat Interval for the task.
- (3) Airplane date of initial delivery from the manufacturer.
- (4) Effective date of the AD.

b. AD paragraph (a)(1) establishes the requirements for the first task accomplishment. These requirements are presented in the decision logic diagram of figure 3-1 in this order.

c. The Basic Task(s) must be accomplished on at least one affected or equivalent airplane per year.

3-8. PREVIOUS GUIDANCE. Policy letters have been issued by Northwest Mountain Region (ANM-100) pertaining to the corrosion AD's. These letters are attached as appendix 1.



FIGURE 3-1. IMPLEMENTATION AGE DECISION LOGIC DIAGRAM

NOTES:

- A = Airplane age at 1 year after effective date of AD
- \mathbf{R} = Repeat Interval for the Corrosion Task
- C = Airplane age when the task is first required to be accomplished
- **IA** = Implementation Age for the Corrosion Task
- < = Less than

CHAPTER 4. PROGRAM ADJUSTMENTS

4-1. ADJUSTMENTS TO BASELINE PROGRAM. Only the CO may make Baseline Program adjustments by issuing revisions to the AD. These revisions are based on the evaluation of corrosion reports submitted by operators and the program implementation difficulties identified by the AI's. These revisions will normally be the result of a consensus made by the model Working Groups during the periodic review meetings.

a. The CO should review all reports of Level 3 Corrosion in conjunction with the manufacturer to identify trends in the model fleet.

b. When the AI's identify difficulties in implementing the CPCP which are common throughout the fleet, the CO's should consider initiating AD revision action rather than issuing multiple alternative methods of compliance or policy letters.

c. The model working group annually reviews corrosion reports that have been submitted to the manufacturer. The working group will recommend any Baseline Program changes necessary. Such program changes are implemented by a change to the manufacturer's CPCP and a revision to the affected AD.

d. If an AD revision is issued, each operator must comply. Where the AD revision affects task requirements, the operator's CPCP should be reviewed to determine if and where changes are necessary. For example, an operator whose CPCP contains task requirements which are more restrictive than those mandated in the AD revision would be in compliance. An operator that can show that its CPCP is consistently maintaining corrosion to Level 1 would also be in compliance with the revised AD.

4-2. ADJUSTMENTS TO OPERATOR'S APPROVED CPCP. Operators using either method of compliance may adjust their CPCP.

a. Task-by-Task Method. Any operator who has elected to comply with paragraph (a) of the AD must make adjustments to their program through an alternative method of compliance in accordance with paragraph (h) of the AD.

b. Maintenance/Inspection Program. Any operator who has elected to comply with paragraph (b) of the AD may make changes to its program upon the approval of the AI. Approval request must be accompanied by information substantiating the changes. The AI should use the following guidelines in approving such requests:

(1) The operator should have substantiating data to show that findings of corrosion are limited to Level 1.

(2) The operator's substantiating data should indicate that the numbered Corrosion Task at the present Repeat Interval has been completed on 75 percent of its affected airplanes.

(3) The operator may not use its "reliability program" as a basis for adjusting the Repeat Interval; however, the operator may use the reliability program for recording numbered Corrosion Task findings and level determinations to substantiate data for Repeat Interval changes.

(4) The requested change should be expected to result in a program that continues to be effective. That is, future corrosion findings should be expected to continue to be limited to Level 1.

(5) The AI should consult with the CO if any of the following occurs:

(a) The adjustment constitutes a 10 percent or greater change in a Repeat

Interval.

(b) The adjustment constitutes a change in the Implementation Age.

(c) The operator's experience in the affected area includes one or more findings of Levels 2 or 3 Corrosion during earlier repeat inspections.

NOTE: Areas experiencing Levels 2 or 3 Corrosion are not normally eligible for a program relaxation. There are certain limited circumstances, however, under which Levels 2 or 3 Corrosion findings may not be indicative of an ineffective program (see paragraph 3-3). Any request for a relaxation of such programs should be discussed thoroughly with the CO before an approval is granted or denied.

(d) The operator has not repeated the task in the affected area on at least 75 percent of its existing affected fleet.

(e) The operator's experience in the affected area indicates that its existing program, although effective, is only marginally so, and a relaxation of the program is being requested.

(f) The AI has any other doubt or question about the change.

(6) The AI should review all previously issued alternative method of compliance approvals for the operator's CPCP. If the AI determines that the requested change affects any previously granted alternative methods, then the AI should forward the request to the CO recommending that an alternative method of compliance be considered. The AI may add comments and concurrence, as appropriate.

c. AI Approval of Operator's Requests. The AI should provide approval or status of requested changes to a CPCP within 10 working days after receipt. The approval or status of a change should be made in writing to avoid misunderstandings. If a change is not approved within 10 working days, then the AI should keep the operator informed of the status.

APPENDIX 1. SAMPLE POLICY LETTERS

FEB 5 1991

In Reply Refer To: 91-120S-35

Boeing Commercial Airplane Group Attention: Mr. G.R. Mack, Chief Airworthiness P.O. Box 3707 Seattle, Washington 98124-2207

Subject: Corrosion Control Airworthiness Directive's (AD's) 90-25-07 (707), 90-25-03 (727), 90-25-01 (737), and 90-25-05 (747)

Gentlemen:

This letter is to confirm our interpretation of the compliance times required by the above AD's.

Regardless of when the Baseline Program or alternative program is approved, the required intervals to perform the tasks may be measured from December 31, 1991.

We would appreciate it if you would distribute this information to operators of affected Boeing Models.

Sincerely,

(signed)

MAY 1 1991

In Reply Refer To: 91-120S-361

Boeing Commercial Airplane Group Attention: Mr. K.B. Buchanan, Manager Everett Division Airworthiness P.O. Box 3707 Seattle, Washington 98124-2207

Subject: Corrosion Control Airworthiness Directive's (AD's) for Boeing 707, 727, 737, and 747 Airplanes

Gentlemen:

This letter is in response to questions generated during the Boeing Corrosion Control Course by personnel from various airlines and their FAA principal maintenance inspectors.

Paragraph A of AD's 90-25-01, 90-25-03, 90-25-05, and 90-25-07 states that within 1 year after the effective date of these AD's revise the FAA-approved maintenance program to include the corrosion control program specified in the appropriate Boeing document. Operators which do not have any aircraft that have reached their Implementation Age by December 31, 1991, need not take action to revise their FAA-approved maintenance program by that date. When the Implementation Age is reached, a fully approved Corrosion Control and Prevention Program must be in place to accommodate that airplane.

Please supply copies of this letter to operators of Boeing 707, 727, 737, or 747 airplanes.

Sincerely,

(signed)

MAY 10 1991

In Reply Refer To: 91-120S-441

Boeing Commercial Airplane Group Attention: Mr. Kenneth K. Usui, Manager Renton Division Airworthiness P.O. Box 3707 Seattle, Washington 98124-2207

Subject: Response to Questions Raised During Boeing Corrosion Prevention and Control Training Course

Gentlemen:

This letter is in response to questions generated during the Boeing Corrosion Prevention and Control Training Course.

The Boeing documents for the aging airplane Corrosion Prevention and Control Program called out in Airworthiness Directives (AD's) 90-25-01, 90-25-03, 90-25-05, and 90-25-07, for Boeing 707, 727, 737, and 747 airplanes required that the minimum implementation rate for airplanes that have exceeded the Implementation Age be one airplane per year. This requires that all Corrosion Tasks be completed on one equivalent airplane.

Certain corrosion control tasks have to be accomplished with the landing gear disassembled or the engine removed. The structures working group concluded that these tasks could be best accomplished during landing gear overhaul or engine removal.

The FAA has concluded that the requirement to complete one airplane per year conflicts with the requirement to do the Corrosion Tasks at gear overhaul and engine change. Therefore, it is unnecessary to accomplish, at the minimum implementation rate of one airplane per year, the corrosion control tasks that are required to be accomplished at gear overhaul or engine change.

8300.12 Appendix 1

APPENDIX 1. SAMPLE POLICY LETTERS (Continued)

Please furnish copies of this letter to operators of Boeing Transports affected by AD's 90-25-01, 90-25-03, 90-25-05, and 90-25-07.

Sincerely,

(signed)

MAY 21 1991

In Reply Refer To: 91-120S-503

Boeing Commercial Airplane Group Attention: Mr. Kenneth K. Usui, Manager Renton Division Airworthiness P.O. Box 3707 Seattle, Washington 98124-2207

Gentlemen:

This letter is in response to questions generated during the Boeing Corrosion and Control Training Course.

The Boeing documents for the aging airplane Corrosion Prevention and Control Program called out in Airworthiness Directives (AD's) 90-25-01, 90-25-03, 90-25-05, and 90-25-07, for Boeing 707, 727, 737, and 747 airplanes, respectively, requires that the minimum implementation rate for airplanes that have exceeded the Implementation Age be one airplane per year. If a foreign operator has some U.S.-registered airplanes in its fleet, that operator is required to have those airplanes comply with the AD. If the U.S.-registered airplane is representative of the fleet, it is acceptable to use a foreign registered airplane in lieu of the U.S.-registered airplane to comply with the minimum implementation rate requirement. This procedure may be used, provided the foreign operator's corrosion program complies with the requirements of the AD's mentioned above.

In addition, if a foreign operator has U.S.-registered and foreign registered airplanes in its fleet and Level 2 or Level 3 Corrosion is detected, it is not necessary to submit proposed adjustments to the corrosion control program to the FAA, provided equivalent action is taken with their airworthiness authority.

Sincerely,

(signed)

MAY 23 1991

In Reply Refer To: 91-120S-522

Boeing Commercial Airplane Group Attention: Mr. K.B. Buchanan, Manager Everett Division Airworthiness P.O. Box 3707 Seattle, Washington 98124-2207

Subject: Response to Questions Raised During Boeing Corrosion Prevention and Control Training Course

Gentlemen:

This letter is in response to questions generated during the Boeing Corrosion Prevention and Control Training Course.

The Boeing documents for the aging airplane Corrosion Prevention and Control Program called out in Airworthiness Directives (AD's) 90-25-01, 90-25-03, 90-25-05, and 90-25-07, for Boeing 707, 727, 737, and 747 airplanes specifies the implementation time period for the corrosion control tasks. Certain corrosion control tasks have to be accomplished with the landing gear disassembled or the engine removed. The structures working group concluded that these tasks could be best accomplished during landing gear overhaul or engine removal.

The FAA has reviewed the requirement for airplanes that have exceeded 20 years since delivery to accomplish the corrosion control tasks within 6 years. For airplanes that have exceeded 20 years since delivery, the FAA has concluded that the corrosion control tasks that are to be accomplished at landing gear overhaul or scheduled engine change do not have to be accomplished within 6 years of December 31, 1991. The tasks must be accomplished at landing gear overhaul or scheduled engine change.

Sincerely,

(signed)

MAY 31 1991

In Reply Refer To: 91-120S-557

Boeing Commercial Airplane Group Attention: Mr. K.B. Buchanan, Manager Everett Division Airworthiness P.O. Box 3707 Seattle, Washington 98124-2207

Subject: Corrosion Airworthiness Directives (AD's), Boeing Model 747

Gentlemen:

A question has arisen concerning Implementation Ages of items, such as flap tracks, which have been replaced. As with all AD's, the corrosion AD Implementation Age (or compliance time) may be calculated from the time of installation of a new part.

We would appreciate it if you would distribute this information to the operators.

Sincerely,

(signed)

APPENDIX 2. EXAMPLE OF OPERATIONS SPECIFICATIONS PARAGRAPH D72, AIRCRAFT MAINTENANCE - GENERAL REQUIREMENTS

U.S. Department of Transportation Operations Specifications Federal Aviation Administration								Form A OMB No. 212	Approved 20-00028
			TABLE	OF CONTENTS	(Revision)				
			PART I	O - AIRCRAFT	MAINTENANCE				
					I	HQ	CONTROL DATE	EFFECT: DATE	IVE
*72.	AIRCRAFT	MAINTENANCE	- GENERAL	REQUIREMENTS	3	7/	22/93		

Print Date: ____

CERTIFICATE NO.:

FAA Form 8400-8 (10-90)

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APPENDIX 2. EXAMPLE OF OPERATIONS SPECIFICATIONS PARAGRAPH D72, AIRCRAFT MAINTENANCE - GENERAL REQUIREMENTS (Continued)

U.S. Department of Transportation Federal Aviation Administration

Operations Specifications

Form Approved OMB No. 2120-00028

D72. AIRCRAFT MAINTENANCE - GENERAL REQUIREMENTS (7/22/93).

The certificate holder is authorized to conduct operations under Part 121 of the Federal Aviation Regulations using the aircraft identified in the certificate holder's aircraft listing providing the following conditions are met:

- a. Each aircraft authorized for use shall be maintained in accordance with the continuous airworthiness maintenance program and limitations specified in these operations specifications.
- b. The continuous airworthiness maintenance program must be sufficiently comprehensive in scope and detail to fulfill its responsibility to maintain the aircraft in an airworthy condition in accordance with applicable Federal Aviation Regulations and standards prescribed and approved by the Administrator. The program shall be included in the certificate holder's manual.
- c. Each aircraft and its component parts, accessories, and appliances are maintained in an airworthy condition in accordance with the time limits for the accomplishment of the overhaul, replacement, periodic inspection, and routine checks of the aircraft and its component parts, accessories, and appliances. Time limits or standards for determining time limits shall be contained in these operations specifications or in a document approved by the Administrator and referenced in these operations specifications.
- d. Items identified as "on condition" shall be maintained in a continuous airworthy condition by periodic inspections, checks, service, repair, and/or preventive maintenance. The procedures and standards for inspections, checks, service, repair, and/or preventive maintenance, checks or tests, shall be described in the certificate holder's manual.
- e. Parts or subassemblies of components that do not have specific time intervals shall be checked, inspected, and/pr overhauled at the same time limitations specified for the component or accessory to which such parts or subassemblies are related or included at the time period indicated for the ATA chapter heading.

Effective Date: ____

D72-1

CERTIFICATE NO.: _____

FAA Form 8400-8 (10-90)

APPENDIX 2. EXAMPLE OF OPERATIONS SPECIFICATIONS PARAGRAPH D72, AIRCRAFT MAINTENANCE - GENERAL REQUIREMENTS (Continued)

U.S. Department of Transportation Federal Aviation Administration

Operations Specifications

Form Approved OMB No. 2120-00028

f. Each aircraft requiring a corrosion program shall be maintained in accordance with an approved Corrosion Prevention and Control Program (CPCP). This program is hereby incorporated into the operator's continuous airworthiness maintenance program. The CPCP revision number reflects the latest revision made to this CPCP in accordance with the FAA Order containing guidance on corrosion prevention and control programs.

INSERT: The information requested in the following table.

AIRCRAFT MAKE/MODEL/SERIES	CPCP REVISION NUMBER

1. Issued by the Federal Aviation Administration.

2. These Operations Specifications are approved by direction of the Administrator.

Principal Maintenance Inspector

Inspector Na 3. Date Approval is effective: 4. I hereby accept and receive	me the Operations Specific	Office Amendment No.: cations in this paragraph.
Name	Title	Date
Effective Date:	D72-2	CERTIFICATE NO.:
-		

FAA Form 8400-8 (10-90)



Federal Aviation Administration

Directive Feedback Information

Please submit any written comments or recommendations for improving this directive, or suggest new items or subjects to be added to it. Also, if you find an error, please tell us about it.

Subject: Order <u>Order 8300.12</u> - CORROSION PREVENTION AND CONTROL PROGRAMS

To: Directive Management Officer, _____

(Please check all appropriate line items)

An error (procedural or typographical) has been noted in paragraph _____ on page _____.

Recommend paragraph ______ on page _____ be changed as follows: (attach separate sheet if necessary)

□ In a future change to this directive, please include coverage on the folowing subject (briefly describe what you want added):

Other comments:

FAA Form 1320-19 (8-89)

I would like to discuss the above. Please contact me.

Submitted by:	Date:
FTS Telephone Number:	Routing Symbol: