EMERY WORLDWIDE AIRLINES

RESPONSE TO

EXHIBIT 17T

EMERY
WORLDWIDE AIRLINES
A CNF COMPANY

April 2, 1999

Mr. Jay Howard
Officer Manager
FSDO SJC
1250 Aviation Ave. Suite 295
San Jose, CA 95110

Dear Mr. Howard:

This letter constitutes Emery Worldwide Airlines, Inc. (EWA's) formal response to your March 18, 1999, letters regarding File No. 99WP150028 addressed to Mr. Kent Scott, President and Chief Operating Officer. (Reference Attachment 1.)

I would like to assure you that your letters have merited EWA's immediate and undivided attention. EWA, as a certified air carrier, it's management and employees are fully appreciative of their responsibilities arising under pertinent laws, and under the Federal Aviation Regulations (FAR's), and strive to fulfill these responsibilities in a professional and conscientious manner.

In demonstration of this professional compliance attitude, a meeting was held with Mr. Scott and the Director, Quality Control on March 19, 1999, and an immediate proactive plan was established. This plan was discussed with you and the FAA Principals during a conference call with the Director, Quality Control the same day, and was agreed to by your office. (Reference Attachment 2.)

EWA's Director, Quality Control arranged for an immediate meeting to discuss the concerns of the FAA and provide immediate solutions to these concerns. Per Mr. Joseph Abramski, an agenda was sent representing items to be discussed with the Director of Quality Control, during his scheduled meeting at the SJC office March 23 and 24, 1999. (Reference Attachment 3.)

This letter will provide substantiation that EWA did not compromise safety in air commerce, and/or negate the public's interest, to constitute the requirement of amending EWA's Operation Specification D74 and D76. EWA requests that you thoroughly review the contents of this data package, and provide EWA the opportunity to discuss any other concerns that you may have, if you are not satisfied this constitutes our compliance position. It is our utmost desire to continue to resolve all open issues, with the first opportunity face-to-face.

Your letter cites eight (8) reasons for considering the modification of EWA's Operational Specifications. All eight (8) reasons will be addressed in this letter in the order listed in your referenced letter. Supportive data is provided as attachments in these responses.

I. FAA REASON/EWA RESPONSE

FAA Reason:

1. EWA failed to conduct monthly Reliability Program meetings to review and analyze aircraft maintenance data as required in their Maintenance Reliability Program Document No. EWA 51990, for the months of October, November, December 1998, and again in January 1999.

   EWA Response:

   - The monthly meetings are for review of the reports only. As stated in EWA 51990, Chapter 3, Page 8; C; 9; b) ".....reviews by the Manager of Reliability pertaining to the previous month's fleet performance and reliability highlights provided in the monthly Fleet Reliability Report." Further this section of EWA 51990 clearly indicates that the analysis of the data has been performed in order to present to the meeting attendees; proposed amendments to the CAMP, and other special interest subjects. (Reference Attachment 4.)

   - The duration indicated in your letter appears to be incorrect. Data collection for the September Reliability report began in the second week of October. At this time the Reliability Section discovered a possible problem with the September log book data stored in MERIT. Immediate corrective action taken by EWA resulted in an eight (8) week delay in the reporting process. The distribution of the January Reliability report placed the monthly Reliability report process back on schedule.

   - The Reliability data was continually analyzed as required and actions were taken, if necessary. The meetings that were scheduled had to be canceled, not due to a lack of data, but rather due to the fact that the data required for the report was incomplete in the MERIT data base. This was explained in the EWA response letter to LOI 99WP150025. (Reference Attachment 5).

   - The EWA response to the LOI number 99WP150025 included supportive information such as; 1) telephone conversations with the PMI concerning this issue had taken place with the Manager, Reliability; 2) this isolated occurrence was the first over the past nine (9) years; 3) EWA's training performance and FAR compliance record during this nine (9) year period has been exceptionally high in demonstrating results of a professional attitude as a company, to FAR compliance. This achievement by EWA is only enforced and promoted by the surveillance and Principal oversight management of your office, to which we are very grateful. (Reference Attachment 5.)

FAA Reason:

2. EWA voluntarily implemented an aircraft maintenance electronic data collection system; specifically known as Maintenance/Material, Engineering, Reliability, Information Technology (MERIT), which was not accepted by the administrator. Further, that the MERIT system was faulty and contributed to the absence of accurate fleet airworthiness data for the months of September, October, November and December 1998. This deficiency of data, and the subsequent recovery and verification of such by EWA, continued from the months of October 1998 through February 1999.

   EWA Response:

   - The MERIT program, much like the EWA01 system, is not listed in EWA's Operational Specifications. Data is collected and input into the MERIT system similar to the process used for EWA01 for the past nine (9) years. Previous revisions to the MPP reflect EWA's use of MERIT, and have been accepted by the Administrator.

   - The MERIT system has functioned as designed, and was not "faulty" as indicated in your letter. A change in the data input process resulted in the data in MERIT to be incomplete. Because of the thoroughness in analyzing the data by the Reliability Section, this problem was discovered and immediately acted upon by EWA's Management. The data was checked against the log pages to ensure that all inputs were correct. This process took approximately five (5) weeks.

   - EWA established an "EWA Computer Based Maintenance Program Manual" dated 1/20/92 with Mr. John Howard, EWA's previous PMI from January 1990 to December 1997. This procedure provided guidelines for the administration of this program, which EWA has followed to date. (Reference Attachment 6.)

   - Since the implementation of the new Maxi-Merlin Computer System, EWA has provided correspondence to the Principal Maintenance Inspectors beginning in 1996 through February, 1999, and at all times received FAA acceptance. (Reference Attachment 7.)

   - EWA elected to upgrade the EWA01 computer software system in early 1996. The Maxi-Merlin software program was purchased from U.S. Airways to accommodate the growth of EWA's fleet, and provide a major carrier control system that has many years of proven effectiveness. EWA has invested over $2.5M in this program enhancement.

     This new software provides growth options to EWA's FAA approved Reliability Program, which is under implementation consideration currently.

FAA Reason:

3. EWA failed to reasonably and prudently notify the Administrator of encountered deficiencies with respect to their MERIT system; which subsequently compromised their Maintenance Reliability Program, resulting in ineffective and inadequate program functions. Further, EWA failed to provide acceptable documentation and testing of their parallel EWA01 and MERIT systems.

EWA Response:

- EWA responded immediately, internally, to resolve the issue of incomplete data contained within the MERIT system. At no time did the lack of information in MERIT compromise EWA's Maintenance Reliability Program. The effect on the Maintenance Reliability Program was simply a delay in the publishing and distribution of the monthly Reliability Report.

- Extensive comparison testing was performed between MERIT and EWA01. Several months of testing all aspects of both systems was accomplished. The MERIT database was incomplete, not because of a system hardware or software problem, but due to a data input process change. In addition EWA01 and MERIT ran parallel for nearly one (1) year to ensure that the process would be intact.

- EWA01 and MERIT operated parallel for approximately one (1) year. In that year over 20,000 man-hours were devoted to ensuring that the system functions would not have an impact once EWA converted to the MERIT database. Once the data collection issue was identified, EWA spent five (5) weeks reviewing the data and correcting errors.

- EWA provided the Merit Data Audits of the Time and Cycle Reports in August, 1997, and the log page in February, 1999. This submittal of a parallel program comparison is in compliance with the procedures. (Reference Attachment 7.)

FAA Reason:

4. EWA failed to maintain adequate Reliability Program personnel to consistently analyze, evaluate and address acquired maintenance data, relative to the complexity and composition of the EWA's forty-one (41) DC-8 aircraft and their continuing analysis and surveillance system.

EWA Response:

- EWA aircraft performance data is continually collected, monitored and analyzed by the Reliability Section. During the month of September, the Reliability Section experienced three separate events that contributed to the delay of producing the monthly Reliability Report. These events are as follows:

  - MERIT data was found to be incomplete during a routine download.
  - One of the Technical Analysts under went emergency surgery and was out of the office for 3 weeks.
  - The ongoing review of the DC-10 Maintenance Program review.

- EWA aircraft performance and reliability statistics indicate that the Reliability Section has been, and is, adequately staffed.

- EWA's Maintenance Program has demonstrated a proactive approach to identifying and correcting potential problems. This is done by setting the alert levels at one standard deviation for the aircraft systems, and investigating those systems that exceed their alert level. Alert levels set at one standard deviation, identifies emerging problems, and in most cases, the potential problem is related to only a small percentage of EWA's fleet. These tight alert levels allow EWA to correct potential problems before they become a fleet problem. (Reference Attachment 8.)

- An EWA presentation was provided March 14, 1995, to the FAA SJC office personnel by the Director, Quality Control, regarding the support of Mr. John Howard's decision to approve the D74 Operations Specification, Maintenance Policy and Procedures Manual, and the Reliability Manual revisions.

  The results of this meeting were very positive in resolving the misunderstandings which seemed to have existed regarding the Reliability Program. Additionally, and more importantly, the EWA and FAA Principals were able to solidify a very good working, professional relationship for the ongoing interaction between the respective members.

  Based on this presentation, and substantiation provided to Mr. John Howard, March 30, 1995, EWA received Revision #5 to the Maintenance Reliability Program, Document EWA-51990, that provided control of the Reliability Program to the EWA MRB, without the requirement of being FAA approved.

It is important to note, however, that EWA has received FAA approval by the Principals for all Inspection/Maintenance Program changes from 1989 to date. The Director, Quality Control, as a courtesy to Mr. Joseph Abramski in 1997 upon assignment as the PMI, has and continues to send all changes for his approval, in order to give him time to acclimate to our program.

EWA continues to believe that the professional relationship and ability to interact with our Principals remains present, as it was demonstrated in 1995, to jointly resolve any and all FAA concerns with this substantiated data, and EWA's willingness to provide solutions real time. (Reference Attachment 9.)

- The EWA MRB organization has grown in technical, qualified staffing since 1995. The most recent addition and reorganization was the development of the Engineering Department. (Reference Attachment 10.)

- In November, 1996, the EWA Finance and Administration Division implemented a new "project oriented" organization known as Systems and Controls. This organization was established to create, improve, and support our various airline business functions through development and implementation of computer and non-computer related projects, and to maintain the integrity of the systems and information produced.

  This dedicated, skilled, professional computer group was added to provide direct support to the Merit Program. (Reference Attachment 11.)

- EWA's Material Department is now under the direction of Tracy Chaplin, Director Material Management.

  This department has expanded in several areas, but one important establishment was the addition of seven (7) Inventory Controllers, staffed 24 hours a day/7 days a week. This 24/7 now enables EWA Merit system to operate real time. (Reference Attachment 12.)

FAA Reason:

5. EWA failed to evaluate, analyze, and submit to the Administrator, regulatory required Mechanical Interruption Summary Report, or Mechanical Reliability Reports for the months of September, October, November and December 1998 and again in January 1999. These reports were eventually received by the CHDO on February 12, 1999 and March 1, 1999 respectively.

EWA Response:

- During the months in question, EWA's Reliability Section continued to evaluate and analyze the Mechanical Interruption Summaries. No action items were generated, as none were required.

- During the months in question EWA's Reliability section continued to evaluate, analyze and submit Mechanical Reliability Reports as required per FAR 121.703. A comprehensive fix for this reporting requirement was provided in the response letter to the LOI 99WP150023, dated January 11, 1999, from the Director, Quality Control. (Reference Attachment 17.)

- There is no specific interval for submitting a Mechanical Interruption Summary Report per FAR 121.705, nor does EWA 51990 state a specific interval for submitting this report. However, EWA's Maintenance Polices and Procedures Manual (MPP) does provide a procedure for sending monthly reports.

- The Mechanical Interruption Summary Report is part of the EWA monthly Reliability Report and as a result was not submitted during the indicated months.

FAA Reason:

6. EWA failed to maintain their continuing analysis and surveillance system in a manner which identifies and corrects deficiencies, as reflected in their untimely submitted Mechanical Interruption Summary Reports for the months of September, October, November and December 1998.

EWA Response:

- The EWA Reliability Section continually collects, monitors and analyzes aircraft performance data. The conclusion that "EWA failed to maintain their CASS" based solely upon the lack of a report being submitted to the administrator cannot be substantiated. EWA's fleet reliability continued to show positive results throughout the months in question.

- It should be noted that between the months of September and November the fleet mechanical dispatch reliability increased by 1.1%.

- EWA increased it's flight hours by 9% in 1998, due to the PMPC operation, and decreased it's number of PIREP's per flight hour by 25%.

- The Mechanical Interruption Summary Report is part of the EWA Reliability Report, and therefore, was not submitted for the indicated months due to the facts provided in items 4 and 5 above.

- During this time EWA had formed a Tiger Team to analyze, evaluate and correct, repeat and chronic problems identified through the daily log pages, Merit Data System, EWA01, Reliability, and Maintenance Control. Representatives from the Tiger Team attended the daily 7:15 morning meeting chaired by the Manager of Maintenance Control to gather information concerning identified chronic and repeat problems. (Reference Attachment 13.)

- EWA's Maintenance Review Board (MRB) formally advised Mr. Joseph Abramski by letter, dated September 17, 1998, that EWA was an active member on the DC-8 MSG-3 Steering Group, and would implement the new Douglas DC-8 MSG-3 Maintenance Inspection Program upon FAA approval, (expected to be complete in August, 1999.)

  In addition to this program improvement, EWA senior management contracted Avitech to develop a new Maintenance Program and Maintenance Task Cards for the DC-8 aircraft. This project is underway and projected to be complete and sent to your office for review and approval, by May 1999. EWA has invested $125,000 to this program enhancement.

  These proactive measures of the EWA MRB demonstrate the effectiveness of the CASS Program, and specifically the Reliability Program. (Reference Attachment 14.)

FAA Reason:

7. EWA failed to submit to the Administrator required Major Alteration Reports which directly impacts EWA's data collection system for the Reliability Program.

   EWA Response:

   - EWA provided notification to the Principal concerning the Stage III Husk Kit (major alteration) installation STC SA5455NM, initially by a copy of the referenced STC in 1998 prior to installation.

   - The Aircraft Maintenance Manual was revised October 23, 1998, and received FAA approval from the Principal providing notification. (Reference Attachment 15.)

   - A revision to the MPP, Chapter 4, Page 135, dated October 22, 1998, was sent to the Principals, to which the requirement of 121.707 was added to the MA procedures. This revision is currently at your office under review by the Principals. (Reference Attachment 16.)

- Based on the Director, Quality Control's discussion on March 23 and 24, 1999, at your office, I understand there was a misunderstanding of the new FAR 121.707 procedure added to the MPP revision. This procedure provides them a copy of the MA for the aircraft to be issued . Your understanding was that EWA would send each completed MA to them, for each aircraft. An action item was taken by the Director, Quality Control to revise the procedures accordingly.

- EWA's Reliability Program receives data relative to these modifications based on it's continuous airworthiness maintenance program. In no case did this adversely affect the data collection system for the Reliability Program.

FAA Reason:

8. Contrary to EWA procedures outline in the EWA Maintenance Policy and Procedures Manual and EWA's Maintenance Reliability Program Document EWA-51990, EWA escalated five (5) DC-8 aircraft "C Check" Inspection intervals without benefit of adequate Reliability Program analysis or evaluation.

EWA Response:

- As previously stated, EWA had all information available for review and evaluation. EWA only failed to submit monthly reports per our own manual procedures, which we believe falls under the category of an FAA Administrative Enforcement Action, to which a letter of correction would serve both the FAA and EWA, to promote procedural controls, as corrective action has already been accomplished.

II. SUMMARY OF SUBSTANTIATION:

EWA at no time had a lack of data available to support its fleet of DC-8's. The Technical Services staffing is adequate to manage and produce the amount of work, and the detail level of analysis required to evaluate this data. Since January, 1999, two (2) DC-8 aircraft have been removed from the Operations Specifications, and seven aircraft are scheduled to be parked this year. This reduction in the fleet will reduce workload and fleet types to monitor, therefore, improving man-hour availability.

As outlined above, a data input process change resulted in an approximate eight (8) week delay in the publishing/distribution of the EWA Reliability Report. As a result of incomplete data within the MERIT database, EWA decided to withhold publishing/distributing the September report until the end of December 1998. This was a delay of two (2) months or eight (8) weeks.

The EWA Reliability Program is based on Pilot Report (PIREP) data. This data is collected from the aircraft log pages which are submitted to Aircraft Records (hard copy), and are always available for all departments use, including the Reliability Section. To assume that an airline cannot run effectively without the aid of data management by computer is incorrect. The task of analyzing data is much easier using a computer, but it is not a requirement for operation or regulatory control by an FAR.

EWA's use of MERIT merely aids in the tracking of parts for accounting purposes and assists maintenance by generating reports quickly. Thousands of man-hours were expended making sure that the functionality of MERIT was as good as, or better than, those functions found in the EWA01 system. Every effort was taken to ensure a smooth transition to MERIT from EWA01. When it was noted that there was a problem in the data that populated the MERIT data base, immediate corrective action was taken by EWA. As stated before, this demonstrates EWA's Reliability Program performed, and continues to perform, as designed and approved by the FAA.

If EWA's Reliability Section had failed to evaluate or analyze data properly, or did not have the staff or resources to effectively perform its tasks, the problem found in the MERIT system would have taken much longer to be discovered . Only by the evaluation and analysis by the Reliability Section in preparation of the September Monthly Report, was this discrepancy found.

EWA has operated since 1989 with a growing fleet of DC-8 aircraft. EWA has always maintained a high degree of reliability at a reasonable cost. A key factor in EWA's ability to compete with other operators, is the proficiency of the Reliability section. EWA's proven 98% Mechanical Dispatch Reliability average of it's DC-8 fleet in the past nine (9) years, is relative to a successfully managed program.

I have also enclosed the FAA EIR Consolidation Notification letter received from Mr. John Howard, March 16, 1999, and a copy of the letters and EWA responses, for your information. (Reference Attachment 17.)

III. EWA PROPOSED MAINTENANCE PROGRAM PLAN

1. During the FAA meeting March 23 and 24, 1999, at the SJF FSDO office, the Director, Quality Control presented a proactive plan to address the FAA's concern regarding this letter. This discussion was held in part with Mr. John Howard, and in detail with Joseph Abramski, Nick Pearson and Shawn Skaggs.

2. This plan consisted of some of the following items:

   A. Provide an updated EWA DC-8 C/D Check Inspection Program that is under contract development with Avitech. A discussion was held reflecting this program implementation with a C Check interval at 24 months, with a phase in plan to be provided for FAA approval.

   B. A previous letter of commitment was sent to Mr. Abramski, to implement the DC-8 MSG-3 Program upon approval this year, expected in August, 1999.

   C. The development of the EWA Engineering Department provided to Joe on March 12, 1999.

   D. Develop FAA/EWA communication policy, and incorporate into the Maintenance Policy and Procedures Manual (M.P.P.).

   E. Revise the Reliability Program Manual to include the Director of Engineering as an MRB Judiciary Member.

   F. Increase data to be sent to the Principals, i.e., MA's, FCD's, MSL, OEM correspondence, etc..

   G. Upgrade the Reliability Program to monitor non-routines and other data analysis processes, as EWA is equipped to manage, or increase staffing to support upgrades agreed upon by the FAA/EWA.

   H. EWA is maintaining the contract training support of AMT, to facilitate in the overall reliability improvement focus. In addition, EWA has purchased an interactive Computer Based Training (CBT) program to be used for EWA Line Station maintenance recurrent training.

   I. Manager of Maintenance Training, Manager Quality Assurance, Director Line Maintenance and Director Base Maintenance positions will be filled in thirty (30) days.

   J. Forward the MPP, Chapter 6 revisions currently being revised by Abraham Michael regarding new log page procedures.

   K. Based on the proposed change to the Inspection Program to address the CPCP Level II findings found in 1998, a management decision was made to report the more conservative CPCP findings to Douglas and the FAA. These items were changed and reported on March 23, 1999.

- Revise the Inspection Program Manual, CPCP section, with additional guidelines (logic chart) for determining corrosion levels, based on written notification from Douglas concerning the DC-8 and DC-10 level assignment.

- EWA's new DC-8 Inspection Program will incorporate additional corrosion inspections to maintain Level I corrosion between scheduled inspection visits.

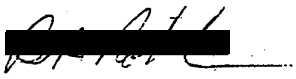
3. The Principal's stated objection of the use of previous operators manual (UAL) as EWA's manual. This was discussed and continued to agree that the solution is an EWA customized manual system. Mr. Abramski requested a time be provided for this solution. EWA has committed to a December 1999, completion date.

   Per our conversation on March 30 and 31, 1999, at your office, EWA will commit to revising the M.P.P. to reflect Maintenance Manual usage based on your acceptance.

Based on the provided written substantiation, excellent compliance history of EWA, previous working professional relationship with your office, it is confirmed that no safety was comprised, and EWA should continue to hold D74 and D76 Operations Specification, as issued.

I trust this has been responsive to your letter. Should you wish to discuss this matter more fully, EWA's senior management would be more than willing to meet with you and address your concerns. If this is the case, please contact me to arrange this meeting.

Sincerely,



Bruce A. Robbins
Director of Engineering

Attachments

BR/csh

cc: Kent Scott
Rene' Visscher
Thomas Wood
Robert Conlon
Ted Ellett
Michael Dworkin

EMERY
WORLDWIDE AIRLINES
A CNF COMPANY

Emery Worldwide Airlines

Technical Services Department

Response letter to

Mr. Jay Howard, SJC FSDO

Office Manager, dated April 2, 1999

Subject: Letter of Investigation

File No. 99WP150028 amendment of

EWA's Operations Specification

D74 and D76.

303 CORPORATE CENTER DRIVE, VANDALIA, OH 45377

U.S. Department
of Transportation
Federal Aviation
Administration

San Jose Flight Standards District Office

San Jose International Airport
1250 Aviation Avenue, Suite 295
San Jose, CA 95110-1130
Phone: (408) 291-7681
FAX: (408) 279-5448

March 18, 1999

Mr. Kent T. Scott
President and Chief Operating Officer
Emery Worldwide Airlines, Inc.
One Emery Plaza
~~Dayton International~~ Airport
Vandalia, OH 45377

Mr. Scott:

The attached is the letter Mr. David Gilliom said would be forthcoming from the San Jose Flight Standards District Office (FSDO) regarding Emery's reliability and short term escalation programs. Basically, the attached letter proposes to amend Emery's Operations Specifications by rescinding Operations Specifications D74 - Maintenance Reliability Program; and D76 - Short Term Escalation for the reasons specified in that letter. However, the letter also gives Emery the opportunity to provide, to the San Jose FSDO, justification in the form of written information, views and arguments as to why Emery should continue to hold D74 and D76 Operations Specifications.

As stipulated in the attached letter, Emery has 10 days to respond to the proposal to amend Emery's Operations Specifications D74 and D76. In the interim, no action will be taken in regard to the subject Operations Specifications until we have reviewed all material submitted by Emery. Should Emery choose not to reply within the specified time, we will continue the amendment process as outlined in the attached letter.

Sincerely,

[redacted]
Jay P. Howard
Manager, San Jose FSDO

1 Enclosure
Letter: File No 99VP150028 to Kent Scott

U.S. Department
of Transportation
Federal Aviation
Administration

San Jose Flight Standards District Office

San Jose International Airport
1250 Aviation Avenue Suite 295
San Jose, CA 95110-1130
Phone: (408) 291-7581
FAX: (408) 279-5448

March 18, 1999

REGISTERED RETURN-RECEIPT

Mr. Kent Scott
President & Chief Operating Officer
Emery Worldwide Airlines, Inc.
One Emery Plaza
Dayton International Airport
Vandalia, OH 45377

Dear Mr. Scott:

FILE NO.: 99WP150028

This letter is to inform Emery Worldwide Airlines, Inc. (EWA), holder of Air Carrier Certificate Number RRXA558B, that in accordance with the provisions of 14 CFR §119.51, the San Jose Certificate Holding District Office finds that safety in air commerce and the public interest requires the proposed amendment of EWA's Operations Specifications. EWA is hereby notified that their operations specifications may be amended by rescinding D74 - Maintenance Reliability Program Authorization; and D76 - Short Term Escalation Authorization. EWA may within ten (10) days after receipt of this notice, submit to our office written information, views, and arguments regarding this proposed amendment to EWA's operations specifications specified above.

After considering all material presented by EWA, the San Jose Certificate Holding District Office will notify EWA of:

i) The adoption of the proposed amendment;
ii) The partially adoption of the proposed amendment; or
iii) The withdrawal of the proposed amendment.

If the San Jose Certificate Holding District Office issues an amendment to the EWA's Operations Specifications, it becomes effective not less than 30 days after EWA receives notice. At that time, EWA may petition for reconsideration under to the provisions of 14 CFR §119.51(d).

This action is necessary due to the following reasons:

1) EWA failed to conduct monthly Maintenance Reliability Program meetings to review and analyze aircraft maintenance data as required in their Maintenance Reliability Program Document No. EWA-51990, for the months of October, November, December, 1998; and again in January, 1999.
2) EWA voluntarily implemented an aircraft maintenance electronic data collection system; specifically known as Maintenance/Material, Engineering, Reliability, Information Technology (MERIT), which was not accepted by the Administrator. Further, that the MERIT system was faulty and contributed to the absence of accurate fleet airworthiness data for the months of September, October, November, and December, 1998. This deficiency of data, and the subsequent recovery and verification of such by EWA, continued from the months of October, 1998 through February, 1999.

3) EWA failed to reasonably and prudently notify the Administrator of encountered deficiencies with respect to their MERIT system; which subsequently compromised their Maintenance Reliability Program, resulting in ineffective and inadequate program functions. Further, EWA failed to provide acceptable documentation and testing of their parallel EWA1 and MERIT systems.
4) EWA failed to maintain adequate Reliability Program personnel to consistently analyze, evaluate, and address acquired maintenance data relative to the complexity and composition of the EWA's forty-one (41) DC-8 aircraft and their continuing analysis and surveillance system.
5) EWA failed to evaluate, analyze, and submit to the Administrator regulatory required Maintenance Interruption Summary Reports, or Mechanical Reliability Reports for the months of September, October, November, and December, 1998; and again in January, 1999. These reports were eventually received by the CHDO on February 12, 1999 and March 1, 1999; respectively.
6) EWA failed to maintain their continuing analysis and surveillance system in a manner which identifies and corrects deficiencies, as reflected in their untimely submitted Maintenance Interruption Summary Reports for the months of September, October, November, and December, 1998.
7) EWA failed to submit to the Administrator required Major Alteration Reports which directly impacts EWA's data collection system for the Reliability Program.
8) Contrary to EWA procedures outlined in the EWA Maintenance Policy and Procedures Manual, and EWA's Maintenance Reliability Program Document EWA-51990, EWA escalated five (5) DC-8 aircraft "C Check" Inspection intervals without benefit of adequate Reliability Program analysis or evaluation.

If the San Jose Certificate Holding District Office finds that adoption of this amendment as proposed, EWA will be notified, in accordance with 14 CFR §121.373(b), that your continuing analysis and surveillance program and your program covering other maintenance, preventive maintenance, and alterations, and for the correction of any deficiency in those programs, does not contain adequate procedures and standards to meet the requirements of 14 CFR Part 121. EWA may have to make changes in those programs that are necessary to meet those requirements; including the following:

- Within ten (10) after receipt of FAA notification, EWA may have to revise and obtain FAA approval for their Time Limits Manual reflecting original Hard Times (HT); On-Condition (OC) and Condition Monitoring (CM) items, outlined in the currently revised McDonnell Douglas DC-8 Maintenance Planning Document (MPD); and

- Within thirty (30) days after obtaining FAA approval for their revised Time Limits Manual as outlined above. EWA may have to immediately conform their fleet of forty-one (41) DC-8 aircraft to the time limits and maintenance processes contained therein.

Sincerely,

[redacted]
Jay P. Howard
Manager

cc: Rene P. Visscher - EWA
Thomas M. Wood - EWA

cc: Rene Vasche
Tom Wood
Fred Shane
Dan De Wees
Dick Hagg

Fax Cover Sheet

FEDERAL AVIATION ADMINISTRATION
Flight Standards District Office
1250 Aviation Avenue
Suite 295
San Jose, California 95110-1130

To: Mr. Kent Scott - President & COO - EWA

Phone: [redacted]
Fax:

From: Joseph A. Abramski
Principal Maintenance Inspector

Phone: [redacted]
Fax:

Date: March 18, 1999
Total Pages (with cover): 4

Comments: Sending original letter to you VIA Certified US Mail.

Regards,

Joe

EMERY
WORLDWIDE AIRLINES
A CNF COMPANY

March 19, 1999

Mr. Jay P. Howard
Office Manager
FSDO - SJC
1250 Aviation Ave., Suite 295
San Jose, CA 95110

Dear Mr. Howard:

This letter constitutes Emery Worldwide Airlines, Inc. (EWA's) initial formal response to your letter of investigation (99WP150028) addressed to EWA's President and Chief Operating Office, dated March 18, 1999, concerning the notice of possible operations specification amendments. (See attached.)

I would first like to express my appreciation for the opportunity to discuss this with Mr. John Howard, Mr. Nick Pearson, Mr. Joseph Abramski and yourself today, by conference call.

As I stated during the conference call, this EWA immediate proactive plan that you have agreed to, will continue to promote the safety of EWA's operations in an expeditious manner, desirable by both parties.

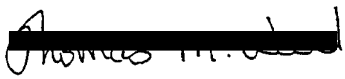
The following action plan has been approved by Mr. Kent Scott, and is currently in operation, as of this writing.

1. The Director, Quality Control will travel to your office on March 22, 1999, and formally discuss with the Principal Maintenance Inspector and Principal Avionics Inspector, this issue with the purpose of providing immediate solutions to the FAA concerns. I will arrive at your office at 8:00 a.m. on March 23, 1999, and have scheduled through March 25, 1999, my time to be spent supporting this solution based objective.

2. The Director of Engineering will submit a formal response to you by April 2, 1999, providing technical substantiation regarding the FAA proposed amendment to EWA's operations specifications.

Thank you again, Mr. Howard for the opportunity to meet with you at your office this past week, and this opportunity to serve and support EWA's Principal Maintenance Inspectors and your office.

Sincerely,



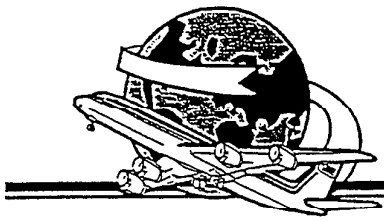
Thomas M. Wood
Director Quality Control

Attachment

cc: Kent Scott
Rene' Visscher
Bruce Robbins

TMW/ab

EMERY WORLDWIDE AIRLINES



Thomas M. Wood
DIRECTOR QUALITY CONTROL

303 CORPORATE CENTER DR. VANDALIA, OH 45377
FAX: (937) 898-2803 PHONE: (937) 454-3940

FACSIMILE TRANSMISSION COVER SHEET

DATE: 3/19/99 SEND TO FAX #: [redacted]

DELIVER IMMEDIATELY TO:

NAME: MR. JAY HOWARD TELEPHONE #: [redacted]

COMPANY / DEPARTMENT: FAA SJC

This is page 1 of 7 pages sent in transmission regarding the following principal subject(s):

Jay: Many thanks for your support

FACSIMILE MESSAGE FROM:

NAME: [redacted]

EMERY
WORLDWIDE AIRLINES
A CNF COMPANY

March 22, 1999

Mr. Joseph Abramski
FSDO-SJC
1250 Aviation Ave., Suite 295
San Jose, CA 95110

Dear Mr. Abramski:

This letter is a follow-up to my March 19, 1999, letter to Mr. Jay Howard, and our conference call regarding my visit this week.

Per your request, I am forwarding an agenda of items that I presented to be discussed during our conference call.

1. DC-10 Certification outstanding issues. I will also represent the EWA Flight Operations as support to Mr. Terje Kristiansen during my visit.

2. Mr. Jay Howard's letter dated March 18, 1999, addressed to Mr. Kent Scott regarding notification of EWA Operations Specifications D74 and D76 proposed amendments.

3. Open FAA LOI's regarding EWA questions concerning subject matter as written in the original FAA letters, and the opportunity for EWA to provide immediate solutions to the FAA concerns.

4. RASIP Findings

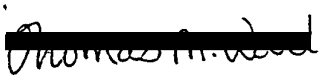
I want to thank you for your initial agreement of this meeting, which we discussed March 11, 1999, during our telephone conversation. I also speak for Mr. Scott and Mr. Visscher, for their appreciation for this time you are providing, which we are all confident will be productive to promote solutions to the FAA concerns, and continue to develop professional results.

303 CORPORATE CENTER DRIVE, VANDALIA, OH 45377

I have also made available the week of March 29, 1999, to return to your office to continue and complete this effort, if required.

Thank you for your continued support.

Sincerely,

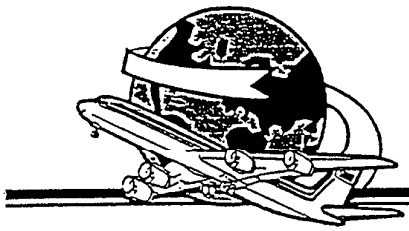


Thomas M. Wood
Director Quality Control

TMW/csh

cc: Kent Scott
Rene' Visscher
Jay Howard

EMERY WORLDWIDE AIRLINES



Thomas M. Wood
DIRECTOR QUALITY CONTROL

303 CORPORATE CENTER DR. VANDALIA, OH 45377
FAX: (937) 898-2803 PHONE: (937) 454-3940

FACSIMILE TRANSMISSION COVER SHEET

DATE: 3/22/99 SEND TO FAX #: [redacted]

DELIVER IMMEDIATELY TO:
NAME: JAY HOWARD JOE ABRAMSKI TELEPHONE #: [redacted]

COMPANY / DEPARTMENT: FAA SJC

This is page 1 of 3 pages sent in transmission regarding the following principal subject(s):

See you tomorrow!

FACSIMILE MESSAGE FROM:

NAME: [redacted]

EMERY WORLDWIDE AIRLINES

MAINTENANCE

RELIABILITY

PROGRAM

DOCUMENT NO. EWA-51990

JUNE 13, 1997

REVISION 7

Original Issue: October 1, 1990

EMERY WORLDWIDE AIRLINES
MAINTENANCE RELIABILITY PROGRAM
DOCUMENT NO. EWA-51990

RELIABILITY PROGRAM APPROVAL

This document renders the scope of the Emery Worldwide Airlines Maintenance Reliability Program and sets forth the approved policies and procedures for managing it's continuous airworthiness maintenance program through application of a system of maintenance control by reliability methods.

Maintenance Reliability Program Document No. EWA-51990 was originally approved by the Emery Worldwide Airlines Maintenance Review Board judicial members and the Federal Aviation Administration in October 1990. The signatures below reflect unanimous approval for all changes implemented in revision 7 to this document.

Prepared by: [redacted] Date: 6-13-97
MANAGER OF RELIABILITY

Approved by: [redacted] Date: 6/17/97
SR. DIRECTOR OF TECHNICAL SERVICES

Approved by: [redacted] Date: 6-13-97
DIRECTOR OF QUALITY CONTROL

Approved by: [redacted] Date: 6-18-97
DIRECTOR OF OPERATIONS

Approved by: [redacted] Date: 7/30/97
FAA PRINCIPAL MAINTENANCE INSPECTOR

C. 9. EWA MAINTENANCE REVIEW BOARD MEETINGS

a. EWA Maintenance Review Board Meetings are scheduled regularly each month and attended by the designated permanent members of the EWA MRB. Additional representatives of Quality Control, Line Maintenance, Production Control, Heavy Maintenance, Materials and Flight Operations attend MRB meetings regularly to provide technical support during the meetings.

b. Scheduled agenda regularly consists of thorough reviews by the Manager of Reliability pertaining to the previous month's fleet performance and reliability highlights provided in the monthly Fleet Reliability Report. Proposals to amend the continuous airworthiness maintenance program, policies and procedures, or other special interest subjects are also reviewed.

c. The EWA MRB formally evaluates presented items for significance, priority, cost effectiveness and establishes appropriate corrective actions as warranted. Additional action assignments may be implemented by the EWA MRB as necessary. The EWA MRB has overall approving authority for all changes and amendments to the continuous airworthiness maintenance program.

d. Supplemental EWA MRB meetings may be held as necessary for significant circumstances requiring priority administration and EWA MRB coordination and/or approval.

e. Minutes of EWA MRB meetings convened are prepared and maintained on file in the Reliability Department. Copies of meeting minutes are distributed to each meeting attendant and the FAA. Minutes are reviewed at the next meeting and discussions are held relative to previous action assignments and status of active projects.

f. An open invitation is extended to assigned FAA Inspectors to attend any EWA MRB meeting convened.

EMERY WORLDWIDE AIRLINES

MEMORANDUM

TO: Thomas Wood, Director of Quality Control

FROM: Bob Peck, Manager of Reliability

SUBJECT: LOI 99WP150025

DATE: 18 January, 1999

The Following is a list of events that contributed to the late reporting of the Mechanical Interruption Summary Reports for the months of September , October, and November 1998, and the detailed corrective actions that have been implemented to prevent this from happening again in the future.

Beginning in September, the completion of the DC-10 Inspection Program became a high priority. The Reliability Section currently has three technical analyst assigned, one Reliability specialist, one Data entry clerk, and the Manager. In September, Reliability had one technical analyst assigned full time to the DC-10 tasking, one assigned 70% of the time to the DC-10 tasking, and 30% to completion of the Fleet Monthly Reliability Report. The third technical analyst was assigned to providing CPCP training to newly contracted Heavy Maintenance facilities, and reviewing completed heavy maintenance packages. The reliability Specialist is responsible for entering data for the Engine Condition Monitoring Program. Mr. Feisley, the technical analyst that was assigned full time to the DC-10 program was lost for 3 weeks in September for surgery on his neck.

In October when preparing for September Monthly Fleet Reliability Report, an unforeseen problem was found with the MERIT data base system. When programs were being run to collect the Pilot Report (PIREP) Data, it was suspected that only about 50% of the reported PIREPs for September were in MERIT. This was determined by comparing previous monthly counts of PIREPs with what was being shown for September. To verify, a complete audit of the log page information to MERIT information was performed. This audit began a snowball affect, and has carried through Decembers data. If the MERIT problem had not been there, the Fleet Reliability Reports would have been on time.

An extensive corrective action program has been initiated to eliminate the MERIT backlog, and prevent this from happening again. The program has two separate actions; one is to assign two people to clear the remaining backlog. These two people are solely responsible for eliminating the MERIT backlog. The second part of this program has two people from aircraft records assigned to monitoring and correcting the current MERIT log

page entries on a daily basis. Also in conjunction with the current month monitoring and correcting, a copy of the log page with the MERIT discrepancy will be forwarded to the Manager of Line Maintenance for his action. The corrective action steps to prevent this from happening in the future, and the current backlog will be completed by 1 March, 1999.

With the addition of the data entry clerk, the Mechanical Interruption Summary Report information will be processed on a daily basis. The MISR information will be reviewed the first full week following the end of the month and forwarded to the FAA/PMI by the end of that week or before, if the current procedure of receiving this information at the end of each month in the Reliability Report is now not acceptable.

[redacted]

Bob Peck
Manager of Reliability

EMERY WORLDWIDE AIRLINES

January 18, 1999

Mr. Joe Abramski
FSDO-SJC
1250 Aviation Ave., Suite 295
San Jose, CA 95110

Dear Mr. Abramski:

This letter constitutes Emery Worldwide Airlines Inc. (EWA)'s follow-up (initial letter sent 1-15-99 attached) formal response to your letter of investigation (99WP150025), addressed to EWA's President and Chief Operating Officer, dated January 7, 1999.

The Manager of Reliability has prepared a comprehensive fix and action plan to prevent future occurrence of this inadvertent isolated event (See Attachment).

It is equally important to consider and review the overall performance of EWA's Approved Maintenance Program over the past nine (9) years. I have provided a score card (See Attachment) that demonstrates the overall above average performance of EWA's Technical Services Department.

The very achievement of a 98% Mechanical Dispatch Reliability average for the past nine (9) years of an aging fleet reflects the overall achievement of an effective maintenance program under sincere management oversight and leadership.

EWA has maintained an average of two (2) pilot reports per flight hour since 1990. It is important to note that EWA increased its flight hours by 9% in 1998 and decreased the number of PIREP'S per flight hour by 25%.

This performance measurement also demonstrates the effectiveness of EWA's training program and manual system as the mechanics performance is a direct result of EWA's program administration.

I trust EWA's comprehensive fix is satisfactory. Should you wish to discuss this matter more fully, EWA's Senior Management and I would be more than willing to meet with you and address any concerns.

Sincerely,

Thomas M. Wood
Director Quality Control

TMW/re

Attachment

cc: Kent Scott
Rene' Visscher
QC Managers

EMERY WORLDWIDE AIRLINES

January 15, 1999

Mr. Joe Abramski
FSDO-SJC
1250 Aviation Ave., Suite 295
San Jose, CA 95110

Dear Mr. Abramski:

This letter constitutes Emery Worldwide Airlines, Inc. (EWA)'s initial formal response to your letter of investigation (99WP150025), addressed to EWA's President and Chief Operating Officer, dated January 7, 1999.

I would like to assure you that your letter has merited EWA's immediate and undivided attention. EWA, as a certificated air carrier and its management and employees are fully appreciative of their responsibilities arising under pertinent laws and under the Federal Aviation Regulations (FAR's) and strive to fulfill these responsibilities in a professional and conscientious manner as successfully demonstrated over the past nine years.

Upon receipt of your letter January 11, 1999, the Manager of Reliability contacted you by telephone and acknowledged receipt of your letter and explained the basic details of the delay of the inadvertent failure of the Reliability Reports being sent to you, that provides you the Mechanical Interruption Summary Reports. This is the first occurrence since the FAA approval of the Reliability Program in 1990.

The Manager of Reliability has completed the September, October and November 1998 MISR reports that are enclosed with this letter.

A comprehensive review was performed by EWA Technical Services Management and a corrective action plan put in place to prevent future non-compliance. A comprehensive Fix will be submitted to you next week.

Sincerely,

[redacted]

Thomas M. Wood
Director Quality Control

TMW/re

Attachments

cc: Rene' Visscher
Robert Peck

FAA TRAINING AWARDS

EMERY WORLDWIDE AIRLINES
FOURTH ANNUAL FEDERAL AVIATION ADMINISTRATION
TECHNICAL AWARDS PRESENTATION 1997

EWA Accomplishment Overview

Emery Worldwide Airlines (EWA) is pleased to receive for the fourth consecutive year, the Federal Aviation Administration (FAA) Technical Awards presented to the EWA Mechanics, Technical Service Management, Senior Director Technical Services, and Vice President and General Manager. A chronological history of the awards received to date is presented for your review.

1994 FAA Awards

The awards received during a ceremony on May 11, 1994 were as follows:

1. Mechanical Technical Awards

   133 mechanics were presented these awards which represented 42% of the EWA mechanics.

   This 42% or 133 mechanics actually represent 96% of EWA's full-time mechanics.

2. Organizational Awards

   The highest award, the Diamond Certificate of Excellence was presented to Emery Worldwide Airlines.

3. Master Mechanic Award

   This prestigious aviation career accomplishment was presented to Mr. Roy Deeming. The requirement of selection for this award is fifty (50) years of serving as a certificate airframe and powerplant mechanic.

1995 FAA Awards

1. Mechanical Technical Awards

EWA employed 304 technicians/mechanics. Out of these, 228 or 75% have received awards. This was a 33% increase in training EWA personnel from the previous year.

This 75% or 228 mechanics actually represent 60% of EWA's full-time mechanics.

2. Organizational Awards

For the second consecutive year, required training percentage achieved by EWA surpasses the requirement stated in the Advisory Circular. The Diamond Certificate of Excellence requires 25% of eligible employees to be trained. Therefore in view of the great achievement of training rendered to its employees, EWA qualified itself to receive again the Diamond Certificate of Excellence.

1996 FAA Awards

1. Mechanical Technical Awards

EWA employment 320 technicians/mechanics. Out of these, 264 or 83% received awards. This is a 14% increase in training EWA personnel from the previous year.

2. Organizational Awards

For the third consecutive year, the required training percentage achieved by EWA surpassed the requirement stated in the FAA Advisory Circular. Therefore, in view of the great achievement of training rendered to its employees, EWA qualified and received the Diamond Certificate of Excellence Award.

1997 FAA Awards

1. Mechanical Technical Awards

EWA employed 338 technicians/mechanics. Out of these, 181 or 54% received awards. This is a 49% decrease in training EWA personnel from the previous year. This decrease reflects the previously accomplished extensive training provided in the previous seven years.

2. Organizational Awards

For the Fourth consecutive year, the required training percentage achieved by EWA surpassed the requirements stated in the FAA Advisory Circular. Therefore, in view of the great achievement of training rendered to its employees, EWA qualified for and received again the Diamond Certificate of Excellence Award.

Awards Summary:

This training is a direct contribution to the continued success of EWA. We have experienced for the past nine years an average of 98% Mechanical Dispatch Reliability performance, a standard desired by many Air Carriers.

These FAA awards exemplify EWA's professional approach to lead its employees to produce the highest level of safety possible and the most cost effective process to provide the customer the best product.

C. EWA'S Maintenance Program Continues to Produce Successful Results

Emery Worldwide Airlines Maintenance Program is tested by other means than it's Mechanical Dispatch Reliability that has maintained 98% average over the past nine years. EWA has gone through several very in-depth FAA/DOD/Outside Firms inspections over the past nine (9) years. The successful results of these inspections continued to reveal EWA's ratings to be higher than the Industry performance of the 121 Air Carriers and average to excellent ratings from the Department of Defense (DOD).

In 1992, EWA went through a very in-depth FAA NASIP Inspection to which EWA rated 64% higher than the Industry performance of the 121 Air Carriers. EWA received honorable recognition for this achievement from the San Jose FAA Certificating Holding Office Manager.

In 1995, EWA received a specific FAA inspection that was administered by FAA Washington, DC to be accomplished on all 121 Air Carriers in 1995. This inspection was titled a Regional Aviation Safety Inspection Program (RASIP). This inspection lasted ten days and covered the Operations/Maintenance Departments. On June 22, 1995, the FAA RASIP team provided EWA Senior Management a debrief of their findings. The team reported that their inspection did not reveal any major discrepancies and overall EWA was above average in performance.

In 1997, EWA received a comprehensive Internal Evaluation performed by the SH&E International Air Transport Consultancy. This evaluation was performed based on the FAA NASIP items to ensure EWA has adequate systems and controls in place to support the growth of the airline. A report was provided to EWA Senior Management from the SH&E team that reflected an excellent rating of the Technical Services Organization. Their report specifically reflected that all aspect of the necessary systems and controls were in place and performing excellent ratings.

EWA Technical Services Department has gone through four Department of Defense (DOD) inspections in the past nine years. We received average to excellent ratings on all inspections.

EWA's Maintenance Program success is a direct result of true team effort promoting synergy.

Another indicator for EWA's performance is reflected by the low number of FAA Enforcement Actions received. The following data provides an analytical summary of this performance.

EMERY WORLDWIDE AIRLINES MAINTENANCE PERFORMANCE
BASED ON FAA SAFETY INSPECTION/ENFORCEMENT HISTORY

YEAR	#ADMIN ENFORCEMENT'S	FAA NPTRS	FLEET SIZE	FLT HOURS	CYCLES	PILOT REPORTS
1990	4	Ref. Total	7	11,070	4,732	3,679
1991	3	Ref. Total	20	28,095	12,565	10,512
1992	3	Ref. Total	29	40,606	20,559	17,196
1993	2	Ref. Total	29	42,473	20,718	15,443
1994	1	Ref. Total	37	52,465	23,704	16,667
1995	2	Ref. Total	37	55,178	25,169	16,280
1996	1	Ref. Total	39	57,994	23,960	15,284
1997	0	Ref. Total	43	62,405	28,127	14,760
1998	1	Ref. Total	43	68,140	32,561	22,061
TOTALS	17	4,944		418,426	192,095	131,882

EWA PERFORMANCE FACTORS SUMMARY - 1/90 THROUGH 12/98

- During the nine (9) year period of Air Carrier Operations, EWA Technical Department experienced the following:

  FAA Administrative Enforcement's compared to # of Safety Inspections = .3%

  FAA Administrative Enforcement's compared to # of Flight Hours = .004%

  FAA Administrative Enforcement's compared to # of Flight Cycles = .008%

  FAA Administrative Enforcement's compared to # of Pilot Reports = .01%

- EWA's FAA Administrative Enforcement's are minor in numbers as represented during 1990 thru 1998.
- EWA increased its fleet size by 22% in 1994 and decreased its number of PIREP's per flight hour by 5%.
- EWA increased its fleet size by 6% in 1996 and decreased its number of PIREP's per flight hour by 3%.
- EWA increased its fleet size by 10% in 1997 and decreased its number of PIREP's per flight hour by 10%.
- EWA increased its flight hours by 9% in 1998 and decreased its number of PIREP'S per flight by 25%.

FAA/SPOT RAMP
INSPECTION RESULTS
1998

EWA incorporated an airline industry standard "FAA Spot/Ramp Inspection Procedures" into our Maintenance Policy and Procedure Manual (MPP) in 1995.

The purpose of this program was to enhance EWA's Continuing Analysis and Surveillance System (FAR 121.373) for the continuing analysis and surveillance of the performance and effectiveness of its inspection program and the program covering other maintenance, preventative maintenance, and alterations and for the correction of any deficiency in those programs.

It also provides direct support to FAR 119.59 to assure that EWA properly handles FAA Inspector contacts, and expedites the handling of any FAA request for information.

In 1998, 78 FAA Station Inspections of the EWA's 43 line stations were reported. A total of 173 minor findings was noted and corrected. This number of findings reflected 70% of the inspections resulted in an average of 2 write-ups per visit, and 30% no findings.

This audit performance continues to reflect EWA's compliance of FAA regulations and company policies and procedures.

U.S. Department
of Transportation
Federal Aviation
Administration

San Jose Flight Standards District Office

San Jose International Airport
1250 Aviation Avenue, Suite 295
San Jose, CA 95110-1130
Phone: (408) 291-7581
FAX: (408) 279-5443

January 7, 1999

File Number: 99WP150025

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kent Scott
President & Chief Operating Officer
Emery Worldwide Airlines, Inc.
One Emery Plaza
Dayton International Airport
Vandalia, OH 45377

Dear Mr. Scott:

This letter is to inform you that Emery Worldwide Airlines, Inc., the holder of Air Carrier Certificate Number RRXA558B, may be in violation of Federal Aviation Regulations, in that this office has not received the required Mechanical Interruption Summary Reports for the months of September, October, and November, 1998; and that this matter is under investigation by the Federal Aviation Administration.

We offer you the opportunity to submit a written statement to this office regarding this matter, which should be accomplished within ten (10) working days following receipt of this letter. Your response should contain all pertinent facts and extenuating or mitigating circumstances that you believe may have a bearing on this matter. Should you elect not to respond within the specified time, our report will be processed without the benefit of your statement.

Sincerely,

ORIGINAL SIGNED BY

Joseph A. Abramski
Principal Maintenance Inspector

cc: Rene P. Visscher - EWA
Thomas M. Wood - EWA

EMERY WORLDWIDE AIRLINES

A CF Company

EWA COMPUTER BASED MAINTENANCE PROGRAM MANUAL 1/20/92

POLICY:

Emery Worldwide Airlines (EWA) will manage maintenance record keeping requirements by the means of a FAA approved computer based system, that will reflect mirror image to the required aircraft records kept on file.

This system is based on the recording keeping requirements of FAR 121.369, 121.380 and policies established by EWA.

This manual will contain the documents submitted to the FAA Certificate Holding Office (SJC) for approval and the letters received from them approving EWA Computer program changes.

EWA will provide the FAA SJC office with a computer data link to the EWA system to allow the Principal Maintenance Inspector (PMI) to carry out required surveillance activities such as random record retrieval for spot inspections, data audits, selective data retrievals and reports or summaries.

FAA Computer access has been reviewed and authorized by the EWA Director of Quality Control.

PROCEDURE:

The Director of Quality Control is responsible for the administration of this program that includes the review, approval and submittal of all computer based programs to the FAA SJC office for approval.

Appropriate associated EWA manuals will be revised and updated upon approval of all changes.

Quality Control will establish and audit parallel programs on software changes for a period established by the Director of Quality Control. In some cases a 90 day comparison period may be required. In any case the period will be in agreement with the FAA PMI.

This manual will not be controlled by a list of effective pages. It will be the responsibility of the Director of Quality control to update and copy other EWA Department Directors.

Director Quality Control

[redacted]

Thomas M. Wood

U.S. Department of Transportation
Federal Aviation Administration

FLIGHT STANDARDS DISTRICT OFFICE
1250 Aviation Avenue, Suite 295
San Jose, CA 95110-1130

408/291-7681
FAX 408/279-5448

February 3, 1993

Thomas M. Wood,
Director of Quality Assurance
Emery Worldwide Airlines, Inc.
303 Corporate Center Drive
Vandalia, OH 45377

Dear Mr. Wood:

This letter is in response to your letter of December 29, 1992. We have completed our review of your submitted justification regarding current PC program software, which provides current computer tracking for your Reliability Program, to your new EWA1 computer system. We have found your submittal acceptable as presented. Both computer systems appear to yield identical data representations and calculations.

Please provide required revisions to your Maintenance Reliability Program Document No. EWA-51990, i.e.: Chapters 4, 5, 10, and possibly Appendix A if report formats are changed. We request these submittals within 30 to 60 days after receipt of this letter.

Please advise if you have any questions.

Sincerely;

[redacted]

John R. Howard
Principal Maintenance Inspector

U.S. Department of Transportation
Federal Aviation Administration

FLIGHT STANDARDS DISTRICT OFFICE
1250 Aviation Avenue, Suite 295
San Jose, CA 95110-1130

408/291-7681
FAX 408/279-5448

May 22, 1992

Thomas M. Wood,
Director of Quality Assurance
Emery Worldwide Airlines, Inc.
303 Corporate Center Drive
Vandalia, OH 45377

Dear Mr. Wood:

This letter is a follow-up of your final response to our Speedmemo 92-12, dated 2/26/92, regarding computer software changes. We appreciate the time and effort put forth to enhance Emery Worldwide Airline's (EWA) computerized maintenance tracking system.

We concur with your findings that the newly implemented maintenance tracking software is an improvement over EWA's previous software. We accept the successful completion of running your new software in parallel with your existing software. Further, extensive EWA audits have proven the accuracy of the new computer software. Therefore, your stated official start-up date of April 30, 1992 for this new software has been determined as acceptable by our office.

Please convey our congratulations to all your staff who participated in the development of this new software and bringing it on-line. In particular, to David Bucher and Alex Gardner who assisted in providing the professionalism this new program represents.

Sincerely;

John R. Howard
Principal Maintenance Inspector

U.S. Department of Transportation
Federal Aviation Administration

FLIGHT STANDARDS DISTRICT OFFICE
1250 Aviation Avenue, Suite 295
San Jose, CA 95110-1130

408/291-7681
FAX 408/279-5448

November 2, 1992

W.H. Scherrer,
Senior Vice President and General Manager
Emery Worldwide Airlines, Inc.
One Emery Plaza
Vandalia, OH 45377

Dear Mr. Scherrer:

This letter is to inform you that we have completed our review of Emery Worldwide Airlines, Inc. (EWA) Revision #2 to the Maintenance Reliability Program Document No. EWA-51990. We find this document to be a significant accomplishment for EWA as it represents a high-quality end product which meets or exceeds the current industry standards.

We would like to pause for a moment, to recognized Mr. Robert Crabtree's efforts on behalf of EWA. He has engineered a Reliability Program that continues to excel within the industry, but more importantly, provides EWA with a maintenance management system that is sound and, if followed by EWA personnel, will ensure the safe operation of EWA fleet of aircraft.

It has been a pleasure to work closely with Mr. Crabtree during the approval process of this document. Mr. Crabtree is a dedicated professional who simply wants the best programs for EWA. This Maintenance Reliability Program Document attests to this simple fact.

If you have an opportunity, we urge you to review this Reliability Program Document for yourself. We believe you will agree that it is representative of what is meant by Emery's philosophy; "Miles Ahead"!

Sincerely;

[redacted]

John R. Howard
Principal Maintenance Inspector

cc: Richard Jacobson
Thomas M. Wood

SPEED MEMO

GRAPHIC INSPECTOR REPORT, REFERENCE NO. 92-12. (Please use this reference number on all .respondence regarding this matter.)

TO:

Thomas M. Wood
Director of Quality Control
Emery Worldwide Airlines, Inc.
303 Corporate Center Drive
Vandalia, OH 45377

DATE OF INITIAL MESSAGE: 12/26/92

SIGNATURE OF ORIGINATOR: [redacted] John R. Howard

TITLE: PMI | ROUTING SYM.: CHDO

ITIAL MESSAGE

Dayton Base Inspection, J.R. Howard 1/17/92

Request Emery Worldwide Airlines (EWA) to provide the methodology which will be used regarding computer software updates for EWA's maintenance program; including EWA's Reliability Program. During our last visit, we noted changes to computer software. We are supportive of these changes provided "test beds" are used to implement these updates. Per our previous "hand-shake" agreements, EWA would run parallel programs on any software changes for a period of not less than 90 days. This provides a sound transition to new software with little or no unforeseen programing problems. Anything less than this standard procedure, without proper justification, would be unacceptable from an FAA ·ulatory standpoint. (FAR 121.369 & 121.380)

.se provide a procedure, in writing, that EWA will employ for all future computer oftware revisions/updates. This may be in the form of a letter of agreement, or contained in an up-coming Maintenance Policies and Procedures Manual revision.

PLY MESSAGE

Reference letter attached.

FLIGHT STANDARDS DISTRICT OFFICE
1250 Aviation Avenue, Suite 295
San Jose, CA 95110-1119
408/291-7681 FAX 408/279-5448
Attn: John R. Howard

DATE OF REPLY: 7-31-92

SIGNATURE OF REPLIER: [redacted]

TITLE: Director Quality Control | ROUTING SYM.: RRXA

EMERY WORLDWIDE AIRLINES

A CF Company

December 29, 1992

Mr. John Howard
FAA/PMI
FSDO-SJC
1250 Aviation Ave
Suite 295
San Jose, CA 95110

Dear Mr. Howard:

This letter represents the "Document Submittal" for the transition of the Reliability Program Computer software/hardware referenced in my letter to you dated December 10, 1992.

A thorough database comparison enclosed represents 100% accurate in paralleling the data processed into each computer system.

Based on your review and approval of this transition, EWA will commence operation of this plan January 2, 1992.

Sincerely,

Thomas M. Wood
Director of Quality Control

ajb

cc: Dick Jacobson, Sr. Director Technical Services
Dave Bucher, Director Production Control
Larry Inscoe, Director Heavy Maintenance
Alex Gardner, Manager Aircraft Records
Robert Crabtree, Manager Reliability

attachments

DATA COMPARISON

AUGUST 1992

THRU

NOVEMBER 1992

EMERY
WORLDWIDE AIRLINES
A CNF COMPANY

February 22, 1999

Mr. Joseph Abramski
FSDO-SJC
1250 Aviation Ave., Suite 295
San Jose, CA 95110

Dear Mr. Abramski:

This letter is to provide you audit information pertaining to MERIT software change transition. Previous letters concerning this subject were sent February 10, 1997, March 5, 1997 to John Howard and August 8, 1997 to you.

In September 1998 the pilot/maintenance log page discrepancies/corrective action, began being entered into the MERIT software by the EWA Line Maintenance Stations. The Aircraft Records Section performs a daily audit of the entered information against the original log page upon receipt. At this time, these items are no longer entered into the EWA01 software program.

In addition to the daily audit of entered log page discrepancies, the Reliability Section also audits this program.

The attached six (6) month audit verified data entered and processed in the new MERIT software was identical to the data previously data entered in the EWA01 software program.

Sincerely,

Thomas M. Wood
Director Quality Control

TMW/re

Attachments

cc: Abraham Michael
Robert Peck

EMERY WORLDWIDE AIRLINES
A CNF COMPANY

MEMORANDUM

TO: Thomas Wood, Director of Quality Control

FROM: Bob Peck, Manager of Reliability

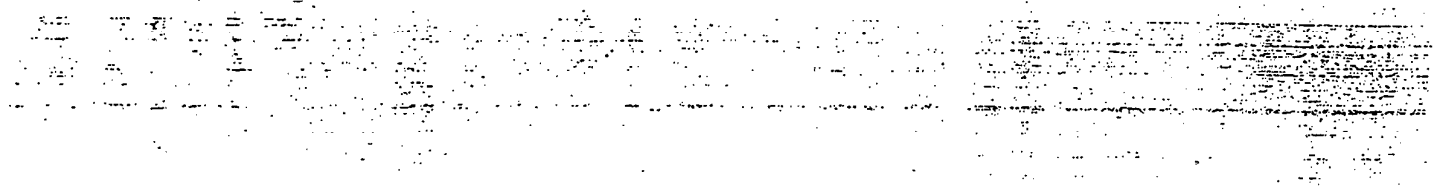
SUBJECT: Log Page Transition Plan

DATE: February 23, 1999

Beginning September 1, 1998 the Aircraft Records Section discontinued the daily input of pilot/maintenance log page discrepancies/corrective actions into the EWA01 Maintenance Data System.

Prior to this date, Reliability had requested, and received from the MERIT IS people a daily run that would provide information on a daily basis of the previous days opened discrepancies. Reliability used this report to verify proper ATA coding by the line station personnel. This is a continuation of the ATA coding that Reliability did with EWA01.

The information being entered in MERIT is the same as was previously entered in EWA01. In addition, there is other supporting data (i.e. Non-Routines) that are entered in MERIT, but were not entered in EWA01.



EMERY WORLDWIDE AIRLINES

A CF Company

August 8, 1997

Mr. Joe Abramski
FSDO-SJC
1250 Aviation Ave., Suite 295
San Jose, CA 95110

Dear Mr. Abramski:

This letter is to provide you audit information pertaining to Merit software change transition. Previous letters concerning this subject were sent February 10, 1997 and March 5, 1997 to John Howard.

The attached monthly audit performed for four (4) months verified data entered and processed in the new Merit software was identical to the data entered in the EWA01 software program.

If you have any questions, please call Edward Jones or myself.

Sincerely,

[redacted]

Thomas M. Wood
Director of Quality Control

attachments

cc: Edward Jones

TMW/amb

MILES AHEAD

EMERY WORLDWIDE AIRLINES

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To Whom it May Concern:

This package represents an EWA01 System Airframe Time & Cycles Report done for February 1997 and a MERIT System Airframe Time & Cycles Report for the same period. On April 7, 1997, I reviewed both reports. Although they may be formatted differently, the information is the same in respect to dates, times and cycles.

Lyle Richardson
Emery Worldwide Airlines
Quality Control Inspection Rep

SETTING STANDARD 50 YEARS

303 CORPORATE CENTER DRIVE, VANDALIA, OH 45377

EMERY WORLDWIDE AIRLINES

A CF Company

To Whom it May Concern:

This package represents an EWA01 System Airframe Time & Cycles Report done for March 1997 and a MERIT System Airframe Time & Cycles Report for the same period. On April 10, 1997, I reviewed both reports. Although they may be formatted differently, the information is the same in respect to dates, times and cycles.

Lyle Richardson
Emery Worldwide Airlines
Quality Control Inspection Rep

SETTING THE STANDARD 50 YEARS

303 CORPORATE CENTER DRIVE, VANDALIA, OH 45377

EMERY WORLDWIDE AIRLINES

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To Whom it May Concern:

This package represents an EWA01 System Airframe Time & Cycles Report done for April 1997 and a MERIT System Airframe Time & Cycles Report for the same period. On May 8, 1997, I reviewed both reports. Although they may be formatted differently, the information is the same in respect to dates, times and cycles.

[redacted]

Lyle Richardson
Emery Worldwide Airlines
Quality Control Inspection Rep

303 CORPORATE CENTER DRIVE, VANDALIA, OH 45377

SETTING STANDARD 50 YEARS

EMERY WORLDWIDE AIRLINES

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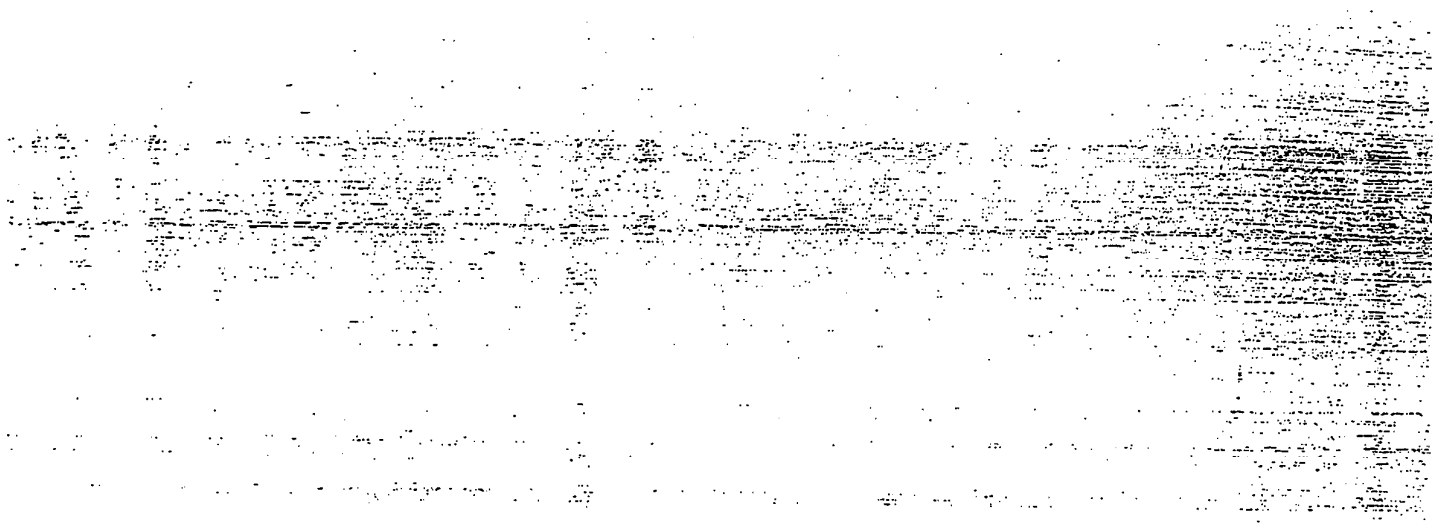
To Whom it May Concern:

This package represents an EWA01 System Airframe Time & Cycles Report done for May 1997 and a MERIT System Airframe Time & Cycles Report for the same period. On June 23, 1997, I reviewed both reports. Although they may be formatted differently, the information is the same in respect to dates, times and cycles.

Lyle Richardson
Emery Worldwide Airlines
Quality Control Inspection Rep

303 CORPORATE CENTER DRIVE, VANDALIA, OH 45377

SETTING STANDARD 50 YEARS



EMERY WORLDWIDE AIRLINES

A CF Company

March 5, 1997

Mr. John Howard
FSDO-SJC
1250 Aviation Ave.
Suite 295
San Jose, CA 95110

Dear Mr. Howard:

I am forwarding you the Emery Worldwide Airlines Maintenance Training, MERIT System Training Manual Volume I & II.

This manual was developed by Mark Gregory, Aircraft System Instructor/Avionics Engineer assigned to this program. As you will see from your review it is extremely professionally developed with block flow process descriptions.

We have been performing training for the past two weeks at the EWW Hub training facility with hands-on computer instruction. Please do not hesitate to contact Bruce Robbins or Mark Gregory for any questions you may have.

I am also enclosing copies of the draft procedures for hour cycle reporting to MERIT I discussed with you during a telephone conversation and the new Part Tag Policy and Procedure. We are planning to start up the MERIT on March 17, 1997 utilization these and other parallel procedures to establish data verification. Please call after you review to discuss this issue.

Sincerely,

Thomas M. Wood
Director of Quality Control

attachments

aee

SETTING STANDARD 50 YEARS

333 CORPORATE CENTER DRIVE, VANDALIA, OH 45377

I. PART TAG POLICY AND PROCEDURE

A. Policy

1. The part tag is used for Rotable (Merit tracking level 3) and Repairable (Merit tracking level 2) parts only. Expendable parts do not require tags. The purpose of the part's tag is to record the installation data of the serviceable parts and the removal data of the unserviceable/repairable part. The tag is designed with a hard back and a NCR top copy.

2. The "Serviceable" part information section of the tag contains specific information about that part and is printed after receiving inspection. This half of the tag represents the Serviceable Tag.

   When off line situations arise where an aircraft is at a station that does not have a computer link to the Merit Data System, and the needed part is direct shipped from the vendor, a blank Part Change Tag will be completed by either the authorized Flight Engineer or Maintenance Representative. The Serviceable portion of the tag will be completed using information from either the attached RO or PO and the component data plate. The Unserviceable portion of the tag will be completed as described below.

3. The "Unserviceable" part information section of the tag contains spaces to record REMOVAL-INSTALLATION DATA and is completed by the mechanic performing the installation and removal. This portion of the tag represents a Repairable Tag.

4. After the REMOVAL-INSTALLATION data is recorded on the tag, the mechanic records the transaction in the MERIT system using Component Control Removal/Installation program, (CCRI); or Mach Create Final (MCCF) action. The mechanic attaches the top copy of the part tag and the vendor tag/certificate of conformity to the log sheet/non-routine maintenance form and route to Aircraft Records. Ensure the hard bottom copy is legible, attached to the removed part, and routed to the appropriate location.

B. Procedure

The following numbers correspond to the sample part change tag as explained below.

Unserviceable Information Section

1. CPN Removed	The Company Part Number for the removed part. Automatically printed by MERIT.
2. CSN Removed	The Company Serial Number for the removed part. Automatically printed by MERIT.
3. MPN Removed	Enter the Manufacturer's Part Number of the removed component. (do not use specification or model number).
4. MSN Removed	Enter the Manufacturer's Serial Number of the removed component. (do not use sub-assembly serial numbers.
5. ACN	Enter the aircraft tail number.
6. POS	Enter the position where the part was removed from.
7. Borrowed From	Enter the air carrier the component was borrowed from, if known at time of removal.
8. Reason	Enter the reason for removal code. The lower left hand portion of the tag lists the appropriate codes.
9. LOCN	Enter the station designator where the transaction occurred.
10. Date	Enter the date of the transaction.
11. EMP	EWA employees installing the part enters his/her employee ID number. All other Contract or Temporary employee's enter their full signature and their A&P certificate number and/or their repair station certificate number.
12. Text	Provide sufficient information of removal reason to aid in isolating cause during repair.
13. Tag Number	The Part Tag Number. MERIT tracks the serviceable part to installation, and the unserviceable part to repair with this number.

Serviceable Information Section

14.CPN	Company Part Number for the serviceable part. Automatically printed by MERIT.
15. CSN	Company Serial Number for the serviceable part. Automatically printed by MERIT.
16. MPN	Manufacturer's Part Number for the serviceable part. Automatically printed by MERIT.
17. MSN	Manufacturer's Serial Number. Automatically printed by MERIT.
18. Shelf Life Date	Shelf life expiration date. Entered by Receiving Inspector and automatically printed by MERIT.
19. Tag Complete Date	The date the tag was printed.
20. EMP NBR	The employee number of the inspector performing the inspection.
21.Approval	This space to be signed or stamped by the Receiving Inspector certifying that all entries are correct. If the Receiving Inspector stamps the tag, the second copy must also be stamped.
22. Bar Code	Area for Bar Code Identification Stickers to print.
23. Removal Codes	List of approved removal codes to use in block 8.

Note 1: When a rotable/repairable part is received from the manufacture/vendor the stores clerk or line station mechanic is required to complete the following item numbers on the Part Change Tag:

Item numbers 14 through 19.

The Receiving Inspector will complete blocks 20 and 21.

te 2: When a rotable/repairable is Removed Serviceable (Robbed) the mechanic will complete the following item numbers on the Part Change Tag:

Item Numbers 3 through 12, Item Number 8 (Reason Code) will reflect a number 4 for robbed part.

te 3: When a rotable/repairable part is removed/installed the mechanic will complete the following item number on the Part Change Tag:

Item Numbers 3 through 12.

Removal Reason Codes

CODE	REMOVAL REASON	USAGE
01	Time Controlled Removal	Component removed because of Time Limits criteria.
02	Removed for Cause/Defect	Component removed for defect or suspected defect.
03	Bad from Stock	Component was installed on aircraft , but failed ops check.
04	Robbed/Cannibalized Part	Component was removed serviceable from one aircraft and installed in another aircraft to complete a maintenance action.
07	Component Swap	Component is moved from one position to another on the same aircraft.
08	Troubleshooting	Component is removed from the aircraft for troubleshooting.
09	Unit to Shop for Modification	Component is removed so a modification can be completed on the component.
17	Unit created Unserviceable	Component is determined unserviceable during receiving inspection.

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PART CHANGE TAG

UNSERVICEABLE PART INFORMATION

CPN REMOVED: (1) CSN REMOVED: (2)

MPN REMOVED: (3) MSN REMOVED: (4)

ACN: (5) POS: (6) BORROWED FROM: (7) REASON: (8)

LOCN: (9) DATE: (10) EMP: (11)

TEXT: (12)

(13)

SERVICEABLE PART INFORMATION

CPN: (14)

CSN: (15)

MPN: (16)

MSN: (17)

SHELF LIFE DATE: (18)

TAG COMPLETE DATE: (19)

EMP NBR: (20)

APPROVAL: (21)

CODE	REMOVAL REASON (23)
01	TIME CONTROLLED REM
02	REM FOR CAUSE/DEFECT
03	BAD FROM STOCK
04	ROBBED/CANNIBALIZED PART
07	COMPONENT SWAP
08	TROUBLESHOOTING
09	UNIT TO SHOP FOR MOD
17	UNIT CREATED UNSERVICEABLE

(22) BAR CODING AREA

ME034 (REV 4) 2/01/97

MEMORANDUM

TO: Tom Wood
Jeff McGlaun
Rick Morganstern

FROM: David Bucher DB

DATE: February 18, 1997

RE: Draft procedure for Hour and Cycle reporting to MERIT

Attached is the draft procedure for hour and cycle reporting to MERIT and EWA01. I ask that you review the draft and supply to me by Friday your questions and comments. I will then revise the draft as necessary to reflect any needed changes.

If you require further information, please advise.

Regards.

WDB:seh

Attachment

cc: David Bell

DRAFT

Procedure for Aircraft Hour and Cycle Reporting

1. Flight Crew will call in to Flight Operations the aircraft on/off times and cycle count after the completion of each flight leg. The time and cycle information will be entered in the Navtec System by Flight Operations.

2. When all flight legs of the flight number are completed the flight crew will fax to Flight Operations all Aircraft Maintenance Logs (Form Number - AIR-0-092) which were completed by the flight crew. Page 2 of the 3 part AIR-0092 form will be used for this purpose. In the event that a fax can not be accomplished, the Flight Crew is required to telephone to Flight Operations the logged data.

3. Upon receipt of the fax or telephone call, the Flight Operations data entry clerk will enter the completed log information into the database. An electronic comparison of the information contained in Navtec/FliteTrac and the information entered into the database will be made. The data entry clerk will review and correct any discrepancies between Navtec/FliteTrac.

4. When all corrections have been made and the information in the Navtec/FliteTrac database and the data entry database match, the information is released to the MERIT system for update.

5. MERIT will produce a monthly report of aircraft utilization, which summarizes by aircraft, the flight leg station pairings, flight leg hours and cycles, and daily and monthly hours and cycles. This report will be used by Quality Control for the monthly audit of aircraft hours and cycles.

Interim Period

During the interim between now and the establishment of the entry database, the following procedure will be followed:

1. Step one will be as described.

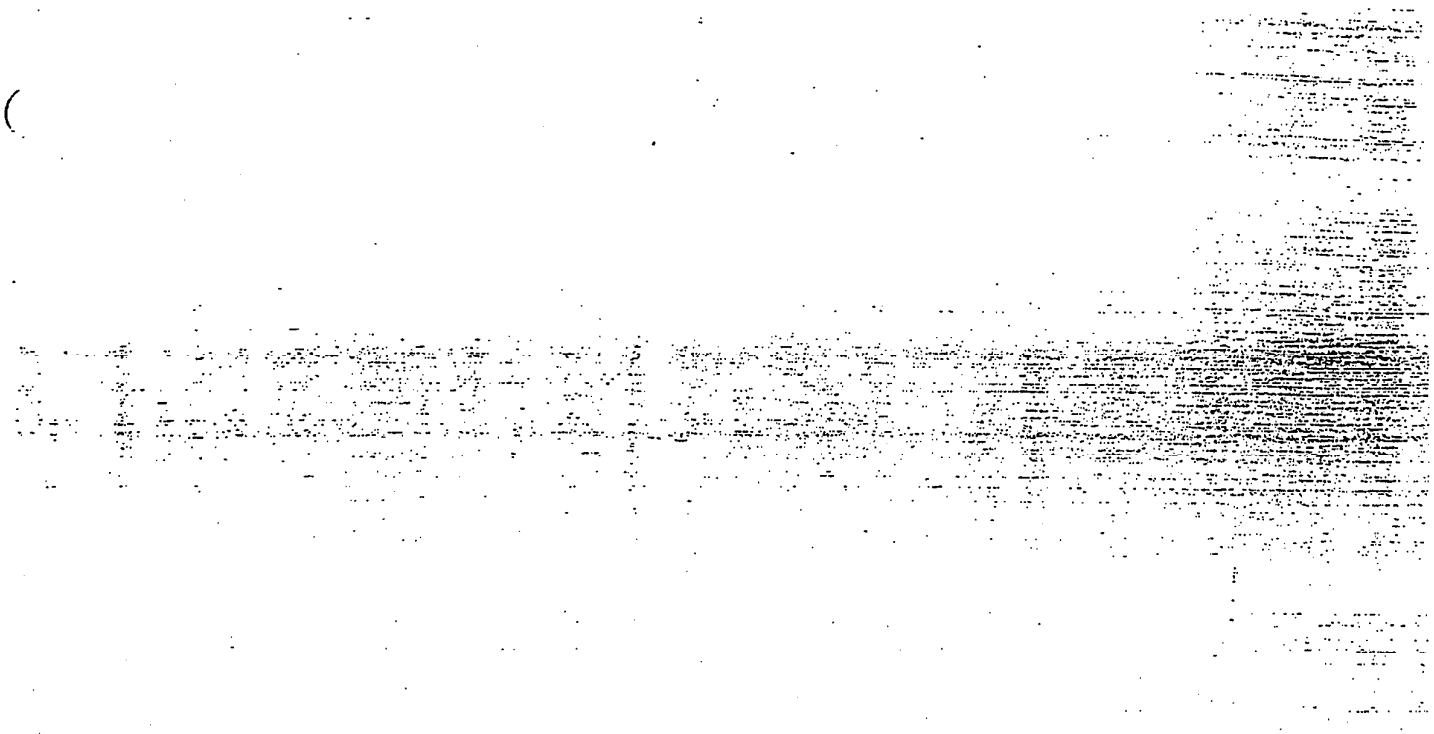
2. Step two will be as described.

3. Step three will be same except: 1. Instead of entering the leg information into the data entry database, the information will be entered into the EWA01 system. 2. A visual comparison will be made between Navtec/FliteTrac and EWA01 will be made by the data entry clerk in Flight Operations and any corrections necessary will then be made by the data entry clerk.

4. When the flight leg information in Navtec/FliteTrac and EWA01 match, the information will be released to the MERIT system and EWA01 for system use.

5. Aircraft Records will compare the log page to the database 4-5 days later after received by Records. All discrepancies will be reported to Flight Ops who will correct EWA01, Navtec/FliteTrac. After these have been corrected, Records will be notified and will update MERIT.

6. Step six will be as described in step five of long-term procedure.



EMERY WORLDWIDE AIRLINES

A CF Company

Mr. John Howard
FSDO-SJC
1250 Aviation Ave.
Suite 295
San Jose, CA 95110

February 10, 1997

Dear Mr. Howard:

This letter is in response in part to your letter dated December 26, 1996, to continue to provide you a close coordination of the Maxi-Merlin (now named MERIT) software change. Previous correspondence and communication provided was:

1. My letter dated January 24, 1997 to you providing:
   a. Scheduled implementation plan date March 1997.
   b. Training Plan for EWA employees prior to software change implementation.
   c. Notice of six (6) contract quality control engineers hired to audit and verify program implementation data from EWA01 to MERIT.

2. My letter dated December 12, 1996 to you providing:
   a. Acknowledged indoctrination/introduction of the Maxi-Merlin System software from a USAir Instructor.
   b. Introduction of new System and Controls Section of EWA, directly responsible for the implementation and management of the MERIT software.

3. My letter dated October 11, 1996 to you providing:
   a. The EWA Line Station Computer Training Manual.
   b. Notice of line station equipped with a PC and fax printer.
   c. Notice of the development of the new department Systems and Controls Section.
   d. Notice of Maxi-Merlin software business plan being developed.

This letter is to continue concurrent efforts with you to promote our new software change over. I am providing you information that I have received for the MERIT Project Plan and implementation schedules. All applicable areas of the Maintenance Policy and Procedure Manual are currently being revised to reflect the software changes. Upon completion, I will forward to you for your review and approval.

I will utilize the EWA Computer Based Maintenance Program Manual (dated 1-20-92) developed to manage the maintenance manual revision/implementation (Policy & Procedure enclosed).

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I have also hired two (2) additional Quality Control Engineers with specific 121 air carrier backgrounds in record keeping. These individuals will work in the aircraft records section and perform a 100% audit of the data transferred for the EWA01 maintenance program to MERIT, and perform daily audits for record accuracy.

I am sure you are as pleased as we are with this software change that provides us an industry approved standard with a very successful history. Please feel free to call Bob Peck for specific questions you may have.

Sincerely,

Thomas M. Wood
Director, Quality Control

attachments

aaa

cc: Technical Services Directors
Bob Peck

MEMORANDUM

TO: Tom Wood

FROM: Jeff McGlaun JM

RE: MERIT Project Plan and Schedules

DATE: 4 February 1997

I am providing 4 documents in support of obtaining FAA approval of EWA to move from EWA01 to MERIT:

1. Internal Project Plan
2. High-level Implementation Schedule
3. Medium-level Implementation Schedule
4. Low-level Implementation Schedule

The Airline Maintenance and Materials System (AMMS) Internal Project Plan describes the management and technical strategies for implementing MERIT within EWA. It also contains a rough, initial implementation schedule. All Steering Committee members formally approved the document. The document was named AMMS because, although Maxi-Merlin was the commercial system that was selected, the new system name had not been selected.

The high-level schedule is a one page summary of the dates at which each of the Maxi-Merlin modules are scheduled to be implemented. This schedule, like the other two schedules, reflects Phase I - Preparation and Phase II - Initial Operating Capability (IOC), but does not reflect Phase III - Full Operational Capability (FOC). IOC is scheduled to be completed by September '97. FOC might take two to five years.

The medium-level schedule is an implementation summary of each Maxi-Merlin module by life-cycle phase. The life-cycle phases are : Conceptualization, Visualization, Development, Transition, and Production. The life-cycle phases for SPS, WCS, and MCS will be scheduled in detail as their implementation time approaches. SAG Training is for the Software AG training our programming staff required for the project.

The low-level schedule is a Gantt chart of each task to be accomplished along with the scheduled start dates, finish dates, and the predecessor task relationships. These tasks reflect the explosion of the summary tasks shown on the high- and medium-level schedules.

MEMORANDUM

TO: AMMS Steering Committee (See Distribution)

FROM: Jeff McGlaun

CC: John Colletti
Dick Jacobson

RE: AMMS Internal Project Plan

DATE: 7 August 1996

Please review the attached AMMS Internal Project Plan and return any comments to Andy Farrell no later than 12 August 1996. This plan represents the approach and resources which will be used to accomplish the AMMS implementation. A revised copy will be distributed to the Steering Committee by COB 14 August 1996. Steering Committee members will be asked to sign off on the document at the meeting scheduled for 16 August 1996. Comments or questions should be directed to Jeff McGlaun [redacted] or Andy Farrell [redacted]

DISTRIBUTION:

David Bucher
Dick Hickey
Larry Inscoe
Jim Kear
Cliff Scheurich
Charlie Shaskus
Gary Wolfe
Tom Wood
Andy Farrell

EMERY WORLDWIDE AIRLINES

A CF Company

Airline Maintenance and Materials System (AMMS)

Internal Project Plan

16 August 1996

Prepared for:

Emery Worldwide Airlines, Inc.
303 Corporate Center Drive
Vandalia, OH 45377

Prepared by:

Jeff McGlaun
Senior Project Manager

Airline Maintenance and Materials System
(AMMS)

Internal Project Plan
Signature Page

The intent of this document is to plan the strategies and resources which will be applied to the implementation of the AMMS. This plan will be revised again after reaching Initial Operating Capability (IOC) to ensure that the strategies and resources are consistent with the defined goals for Full Operating Capability (FOC).

By signing this document we understand its intent and impact. We have reviewed the document and are in agreement with the approach to implementation. As the Steering Committee, we will facilitate communication between users in our functional areas and the project team. We will champion the system to ensure a successful implementation.

[redacted]
Jeff McGlaun, Senior Program Manager — 8/20/96 Date

[redacted]
David Bucher, Director, Production Control — 8/19/96 Date

[redacted]
Dick Hickey, Director, Line Maintenance — 08/15/96 Date

[redacted]
Larry Hiscoe, Director, Heavy Maintenance — 8/20/96 Date

[redacted]
Jim Kear, Director, Administration & Finance — 8/20/96 Date

[redacted]
Cliff Scheurich, Manager, Surplus Sales — 8/16/96 Date

[redacted]
Charlie Shaskus, Manager, MIS — 8/21/96 Date

[redacted]
Gary Wolff, Director, Operations Analysis — 8/20/96 Date

[redacted]
Tom Wood, Director, Quality Control — 8-20-96 Date

TABLE OF CONTENTS

1. INTRODUCTION

1.1 Corporate Background

Now in its 50th year of operation, Emery Worldwide (EWW) is a $1.8 billion global air freight, ocean forwarding, customs brokerage and logistics services company. Based in Redwood City, CA, EWW specializes in business-to-business transportation and logistics. With 9,000 employees, EWW operates 94 aircraft, 2000 surface vehicles and 538 service centers and agent locations throughout North America and 90 countries to provide an array of expedited and time-definite delivery options for any size commercial freight shipment. With consistent on-time delivery, EWW moves 7 million shipments per year, 773,000 tons. EWW is a subsidiary of Consolidated Freightways, Inc., of Palo Alto, CA, a $5.3 billion diversified transportation company.

Emery Worldwide Airlines, Inc. (EWA) is the certificated airline affiliate of EWW. With 900 employees, EWA operates 36 DC-8 aircraft and 31 maintenance line stations. It maintains a spare parts inventory approaching 40,000 parts (this includes everything from $3 million aircraft engines to 15¢ nuts and bolts) and moves approximately 4 million pounds of cargo per day. Dayton International Airport in Vandalia, OH is Emery's North American Sortation Center.

1.2 Project Background

EWA's Technical Services Department (maintenance and materials functional areas) assure aircraft capacity when and where required, to meet EWW's dedicated lift and charter requirements. Technical Services, in conjunction with Flight Operations, Planning, and System Control functions must provide: 1) airworthy, safe, reliable, and on-time aircraft service, 2) at lowest possible unit operating cost, 3) through decisions that optimize customer satisfaction and system profitability, 4) with the operational flexibility to respond to dynamic business conditions.

To perform its operational mission, and to assure that the large investment in flight equipment and related resource is productive, information for decision making is essential, and presently inadequate. The Technical Services organization must have the operating tools, trained personnel, and decision support mechanisms in order to provide a superior service product, maximize aircraft usage, increase asset utilization, comply with governing regulations, and to operate safely and cost effectively.

The cost of maintaining aircraft is a leading factor in overall airline profit contribution, and for EWA, represents 30% of its total North American Dedicated Airhaul cost. Although short-run costs are principally related to aircraft utilization, stage lengths, labor, and materials market costs, long-run costs are environmentally driven. Key long-term cost drivers include aircraft complexity, aging fleets, multiple configurations or models, and regulatory requirements.

The viability of the airline is directly linked to the ability to manage profit margins. To manage margins, maintenance work must be intelligently scheduled and performed, material costs minimized, records quality maintained, and cross-functional processes streamlined to the point

that exceptions become immediately obvious. Information is the glue that keeps functions and processes working together.

Consistently, strategic studies of airline maintenance, engineering and logistics operations have concluded that re-automation alone does not provide a total cost and operations improvement solution. Information systems are tools that support productivity and work simplification management programs, fostering a state of mind that strives for ways of getting a job done faster, with higher quality, and longer effectiveness. Work and process simplification should define information and technology requirements, not vice-versa. Strategic, tactical, and operational goals of the organization can be realized with more assurance when processes and data requirements are aligned, and organizational support through education and training effected.

Because of the rapid growth of the airline since 1989, coupled with severe budgetary constraints in the start-up period, development and installation of modern computer systems for Technical Services was postponed. Aircraft maintenance activities, however, had to be supported and a records management, purchasing, and parts control data system (known as EWA01) was developed in-house. This system was never designed to be a full-function maintenance, inventory, and engineering system. It lacks much of the required functionality, has a weakly designed data base, and limited connectivity with other enterprise and legacy systems.

Because of system inadequacies, coupled with cumbersome and labor intensive transactional requirements, the data that was in the system lost much of its integrity. A number of internal audit reports identified internal control weaknesses that could be easily corrected with a well maintained and constructed information system. A major area of concern was the ability to accurately and efficiently perform inventory management.

In May of 1995, a cross-functional team was organized to identify business practices, define policies and procedures, and computer system requirements necessary to maintain quality inventory management data. The first system-wide physical inventory of parts and tools was accomplished in February 1996. Although work continues, the major control mechanisms to support adequate management of inventories are in place. The next major step is to review, plan, and implement changes to streamline materials planning and the maintenance activities.

Concurrent with the above effort has been the evaluation of requirements for an integrated full-function maintenance, engineering, and materials system. An aviation consulting firm performed an on-site review in Dayton in September 1995. It also provided a high level functionality document and confirmed the need for a business process review and the need for a modern information system.

In March of 1996, the Technical Services and Administration departments of EWA completed a process analysis of a leading airline maintenance and materials computer system known as Maxi Merlin developed by USAir. The functionality of this system served as a benchmark, permitting expedited review of other systems. Maxi-Merlin was ultimately selected. Strand Associates, Incorporated (SAI) was contracted to review EWA's selection process and ultimate selection. SAI confirmed that the selection process was valid and supported the purchase of Maxi-Merlin for EWA.

1.3 Purpose

The purpose of this project is to achieve corporate goals for the maintenance, materials, and cost management functional areas by the following means. The first is to manage the implementation and maintenance of an integrated EWA maintenance and materials system. The second is to facilitate the development and implementation of improved business processes, policies, and organizational structure.

The intent of this document is to describe EWA's overall strategy for the execution of the Airline Maintenance and Materials System (AMMS) project. This document will describe the strategies associated with the analysis, design, development, and implementation of maintenance and materials business processes, policies, organization, and technical infrastructure. It is intended to be an overarching document of several other detailed documents (e.g., Implementation Schedule, Change Management Plan, and Sustainment Plan).

1.4 Scope

The AMMS project is to be accomplished in three phases. The purpose of Phase I is to validate the selection of Maxi-Merlin to support the maintenance functional areas, to develop an implementation schedule, to develop a plan to achieve user buy-in (change management), and to review existing cost management practices. The purpose of Phase II is to implement the system and the business process, policy, and organizational changes. The purpose of Phase III is to evaluate the improvements of Phase II and continue making new ones. The first two phases combined constitute the Initial Operating Capability (IOC) of AMMS. Phase III will constitute Full Operating Capability (FOC).

The project will encompass the following airline management functional areas:

- Aircraft & Engine Materials Management - Tracking, Parts History, Materials Forecasting, Pooling, Consignments Management, Warranty Recovery, Borrows & Loans, Tool Control & Tracking, Line Station Inventories, Warehousing, Materials Controls, Purchasing, Financial and Cost Accepting, and Inventory Control

- Maintenance Management - Maintenance Programs, Allowable Configurations, As-Built Configurations, Maintenance Planning, Scheduling, Provisioning, FAA Reporting, Reliability, Log Book Processing, Aircraft & Engine History, Aircraft Restrictions, Performance Data, Time & Attendance, Work Cards, Engineering Modifications, Shop Floor Controls, Hanger Management, Purchasing, Maintenance Accounting, and Financial Accounting

- Cost Management - Maintenance Cost Accounting and Activity-Based Measurements

1.5 Objectives

The prime objective of this project is to swiftly and successfully provide the tools to manage EWA's aircraft maintenance program, and spare/rotable part inventory in order to improve profitability. To do this we plan to implement the selected system as quickly as possible, while maintaining the integrity of the current business. The implementation, which includes changing the business processes, is expected to provide substantial improvements over how work is accomplished today. After the implementation is stable, a review of the improvements will be conducted. From that point, improvements to the business processes, policies, organizational structure, and system will continue to be implemented.

1.6 Document Overview

Section 1 provides an introduction to the project. Section 2 identifies the applicable strategies. Section 3 describes the technical approach. Section 4 identifies the project resources. Section 5 lists the project deliverables by phase. Section 6 provides the project schedule.

2. PROJECT STRATEGIES

2.1 Project Management

The Senior Project Manager and Steering Committee will be responsible for a large part of the program management function. All project members, though, should be aware of program management practices and should be prepared to support these practices. Project status will be briefed each week by the Senior Project Manager (or his designee) to the Steering Committee at a Project Management Status Review (PMSR). It is the responsibility of the Senior Project Manager to report accomplishments, future activities, and areas of concern or risk. It is the responsibility of the Steering Committee to raise functional concerns from the appropriate areas and to provide guidance.

Project progress will be reported monthly in the form of a progress report. The progress report will be directed to the CEO, Bill Scherrer, the EWW Controller, Ed Kelly, and the EWA Controller, John Colletti. It will include a summary of accomplishments for the previous month, tasks to be accomplished in the next month, status against documented risks, and cost performance.

The Senior Project Manager will be responsible for maintaining an integrated schedule. The project will be managed from the critical path of this schedule.

Documentation of action items, risk items, and system problem/change requests (SP/CR)in a standard format will be the responsibility of the project team. These items will be the vehicle for all involved to identify needed actions or express concerns.

2.2 System Integration

EWA has made a corporate decision to create an open systems, "plug-and-play" environment. This will be accomplished by selecting computer and communications hardware and software systems based on corporate standards. As much as possible, the technical architecture will be vendor independent.

The goal is to create an environment where applications can be placed within (and removed from) the EWA computing environment with limited interference to other systems. The target architecture will eventually support and enforce standardized data, a single user log-on from a single workstation, running on an integrated data base.

EWA has decided to implement new systems in a phased approach. A system will first be installed as a "stovepipe". This means that as much as possible, the new system will not be modified for functionality or for interfaces with other systems. After the stovepipe system has been accepted by the user, interfaces will then be developed in order of importance and acceptable risk. EWA will determine if and when to integrate the new systems with other enterprise-wide systems.

2.3 Software Acquisition

EWA wants to focus its resources on transporting air freight and decrease its resources spent on developing computer software. Therefore, EWA has made a corporate decision to purchase Commercial-Off-The-Shelf (COTS) software, where possible, to satisfy its functional requirements. Not modifying COTS will also make it easier to upgrade when the vendor provides new releases. The use of COTS will, over time, reduce the maintenance cost and extend the technological life of AMMS. If a COTS package can not satisfy a specific requirement, then the user community will determine if the requirement can be relaxed or waived. If this is not possible, EWA will determine if the best solution is to purchase supplementary COTS packages to fill functional voids, to modify COTS, or to create new supplemental code.

Where possible, a COTS software application which best satisfies the corporate standards will be selected. However, there may be situations where a critical requirement (e.g., FAA regulation) is best satisfied by a system that is less "standard" than another. In this instance, the negative long-term impact of selecting the less standard system will be weighed against the functional requirement and the less "standard" system may still be selected.

2.4 Business Process Improvement

EWA has determined that incremental improvements in its operations will not yield the results needed to operate a profitable air freight organization in the 21st century. EWA has also determined that automation alone will not provide a total cost and operations improvement solution. Work must first be simplified, then integrated with other streamlined processes, and then automated.

However, for the AMMS project, EWA has decided to change their business processes (and related policies and procedures) to comply with the automated system, even if some process are not necessarily the best practices. This decision was based on the understanding that the selected system will already contain numerous improvements which reflect substantial change for the maintenance organization and that EWA desires to make few software changes.

The AMMS project team will evaluate and model the current or "as-is" business processes. The team will then model the processes as needed to support the target system. The two models will be compared and contrasted to identify functional gaps.

As the current business processes are evaluated, near-term initiatives (NTIs) will be identified and implemented. NTIs are changes that can be implemented regardless of ADP changes. Also, while the new system is in being implemented, other quick payback activities will be accomplished. These are changes to policies, procedures, organizational structure, or the current systems. Any major changes will be deferred until the completion of the new system implementation.

Once the business process, policy, organization, and target system are operational, performance indicators will be measured and compared against the original operating values and the estimated target values. These values will be used to manage and improve the new processes and to identify

the true Return on Investment (ROI) of the improvements. The ROI will be tracked for two years or until "payback" is achieved, whichever comes last.

2.5 Legacy Management

A legacy system generally operates on outdated technology, is costly to maintain, has limited functional scope. Legacy systems are strong candidates for replacement. A new, or target system, is one the one that operates on newer technology, is more integrated with the corporate standards, and will provide a wider breadth of functionality for the enterprise.

Legacy systems usually are maintained until at least the point in time they are replaced. As a risk mitigation, a common practice is to run the legacy system in parallel with the target system until some form of user acceptance test or "burn-in" period has been accomplished. At the end of the acceptance testing the target system is cutover into Production. The legacy system is then either kept running as a "fallback solution" or is completely shut down. A specific software application can be shutdown while the hardware continues to operate other software applications. When the entire system is shut down, the hardware is either used somewhere else in the enterprise or surplused.

Due to economic costs involved, a decision may be made not to replace a legacy system. Each legacy system must be reviewed on a case-by-case situation to determined how it will be handled.

2.6 Risk Management

The heart of risk management is informed decision-making under uncertainty. Risk management is about being active, not passive. It does not deal with future decisions, but with the future of present decisions. To be effective, risk management must be an integral part of the way the project is managed, in terms of cost, schedule, and technical elements. Therefore, risk management must be systematic and on-going.

The risk management model to be used consists of the following elements:

- Identify - locate risks before they become problems
- Analyze - turn the raw risk data into decision-making information
- Plan - turn the risk information into decisions and actions
- Track - monitor the status of risks and actions taken against risks
- Control - correct deviations from the planned risk actions
- Communicate - provide feedback on the active risk activities, current risks, and emerging risks

2.7 Change Management

There will be resistance to the changes that the project introduces, therefore change must be managed in order to ensure project success. People resist change because of loss of control, excess uncertainty, concerns about their future competence, and concerns about more work.

Entire organizations resist change because of bureaucratic organizational structures, limited resources, and corporate culture.

As a result of this project, a person may find their role reduced or expanded. A person may find they will report to a different manager. An entire sub-organization may even find itself reporting to another manager. Some people may find their current positions eliminated and other new positions being created. Many organizational changes are expected, and must be managed. In order to manage these adjustments, the change management model to be used consists of:

- Identify stakeholders and their likely issues and interests
- Define how communication will be managed to ensure stakeholders are informed
- Assess stakeholder buy-in
- Intervening as necessary

Effective change management will produce increased acceptance of change and willingness to support it, and foster reduced negative impacts of change and resistance.

2.8 Requirements Management

Although there may be some resistance to changes, many of the users will be excited about a new system and new technology. Some users may want the system to do more than its current functionality provides or to accomplish the same task as their current system (with newer technology). In some cases these requests are simply unrealistic and form the basis of "requirements creep". The goal of successful requirements management balances the users requests against system feasibility, yet does not allow the projects overall success to be compromised.

The Steering Committee is responsible for helping Project Management control user expectations. Before a SP/CR is approved, the Steering Committee will determine if the change is a necessary function needed for business. Furthermore, the Steering Committee will have the responsibility for determining if a change request (requirement) is needed for IOC or will be accomplished for FOC.

3. TECHNICAL APPROACH

3.1 Three-Phased Approach

The AMMS project has been broken into three distinct phases. In Phase I, the team will validate the selection of the selected maintenance system; develop the change management plan; develop the implementation schedule and evaluate existing maintenance cost management practices. In Phase II, the team will execute the project based on the schedule. IOC of the system will be achieved at the end of Phase II, with user acceptance. In Phase III, the improvements generated by the maintenance system will be reviewed, other improvements (e.g., interfaces with other systems) will be identified, and the needed modifications will be implemented. Completion of these changes will constitute FOC.

3.2 Phase I - Planning

Phase I consists of a validation of the selected target maintenance system, the development of an implementation schedule, the development of a change management plan, and the evaluation of existing maintenance cost management practices.

An assessment of the current environment has already been accomplished. From this, it has been determined that implementation of an integrated maintenance system would not introduce any harmful business process changes. On the contrary, the maintenance system would introduce numerous changes that would significantly increase the ability of the maintenance and accounting staffs to accomplish their work.

3.2.1 Selection Validation

This task includes both a validation of the EWA selection process and the selected system. This task will be performed by SAI, and be conducted at a high level. Most of the maintenance-type systems have already been evaluated by EWA. Part of the assessment is to determine how well the selected system fits within the corporate technical architecture framework. Once the assessment has been completed, SAI will submit a validation report to EWA documenting the findings. Unless a critical void has been found in the selected system, it will be immediately acquired.

3.2.2 Implementation Planning

One of the keys to a successful project is good planning. For this purpose, an AMMS Implementation Schedule will be developed. This schedule will cover all areas of the project including: facilities preparation, acquiring, installing, and checking out the system, defining the module implementation sequence, loading and converting data, process transitions, pilot testing, training, documentation, and system sustainment. These tasks will have durations, relationships, and personnel applied to them and a critical path will be established. The project will be managed from this schedule.

In addition to deploying the new system, the project must also deal with other related systems. For example, AMMS will be replacing an existing (legacy) system known as EWA01. EWA01 is expected to interface with the Crew Information System within the next six months. The schedule must reflect the affect on the current and planned operating environments.

3.2.3 Organizational Buy-In (Change Management)

Maintenance and Accounting personnel are looking forward to the implementation of the new system. However, there will still be some resistance to the changes the project will introduce. Change will primarily be managed by open and frequent communication. A change management plan will be developed to describe how the changes will be proactively managed.

3.2.4 Maintenance Cost Management Practice Evaluation

The last item included in Phase I is a high level evaluation of the current maintenance cost management practices by SAI. Recommendations from this analysis will be introduced into the business processes at the appropriate times. Some may be accomplished immediately, some during the IOC timeframe, while others may be deferred until Phase III.

3.3 Phase II - Implementation to IOC

Whereas Phase I contained the plans for system implementation, Phase II represents the actual execution of those plans. Execution consists of preparing the facilities, acquiring, installing and checking out the system, loading and converting data, transitioning processes, testing, training personnel, and sustaining the system. The completion of Phase II constitutes IOC.

3.3.1 System Acquisition

This task includes preparing the paperwork to purchase/lease the necessary hardware, software, and communications facilities. In the case of sharing existing equipment, this task represents developing memorandums of agreement (MOAs) between the current "owner" of the system and the "owner" of the maintenance system. Also included in this task is the site preparation, technical user training, installation of the software, initialization of the data bases, and testing of the software with "canned" or test data.

3.3.2 Transitioning

This task begins concurrently with system installation and addresses the different elements to be transformed. One area of transformation is the business process, another is job characteristics, while another is the organizational structure. The list that follows, although not exhaustive, covers several elements involved in the transition.

- Documenting existing processes
- Learning and documenting processes supported by the new system
- Mapping old processes to new ones and creating a transition path
- Identifying new job characteristics, teams, skills, and staffing levels

- Designing career paths
- Specifying new management structure
- Training EWA management and trainers in the new processes
- Defining change management program

The new processes will be documented in a Concept of Operations (CONOPS) document. The CONOPS defines the proposed process and system in terms of the user needs it will fulfill, its relationship to existing systems or procedures, and the ways it will be used. The CONOPS will define the characteristics of the operating environment, interfaces (required and potential) with other systems, process flows in sufficient detail in order to understand the new or modified situation, performance characteristics, affected personnel, and a summary of impacts. The CONOPS will be supported by flow charts and some performance data for the new business processes.

3.3.3 Evaluate Personnel and Train

This task assesses current personnel in terms of their skills, knowledge, orientation, the extent of their buy-in to the change and their aptitude. The disposition of each person will be determined by their aptitude and not the job they currently hold. The assessment of each person will then be matched against the job requirements and staffing levels in order to identify personnel shortages or excesses and training needs.

End-user training will be conducted by internal EWA trainers at the EWA facility. Training will also include how to get help with problems. Training will be iterative and on-going.

3.3.4 Data Load/Conversion

Much data will need to be either loaded into a system for the first time (new data) or converted from where it currently resides (legacy data). Some data will be loaded and/or converted by fully automated processes, some by semi-automated processes, and some by manual data entry. Some data needed for the new process may have to be located or created from scratch.

Part of this process is also to determine what to do with the data from the legacy system. For example, should the data be converted, allowed to "run-off", or be ignored? This is expected to be one of the longer tasks.

3.3.5 Software Modifications and/or Interfaces

Changes to the new system will be implemented on a limited basis in Phase II. As much as possible, any changes to the software will be deferred until after the user has accepted it (i.e., IOC). Interfaces will be developed in the same manner. Only interfaces that are absolutely necessary for the system to run will be developed for IOC. During Phase III the remaining interfaces will be developed.

For each interface, an agreement will be made with the owners of the system to supply the needed data in the necessary format, at the necessary frequency, on the necessary medium, etc. This

agreement will be spelled out in an Interface Control Document (ICD). ICDs will be developed for each interface. ICDs may be developed and implemented in the same or different phases. For example, an ICD may be developed in Phase II but not implemented until Phase III.

3.3.6 Pilot Testing

This task operates the new process in a limited area in order to identify any needed improvements or corrections, without incurring the risk of a full deployment. The process and/or system flaws discovered during the pilot operation will be corrected and deployed in a controlled manner. Where applicable, the results of the new system will be tested against results of the old. The duration of the pilot program will be determined by the users during Phase II. FAA requirements may impact the duration of pilot test.

3.3.7 User Acceptance

Once the user community is satisfied that the system will adequately support their operation, they will officially accept the system. A signature page from senior management will suffice. Acceptance of the system by the user constitutes the end of Phase II. At this point in time, the system will be placed into production and managed accordingly.

3.3.8 System Sustainment

This task conducts the activities required to manage and maintain the hardware, software, and communications to sustain operations throughout the life of the system. It includes such things as hardware and software upgrades, periodic backups, and disaster recovery. A Sustainment Plan will be developed to address each of the elements. It does not directly address Phase III modifications.

3.3.9 Legacy Shut-Down

The shutting down of the legacy systems will be handled on a case-by-case situation. The timeframe for shutting down the primary maintenance legacy system (i.e., EWA01) will be determined by the users during Phase II. Shutting down the system will include determining what to do with the data, hardware, software, and communications capabilities. Although the equipment may be used for other applications, it is considered to be shutdown in terms of the AMMS.

3.4 Phase III - Implementation to FOC

Phase III tasks will convey AMMS from IOC to FOC. Some of the tasks include developing interfaces to other systems, developing software changes (inside or outside of the COTS), and applying new technology. The duration of this period will be determined by the amount of changes to be incorporated. Although Phases I and II of the AMMS project have already been funded, Phase III is not. Phase III is expected to be funded from the results of Phase II.

4. RESOURCES

4.1 Corporate Sponsors

Sponsorship of the AMMS project is one of the keys to its success. The corporate sponsor provides the span of authority to make the necessary shifts. The corporate sponsors for the AMMS project are:

- John Colletti - Vice President, Controller, and
- Dick Jacobson - Senior Director, Technical Services.

4.2 Project Steering Committee

The AMMS project will address cross-functional processes. Therefore, to ensure the necessary leadership and support, the various process owners must be involved. At a minimum, their involvement will be realized in the form of a steering committee. The steering committee for the AMMS project consists of:

- David Bucher, Director, Production Control
- Dick Hickey, Director, Line Maintenance
- Larry Incsoe, Director, Heavy Maintenance
- Jim Kear, Director, Administration & Finance
- Jeff McGlaun, AMMS Senior Project Manager
- Cliff Scheurich, Manager, Surplus Sales
- Charlie Shaskus, Manager, MIS
- Gary Wolfe, Director, Operations Analysis
- Tom Wood, Director, Quality Control

The committee will identify issues, give guidance, and set goals and priorities. This committee will meet for PMSR's on a weekly basis, to review the project. Areas of review include, but are not limited to schedule, budget, risk, change management issues, and various functional issues.

There may be times when management from other parts of the organization need to be involved (e.g. Human Resources, Flight Operations). They will be invited to the PMSR's on an as-needed basis.

4.3 Project Team

EWA has determined that it does not have sufficient staff to dedicate maintenance or accounting personnel to this project. New EWA employees will be hired to learn the respective disciplines and help teach the new processes to the current staff. Consultants will be used, as needed, to augment the project team. The core project team includes the following personnel:

- Jeff McGlaun, Senior Project Manager
- Andy Farrell, Business Systems Analyst
- Paul Virgallito, Business Systems Analyst
- TBD, Business Systems Analyst
- TBD, Programmer/Analyst
- TBD Project Administrator

As the scope of the implementation changes from one Maxi Merlin module to another due to functional content and required support, those individuals that are providing functional expertise to the core team are likely to change.

4.4 Contractors

Due to the shortage of personnel and the specialized skill sets required, EWA will contract with consultants which specialize in aircraft maintenance, material inventory, inventory accounting, cost management, material planning, engineering, and information technology. Although considered part of the EWA team, consultants will be assigned specific tasks for specific periods and will provide periodic status reports on their company's progress.

4.5 Equipment

The operating platform for the AMMS will be a UNIX mini computer, and consistent with the EWW corporate technical architecture framework. In addition, the AMMS project plans to utilize existing printers, bar code readers, network operating system, and personal computers wherever economically and technically feasible.

5. DELIVERABLES

Deliverables for this project and the phase in which they will be delivered are as follows:

	Deliverables	EWA		USAir	SAI	Other
		Steering Committee	Project Team			
Phase I	Project Plan	•	X			
	System Selection Validation Report				X	
	Implementation Schedule (Preliminary)	•	X			
	Cost Management System Review				X	
	Change Management Plan		X			
	Internal Monthly Progress Report		X			
Phase II	Implementation Schedule (Revised)	•	X			
	CONOPS	•	X			
	Sustainment Plan		X			
	Internal Weekly PMSR		X			
	Internal Monthly Progress Report		X			
	Contractor Weekly Status Report			X	X	X
	Contractor Monthly Progress Report			X	X	X
Phase III	Project Plan (Revised)	•	X			
	CONOPS	•	X			
	Sustainment Plan		X			
	Internal Weekly PMSR		X			
	Internal Monthly Progress Report		X			
	Contractor Weekly Status Reports			X	X	X
	Contractor Monthly Progress Report			X	X	X

X Denotes primary responsibility
• Denotes review and approval responsibility

6. SCHEDULE

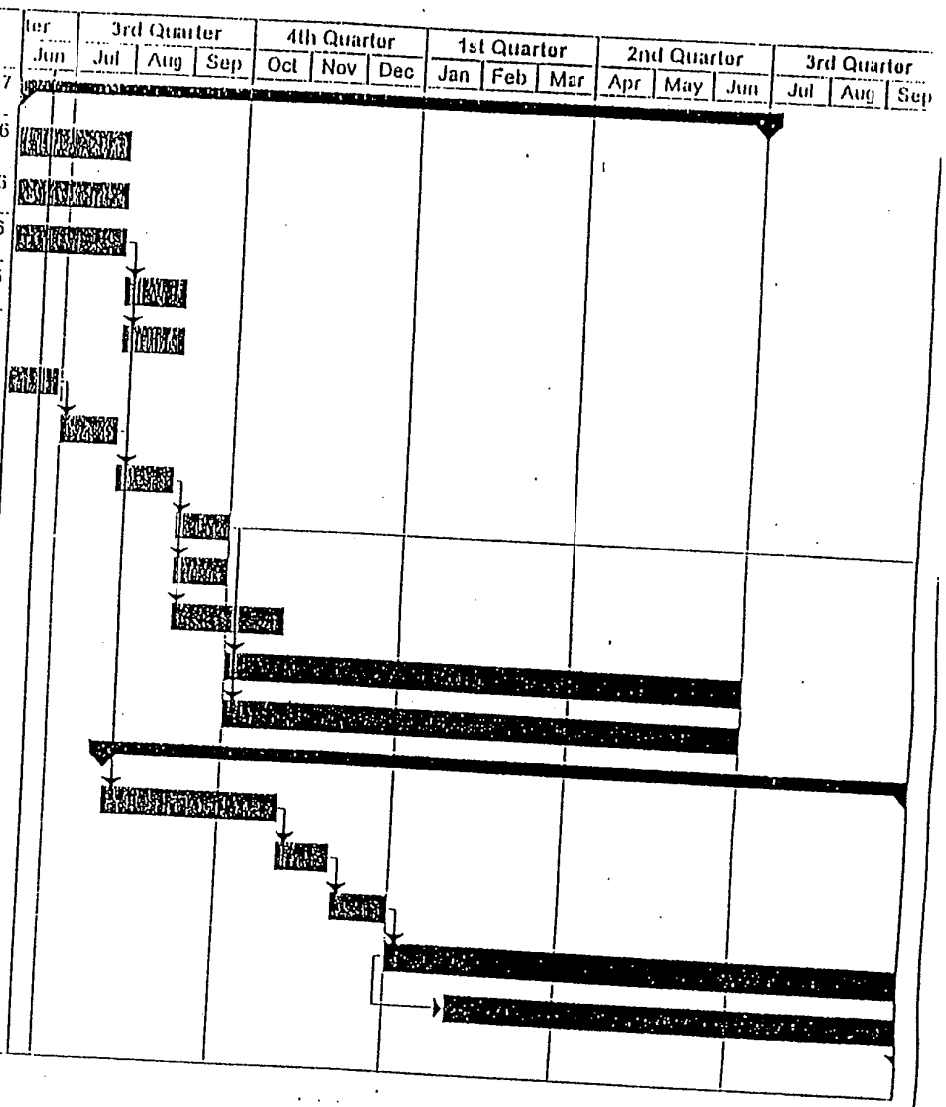
The preliminary project schedule is shown in Attachment A. This schedule was also used for cash flow analysis, shown in Attachment B. A detailed project schedule network will be completed at the beginning of Phase II. At this time, a high level schedule is available. It is as follows:

- Phase I - 3 June 1996 to 19 August 1996
- Phase II - 19 August 1996 to 19 August 1997
- Phase III - 19 August 1997 to 19 August 1999

Attachment A

AMMS Schedule (Preliminary)

ID	Task Name	Duratio	Stat	Finish
1	Implement Part Management System (PMS)	201d	6/3/96	6/30/97
2	Complete clean-up of inventory data	43d	6/3/96	7/31/96
3	Finalize PMS initial reviews	43d	6/3/96	7/31/96
4	Finalize MMS initial reviews	43d	6/3/96	7/31/96
5	Define basic PMS/MMS requirements	23d	8/1/96	9/2/96
6	Finalize requirements	23d	8/1/96	9/2/96
7	Determine short list of system suppliers	20d	6/3/96	6/28/96
8	Conduct detailed review of PMS/MMS systems	23d	7/1/96	7/31/96
9	Select PMS/MMS	22d	8/1/96	8/30/96
10	Acquire PMS/MMS	21d	9/2/96	9/30/96
11	Determine implementation team	21d	9/2/96	9/30/96
12	Develop implementation plan	44d	9/2/96	10/31/96
13	Perform readiness reviews	195d	10/1/96	6/30/97
14	Implement system	195d	10/1/96	6/30/97
15	Implement Maintenance Management System (MMS)	304d	8/1/96	9/30/97
16	Perform MMS process reviews	66d	8/1/96	10/31/96
17	Determine implementation team	21d	11/1/96	11/29/96
18	Develop implementation plan	22d	12/2/96	12/31/96
19	Perform readiness reviews	195d	1/1/97	9/30/97
20	Implement system	172d	2/3/97	9/30/97
21	Purchase maintenance and technical support	1d	10/1/97	10/1/97



Project: Airline Maintenance and Material System (AMMS)
Date: 6/19/96

Task
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Rolled Up Progress

Attachment B

nthly Cash Flow
Airline Maintenance and Material System (AMMS)

19 June 1996

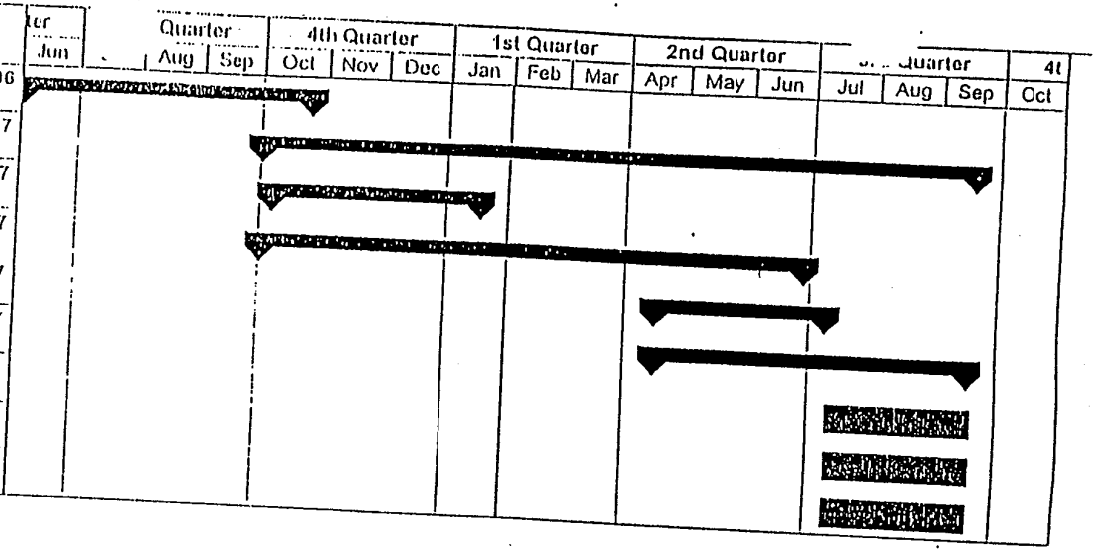
Task Name	Jun '96	Jul '96	Aug '96	Sep '96	Oct '96	Nov '96	Dec '96	Jan '97	Feb '97	Mar '97
Implement Part Management System (PMS)										
Complete clean-up of inventory data	$ 37,000	$ 42,000								
Finalize PMS initial reviews	$ 37,000	$ 42,000								
Finalize MMS initial reviews	$ 37,000	$ 42,000								
Define basic PMS/MMS requirements			$ 40,000	$ 2,000						
Finalize requirements			$ 40,000	$ 2,000						
Determine short list of system suppliers	$ 66,000									
Conduct detailed review of PMS/MMS systems		$ 76,000								
Select PMS/MMS			$178,000							
Acquire PMS/MMS				$ 271,000						
Determine implementation team				$ 7,000						
Develop implementation plan				$ 13,500	$ 131,000					
Perform readiness reviews					$ 14,000	$ 12,000	$ 13,000	$ 14,000	$ 12,000	$ 12,000
Implement system					$ 71,000	$ 65,000	$ 36,000	$ 22,000	$ 18,000	$ 19,000
Implement Maintenance Management System (MMS)			$ 40,000	$ 38,000	$ 36,000					
Perform MMS process reviews						$ 63,000				
Determine implementation team							$ 62,000			
Develop implementation plan								$ 2,000	$ 2,000	$ 2,000
Perform readiness reviews									$ 53,000	$ 56,000
Implement system										
Purchase maintenance and technical support										
Monthly Cost Totals	$177,000	$202,000	$298,000	$ 454,500	$ 252,000	$ 140,000	$ 111,000	$ 38,000	$ 85,000	$ 89,000
Monthly Cost Totals (Cum)	$177,000	$379,000	$677,000	$1,131,500	$1,383,500	$1,523,500	$1,634,500	$1,672,500	$1,757,500	$1,846,500
One-time inventory capital cost savings										
Recurring inventory cost savings										
Monthly Cost Savings	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Monthly Cost Savings (Cum)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Project ROI	0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Airline Maintenance and Material System (AMMS) — Monthly Cash Flow

19 June 1996

Task Name	Apr '97	May '97	Jun '97	Jul '97	Aug '97	Sep '97	Oct '97	Total
Implement Part Management System (PMS)								
Complete clean-up of inventory data								$ 79,000
Finalize PMS initial reviews								$ 79,000
Finalize MMS initial reviews								$ 79,000
Define basic PMS/MMS requirements								$ 42,000
Finalize requirements								$ 42,000
Determine short list of system suppliers								$ 66,000
Conduct detailed review of PMS/MMS systems								$ 76,000
Select PMS/MMS								$ 178,000
Acquire PMS/MMS	$ 267,000					$ 267,000		$ 808,000
Determine implementation team								$ 7,000
Develop implementation plan	$ 13,000	$ 13,000	$ 12,000					$ 262,500
Perform readiness reviews	$ 20,000	$ 20,000	$ 19,000					$ 115,000
Implement system								$ 290,000
Implement Maintenance Management System (MMS)								
Perform MMS process reviews								$ 114,000
Determine implementation team								$ 63,000
Develop implementation plan	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000		$ 62,000
Perform readiness reviews	$ 32,000	$ 13,000	$ 9,000	$ 10,000	$ 9,000	$ 10,000		$ 18,000
Implement system								$ 192,000
Purchase maintenance and technical support							$ 300,000	$ 300,000
Monthly Cost Totals	$ 334,000	$ 48,000	$ 42,000	$ 12,000	$ 11,000	$ 279,000	$ 300,000	$2,872,500
Monthly Cost Totals (Cum)	$2,180,500	$2,228,500	$2,270,500	$2,282,500	$2,293,500	$2,572,500	$2,872,500	
One-time inventory capital cost savings		$ 500,000	$1,000,000	$2,000,000	$2,500,000			$6,000,000
Recurring inventory cost savings		$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$1,800,000
Monthly Cost Savings	$ -	$ 800,000	$1,300,000	$2,300,000	$2,800,000	$ 300,000	$ 300,000	$7,800,000
Monthly Cost Savings (Cum)	$ -	$ 800,000	$2,100,000	$4,400,000	$7,200,000	$7,500,000	$7,800,000	
Project ROI	0.0%	0.4%	0.9%	1.9%	3.1%	2.9%	2.7%	

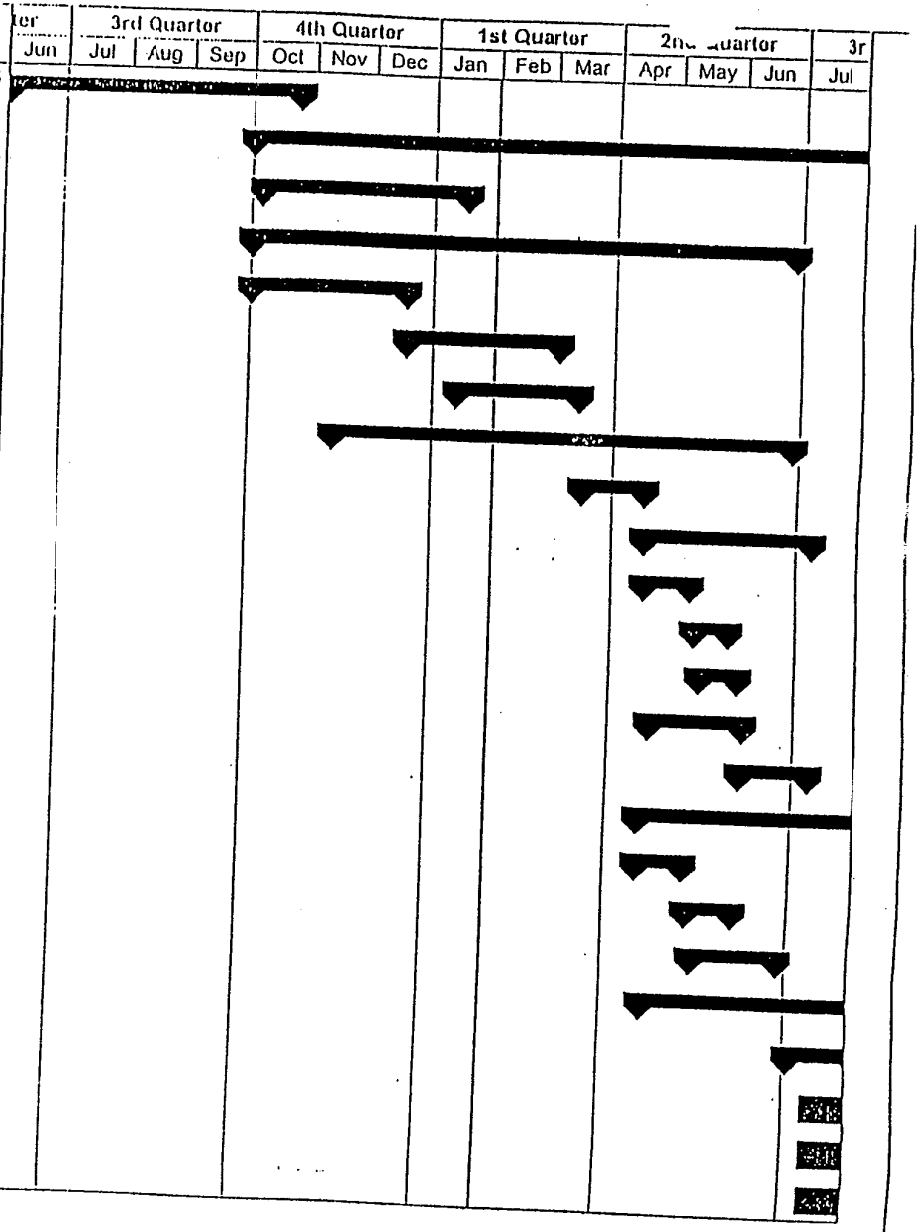
ID	Task Name	Duration	Start	Finish
1	PHASE I - PREPARATION	102d	6/3/96	10/25/96
33	PHASE II - IOC	248d	10/2/96	9/18/97
34	SAG Training	72d	10/7/96	1/17/97
40	MSCS/CCS (COMP)	191d	10/2/96	6/27/97
104	CCS (ACN)	57d	4/17/97	7/8/97
163	MACH	106d	4/17/97	9/16/97
223	SPS	50d	7/10/97	9/18/97
224	WCS/(PCS and CARD)	50d	7/10/97	9/18/97
225	MCS	50d	7/10/97	9/18/97



Project: MERIT
Date: 1/31/97

Task
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Rolled Up Progress

ID	Task Name	Duration	Start	Finish
1	PHASE I - PREPARATION	102d	6/3/96	10/25/96
33	PHASE II - IOC	248d	10/2/96	9/18/97
34	SAG Training	72d	10/7/96	1/17/97
40	MSCS/CCS (COMP)	191d	10/2/96	6/27/97
41	CONCEPTUALIZATION MSCS/CCS (COMP)	55d	10/2/96	12/18/96
50	VISUALIZATION MSCS/CCS (COMP)	52d	12/19/96	3/4/97
60	DEVELOPMENT MSCS/CCS (COMP)	45d	1/13/97	3/14/97
71	TRANSITION MSCS/CCS (COMP)	161d	11/13/96	6/27/97
100	PRODUCTION MSCS/CCS (COMP)	23d	3/17/97	4/16/97
104	CCS (ACN)	57d	4/17/97	7/8/97
105	CONCEPTUALIZATION CCS (ACN)	17d	4/17/97	5/9/97
114	VISUALIZATION CCS (ACN)	12d	5/12/97	5/28/97
123	DEVELOPMENT CCS (ACN)	12d	5/15/97	6/2/97
133	TRANSITION CCS (ACN)	33d	4/21/97	6/5/97
159	PRODUCTION CCS (ACN)	23d	6/5/97	7/8/97
163	MACH	106d	4/17/97	9/16/97
164	CONCEPTUALIZATION MACH	17d	4/17/97	5/9/97
173	VISUALIZATION MACH	16d	5/12/97	6/3/97
182	DEVELOPMENT MACH	30d	5/15/97	6/26/97
192	TRANSITION MACH	104d	4/21/97	9/16/97
219	PRODUCTION MACH	23d	7/3/97	8/5/97
223	SPS	50d	7/10/97	9/18/97
224	WCS/(PCS and CARD)	50d	7/10/97	9/18/97
225	MCS	50d	7/10/97	9/18/97



EMERY WORLDWIDE AIRLINES

A GF Company

EWA COMPUTER BASED
MAINTENANCE PROGRAM MANUAL
1/20/92

POLICY:

Emery Worldwide Airlines (EWA) will manage maintenance record keeping requirements by the means of a FAA approved computer based system, that will reflect mirror image to the required aircraft records kept on file.

This system is based on the recording keeping requirements of FAR 121.369, 121.380 and policies established by EWA.

This manual will contain the documents submitted to the FAA Certificate Holding Office (SJC) for approval and the letters received from them approving EWA Computer program changes.

EWA will provide the FAA SJC office with a computer data link to the EWA system to allow the Principal Maintenance Inspector (PMI) to carry out required surveillance activities such as random record retrieval for spot inspections, data audits, selective data retrievals and reports or summaries.

FAA Computer access has been reviewed and authorized by the EWA Director of Quality Control.

PROCEDURE:

The Director of Quality Control is responsible for the administration of this program that includes the review, approval and submittal of all computer based programs to the FAA SJC office for approval.

Appropriate associated EWA manuals will be revised and updated upon approval of all changes.

Quality Control will establish and audit parallel programs on software changes for a period established by the Director of Quality Control. In some cases a 90 day comparison period may be required. In any case the period will be in agreement with the FAA PMI.

This manual will not be controlled by a list of effective pages. It will be the responsibility of the Director of Quality control to update and copy other EWA Department Directors.

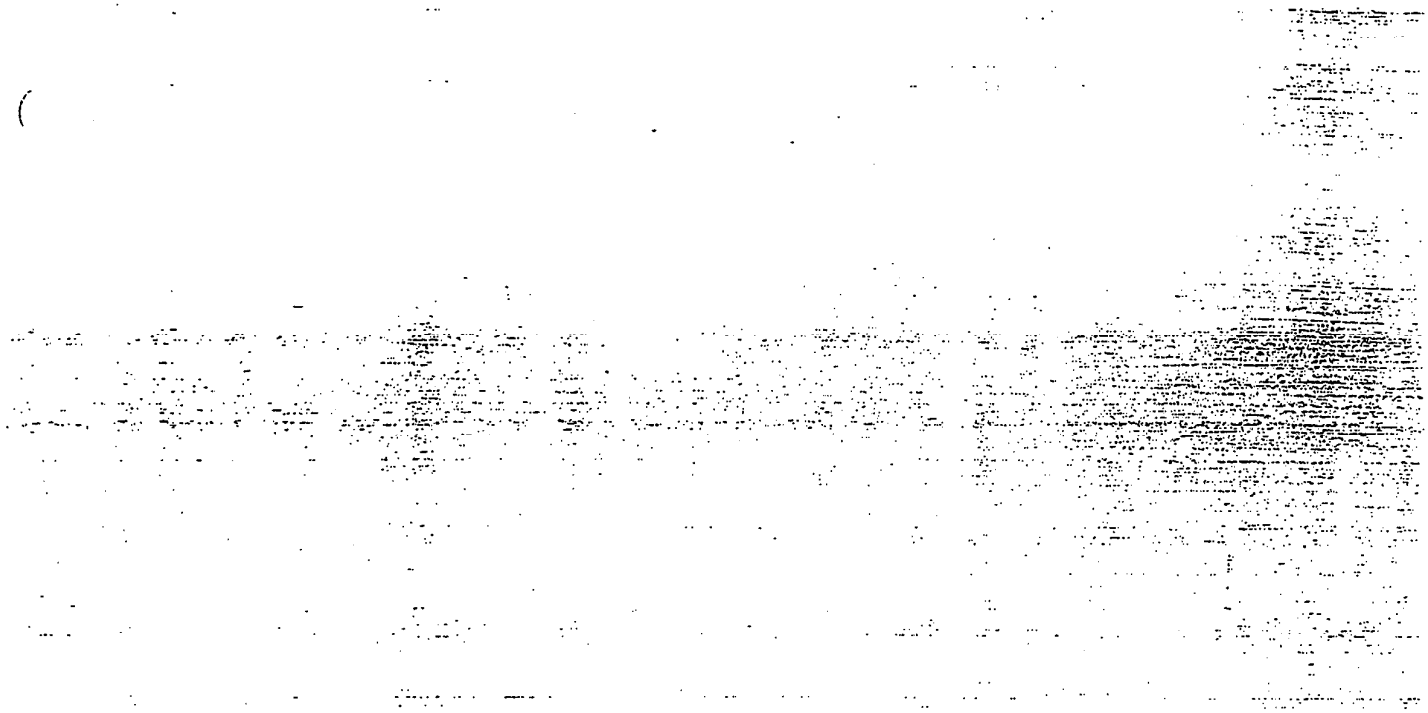
Director Quality Control

[redacted]

Thomas M. Wood

303 CORPORATE CENTER DRIVE, VANDALIA, OHIO 45377

MILES AHEAD



EMERY WORLDWIDE AIRLINES

A CF Company

Mr. John Howard
FSDO-SJC
1250 Aviation Ave.
Suite 295
San Jose, CA 95110

January 24, 1997

Dear Mr. Howard:

This letter is a follow-up to my letter to you dated December 12, 1996 which introduced the Maxi-Merlin System Program and the new EWA organization developed to manage the systems and controls of this section.

I have employed six contract quality control engineers who are responsible for the auditing/verification/approval process of this program implementations reporting to Quality Control.

A senior management decision has been made to implement the program in March, 1997. The manager of this program, Jeff McGlaun, will provide an implementation plan to me 1-30-97 to which I will provide you at that time.

This letter will provide you the Training Plan that has been developed for this program implementation.

Sincerely,

[redacted]

Thomas M. Wood
Director of Quality Control

attachments

aee

SETTING STANDARD 50 YEARS

303 CORPORATE CENTER DRIVE, VANDALIA, OH 45377

1.0 Introduction

1.1 Purpose

The purpose of this document is to provide a description of how training for Maxi-Merlin will be developed and performed. To arrive at this goal, the topics that are discussed include: Two-Tier Training Overview, Training Needs Assessment, Training Methodology, Training Materials, Duration/Class Size, Facility Requirements, Instructor Requirements, Help Desk Requirements, and Schedule.

1.2 Assumptions

The following assumptions were made in the development of this document:

1. Training Materials will be developed in-house.
2. The number of users to be trained is approximately 160 before cutover and 385 overall.
3. All initial training will take place at a facility in Dayton.
4. Two people per Line Station will be trained initially, and only one per station will be trained at a time. The remaining population will be trained after cutover.
5. One person per each Heavy Maintenance Vendor with a PC will be trained initially. The remaining Heavy Maintenance Vendors will be trained after cutover.
6. Initial training for Dayton personnel will take place on Monday and Saturday, from 8 am-5pm.
7. Initial training for Line Station personnel will take place Tuesday-Wednesday and Thursday-Friday, from 12 noon-9pm on the first day of class and 8am-5pm on the second day of class.
8. Line Station personnel will "dead head" to and from training.
9. Maxi-Merlin in production 17 March 97.

2.0 Approach

2.1 Two-Tier Training Overview

Training for Maxi-Merlin will be aimed at two major target groups: the Management Group, and the User Group. This approach is based upon the contrasting training requirements within the target groups.

Instruction for the Management Group will consist primarily of an overview of the Maxi-Merlin system and the concepts and modules that are associated with it. The Management Group training will take place sometime after initial training.

The User Group will be made up of all the personnel who will interface directly with Maxi-Merlin. The content of the User Group training will be customized based on job function, and will include only those system functions that apply to that functional group. The functions that will make up the Users Group for the first Maxi-Merlin modules includes: Repair Orders, Purchasing, Line Maintenance, Records, Maintenance Control, Maintenance Planning, Inventory Control, Accounts Payable, Heavy Maintenance Vendors, Quality Control and Reliability. It is likely that some functional areas will be combined with others, based on similar tasks and system functions (e.g., Inventory Control and Material Control).

Approximately 160 users will be trained in Maxi-Merlin before cutover. Amongst these users will be all local Dayton personnel, and two people per Line Station. Shortly after cutover (3-4 weeks), training for all Line Station users will resume.

2.2 Training Needs Assessment

The most common shortcomings of a training program are that trainees are trained in topics that do not need to be trained in, or are not trained in the topics necessary to perform their job. To prevent these problems, a training needs assessment was conducted. The purpose of a training needs assessment was simply to determine who has to be trained and in what they need to be trained. The needs assessment for the Maxi-Merlin training program consisted of a Functionality Checklist.

A Functionality Checklist is an inventory of all topic areas required by a user to perform his/her job using Maxi-Merlin. To assist in the collection of data for the Functionality Checklist, a listing of all Maxi-Merlin transactions for was given to the managers of all affected departments. This listing was in a checklist format, with the transactions listed along the left side of the page and the functional area across the top. Managers were asked to complete the checklist and return the results to the AMMS team. Results were then gathered to develop the Functionality Checklist Matrix.

The Functionality Checklist Matrix consists of the results of the needs assessment in a matrix-format and will act as the "prescription" for the training classes and their content. Classes will consist of similar user types, and they will be trained in only the transactions necessary for their jobs. The Functionality Checklist Matrix can be found in Appendix A. It is important to note that many of the scheduling issues for Maxi-Merlin training will be resolved with the Functionality Checklist, including class duration, class size and demographics.

2.3 *Training Methodology*

The method that is applied to a training program is based upon several factors, including the size of the population to be trained, the material that is to be covered, and the training location. With this in mind, the main training method that will be used for initial Maxi-Merlin training (Management and User's Group) will be classroom instruction.

Classroom training at a central location is the most efficient method for conducting a large number of classes and to a large group of trainees. By implementing classroom instruction, the approximately 385 Maxi-Merlin initial users total will be trained much faster than with any other training method. By providing for a central location, the facility that meets the needs of the class can be set up once, as opposed to having to move equipment and prepare the facility numerous times.

The subject matter of Maxi-Merlin training is very conducive to classroom training, as it allows for the instructor to complete demonstrations of concepts and transactions. It also allows for the student to work interactively with the instructor in the completion of exercises, instructor-guided practice, and review. Also, the customized classes made up of similar user types allows for detailed discussion to occur between trainees regarding their job function and issues and concerns to be answered by the instructor. Feedback on the performance of the instructor and the training environment will be compiled through the completion of course and instructor evaluations, with the results of the evaluations to be incorporated in future training sessions.

Recurrent training will be utilized to allow for further system training as it is required. Recurrent training will occur by updating the training manual that each affected user possess, unless it is determined that the impact of the material warrants another type of training method.

While classroom training is effective for large groups, it is not the most effective method for small functional groups with little Merlin interaction, new-hire training, and individual follow-on training. One-on-one, on-the-job, and self-paced training with an adequate training package will be utilized for this purpose.

Some of the functional areas that do not require extensive initial Maxi-Merlin training will be trained on-the-job, allowing for the designated classroom to be used to train larger functional groups. The functional areas that will be trained on-the-job includes Reliability, Quality Control, Accounts Payable, and Maintenance Planning.

To prepare for all initial training, a preliminary package will be sent to all personnel to be trained initially. This package will include general information about Maxi-Merlin, including system navigation, concepts, modules, and a glossary. The preliminary package will be sent at least two weeks before training is to take place, and trainees will be required to sign-off that they have read the package.

2.4 *Training Materials*

Adequate training materials are often the difference between successful and unsuccessful training. Materials should enhance the concepts being introduced by the instructor during the training session, and also be able to be used after training as a reference and practice tool. For Maxi-Merlin training, materials will be developed that include all of the required characteristics of effective training. In order to allow for the materials to be used as a reference tool, each trainee will receive a personal copy of the training material.

Maxi-Merlin materials will be modularized by logical functional process flows (business processes), with the intent that customized training packages can be put together by "cut and paste" for tailored sessions. Modules within the materials will correspond with the user types described in the Functionality Checklist.

Each module (process flow) will contain the same sections and formats, and will be conducive to effective training. The first section will be the process flow itself, along with a documented description of the flow. Next, each transaction in the process flow will be explained. Each transaction will have a description of the purpose of the transaction, screen prints, as well as descriptions of each field in the transaction. Also, a detailed exercise will be provided for each transaction that will allow for reinforcement of the student's knowledge of the transaction. Finally, after all transactions within a flow are covered, an exercise will be provided so that the student can show their ability to perform an entire process.

The Maxi-Merlin training materials will also include an Introduction, General Information section, Glossary of Terms, Discrepancy Report, and Student Evaluations. Utilization of this training material format, including the process flows, documentation and exercises, will provide an adequate training tool and useful reference manual.

The first completed module of the training materials is being provided (Appendix C) to senior management for review and approval as to form and level of detail. After all the training materials have been developed, they will be provided to senior management for review and comment before the entire training package is finalized. Furthermore, any

changes made to the training materials should be reported by the department/section manager, and reported to Maintenance Training for the purposes of configuration control and incorporation into the training package.

2.5 *Duration/Class Size*

The size of the classes, number of classes, length of the schedule and length of each class associated with Maxi-Merlin training is directly contingent upon the facility size and the volume of material to be covered. The desired class size for Maxi-Merlin initial training is 10, with one person per workstation. Instances may arise, however, when more than 10 will be trained at a time. In these cases, some of the workstations in the class will be occupied by two trainees.

Based on the customized training approach and the amount of content that will be covered in each customized course, the maximum length of any Maxi-Merlin class will be two days. The two day classes will be primarily for the Line Stations, and will take place on Tuesday-Wednesdays and Thursday-Fridays. Two individuals will be trained per Line Station, but not more than one per Station will be trained at one time.

All the remaining classes for local personnel will have a maximum length of one day, and will take place on Mondays and Saturdays.

3.0 Resources

3.1 *Facility Requirements*

In order to properly conduct Maxi-Merlin training, a facility that meets the requirements of the course must be acquired for the duration of the training. Facility requirements can be broken up into two major categories: room layout and equipment. Because initial Maxi-Merlin training will be given in a classroom setting, the facility must be able to accommodate several students. The size of the facility will have a direct impact on the duration of the entire training program. Therefore, it would be desirable to select a facility that will occupy for as many students as possible, while still maintaining a comfortable learning environment for both the instructor and trainee. The desired size of a training facility is one that will allow for 10 students and 10 workstations, plus the instructors.

The training facility must contain all of the necessary equipment and connections. The facility must allow for several work stations to be set up for the "hands-on" system examples and exercises that are the focus of the curriculum. Also, in order to operate Maxi-Merlin, the classroom must have LAN connectivity and the proper software at each workstation, including the instructor's PC. An overhead projector and "hot plate" must

be made available for the instructor to perform examples and demonstrations in full view of the trainees. Finally, a white board or paper easel should also be available for the instructor to use.

3.2 *Instructor Requirements*

Initial Maxi-Merlin training will be conducted by one instructor from Maintenance Training, along with a member of the AMMS Core and/or Functional Team. The AMMS Team member that assists for each class will be chosen based on their expertise in that area of the system and/or job function.

3.3 *Help Desk Requirements*

A Help Desk will be instituted to provide timely, on-line support to the users of Maxi-Merlin. The Help Desk will be made up of two AMMS Core Team members, one Functional and one USAir representative. In-house support will be provided during the first several weeks after cutover. This support will be available during the two heaviest shifts, every day that it is required. Team members will be "on-call" during all other hours. After initial cutover, support can be obtained by contacting Help Desk representatives, who will have the ability to "dial into" the system.

4.0 Schedule

The finalized schedule for Maxi-Merlin training has yet to be approved. However, a draft schedule has been developed (Appendix B) to provide a guideline as to the duration of initial Maxi-Merlin training. All dates and tasks on this draft schedule are subject to change. The training schedule is based on a 17 March cutover date.

Appendix A: Functionality Checklist Matrix

Appendix B: Draft Training Schedule

Appendix C: Sample Training Materials Section

Appendix A: Functionality Checklist Matrix

Maxi-M Functionality Checklist

I. AIRCRAFT MAINTENANCE

MM Function	MM Trans.	MM Capabilities	PUR	A/P	RO	REC	M AT IC	M AT QC	A/C MNT LM	A/C MNT MC	HVY MNT PC	HVY MNT VEN	REL	
Flight crew Write-ups - Update	MCCP	Pilot Discrepancy												
	MCCN	Non-Technical Discrepancy				X								
Maintenance Write-ups - Update	MCCM	Maintenance Discrepancy				X							X	
	MCCN	Non-Technical Discrepancy											X	
Cabin crew Write-ups - Update	MCCM	Maintenance Discrepancy				X			X					
	MCCN	Non-Technical Discrepancy				X			X				X	
Maintenance Planning Write-ups - Update	MCCS	Scheduled Discrepancy				X							X	
	MCCR	Technical Service Item				X							X	
	MCLP	Line Maintenance Planning Item												
Engineering Write-ups - Update	CCMM	Update Mod Status for Multiple Aircraft/Unit (automatically creates an EOFC type discrepancy)										X		
	CCMU	Update Mod Status for One Assignment (automatically an EOFC type discrepancy)										X		
Engine Parameter Readings - Update	MCCJ	Engine Performance Data										X	X	
	MCTC	Test Cell and Margin Readings										X		
Engine Parameter Readings - Display	MCDOA	Oil Consumption Alert							X					
	MCDOC	Oil Consumption Data							X				X	
Discrepancy Updates - Deferrals	MCCD	Standard Discrepancy Deferral							X				X	
									X				X	X
Discrepancy Updates - Closing	MCCF	Discrepancy Final Action Taken							X				X	X
Discrepancy Updates - Additional Text	MCCT	Update Technical Service Item							X					
	MCCL	Update Line Maintenance Planning Item												
MEL Processing - Update	MCME	MEL Discrepancy Deferral							X					
	MCMU	Update Outstanding MEL List							X					
MEL Processing - Display	MCMA	Display Open MEL by Aircraft												
	MCMD	Display Open MEL List by Fleet			X	X	X		X					
Aircraft Damage Record - Update	MCAC	Maintain Aircraft Damage Record			X	X	X		X		X	X	X	
						X			X		X	X	X	

1. AIRCRAFT MAINTENANCE

MM Function	MM Trans.	MM Capabilities	PUR	A/P	RO	REC	M AT IC	M AT QC	A/C MNT LM	A/C MNT MC	HVY MNT PC	HVY MNT VEN	REL	C
Aircraft Damage Record - Display	MCDG	Display Damage by Aircraft				X			X			X	X	X
Discrepancy Alerting & Reliability - Update	MCRA	Remove an Aircraft from Alert											X	
Discrepancy Alerting & Reliability	MCDAS	Display Aircraft/ATA Relationship				X							X	X
	MCHOT	Displays Open Pilot and Maintenance Discrepancies				X			X			X	X	X
Discrepancy Alerting & Reliability - Reports	MC252RPT	Pirep Alert Report											X	X
	MC271RWS	Discrepancy Statistics											X	X
	MC272RMS	Discrepancy Statistics by ATA											X	X
	MC273RAS	Discrepancy Summary by Aircraft											X	X
	MC274RDA	Fleet Statistics by Aircraft											X	X
	MC274RMS	Discrepancy Rates by ATA											X	X
		*Numerous other reports automatically printed, used to derive aircraft reliability											X	X
Aircraft Incident Security	MCUAL	Aircraft Lockout				X								
	MCUUL	Aircraft Unlock				X								X
Discrepancy Retrieval - Display	MCDA	Display Open Discrepancies by Aircraft - ATA order				X			X			X	X	X
	MCDAD	Display Open by Aircraft - Date order				X			X			X	X	X
	MCDD	Display Single Discrepancy				X			X			X	X	X
	MCDS	Display Open by ATA				X			X			X	X	X
	MCHA	Display History by - ATA order				X			X			X	X	X
	MCHAD	Display History by Aircraft - date order				X			X			X	X	X
	MCHD	Display History by and ATA				X			X			X	X	X
	MCHIST	Display History of Discrepancies - Greater Than 90 days				X			X			X	X	X
	MCHOT	Displays Open Pilot and Maintenance Discrepancies				X			X			X	X	X
	MCHS	Display History by ATA within Fleet				X			X			X	X	X
	MCPA	Display Planned Discrepancies							X			X	X	X
	MCMD	Display Open MEL List							X			X	X	X
		*Numerous Batch Reports Printed Automatically or on Request				X			X			X	X	X
Aircraft Check Planning - Update	CCPAS	Assign Aircraft Planned Check Date											X	X
	MCAR	Assign Aircraft to Over Night (RON) by Fleet								X				
	MCRR	Update New RON for One Aircraft												

I. AIRCRAFT MAINTENANCE

MM Function	MM Trans.	MM Capabilities	PUR	A/P	RO	REC	M AT IC	M AT QC	A/C MNT LM	A/C MNT MC	HVY MNT PC	HVY MNT VEN	REL	QC
Aircraft Check Planning - Display	CCDAS	Display Aircraft Status Check Times												
	CCFAC	Forecast Aircraft Checks				X	X		X		X	X	X	X
	MCARINQ	Display RON Assignment by Fleet/Model				X	X		X		X	X	X	X
	MCDT	Display RON Assignment for One Aircraft				X	X	X	X		X	X	X	X
	MCDR	Display RON Aircraft Assigned				X	X	X	X		X	X	X	X
	MCRS	Display RON Aircraft for a Station				X	X	X	X		X	X	X	X
Discrepancy Planning - Update	MCPL	Plan Existing Discrepancy for Future Date				X	X	X	X		X	X	X	X
	MCCS	Scheduled Discrepancy												
	MCLP	Line Maintenance Discrepancy												
	MCCR	Technical Service Discrepancy												
	MCAD	Assign Open Discrepancies to Work Release												
Discrepancy Planning - Display	CCDAS	Display Aircraft Status and Check Times												
	CCFAC	Forecast Aircraft Checks					X		X		X	X	X	X
	CCRFA	Unit Removal Forecast By Aircraft					X		X		X	X	X	X
	CCRFP	Unit Removal Forecast By Part Number				X	X		X		X	X	X	X
	MCDW	Display Assigned Discrepancies by Aircraft or Station				X	X		X		X	X	X	X
	MCPA	Display Planned Discrepancies				X	X		X			X	X	X
Discrepancy Planning - Reports	CCARF	Aircraft Unit Removal Forecast Report				X	X		X			X	X	X
		*Numerous Batch Reports Printed Automatically or on Request				X					X		X	X
Station Performace - Reports	MC254RPT	RON Station Performance Statistics											X	X
	MC254RRT	RON Station Statistics												
	MC258RWR	RON Backlog Worklist							X				X	X
Time Recording/Control/Monitoring Update	CCTE	Update Aircraft Times and Cycles (This transaction is used for manual times/cycles input. Electronic programatic input is automatic alternate.)				X			X				X	X
	CCACS	Update Aircraft Check Specs											X	X
	CCPAS	Assign Aircraft Planned Check Date				X			X					
	CCZA	Zero Aircraft Check Times							X		X			
Time Recording/Control/Monitoring Display	CCDT	Display Aircraft Times/Cycles For a Date				X			X					
	CCHRC	Display Aircraft Times/Cycles Array		X		X			X		X		X	X
	CCDAS	Display Aircraft Status and Check Times		X		X			X		X		X	X

1. AIRCRAFT MAINTENANCE

MM Function	MM Trans.	MM Capabilities	PUR	A/P	RO	REC	M AT IC	M AT QC	A/C MNT LM	A/C MNT MC	HVY MNT PC	HVY MNT VEN	REL	QC
	CCFAC	Forecast Aircraft Checks		X		X			X		X		X	X
Time Recording/Control/Monitoring - Reports	CCTMR	Aircraft Times/Cycles Log		X		X			X		X		X	X

2. COMPONENT MAINTENANCE

Part Number Control - Update	MSSU	Add/Update/Delete Stock Item						X					X	X
	CCUPS	Update Part Number Basic Information (Rotables)					X						X	X
	CCPNC	Change Part Number					X	X					X	X
	CCPND	Delete Part Number						X					X	X
	CCUMF	Update Manufacturers Number & Spec Data						X					X	X
	CCMFC	Change Manufacturers Number						X					X	X
Part Number Control - Display	MSCRS	Cross Reference by Part Number and Location			X	X	X	X	X		X	X	X	X
	MSCRM	Cross Reference Manufacturer Number			X	X	X	X	X		X	X	X	X
	CCDPS	Display Part Status (Aircraft Effectivity)			X	X	X	X	X		X	X	X	X
Serial Number Control - Update	CCCSN	Change Unit Serial Number			X		X							
	CCUPS	Update Part Number Information (Rotables)						X					X	X
	CCMFC	Change Manufacturers Part Number						X					X	X
	CCSER	Add Serialized Unit						X					X	X
	MSAQ	Unit Acquisition Data (Record)					X	X					X	X
	CCUCS	Update Unit Record Times						X					X	X
	CCUSC	Add/Update/Delete Exception Specs						X					X	X
	MSWU	Update Unit Warranty Data						X					X	X
	PTMP-F	Make Unit Serviceable		X				X					X	X
Serial Number Control - Display	CCDUS	Display Unit Status						X					X	X
	CCFSN	Display All Serial for a Part Number		X	X	X	X	X					X	X
	CCXRF	Unit Serial, Manufacturer Part and Manufacturer Serial Numbers Reference		X	X	X	X	X		X	X	X	X	X
	MSWD	Display Unit Warranty Data		X	X	X	X	X		X	X	X	X	X
Assembly Control - Update	CUAM	Create Assembly Mask		X			X	X			X	X	X	X
	CCDA	Update Assembly Unit relationship											X	X
	PTMP-A	Detach and Assign Unserviceable Tag to Assembly Component					X						X	X
	PTMP-B	Attach/Update Component to Assembly					X						X	X

I. AIRCRAFT MAINTENANCE

MM Function	MM Trans.	MM Capabilities	PUR	A/P	RO	REC	M AT IC	M AT QC	A/C MNT LM	A/C MNT MC	HVY MNT PC	HVY MNT VEN	REL	QC
	PTMP-P	Detach and Assign Serviceable Tag to Assembly Component						X					X	X
Assembly Control - Display	CCABM	Display Unit Assembly Bill of Material					X	X	X		X	X	X	X
Assembly Control - Reports	CCBRF	Assembly Bill of Material Removal Forecast							X		X	X	X	X
	CCBRS	Assembly Bill of Removal Summary							X		X	X	X	X
	CCUBM	Uninstalled Assembly Bill of Material Removal Forecast							X		X	X	X	X
Aircraft Configuration Control - Update	CCUAP	Update Aircraft Part Position				X							X	X
	CCAPS	Add/Update/Delete Aircraft Position Specs				X							X	X
	CCAMU	Update Aircraft Workset Data				X							X	X
	CCCDS	Add Aircraft Positions & Install Units Via Workset				X			X			X	X	X
	CCUIC	Add/Update/Delete Aircraft Workset Position/Unit				X							X	X
Aircraft Configuration Control - Display	CCDPS	Display Part Status (Including Aircraft Effectivity)			X	X	X	X	X		X	X	X	X
	CCDAC	Display Aircraft/Part/Position			X	X	X	X	X		X	X	X	X
	CCFSN	Display All Serial Numbers for a Part Number			X	X	X	X	X		X	X	X	X
Aircraft Configuration Control - Reports	CCACL	Aircraft Component Log Report				X			X		X	X	X	X
	CCPEL	Position Index Report by CCN				X			X		X	X	X	X
Component Change/Swap - Update	CCRI	Unit Removal/Installation Production Control Item (PCI) - (This one transaction used to remove/install all sub-assemblies when highest assembly changed)				X			X		X	X		
	CCCS	Removal/Installation												
	CCRIE	Unit Removal/Installation - MACH Interface				X			X			X		
Component History - Update	CCURI	Update Removal/Installation History				X	X							
	CCUCS	Update Unit Times				X								
	MSAQ	Update Acquisition History				X	X							
Component History - Display	CCRIH	Display Unit Installation, Removal and Repair History			X	X	X		X		X	X	X	X
	CCDUS	Display Unit Status			X	X	X		X		X	X	X	X
	CCARH	Display Aircraft Position Unit Removals			X	X	X		X		X	X	X	X

Maxi-M[illegible] Functionality Checklist

1. Air[illegible] T MAINTENANCE

MM Function	MM Trans.	MM Capabilities	PUR	A/P	RO	REC	M AT IC	M AT QC	A/C MNT LM	A/C MNT MC	HVY MNT PC	HVY MNT VEN	REL	C
	CCRH	Display Unit Removal History by Part Number												
	CCRHIX	Display Exchanged Unit Installation, Removal and Repair History			X	X	X		X		X	X	X	
	CCFEX	Display Exchanged Units by RCN			X	X	X		X		X	X	X	
Component Reliability - Update	CCURS	Update Reliability Standard			X	X			X		X	X	X	
Component Reliability - Display	CCFRS	Fleet Removal Statistics											X	
	CCRDH	Reliability Statistics by Part/Fleet					X		X			X	X	X
	CCRIH	Display Unit Installation, and Repair History					X		X			X	X	X
	CCARH	Display Aircraft Position Removals					X		X			X	X	X
	CCRH	Display Unit Removal History by Part Number				X	X		X			X	X	X
Component Reliability - Reports	CCTMR	Aircraft Times Log				X	X		X			X	X	X
	CCACL	Aircraft Component Report				X								
	CC240CRR	Parts Removal Alert Report			X				X			X	X	X
	CC240REL	Reliability Statistics Update							X		X	X	X	X
	CC240UAR	Unit Removal Alert Report							X		X	X	X	X
	CC240IMR	Unit Infant Mortality							X			X	X	X
	CC240URS	Alert Standard Update							X			X	X	X
	CC264FRS	Unscheduled Fleet Removals							X			X	X	X
	CC260RH1	Component Removal by Part Number by Date							X			X	X	X
	CC260RH2	Component Removal by Part Number by Serial Number				X			X			X	X	X
	CC260RH3	Component Removal by Part Number by Aircraft				X			X			X	X	X
	CC270SFR	24 Month Scheduled Removal Forecast Statistics				X						X	X	X
	CC260REM	Top 100 Removals Location							X			X	X	X
Component Removal Forecasting	CCRFA	Unit Removal Forecast by Aircraft							X		X	X	X	X
	CCRFP	Unit Removal Forecast by Part Number										X	X	X
Component Removal Forecasting - Reports	CCARF	Unit Removal Forecast by Aircraft (multiple aircraft & utilization)									X		X	X
	CCBRD	Assembly Removal Forecast by Date									X		X	X
	CCBRF	Assembly Bill of Removal Forecast							X		X	X	X	X
	CCDRS	Assembly Removal Forecast Summary							X		X	X	X	X
	CCPRF	Unit Removal (variable utilization)							X		X	X	X	X
	CCSRF	Softspec Forecast by Remaining							X		X	X	X	X
		*Numerous Additional Batch Reports Printed Automatically or on Request							X		X	X	X	X
													X	X

1. AIRCRAFT MAINTENANCE

3. AIRCRAFT MODIFICATIONS

MM Function	MM Trans.	MM Capabilities	PUR	A/P	RO	REC	M AT IC	M AT QC	A/C MNT LM	A/C MNT MC	HVY MNT PC	HVY MNT VEN	REL	QC
Aircraft Mods Creation - Update	CCMDS	Add/Update/Delete Modification Data				X							X	X
	CCMMS	Major/Subordinate Modification Relationship											X	X
	CCMES	Mod Assignment Specification Update											X	X
Aircraft Mods Creation - Display	CCDMS	Display Modification(s) Status			X	X	X				X	X	X	X
Aircraft Mods Assignment - Update	CCMAM	Modification Assignments										X	X	X
	CCMMA	Modification Assignment by Individual Aircraft/Unit										X	X	X
Aircraft Mods Updating - Update	CCMC	Update Single Mod Status for One Assignment				X						X	X	X
	CCMU	Update Multiple Mod Status for One Assignment				X						X	X	X
	CCMM	Update Single Mod Status for Multiple Aircraft/Unit				X						X	X	X
	MCCF	Discrepancy Final Action Taken				X						X	X	X
	CCMNC	Update Primary Modification Key				X						X	X	X
	CCMES	Mod Assignment Specification Update				X						X	X	X
Aircraft Modification Status - Display	CCMDM	Modification Data & Aircraft/Unit Status				X	X					X	X	X
	CCDMS	Display Modification(s) Status			X	X	X				X	X	X	X
	CCMDU	Modification Status for Aircraft/Unit				X	X				X	X	X	X
	CCMSL	Modification Revision Selection				X	X				X	X	X	X
		*Numerous Batch Reports Printed Automatically or on Request										X	X	X
Aircraft Modification Review - Display	CCMMF	Display Mod Review Forecast				X	X		X		X	X		X

1. COMPONENT MODIFICATIONS

Component Mods Creation - Update	CCMDS	Add/Update/ Modification Data											X	X	X
	CCMMS	Major/ Relationship											X	X	X
	CCMES	Mod Assignment Update											X	X	X
Component Mods Creation - Display	CCDMS	Display Modification(s) Status				X	X				X	X	X	X	
Component Mods Assignment - Update	CCMAM	Modification Assignments										X	X	X	
	CCMMA	Modification Assignment Individual Aircraft/Unit										X	X	X	

4. AIRC MAINTENANCE

MM Function	MM Trans.	MM Capabilities	PUR	A/P	RO	REC	M AT IC	M AT QC	A/C MNT LM	A/C MNT MC	HVY MNT PC	HVY MNT VEN	REL	Q
Component Mods Updating - Update	CCMC	Update Single Mod Status for One Assignment												
	CCMU	Update Multiple Mod Status for One Assignment												
	CCMM	Update Single Mod Status Multiple Aircraft/Unit										X	X	X
	CCMEC	Compliance Status Update Assembly										X	X	X
	CCMNC	Update Primary Modification Key										X	X	X
	CCMES	Mod Assignment Specification Update										X	X	X
Component Modification Status - Display	CCMDM	Modification Data & Aircraft/Unit Status										X	X	X
	CCMDA	Display Open Modifications for Assembly				X	X				X	X	X	X
	CCDMS	Display Modification(s) Status				X	X				X	X	X	X
	CCMDU	Modification Status Aircraft/Unit			X	X	X				X	X	X	X
	CCMSL	Modification Revision Selection				X	X				X	X	X	X
		*Numerous Batch Reports Printed Automatically or on Request				X	X				X	X	X	
Aircraft Modification Review - Display	CCMMF	Display Mod Review Forecast											X	X

5. MATERIAL MANAGEMENT

Vendor Information - Update	MSVU	Update Vendor Data				X									
	MSVC	Update & Certify a Repair Vendor	X	X	X										
	MSWU	Update Unit Warranty Data	?		X										X
Vendor Information - Display	MSVS	Search and Display Vendors			X			X							X
	MSWD	Display Warranty Data	X	X	X				X						
Vendor Information - Reports	MSVL	Vendor Report			X					X			X		
	MSML	Minority Vendor Report	X	X	X										X
	MS2360VP	Vendor Performance Analysis	X	X											
	MS2360VP	Vendor Performance Analysis	X	X	X										X
		*Numerous Batch Reports Printed Automatically or on Request	X	X	X										X
															X
terial Currency - Display	MSDC	Display Currency													X
terial Currency - Update	TABLE 32	Currency Conversion Table		X											
counting Interface - Update	MSACCU	Update CCN Accounting Data	..	X											X
	MSIV	Process Invoice		X											
ounting Interface - Reports	MS2226MA	Monthly Accounting Activity			?										
				X											

I. AIRC. MAINTENANCE

MM Function	MM Trans.	MM Capabilities	PUR	A/P	RO	REC	M AT IC	M AT QC	A/C MNT LM	A/C MNT MC	HVY MNT PC	HVY MNT VEN	REL	G
		*Numerous Batch Reports Printed Automatically or on Request												
Invoice Control - Update	MSIV	Process Invoice												
Part Basic Data - Update	MSSU	Add/Update/Delete Stock Item					X							
Part Basic Data - Display	MSSD	Stock Item Data Display					X	X						
	MSMS	Partial Part Number Search												X
	MSCRS	Cross Reference by Company Part Number and Location	X		X		X	X	X		X	X	X	X
			X		X		X	X	X		X	X	X	X
	MSCRM	Cross Reference by Manufacturer Part Number					X	X	X		X	X	X	X
	MSNS	Part Search by Noun, or Class	X		X									
	CCFSN	Display All Serial Numbers for a Part Number	X		X		X	X	X		X	X	X	X
	CCDPS	Display Part Status (Including Aircraft Effectivity)	X		X		X	X	X		X	X	X	X
	CCDUS	Display Unit Status	X		X		X	X	X		X	X	X	X
Part Basic Data - Reports	MSPNC	MPN Cross Reference Report			X		X	X	X		X	X	X	X
	MSCCC	Cross Reference Report by CCN (back-up)			X		X				X	X	X	X
Unit Data - Update	MSAQ	Update Unit Acquisition Data			X		X		X		X		X	X
	MSCV	Change Book Value									X	X	X	X
	MSWU	Update Unit Warranty Data					X	X						
Unit Data - Display	MSWD	Display Warranty Data						X						
	CCDUS	Display Unit Status			X									
	CCRIH	Display Unit Installation, Removal and Repair History			X			X	X					
					X		X	X	X			X	X	X
	CCMDM	Modification Data & Aircraft/Unit Status			X		X	X	X			X	X	X
	CCMDA	Display Open Modifications for Assembly										X	X	X
	CCDMS	Display Modification(s) Status			X		X	X	X					
Unit Data - Reports					X				X		X	X	X	X
	MS2651SL	Shelf Life Expiration by RCN					X	X	X		X	X	X	X
	MS2652SL	Shelf Life Expiration by Bin									X	X	X	X
Part Activity - Update	MSHU	Update CCN Usage & Recompute RP/EOQ					X	X	X					
Part Activity - Reports							X	X	X			X	X	X
	MSASI	Active Stock Item Report										X	X	X
	MS2224MD	Monthly Location Usage											?	
	MS2959NS	Daily Not In Stock				X		X			X			X
						X		X			X			X
														X

I. AIRCRAFT MAINTENANCE

MM Function	MM Trans.	MM Capabilities	PUR	A/P	RO	REC	M AT IC	M AT QC	A/C MNT LM	A/C MNT MC	HVY MNT PC	HVY MNT VEN	REL	Q
		*Numerous Batch Reports Printed Automatically or on Request					X	X						X
Purchasing - Update	MSSU	Add/Update/Delete Stock Item	X				X							
	MSUP	Update Stock Item Purchase Data	X											X
	MSPU	Add/Update/Delete Purchase/Repair Order	X		X						X			X
Purchasing - Display	MSSD	Stock Item Data Display	X				X	X	X		X	X		X
	MSOD	Display Order	X		X		X	X	X		X	X		X
	MSPD	Display Purchase Orders by CCN	X		X		X	X	X		X	X		X
	MSRD	Display Received Purchase Orders	X		X		X	X	X		X	X		X
Purchasing - Reports	MSHP	Print Purchase Order	X								X		X	X
	MS2803SR	Stock Action Report	X				X						X	X
	MS2520AQ	EOQ Calculation	X				X						X	X
	MS2201PF	TA Procurment Update	X										?	X
		*Numerous Batch Reports Automatically or on Request											X	X
Vendor Repair Processing - Update	MSSU	Add/Update/ Stock Item	X		X		X							
	MSVC	Update & Certify a Vendor	X		X									X
	MSUP	Update Stock Purchase/Repair Data	X		X									X
	MSPU	Add/Update/Purchase/Repair Order	X		X									X
	MSWU	Update Unit Warranty Data	X		X			X						
Vendor Repair Processing - Display	MSSD	Stock Item Data Display	X		X		X	X	X		X	X	X	X
	MSOD	Display Order	X		X		X	X	X		X	X	X	X
	MSPD	Display Purchase/Repair Orders by CCN	X		X		X	X	X		X	X	X	X
	MSRD	Display Purchase/Repair Orders	X		X		X	X	X		X	X	X	X
	MSWD	Display Warranty Data	X		X			X	X		X	X	X	X
	CCRIH	Display Unit Installation, Removal and Repair History			X		X	X	X		X	X	X	X
	CCMDM	Modification Data & Aircraft/Unit Status			X		X	X	X		X	X	X	X
	CCMDA	Display Open Modifications for Assembly			X		X	X	X		X		X	X
	CCDMS	Display Modification(s) Status			X		X	X	X		X	X	X	X
	CCMDU	Modification Status for Aircraft/Unit			X		X	X	X		X	X	X	X
Vendor Repair Processing - Reports	PTRAR	Print Repair Action Report (Duplicate)			X						X		X	X
	MSHP	Print Purchase/Repair Order (Duplicate)			X						X		X	X
	PTVND	Units Sent to Repair Vendor	X		X									

Maxi-M Functionality Checklist

I. AIRCRAFT MAINTENANCE

MM Function	MM Trans.	MM Capabilities	PUR	A/P	RO	REC	M AT IC	M AT QC	A/C MNT LM	A/C MNT MC	IIVY MNT PC	IIVY MNT VEN	REL	
Part Allocation Control - Update	MSAJ	Adjust/Update Location Balance on Hand					X							
	MSAU	Update Location Allocation					X							
Part Allocation Control - Display	MSAD	Display Location Allocation			X		X	X	X		X	X		
	MSDAR	Rotable Distribution Analysis			X		X		X		X	X		
Part Allocation Control - Reports	MSAR	Station Allocation Report			X		X		X				X	
Inventory Analysis - Display	MSDAR	Rotable Distribution Analysis			X		X		X					
	MSDT	Display Tag Movement Status			X		X		X			X		
Inventory Analysis - Reports	MSSAD	Rotable Spares Analysis & Distribution			X		X		X				X	X
	MSIA	Request Inventory Analysis Report - includes					X		X				X	X
	MS2581IA	Inventory Standard Report					X						X	X
	MS2582IA	Inventory Service Report					X						X	X
	MS2583IA	Inventory Balance & Coverage Report					X						X	X
	MS2121DA	Rotable Ownership Variance					X						X	X
	MS2122DA	Daily Rotable Variance					X						X	X
	MS2126DA	Rotable Out of Balance					X						X	X
	MS2959NS	Daily Not in Stock					X						X	X
	MS2803SR	Stock Action Report					X						X	X
	MS2748AA	BC Analysis by Station					X						X	X
	MS2520AQ	EOQ Calculation					X						X	X
		*Numerous Batch Reports Printed Automatically or on Request					X						X	X
Stocking Control - Update	MSCU	Update Stores Stock Item Comments											X	X
	MSLM	Add/Delete Stores Location FAIBASH by MPN					X		X					
	MSLU	Add/Delete Stores FAIBASH by CCN					X		X		X			
Stocking Control - Display	MSDB	Display Bulk Bins					X		X		X			
											X			
Stocking Control - Reports	MSLI	Print Parts Labels					X	X	X					
	MSBB	Bulk Bin Report									X			X
	MSBL	Request Bin Labels					X		X					
	MS2652SL	Shelf Life Expiration by Bin					X		X		X			X
							X		X		X			X
Shipping - Update	MSAS	Adjust/Update Quantity							X		X			X
	MSCSD	Change Shipping Details									X	X		X
	MSSH	Update Shipping Details Multiple Update					X	X	X					
	MSUSD	Update Shipping Details - Single Update					X	X	X		X			
							X	X	X		X			
											X			

I. AIRCRAFT MAINTENANCE

MM Function	MM Trans.	MM Capabilities	PUR	A/P	RO	REC	M AT IC	M AT QC	A/C MNT LM	A/C MNT MC	HVY MNT PC	HVY MNT VEN	REL	QC
Shipping - Display	MSDT	Display Tag Movement Status												
	CCFSN	Display All Serial for a Part Number					X		X			X		X
Parts Issuing - Update	MSMI	Multiple Issue Requests					X		X			X	X	X
	MSRQ	Single Issue/Transfer Request												
	MSHI	Confirm/Update Issue					X	X	X		X	X		
	MSIS	Complete/Update Issue/Credit/Transfer Document					X	X	X		X	X		
	MSIU	Issue/Credit/Transfer Document Approval					X	X	X			X		
Parts Issuing - Display	MSWO	Display Issues by Workorder					X		X			X		
	MSID	Issue/Transfer Display			X	X	X	X	X		X	X	X	X
Parts Transfer - Update	MSMI	Multiple Issue Requests			X	X	X	X	X		X	X	X	X
	MSRQ	Single Issue/Transfer Request												
	MSHI	Confirm/Update Issue					X	X	X			X		
	MSIS	Complete/Update Issue/Credit/Transfer Document					X	X	X			X		
	MSIU	Issue/Credit/Transfer Document Approval					X	X	X			X		
Parts Transfer - Display	MSTD	Display Transfer Data					X	X	X			X		
	MSID	Issue/Transfer Display			X									
	MSWO	Display Issues by Workorder			X		X	X	X		X	X	X	X
	CCFSN	Display All Serial Numbers for a Part Number			X		X	X	X		X	X	X	X
Parts Transfer - Reports	MSTT	Request Intransit Times Report			X		X	X	X		X	X	X	X
Warranty Control - Update	MSWU	Update Unit Warranty Data									X	X	X	X
	MSPU	Add/Update/Delete Purchase/Repair Order			X		X							X
Warranty Control - Display	MSWD	Display Warranty Data			X			X						
Customs Control - Update	MSCI	Receive/Update Order Through Customs			X									
	MSIP	Inspect/Update Unit					X						X	X
Inspection - Update	MSIP	Inspect/Update Unit												
	PTMP-F	Make Unit Serviceable & Assign New Tag					X	X						
Inspection - Display	MSRD	Display Received Purchase Orders					X	X			X	X	X	
					X	X	X	X		X	X			X

I. AIRC... MAINTENANCE

MM Function	MM Trans.	MM Capabilities	PUR	A/P	RO	REC	M AT		A/C MNT		HVY MNT		REL	Q
							IC	QC	LM	MC	PC	VEN		
Part Receiving - Update	MSRU	Add/Update/Delete Receiving				X	X	X				X		X
Part Receiving - Display	MSRD	Display Received Purchase Orders			X	X	X	X	X		X	X		X
Backorder & Reservation Processing - Update	MSBU	Update Backorder			X		X							X
	MSRS	Add/Update/Delete Reservation			X		X				X			
	WCRES	Create Unconfirmed Reservation for Work Package			X		X				X			
Backorder & Reservation Processing - Display	MSBD	Display Backorders and Reservations			X		X	X	X		X	X		X
	MSDR	Display Aircraft or Location Reservation			X		X	X	X		X	X		X
	MSDSR	Display Single Reservation			X		X	X	X		X	X		X
	MSRES	Display Reservation			X		X	X	X		X	X		X
Unit Disposal - Update	MSDU	Unit Disposal Menu			X		X	X					X	X
	MSCV	Change Book Values			X	X	X	X					X	X
Unit Disposal - Display	MSDD	Display Disposal			X	X	X	X					X	X
	CCFEX	Display Exchanged Units by RCN			X	X	X	X					X	X
	CCRIHX	Display Exchanged Unit Removal/Installation History			X	X	X	X					X	X
	CCDUS	Display Unit Status			X	X	X	X					X	X
	CCFSN	Display All Serial Numbers for a Part Number			X	X	X	X					X	X
Material Planning - Update	MSPR	Planner Release/Update Stock Action Report				X								
	MSBR	Buyer Release/Update Stock Action Report				X								
	PTPR	Planner Release/Update Tag Repair Action Report				X								
	PTBR	Buyer Release Tag Repair Action Report				X								
Material Planning - Reports	MSSA	Request Stock Action Report				X								
	MSSAD	Rotable Spares Analysis & Distribution				X								
		*Numerous Batch Reports Printed Automatically or on Request				X								
Shared Business (Borrows/Loans/Customer Work) - Update	MSSB	Add/Update/Delete Shared Business Unit	X		X							X	X	
Shared Business (Borrows/loans/Customer Work) - Display	CCFEX	Display Exchanged Units by RCN	X		X	X	X			X		X	X	

1. A' T MAINTENANCE

MM Function	MM Trans.	MM Capabilities	PUR	A/P	RO	REC	M AT IC	M AT QC	A/C MNT LM	A/C MNT MC	HVY MNT PC	HVY MNT VEN	REL	
	CCRIHX	Display Exchanged Unit Removal/Installation History	X		X		X	X			X		X	
	CCDUS	Display Unit Status												
	CCFSN	Display All Serial Numbers for a Part Number	X		X		X	X			X		X	
	MSPD	Display Purchase Orders by CCN	X		X		X	X			X		X	
	MSDAR	Rotable Distribution Analysis	X		X		X	X			X		X	
	CCRIH	Display Unit Installation, Removal and Repair History			X		X				X		X	
	PTICI	Locate Tag			X	X							X	
SPEC 2000													X	
	GPSPO	Outbound Messages					X	X						
	GPSPI	Inbound Messages	?X		X									X
Vendor Performace Analysis - Reports			X		X								X	X
	MS2305OB	Overdue Purchase Order Report											X	X
	MS2360VP	Vendor Performance Analysis Report	X											
	PTMP-R	Create Repair Action Report	X		X								X	X
					X								X	X
													X	X
Automatic Component Routing - Update	PTRA	Repair Location Station Responsibility			X						X			X

6. SHOP PLANNING

Automatic Component Routing - Update	PTRA	Repair Location Station Responsibility			X									
	PTUR	Add/Update/Delete Repair Locations			X									
	PTMP-F	Make Unit Serviceable & Assign New Tag										X	X	X
Assembly Teardown/Build - Update												X	X	X
	PTMP-A	Detach & Assign Unserviceable Tag to Assembly Component					X					X	X	X
	PTMP-B	Attach/Update Component to Assembly					X					X	X	X
Assembly Teardown/Build - Display														
	CCFSN	Display All Serial Numbers					X					X	X	X
	CCABM	Display Unit Assembly Bill of Material										X	X	X
Part Movement Within Shops - Update						X	X	X		X	X	X	X	X
	PTMP-I	Induct Tag Into Shop				X	X	X		X	X	X	X	X
	PTMP-U	Update Tag - Shop Status												
	PTMP-C	Change Multiple Tags										X		
Part Movement Within Shops - Display												X		
	PTMP-H	Display Tag - Shop History										X		
	PTMP-L	Display Inducted Tags				X	X							
	CCFSN	Display All Serial Numbers				X	X					X		
						X	X					X		

Maxi-M· Functionality Checklist

I. AIRCRAFT MAINTENANCE

MM Function	MM Trans.	MM Capabilities	PUR	A/P	RO	REC	M AT IC	M AT QC	A/C MNT LM	A/C MNT MC	HVY MNT PC	HVY MNT VEN	REL	Q
	MSDT	Display Tag Movement Status												
Shop Production Requirements - Update	PTTMS	Update Module Master Schedule					X	X						
	PTMP-U	Update Tag - Shop Status										X		
Shop Production Requirements - Reports	PTMMR	Print Module Master										X		
	PT2200RP	Repair Planning Report Requirements										X		
	PT2130DR	Modular Requirements												
	PT2135GR	Gross Requirements										X		
	PT2145NR	Daily Net Requirement										X		
	PT2150RS	Four Week Requirement Summary										X		
	PT210QUE	Standard Que Time										X		
	PT2120IB	Bill of Material										X		
	PT2180AD	Assign Tag Due Date										X		
	PT2185DD	Daily Dispatch by Due Date										X		
	PT2190EX	Daily Expedite									X	X		
	PT2195ND	Tags Requiring Due Date										X		
Shop Activity - Update												X		
	PTMP-S	Split & Assign Tags (T/L 1)										X		
	PTMP-M	Merge Multiple Tags to 1 Tag (T/L 1)										X		
	PTMP-T	Assign Tag(s) (T/L 1)										X		
Shop Activity - Display												X		
	PTDH	Display Shop History Records										X		
	PTDT	Display Tag Numbers										X		
Shop Activity - Reports												X		
	PTAPL	Active Parts List by RCN										X		
	PTAPS	Active Parts List by Shop												
	PTCRL	Current Repaired/Scrapped Units by RCN								X	X			
	PTCRS	Current Repaired/Scrapped Units by Shop								X	X			
	PTCRS	Current Repaired/Scrapped Units by Shop									X			
	PTRPM	Repaired/Scrapped Tag History by RCN									X			
	PTRPS	Repaired/Scrapped Tag History by Shop									X			
	PTRPH	Repaired/Scrapped Tag History									X			
ol and Test Equipment Control - Update											X			
	MSSU	Add/Update/Delete Stock Item									X			
	CCUPS	Update Part Number Status									X			
	CCUCS	Add/Update/Delete Unit Exception Specs												
l and Test Equipment Control - Display											X	X	X	
	CCFSN	Display All Serial Numbers									X	X	X	
	CCDUS	Display Unit Status									X	X	X	
								X			X	X	X	
								X			X	X	X	

I. AIRCRAFT MAINTENANCE

MM Function	MM Trans.	MM Capabilities	PUR	A/P	RO	REC	M AT IC	M AT QC	A/C MNT LM	A/C MNT MC	HVY MNT PC	HVY MNT VEN	REL	C
Tool and Test Equipment Control - Reports	PTTEL	Test Equipment Repoit												
	PTTER	Test Equipment Recal Report												
	MSAR	Request Station Allocation Report										X	X	X
Standard Routing - Update	PTUSR	Update Standard Repair Shop Routing										X	X	X
	PTUAR	Update Actual Repair Shop Routing			X							X	X	X
Standard Routing - Display	PTASR	Display Available Standard Roulings			X							X		
	PTDSR	Display Standard Repair Shop Routing										X		
	PTDAR	Display Actual Repair Shop Routing										X		
	PTDII	Display Componont History Through Shop			X							X		

I. WORK CARDS AND PRODUCTION CONTROL

Work Card Graphics - Display	WCDISI	Work Card Display - Single Card				X			X		X	X	X	X
	WCIMG	Display/Print Available Images				X			X			X	X	X
	WCPRINT	Print Menu for Work Card Graphics and Text							X			X	X	X
Work Card Creation - Update	WCUMR	Create Work Card Master											X	X
	WCFMZ	Add/Update Fleet, Model, Zone Relationship											X	X
	WCFMP	Add/Update Fleet, Model, Panel Relationship											X	X
	WCUSA	Aircraft/Interval Relationship											X	X
	WCTEXT	Update Work Card Text											X	X
	WCUFG	Update Figure List of Work Card											X	X
	WCUML	Update Material List of Work Card											X	X
	WCURF	Update Reference List of Work Card											X	X
	WCUSK	Update Manhours and Skills of Work Card											X	X
	WCUTL	Update Tool List of WorkCard											X	X
	WCERT	Work Card Certification for Promotion											X	X
Work Card Creation - Display	WCCI	Display Card Index by Type or Keyword											X	X
	WCDIS	Display Work Card											X	X
	WCDMR	Display Work Card Master				X					X	X	X	X
	WCDP	Display Work Card (Production)				X					X		X	X
Index Maintenance - Update	WCUIC	Work Deck Master Index				X					X		X	X
	WCUSA	Aircraft/Interval Relationship									X		X	X
Index Maintenance - Display	WCDIC	Display Work Card Index									X		X	X
	WCDAI	Display Active Job Packages				X	X	X		X	X	X	X	X

I. AIRCRAFT MAINTENANCE

MM Function	MM Trans.	MM Capabilities	PUR	A/P	RO	REC	M AT IC	M AT QC	A/C MNT LM	A/C MNT MC	HVY MNT PC	HVY MNT VEN	REL	C
Work Package Creation - Update	WCSKD	Update Work Card Schedule												
	WCUES	Update Event Status												
	WCCWA	Create Work Package									X			
	WCMA	Assign Modifications to Work Package									X			
	WCUCS	Update Work Package									X			
	WCWAD	Delete Work Package									X			
	WCRS	Update Station/W/O Reservations									X			
Work Package Creation - Display	WCSSK	Single Skill Occurrence in a Work Package									X			
	WCDSK	Display Package Schedule									X			
	WCAREA	Display Work Cards for a Fleet by Area/ATA					X		X		X	X	X	X
	WCDPS	Display Active Job Packages							X		X	X	X	X
	WCPROOF	Package/Card Verification					X		X		X	X	X	X
	WCFFE	Display Fleet, Effectivity & Zones							X		X	X	X	X
	WCFIG	Summary of Work Card Figure References					X	X	X		X	X	X	X
	WCMAT	Summary of Material Referenced for a Workorder					X		X		X	X	X	X
	WCREF	Summary of Work Card References							X		X	X	X	X
	WCSKL	Summary of Work Cards with Skills									X	X	X	X
	WCTOL	Summary of Tools Referenced for a Work Order							X		X	X	X	X
Work package Creation - Reports	WCPOC	Print Single Work Card for a Workorder							X		X	X	X	X
	WCACC	Accountability Work Sheets for a Check							X		X	X	X	X
	WCACP	Print Check Worksheets												
	WCPGL	Print Group List/Work Sheets for a Check							X		X	X	X	X
	WCACL	Print Worksheets for a Check							X		X	X	X	X
	WCBOM	Print Package Bill of Material							X		X	X	X	X
	WCPEC	Print Check Package in Number Sequence							X		X	X	X	X
	WCRES	Create Unconfirmed Reservation for a Work Package							X		X	X	X	X
									X		X	X	X	X
Work Order Control - Update	PCU	Create Work Order							X		X	X	X	X
	PCDEL	Delete Work Order												
Work Order Control - Display	PCDIS	Display Work Orders									X			
Production Control - Update											X			
	PCJC	Update Work Card Times			X	X		X						
	PCUS	Change Package Task Status									X	X	X	X
Production Control - Display														
	PCJCDIS	Display Times Entered for a Work Order									X			
					X									
											X			
												X	X	

Maxi-M Functionality Checklist

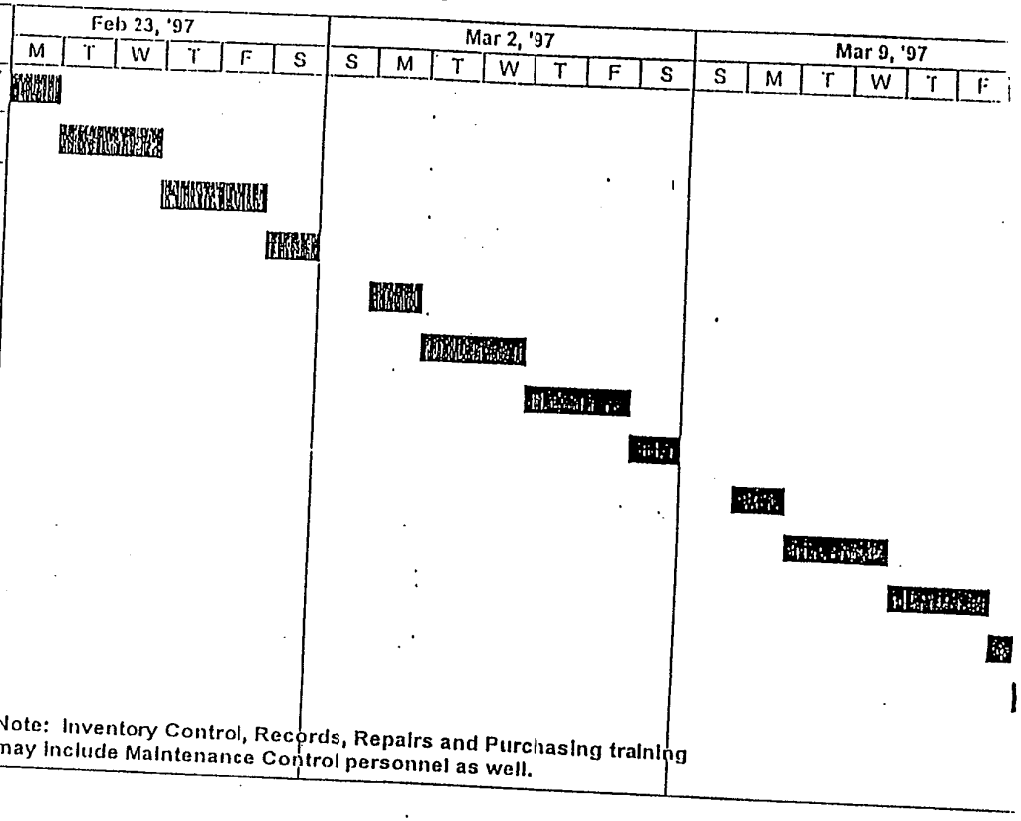
I. AIRCRAFT MAINTENANCE

MM Function	MM Trans.	MM Capabilities	PUR	A/P	RO	REC	M AT IC	M AT QC	A/C MNT LM	A/C MNT MC	HVY MNT PC	HVY MNT VEN	REL	Q
Production Control - Reports	PCCARD	Job Cards for a Work Order												
	PC-TOT	Total Time Costs - All Work Orders												
	PC-DET	Labor for a Work Order									X		X	X
	PCDEF	Defect Work Cards by Area									X		X	X
	PCREP	Material and Labor by Period									X		X	X
	PC-SEP	Labor Costs for Specific Work Order - Routine and Non-Routine									X		X	X
	PCMS	Material by Check for All Fleets									X		X	X
	PCSAC	Scheduled vs Actual Manhours									X		X	X
	PCSORT	Routine and Non-Routine by Skill									X		X	X
	PCTOTRQ	Total Costs for a Work Order									X		X	X
											X		X	X

Appendix B: Draft Training Schedule

Draft Maxi-M Schedule for Initial Training

ID	Task Name	Duration	Start	Finish
1	Inventory Control Training #1	1d	Mon 2/24/97	Mon 2/24/97
2	Line Maintenance Class #1	2d	Tue 2/25/97	Wed 2/26/97
3	Line Maintenance Class #2	2d	Thu 2/27/97	Fri 2/28/97
4	Records Training	1d	Sat 3/1/97	Sat 3/1/97
5	Inventory Control Training #2	1d	Mon 3/3/97	Mon 3/3/97
6	Line Maintenance Class #3	2d	Tue 3/4/97	Wed 3/5/97
7	Line Maintenance Class #4	2d	Thu 3/6/97	Fri 3/7/97
8	Repair Training	1d	Sat 3/8/97	Sat 3/8/97
9	Inventory Control Training #3	1d	Mon 3/10/97	Mon 3/10/97
10	Line Maintenance Class #5	2d	Tue 3/11/97	Wed 3/12/97
11	Line Maintenance Class #6	2d	Thu 3/13/97	Fri 3/14/97
12	Purchasing Training	0.5d	Sat 3/15/97	Sat 3/15/97
13	Maintenance Control Training	0.5d	Sat 3/15/97	Sat 3/15/97



Note: Inventory Control, Records, Repairs and Purchasing training may include Maintenance Control personnel as well.

Project: TRAINING
Date: Mon 1/20/97

Task
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Rolled Up Progress

Appendix C: Sample Training Materials Section

Note: The Sample Training Material is not "clean". Please review as to form and content.

Receiving from a Vendor Process Flow Description

A. Actions to be performed for the functional process:

1) Stores Clerk or Mechanic receives material to Hanger "A" via one of a various types of shipping methods.

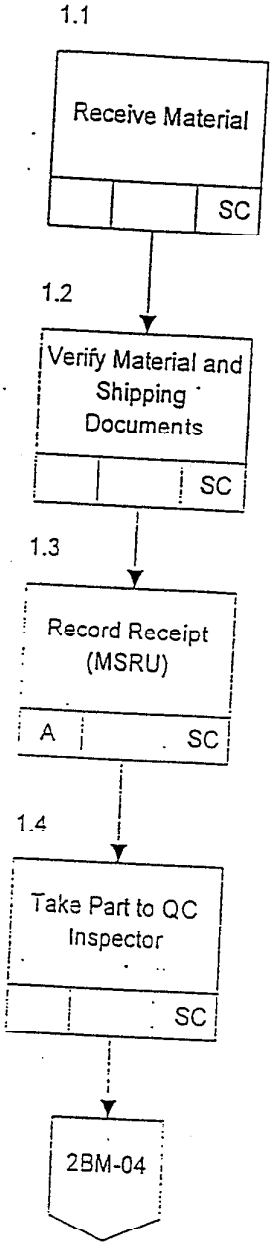
2) Receiver must verify that the quantity received and manufacturer part number is correct. Ensure the material and paperwork are correct.

3) The Receiver can now record the part to the station using an MSRU (Receiving Update) transaction. This will require the Purchase Order number, Part Number, Serial Number, and the Quantity.

4) The Receiver takes the part with the Certification documents to Quality Control (QC) Inspection.

This process is complete, and the material is ready to be inspected by QC.

2BM-03 Receiving from a Vendor

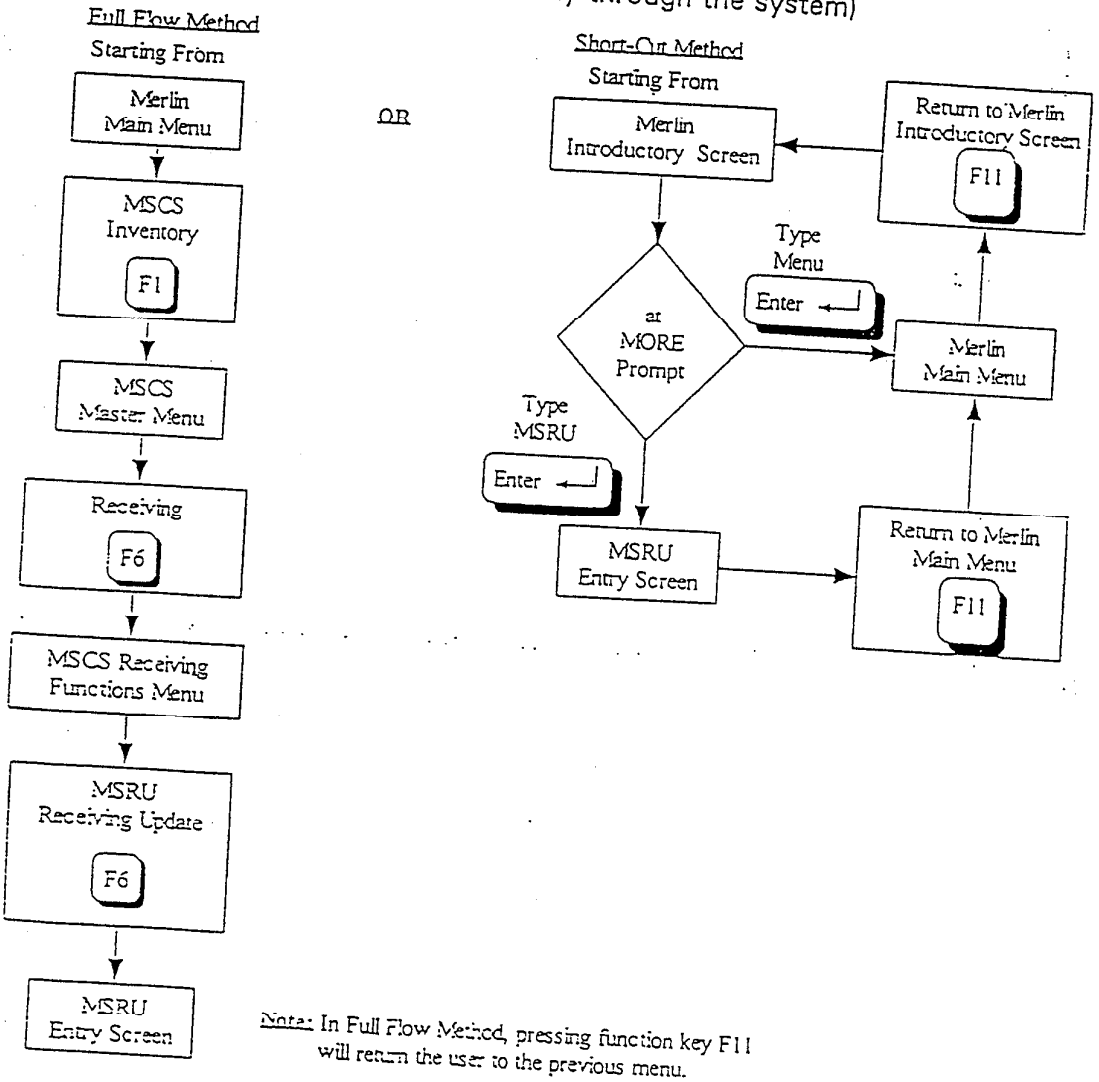


TRANSACTION: MSRU

Material Service Receiving Update

Purpose: This transaction allows the user to receive material against a Purchase Order, Repair Order, or a Transfer from another location. This transaction presents the user with five options; Adding (A), Changing (C), Deleting (D), or Rejecting (R), a receipt, or forwarding to the Next (N) page of the transaction, if there is any.

How to get there: (Navigating your way through the system)



Note: In Full Flow Method, pressing function key F11 will return the user to the previous menu.

MSRU

The RECEIVING UPDATE transaction processes the receipt and either updates the balance on hand at the location or places the material in an awaiting inspection state.

MSRU compares material received with the following:

- Outstanding Purchase Orders
- Outstanding Repair Orders
- Transfers from other locations

This transaction is also involved with activities relating to Shared Business Agreement functions of lending or borrowing materials.

You are now ready to enter data into the MSRU Entry Screen.

MSRU ENTRY SCREEN

```
                ** MSRU: RECEIVING UPDATE **

EMPLOYEE NUMBER..: 45672

PURCHASE ORDER.   : 8340001016_
TRANSFER.....     ..: _____
TAG NUMBER.....   ..: _____

LOCATION.....     ...: DAY STRE

<PF11/23> MERLIN
```

Insert the following information to continue the transaction. (Refer to the list of field names below as they appear in the screen above.)

FIELD NAME	FIELD DESCRIPTION
EMPLOYEE NUMBER	User Employee ID Number
PURCHASE ORDER	Purchase Order or Repair Order Number of Material to Receive
TRANSFER	ICT Number of Material to Receive
TAG NUMBER	Tag Number of Material to Receive
LOCATION	Receiving Location

When you have completed the above field entries, press the <ENTER> key. You will then observe the MSRU Receiving Update screen.

MSRU RECEIVING UPDATE SCREEN

```
P/O-NUMBER  CLS-CNTL  F-S-C  MFG-PART-NUMBER          NOUN      UP  CON-FAC  PO-DATE
  8340001016  8340001  77445  159751-5343-274A        OMEGA     EA        1  12DEC96

LOCATION  TYPE  W/O-NUM  DTE-REQ  QTY-ORD  QTY-DUE  LTM  RC  T  CUR  NET PRICE  INSP
DAY STRE  P/             20DEC96        1        0    8  88  3  USD    800.000  YES

TAG NUMBER  SERIAL  MFG SERIAL  QTY-ISP  QTY-CST  QTY-SHP
                                      1

LN  --RECEIVED--  QUANTITY  BY-EMP  STAT  OTHER MPN          OTHER MSN  LOCATION
1   19DEC96 1411         1   45672  INSPEC                              8340001
                                                                        A130103
--END OF DATA--                                                         Y070923

---------- P/O IS OPEN ----------
ACTION  LINE  QUANTITY  OTHER MPN  OTHER MSN
  _      __    _____              _____

<PF1/PF13>  MSRU MENU  <PF11/PF23> MSCS  MENU
```

The following information appears on the transaction screen. (Refer to the list of field names below as they appear in the receiving update screen.)

FIELD NAME	FIELD DESCRIPTION
P/O-NUMBER	Purchase Order or Repair Order Number to Receive
CLS-CNTL	Company Part Number to Receive
F-S-C	FSC/Cage Code for Vendor
MFG-PART-NUMBER	Manufacturer Part Number of Part Purchased/Repaired
NOUN	One Word Description of Part
UP	Unit of Purchase
CON-FAC	Conversion Factor
PO-DATE	Date Purchase Order Created
LOCATION	Receiving Location
TYPE	Type of Purchase Order - Repair, Purchase, Shared Business
W/O-NUMBER	Work Order Number
DTE-REQ	Date Material Required
QTY-ORD	Quantity Ordered
QTY-DUE	Quantity Not Yet Received
LTM	Manufacturer Lead Time
RC	Recoverability Code
T	Tracking Level
CUR	Currency Used to Price Material
NET PRICE	Cost to Purchase Material

FIELD NAME	FIELD DESCRIPTION
INSP	Inspection Required (yes or no)
TAG NUMBER	Part Tag Number
SERIAL	Company Serial Number
MFG SERIAL	Manufacturer Serial Number
QTY-INSP	Quantity of P.O. in Inspection
QTY-CST	Quantity of P.O. in Customs
QTY-SHP	Quantity of P.O. in Shipping
LN	Line Number
RECEIVED	Date & Time Received
QUANTITY	Quantity Received
BY-EMP	Employee Number of Receiver
STAT	Status of Part - Inspec, RCVD, Delete
OTHER MPN	Manufacturer Serial Number of Part; if Different From P.O. or R.O
LOCATION	FAIBASH (Facility, Aisle, Bay, Shelf) stocking location of part

Notice that immediately below the END OF DATA field, there appears a heavier line across the screen. Data to be inserted below that line concerns the actual operation you wish to generate by this transaction.

Five functions may be accomplished on the MSRU Receiving Update screen:

- A = Add a receipt
- C = Change an existing receipt
- D = Delete an existing receipt.
- R = Reject the materials.
- N = Move to next page (if applicable)

NOTE	If an item is rejected, you must state the reason for the rejection.

Insert the following information to continue the transaction. (Refer to the list of field names below as they appear at the bottom of the receiving update screen.) Consider the needs of the operation as to whether the transaction will be used to Add, Change, Delete, or Reject the received materials.

FIELD NAME	FIELD DESCRIPTION
ACTION	Action to Take For This Part - Adding (A), Changing (C), Deleting (D), Rejecting (R), or Next Page (N)

FIELD NAME	FIELD DESCRIPTION
LINE	Line Number of Item to Change (C) or Delete (D)
QUANTITY	Quantity Received
OTHER MPN	Manufacturer Part Number (optional); if different from R.O. or P.O.
OTHER MSN	Manufacturer Serial Number (optional; if different from R.O. or P.O.

EXAMPLES

A. To Add, insert A into the ACTION field and the quantity received in the QUANTITY field. If the manufacturer's part number or serial number is different, enter the appropriate correct information, and press the <Enter> key.

B. To Change, insert C under ACTION and the applicable line number, then press the <Enter> key.

C. To Delete or Reject, insert D or R (as applicable) under ACTION and the applicable line number, then press the <Enter> key.

D. To attain more information pertaining to the MSRU Receiving Update screen, in particular the materials received, insert N (if applicable) under ACTION, then press the <Enter> key.

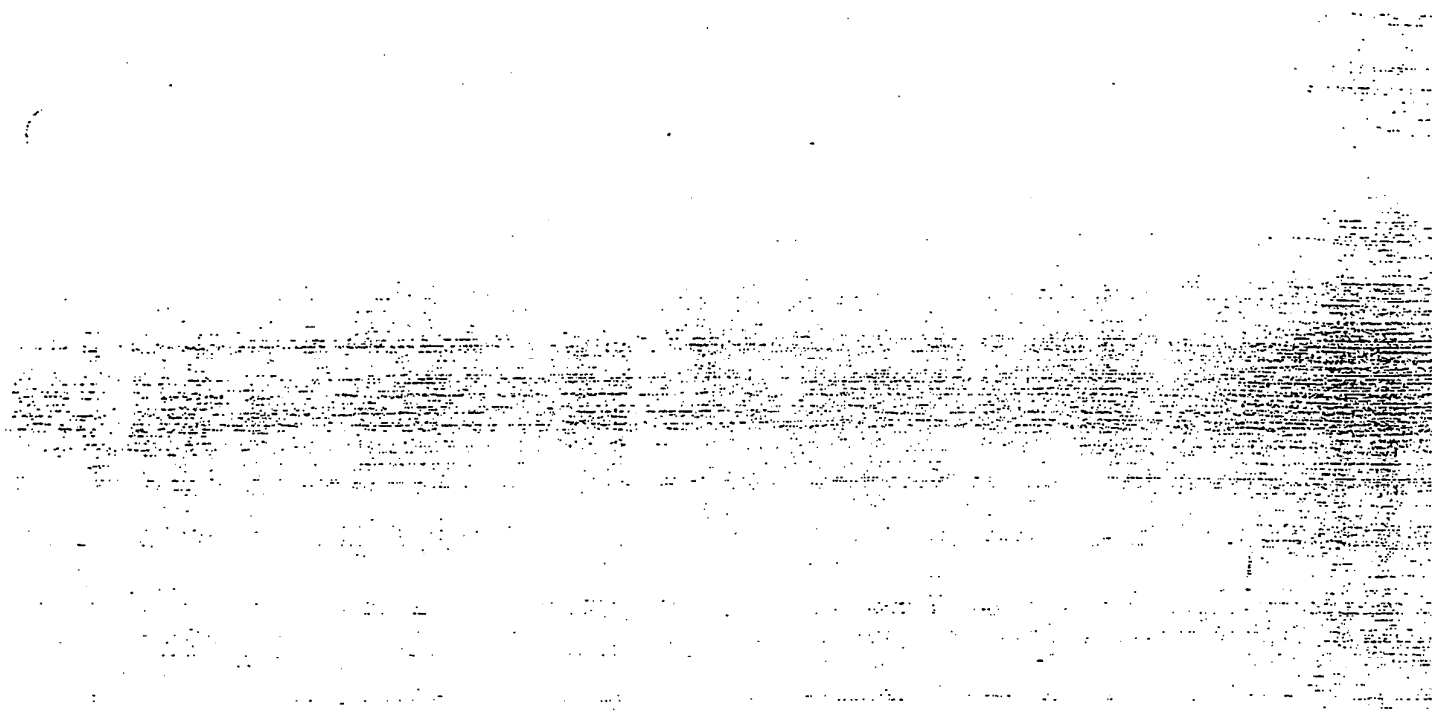
MSRU Receiving Update Transaction Exercise

What you do	Comments/Prompts
1. Enter MSRU at the More prompt and press Enter.	The Receiving Update screen appears.
2. Enter the Purchase Order Number, Transfer Number, or the Tag Number.	
3. If the location is different from your current location, enter the correct location.	No need to enter anything here if the location is correct.
4. Press Enter.	The Purchase Order screen appears.
5. In the Action field enter A (add), C (change), D (delete), or N (next page).	
6. If you are changing (C) or deleting (D) a line, enter the line number.	Leave this space blank if this is a new receipt.
7. Enter the quantity received.	If this is a TL 2 or 3 part, you can only enter a 1.
8. If the Manufacturer Part Number or Serial Number is different from the one listed on the P.O. enter the correct number in this space.	Leave this space blank if the MPN and MSN are the same as listed on the Purchase Order.
9. Press Enter to complete this transaction.	The Date, time, quantity, employee #, INSPEC appear in the status line above.
10. Continue the same process until you receive all the material.	
11. When you are finished receiving this P.O., press F1 to receive another P.O. or F11 to exit.	

RECEIVING, INSPECTING, STOCKING Process Training Exercise

Take the Purchase Order assigned to you and perform the following functions:

1. Receive 4 of the 5 items as the part number listed on the P.O..
2. Receive the last item as the alternate MPN XXXXXXX-2.
3. Change line three to show that it is a XXXXXXX-2 also.
4. Inspect the 1st part, it has no serial number, (have Merlin assign it a serial number), pass it as serviceable, and list it as a new part.
5. Inspect the 2nd part, it has the serial number 000343, pass it serviceable, enter its serial number 000343 (in both locations), this is a used part. Enter any hour, cycle, or days data you may know.
6. Inspect the 3rd part, it has the serial number 000445, fail this part and enter the reason for failure.
7. Look to see if this part has a stocking location, if it doesn't add the location A 12 11 06.



EMERY WORLDWIDE AIRLINES

A CF Company

December 12, 1996

Mr. John Howard
FSDO-SJC
1250 Aviation Ave.
Suite 295
San Jose, CA 95110

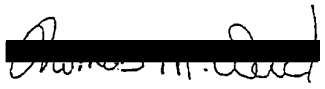
Dear Mr. Howard:

During your visit the week of December 9, 1996 accompanied by the new assistant Principal Maintenance Inspector and the new Principal Avionics Inspector, you received a brief indoctrination/introduction of the Maxi-Merlin System from a USAir Instructor, who was providing training that week to EWA.

To continue to keep you and your office informed of this process, I'm sending you a copy of a memo that presents the development and staff qualification of the newly developed Systems and Controls Section of EWA.

I'm sure you will agree this professional approach is commendable, and will provide professional results.

Sincerely,



Thomas M. Wood
Director of Quality Control

attachments

aee

303 CORPORATE CENTER DRIVE, VANDALIA, OH 45377

SETTING THE STANDARD 50 YEARS

TO: EWA Management and Employees

FROM: Jeff McGlaun, Senior Project Manager, Systems & Controls JM

RE: New Employees/Organization Announcement

DATE: 25 November 1996

As you all are greatly aware, the nature of our business is ever-changing, and the need to apply dedicated resources to enable these changes is crucial. In May of this year, John Colletti established within the Finance and Administration division a new "project-oriented" organization known as Systems & Controls. This organization was established to create, improve, and support our various airline business functions through development and implementation of computer and non-computer related projects and to maintain the integrity of the systems and information produced.

One example of such a project is the Airline Maintenance and Materials System being conducted for the Technical Services organization. This system is a commercially available, integrated package which supports aircraft maintenance, engineering, inventory, and logistics operations. The system will replace and expand upon an existing, technologically-dated, non-integrated, home-grown system. To accomplish this project, several dedicated people with varying technical backgrounds were needed. Selected for this critical project were Andy Farrell, Paul Virgallito, Tom Kuty, Mike Shyne, and Pat (Patricia) Elliott.

- Andy is a Business Systems Analyst with a MBA in Logistics, a BS in Management Information Systems, and 8 years of professional experience. Andy most recently was the Deputy Project Manager for implementing a commercially-available facilities and equipment maintenance system for the Department of Defense (DoD). This assignment included business process improvement analysis, project planning and coordination, and daily interaction with the project team and customer. Prior to this assignment, Andy was responsible for the quality assurance function for a depot maintenance management information system, also for the DoD. Andy's first assignment was as a staff consultant where he focused on system selection, implementation, and system recovery. Andy has experience with a broad range of information systems platforms.

- Paul is a Business Systems Analyst with a BS in Industrial and Systems Engineering, and has 5 years of professional experience. Paul most recently was the lead test engineer for a facilities and equipment maintenance system and for a tool inventory management system, both for the DoD. This assignment included the evaluation of improved business processes and testing of software. Before this, Paul was responsible for analyzing information systems which performed material requirements determination, statistical demand forecasting, and parts cataloging. Paul's first assignment was as an analyst testing a depot maintenance management information system where he assisted shop floor personnel in learning system transactions. Paul is pursuing his APICS Certification in

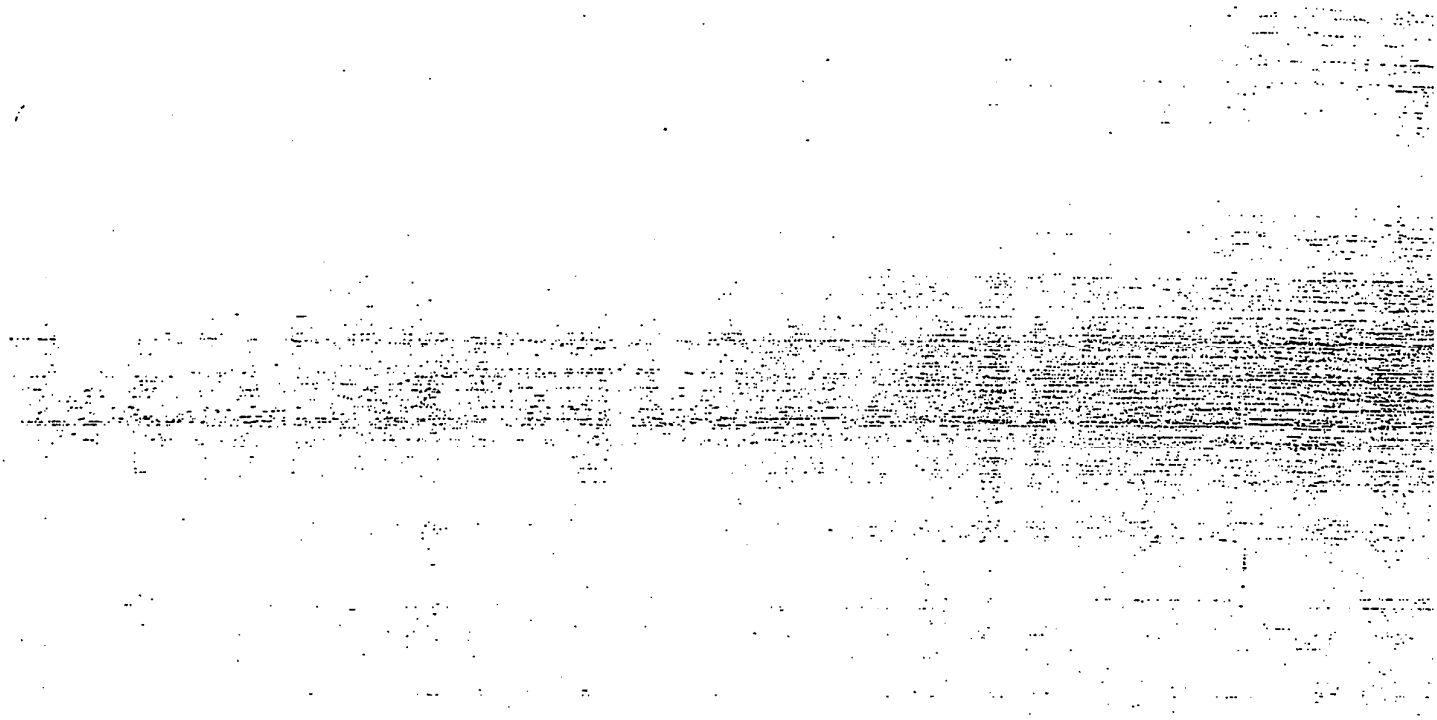
Production and Inventory Management (CPIM). He successfully completed certification for Material and Capacity Requirements Planning (MCRP) and Just In Time (JIT).

- Tom is a Business Systems Analyst with a BS in Business Administration (dual major in Production and Operations Management, and Organizational Behavior), and has 2 years of professional experience. Tom most recently was a training analyst where he designed, developed, and delivered end-user training for a tool inventory management system and laboratory information management system for the DoD. Tom also developed training needs assessments which included analysis of business processes and developing user training profiles. Tom was a member of the APICS Chapter at his alma mater.

- Mike is a Systems Engineer with a BS in Computer Science, and has 23 years of professional experience, four of which were with the U.S. Army. Mike most recently was a systems engineer analyzing hardware and software requirements and configurations to resolve a variety of business objectives. He was responsible for implementing and integrating disparate hardware, software, and networking environments. Mike's prior assignments were: a systems programmer, a technical support manager, an application programmer, and a telecommunications specialist. Mike has a broad range of expertise with regards to computer operating environments and programming languages including: MVS, UNIX, Novell, NT, TCP/IP, SQL*Net, Oracle, C, and C++. He has successfully completed over 30 technical courses.

- Pat is a Project Administrator with an AS in Applied Business, and has 25 years of professional experience. Pat most recently was an executive assistant to the Program Manager of a DoD depot maintenance system integration project. Pat developed and tracked project budgets, coordinated and tracked travel and other direct costs to projects for over 150 people, constructed periodic status reports, prepared management briefings, coordinated conferences, schedules, and communications, and conducted various other research tasks. In a prior assignment Pat worked as a Financial Analyst where she tracked labor, material, and other direct charges, prepared financial reports, and processed invoices and POs. Pat has also worked as a graphics specialist and technical illustrator. Pat has extensive skills with the Microsoft Office suite of software.

Please join me in welcoming these new employees to EWA.



EMERY WORLDWIDE AIRLINES

A CF Company

October 11, 1996

Mr. John Howard
FSDO-SJC
1250 Aviation Ave
Suite 295
San Jose,-CA 95110

Dear Mr. Howard:

Enclosed is the EWA Line Station Computer Training Student Manual for your review and information. Debbie Griffin, Maintenance Training Coordinator prepared this document with the assistance of our EWA MIS Department. Debbie is currently visiting the line stations and providing formal training to the line station personnel. There are 20 line stations that have been trained and equipped with a PC and fax printer.

EWA has also developed a new department titled Airline Maintenance and Material System (AMMS) that reports to the Vice President, Controller. This department is currently responsible for the implementation of the Maxi-Merlin software, Material Services Control System (MSCS) and Component Control System (CCS) modules. A very extensive plan has been developed to manage this program. I will provide a detailed implementation plan upon my receipt, in approximately two to three weeks. This airline standard practice software will provide EWA with a higher degree of operating ability to support EWA's business strategies and objectives, in providing effective service to our customers.

Sincerely,

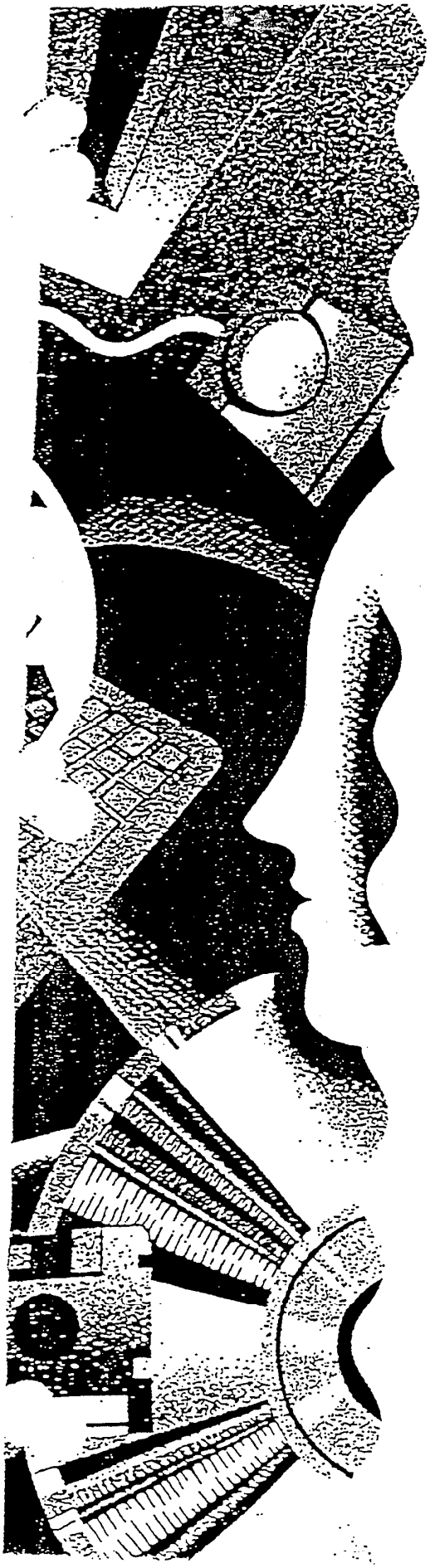
Thomas M. Wood
Director of Quality Control

aee

cc: Dick Jacobson
Technical Services Directors

SETTING STANDARD 60 YEARS

303 CORPORATE CENTER DRIVE, VANDALIA, OH 45377



EMERY WORLDWIDE AIRLINES

A GE Company

EWA Line Station Computer Training

Student Manual

EWA Line Station Computer Training

D I S C L A I M E R

While Logical Operations takes great care to ensure the accuracy and quality of these materials, all material is provided without any warranty whatsoever, including, but not limited to, the implied warranties of merchantability or fitness for a particular purpose.

CONTENTS

INTRODUCTION

Welcome to the *EWA Line Station Computer Training* course. In this Introduction, you'll find the following information:

- how to set up your computer so you can properly run this course if you are completing it on your own, either for self-paced study or for review after a class (see "Course setup information")
- how to use this manual
- how to receive help via Help Line Information Services

Course setup information

If you are attending a class, your instructor will have set up the classroom computers ahead of time. If you are completing this course on your own—either as self-paced study or as review after you have attended a class—then you might have to set up your system yourself.

For this course to run properly, the default settings for each program should be intact, or should be modified according to the instructor's directions.

Note to the instructor

To find out the specific setup for this course, please use the appropriate instructor materials. The instructor materials not only include information on hardware setup so that the course keys properly, but also include lesson timings, tips and suggestions for teaching lessons and topics, an outline of the course, and overhead transparencies.

Using this manual

Because we believe that teaching you concepts is just as important as teaching you procedures, we start each topic with the "big picture"—introducing a feature or providing background information. Then we present details and procedures in small, easy-to-absorb segments. Because we also believe that people generally learn best by doing, most of your training day will consist of guided hands-on activities at the computer.

This teaching philosophy is reflected in the way we organize the material in this manual. Following is an orientation to the manual's structure.

What you'll find in this manual

- A table of contents followed by this Introduction
- Lessons containing objectives, explanations, guided hands-on activities, independent practice activities, and wrap-ups
- Responses for the wrap-up activities and solutions for the minds-on activities
- A keystroke and (if applicable) icon reference
- A glossary for your reference
- An index

What you'll find in each lesson

- **A list of lesson objectives**—Every lesson begins with a general objective and lettered sub-objectives that describe what you will be able to do by the end of the lesson.
- **Topics**—For every lettered sub-objective, there is a corresponding topic. Every topic begins with explanatory text and usually contains guided hands-on activities. Not all activities are "hands-on." To keep students engaged, we have included "minds-on" activities that encourage students to think and respond to material that you are presenting. Provided in each topic are a variety of concepts, "hands-on" activities, and "minds-on" activities.

- **Lab activities**—When appropriate, we supply independent lab activities. You will notice that some labs are optional, while others are required. Follow your instructor's directions for each lab activity. We encourage you to try these labs on your own, using the manual to remind you of procedures when necessary, and asking your instructor for help if you can't find what you're looking for in the manual.

- **A practice activity**—For every lesson covering material that we think you might want additional practice with, we supply a practice activity. We encourage you to try these activities on your own, using the manual to remind you of procedures when necessary, and asking your instructor for help if you can't find what you're looking for in the manual.

- **A "Lesson Wrap-up"**—The wrap-up activity provides an opportunity for you to check your understanding of the main concepts introduced in the lesson. Your instructor might ask you to complete the activity on your own, with a partner, or as part of a group. You can find suggested answers in the Wrap-up Responses section at the end of this book. If you have questions that the Wrap-up Responses do not address, be sure to ask your instructor.

Where to find explanations and procedures

- **"Big picture" information,** such as a description of what a particular program feature is and why you might want to use it, is usually provided at the beginning of each topic in a lesson. To find this kind of information, look for a related topic title. (Every main topic in a lesson is identified by a letter and a title; for example, "C. Saving a file.") You can also look for the heading "Concepts."

- **Detailed information,** such as the procedure to accomplish a given task, is provided just before the accompanying hands-on activity. To find this kind of information, look for the heading "Concepts" within a topic.

- **Hands-on activities** contain the steps you will complete in order to learn various techniques and accomplish lesson objectives. The instructions in these steps are related specifically to files supplied with this course and to files you might create during the course. (In contrast, procedures within "Concepts" sections are worded in a general manner so you can more easily apply them to similar tasks back at your workplace.) To find the course-specific instructions, look for the heading "Task" followed by a task number and name (for example, "Task C-1: Saving a file").

Note: Within any given topic, you might find several sets of Concepts and corresponding tasks. Use the table of contents, the lesson objectives listed at the beginning of each lesson, and the index to help you find the specific information you are seeking.

How to interpret conventions used in this manual

Tasks are written in a two-column format.

- In the left column ("What You Do"), numbered steps list instructions, such as keys you press, characters you type, and commands you choose from menus.
- In the right column ("Comments/Prompts"), comments describe the results of, or reasons for, the steps listed on the left, and prompts display the program's requests for information. This column might also contain pictures to help you identify certain program elements, such as toolbar buttons or dialog-box options, on screen.

The following table describes how various items are represented in *tasks* in this manual.

Typographical convention	*Example*	*What it represents*
reversed type	Choose **File**	Menu command that you choose
reversed **reversed**	Choose **File** **Open**	Menu commands that you choose sequentially
Key in box	Press F5	Keys that you press
Boxed Key + Boxed Key	Press Ctrl + F9	Keys that you press together (while holding down the first key, press the second key; then release both)
Boxed Key Boxed Key	Press End Home	Keys that you press in sequence (press End, then press Home)
Small picture		An icon or tool that you click on

Boldface type	Select **Respectfully** and type **Sincerely** From the Print dialog box, select **All** Click on **OK**	Characters that you select or type Options that you select in dialog boxes or list boxes Buttons that you click on

The following table describes how various items are represented in *explanatory text* in this manual.

Typographical convention	*Example*	*What it represents*
Command, Command	Choose File, Open	Menu commands that you choose sequentially
Key Name	Press Enter	Keys that you press
Key Name + Key Name	Press Ctrl + F9	Keys that you press together (while holding down the first key, press the second key; then release both)
Option Name	Select Print Preview; Select All Click on OK	Options that you select in dialog boxes or list boxes Buttons that you click on
Italic type	Type *win* and press Enter	Characters that you type

How this manual can help you learn both during and after class

Your Student Manual and its accompanying data disk serve three purposes for you—learning, review, and reference—so you can continue learning even after you complete the course.

- **Learning:** During class, you will use the manual and data disk as you complete a series of hands-on activities: step-by-step tasks that focus on specific techniques and skills needed to effectively use a program at a certain level. In addition, if you did not have time to complete all of the practice activities during class, perhaps you can complete the rest later.

- **Reference:** You can use the Concepts sections in this manual as a first source for definitions of terms, background information on given topics, and summaries of procedures. (Within any given topic, you might find several sets of Concepts and corresponding tasks. Use the table of contents, the lesson objectives listed at the beginning of each lesson, and the index to help you find the specific information you are seeking.) For more details or for information not covered in this course, please consult the reference manuals that the program manufacturer supplied with the program.

- **Help Line:** For help regarding the EWA01 Inventory system, continue to call the Dayton Inventory Department at: 513-454-9072 or 800-270-4671. For help regarding PC setup or entry problems, call the MIS Department in Dayton at 513-264-6420. You may also call the Maintenance Training Department in Dayton with any problems or concerns.

L E S S O N 1

EWA Line Station PC / Getting Started

Lesson objectives

In this lesson you will be introduced to the Line Station configured computer. To understand the basic overview, you will review the following:

- **A** How to set up your computer
- **B** Operating your PC
- **C** SkyTel Paging usage
- **D** EWA Maintenance Support usage
- **E** Printing and Faxing
- **F** PC Wrap-up and future plans.

Orientation To Personal Computers

What is a personal computer?

Concepts ➢ Personal computers are:

- Productivity tools. When used appropriately, computers can enhance productivity.
- Business machines. Like calculators and typewriters, computers can perform business-related tasks.
- Fast. Many tasks can be performed more quickly by using a computer.
- Versatile. They can be used for a variety of tasks.

Hardware

Concepts ➢ The personal computer (PC) you will be using is basically the same as other computers. It consists of electronic and mechanical components called *hardware*. It consists of a central processing unit (CPU), a monitor, a keyboard, and a mouse. Your system also includes a fax machine/printer/copier unit, with which you may communicate with the CPU and telephone service.

Hardware elements include:

- The *central processing unit*, or *CPU*. This is the "brain" of the computer.
- The *monitor*. This looks like a television screen. The computer uses the monitor to provide you with a visual representation of what functions the CPU is performing.
- The *keyboard*. The keyboard looks like that of a typewriter (but with more keys). You use the keyboard to give commands and enter information into the computer.
- The *mouse* or tracking device. The mouse is a device that fits in your hand; it is rolled on the surface next to the computer. The mouse supplements, and in some cases replaces, the keyboard as a way to give commands and enter information.
- The *fax machine/printer/copier*. A printer records a personal computer's output on paper and allows you to fax this same output to another location.

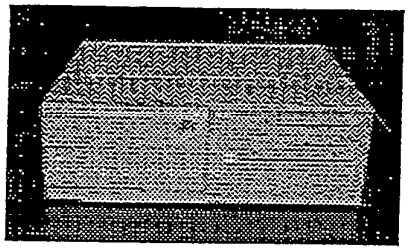


Figure 1-1: The Central Processing Unit (CPU). (Front view)

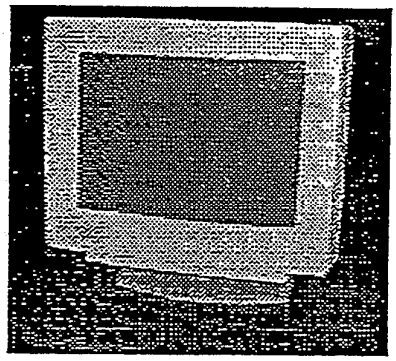


Figure 1-2: The monitor.

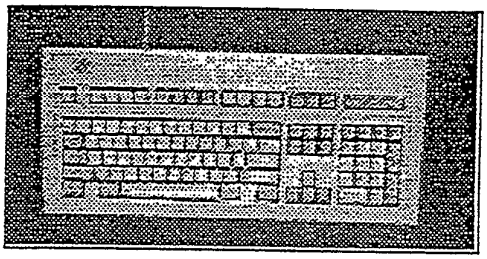


Figure 1-3: The keyboard.

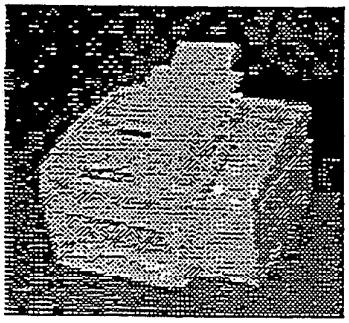


Figure 1-4: The fax machine/printer/copier

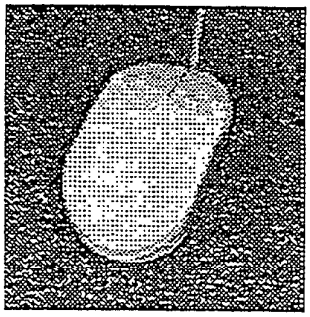


Figure 1-5: The mouse.

Task A-1: Identifying Hardware Components

☐ Objective: Using Figures 1-1 through 1-5 as guides, identify similar hardware components on the workstation you are using.

What you do	*Comments/Prompts*
1. Locate your keyboard	The layout of a computer keyboard resembles that of a typewriter. You will use the keyboard to enter information into the computer.
2. Locate your monitor	Typically located at eye-level, the monitor resembles a TV screen and provides visual feedback on your computer work.
3. Locate your mouse	A computer mouse is generally no larger than a human hand. It provides an additional or alternate way to enter information into the computer. The mouse pointer (usually an arrow) moves across the monitor screen in accord with movement of the mouse on the pad.
4. Locate your fax machine/printer/copier	You can use the printer to display your computer work on paper. The fax machine allows you to receive printed information from your telephone connection.
5. Follow your instructor's discussion of the CPU (*FRONT VIEW*)	The Central Processing Unit (CPU) works behind the scenes to perform calculations and other functions that you need completed. CD-ROMs and floppy disks may be inserted into the front panel.
6. CPU (*REAR VIEW*)	The back of the CPU is where the various cables and power cords connect with other system components.

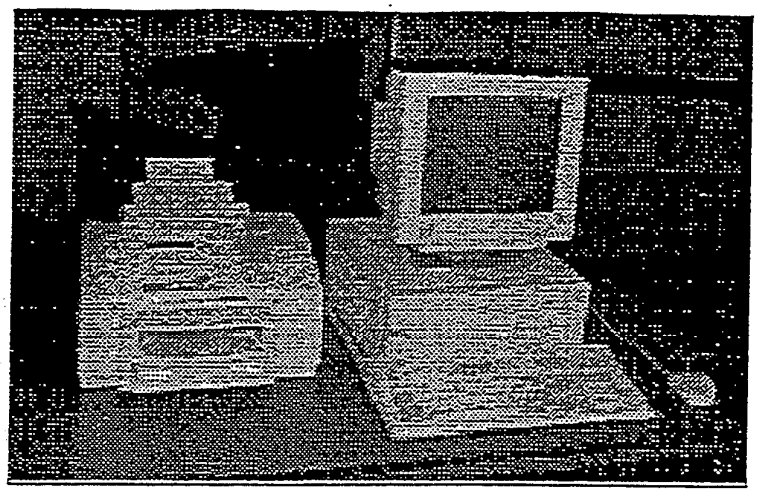


Figure 1-6: Fully assembled EWA Line Station PC with all components.

Assembling your EWA Line Station PC

cepts ➢ When you return to your line station location, you will be expected to assemble your computer and prepare it for use. Before you set up the PC, you will need to set aside a 20" x 30" area of unobstructed space where you want the computer located. Additional adjacent space will need to be available for the keyboard and the mouse.

When you return to your line station location, you will unpack and assemble the computer components according to the task steps that follow. Connections will need to be made exactly as directed. Do NOT apply electrical power to any component until directed to do so in these instructions.

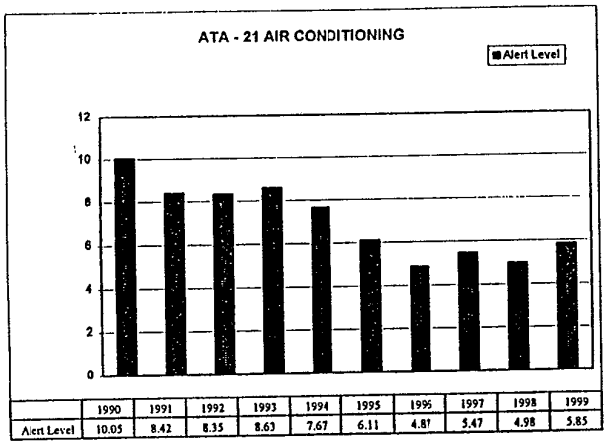
Task A-2: Unpacking and Setting up Components of the PC

❑ Objective: To correctly set up your line station PC components.

What you do	*Comments/Prompts*
1. Carefully unpack all components	Place the CPU right side up on desktop

2. Press the CD-ROM door button	To open and remove packing material (Refer to the IBM instruction manual p. ###)
3. Press the CD-ROM button	To close the CD-ROM door
4. Press the floppy drive button	To remove the packing material from the floppy drive
5. Plug the power cord into the back of the CPU	
6. Carefully unpack the monitor	Place the unit with the swivel platform down on top of the CPU or on another solid, flat surface.
7. Plug the power cord into the back of the monitor	
8. Unpack the mouse	
9. Position the mouse in a location convenient to the keyboard and monitor	For right-handed operators, place the mouse and pad on the right side of the keyboard. For left-handed operators, place to the left.
10. Unpack the keyboard and position in front of the CPU and monitor	
11. Unpack fax machine/printer/copier	
12. Position in a location convenient for document retrieval	
13. Connect parallel printer data cable	Connect to the recessed connector under the center section of the printer.
14. Connect the printer power cord to the printer	Into the receptacle near the lower right corner

PILOT PERFORMANCE REPORT



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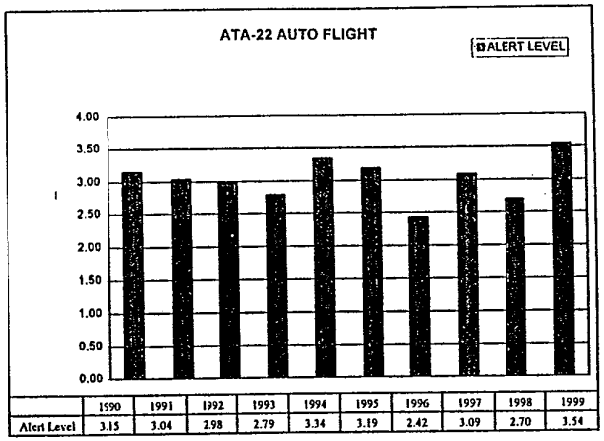

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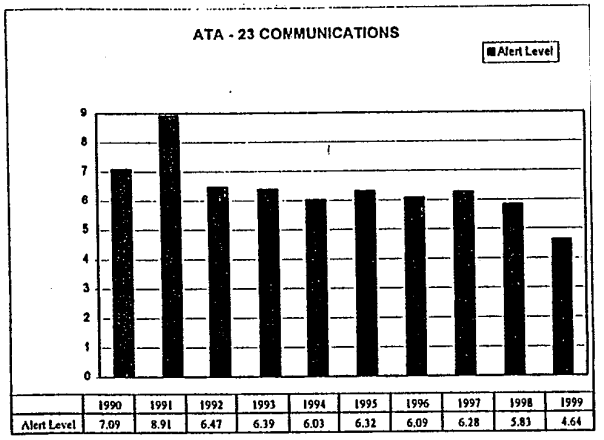

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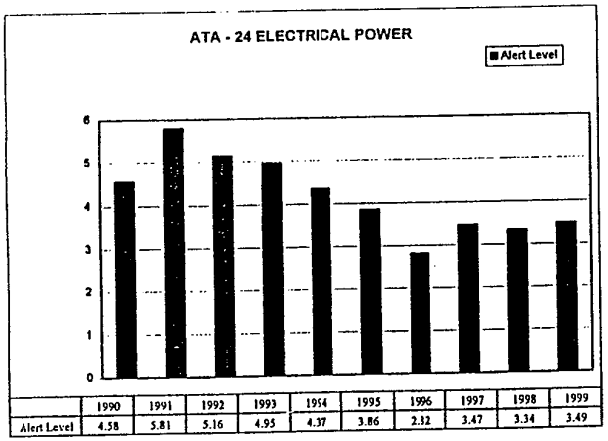

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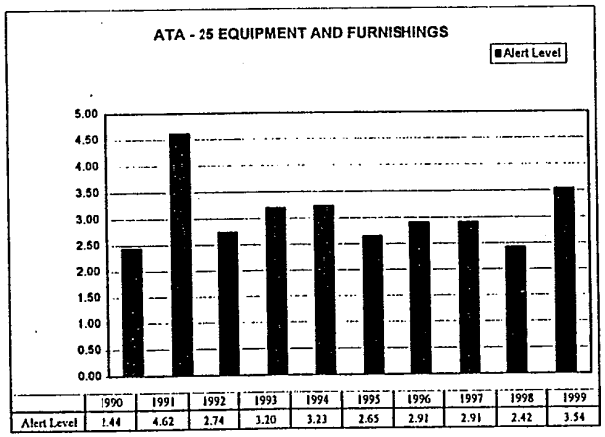

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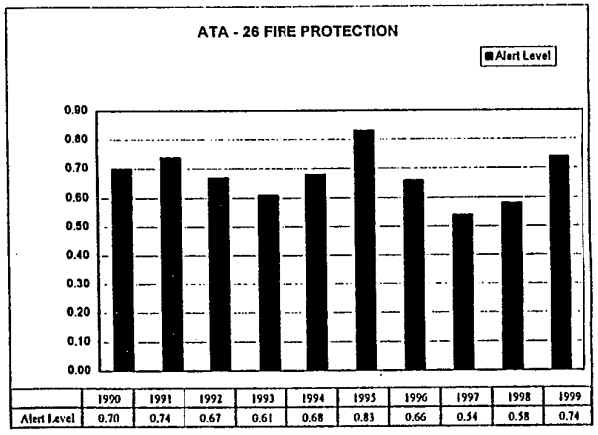

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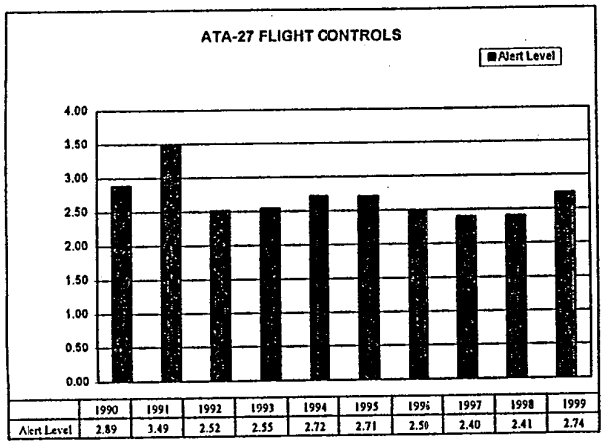
PILOT PERFORMANCE REPORT



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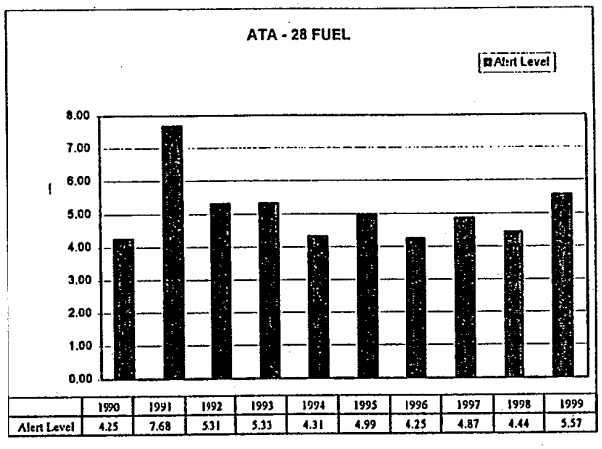

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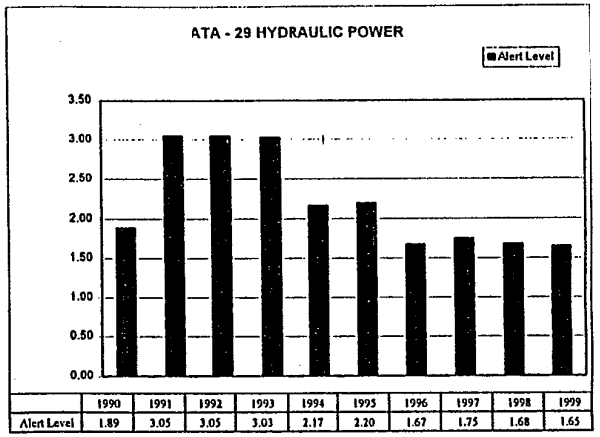

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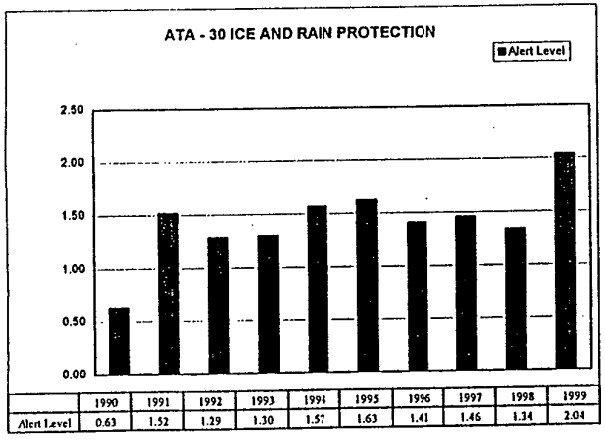

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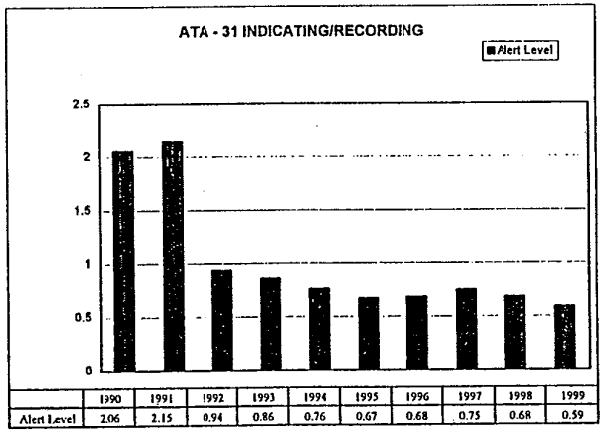

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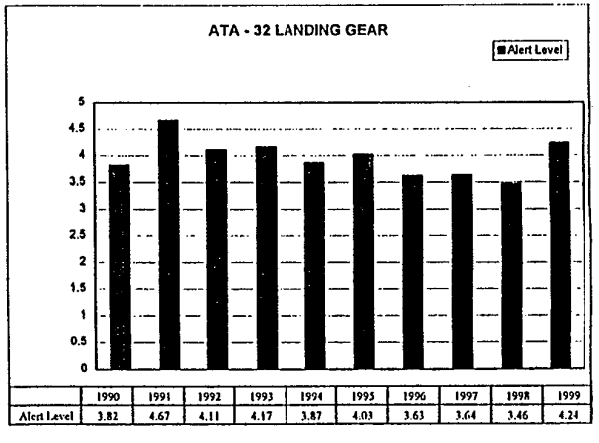

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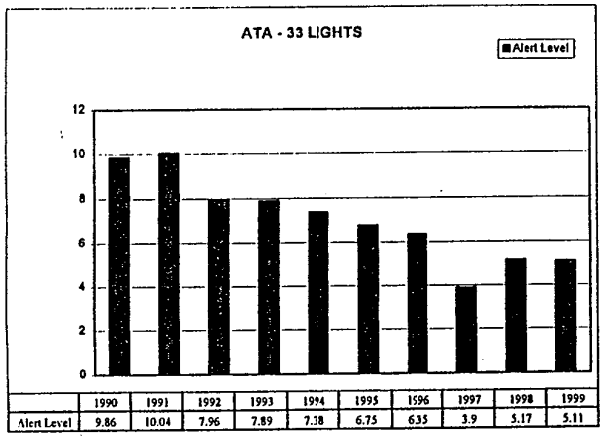
Alert Level	3.82	4.67	4.11	4.17	3.87	4.03	3.63	3.64	3.46	4.24

PILOT PERFORMANCE REPORT



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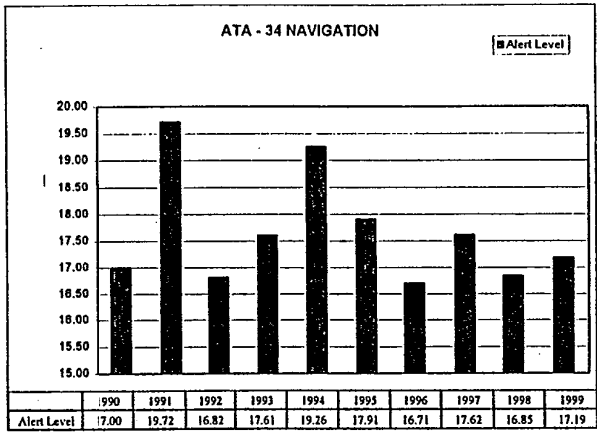

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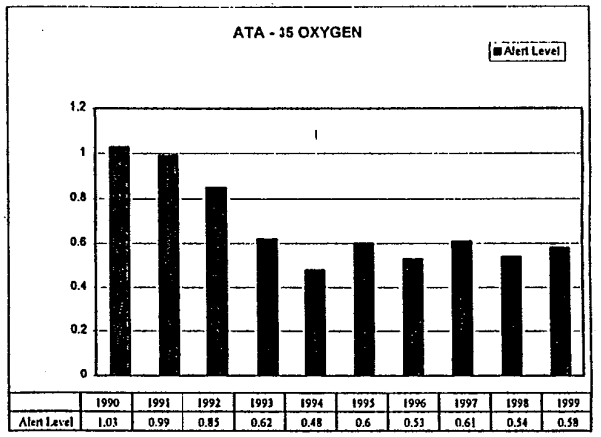

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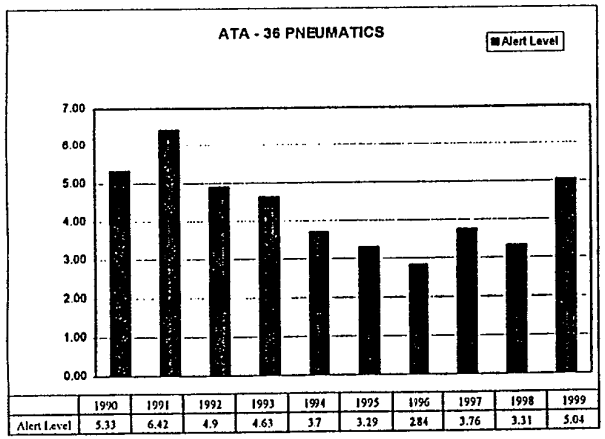

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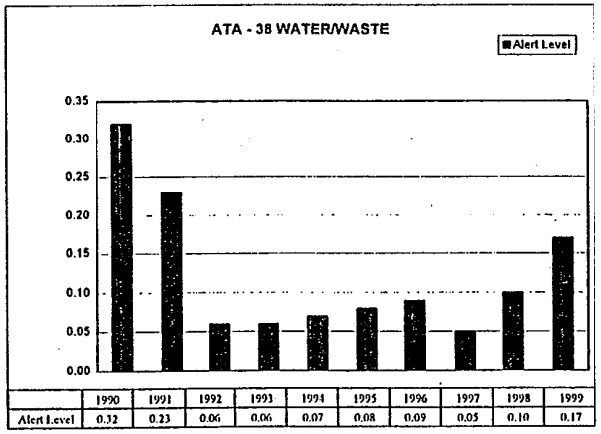

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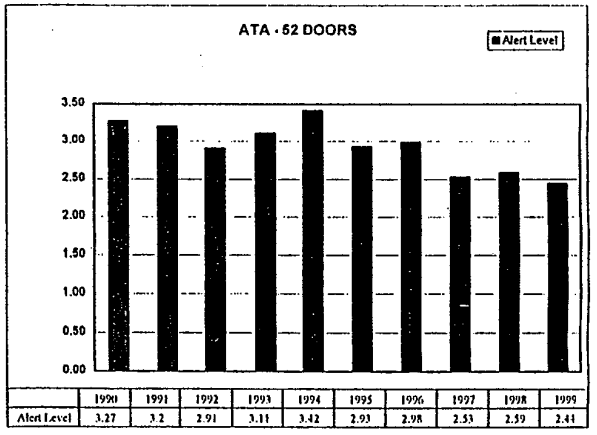

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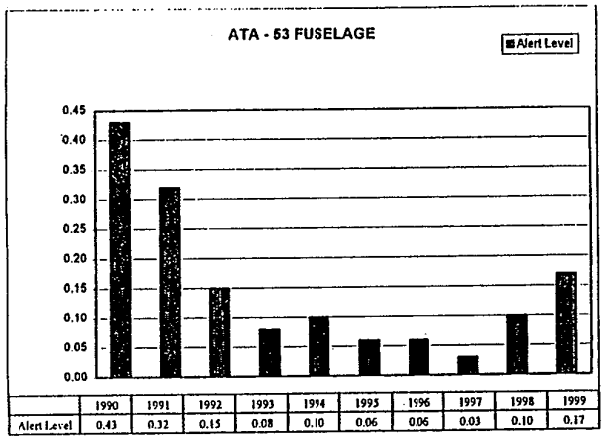

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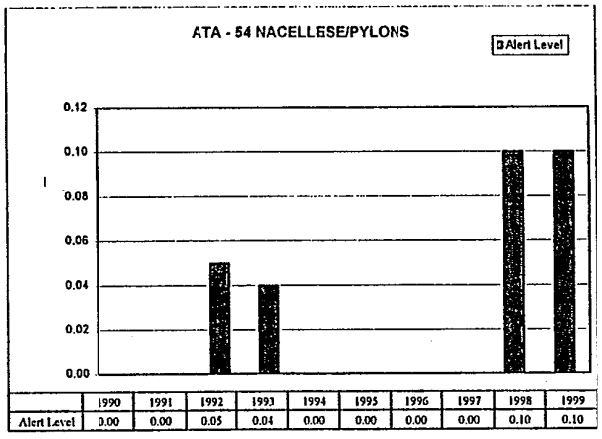

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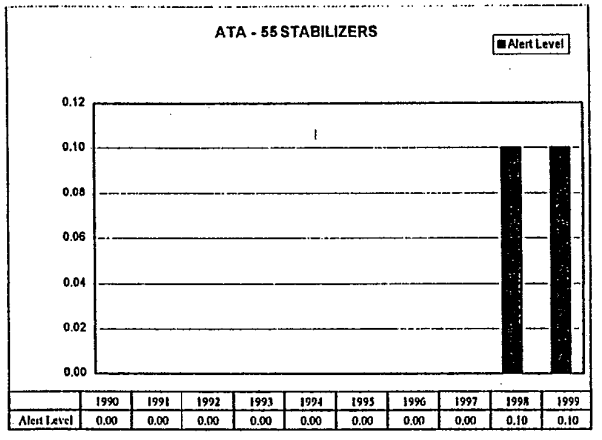

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
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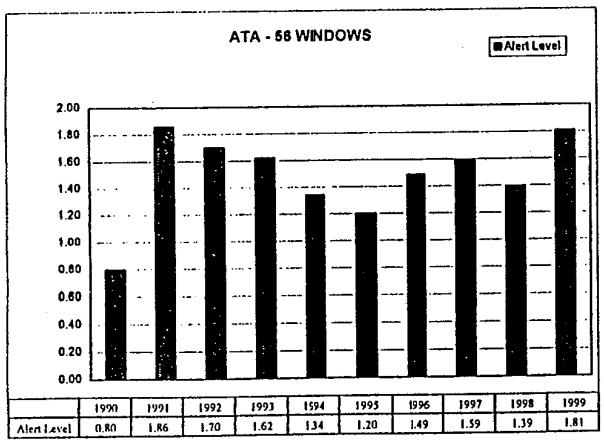
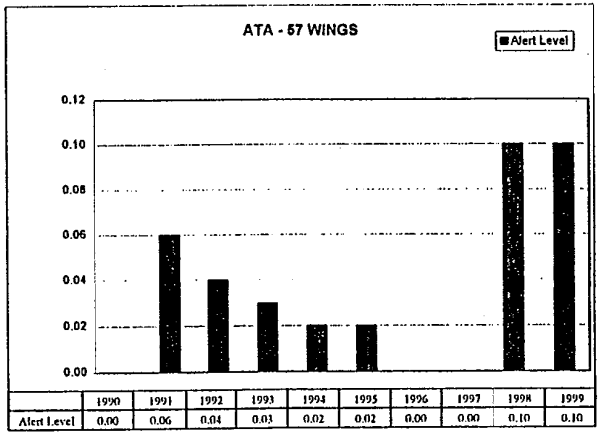
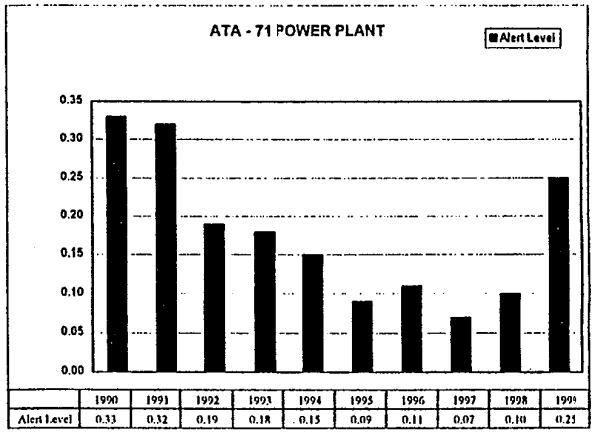


	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Alert Level	0.80	1.86	1.70	1.62	1.34	1.20	1.49	1.59	1.39	1.81

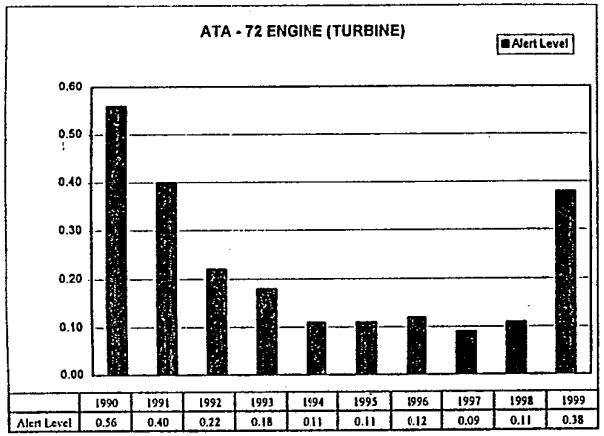


	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Alert Level	0.00	0.06	0.04	0.03	0.02	0.02	0.00	0.00	0.10	0.10

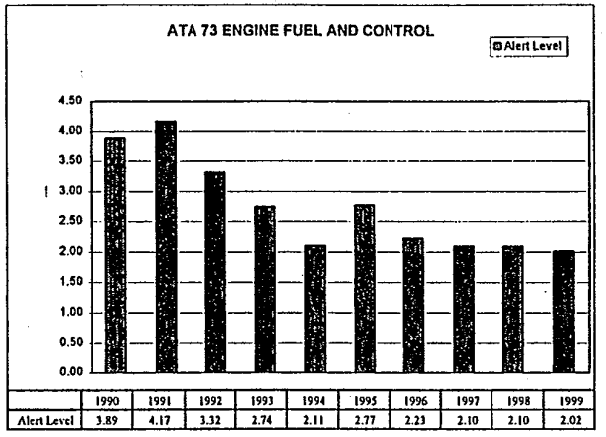


	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Alert Level	0.33	0.32	0.19	0.18	0.15	0.09	0.11	0.07	0.10	0.25

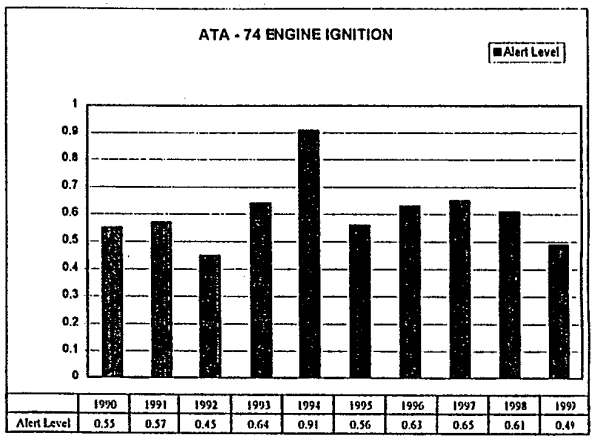
PILOT PERFORMANCE REPORT



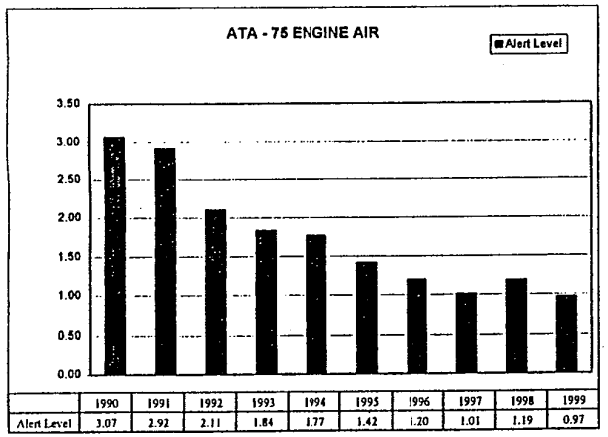
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Alert Level	0.56	0.40	0.22	0.18	0.11	0.11	0.12	0.09	0.11	0.38



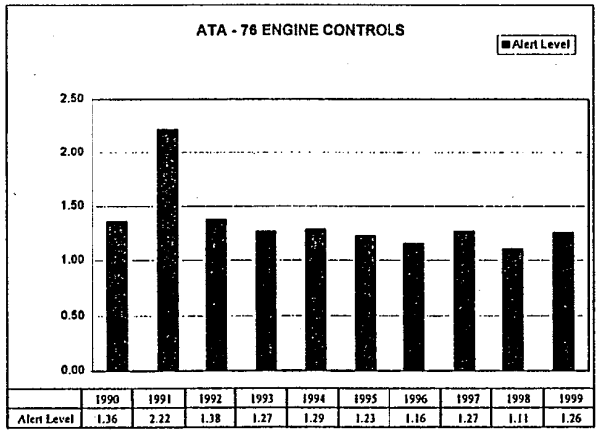
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Alert Level	3.89	4.17	3.32	2.74	2.11	2.77	2.23	2.10	2.10	2.02



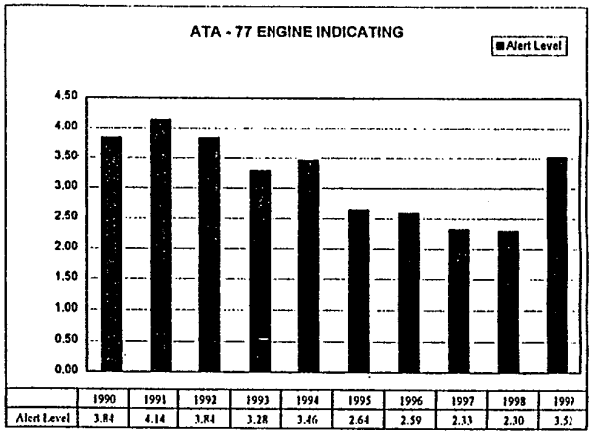
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Alert Level	0.55	0.57	0.45	0.64	0.91	0.56	0.63	0.65	0.61	0.49



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Alert Level	3.07	2.92	2.11	1.84	1.77	1.42	1.20	1.01	1.19	0.97

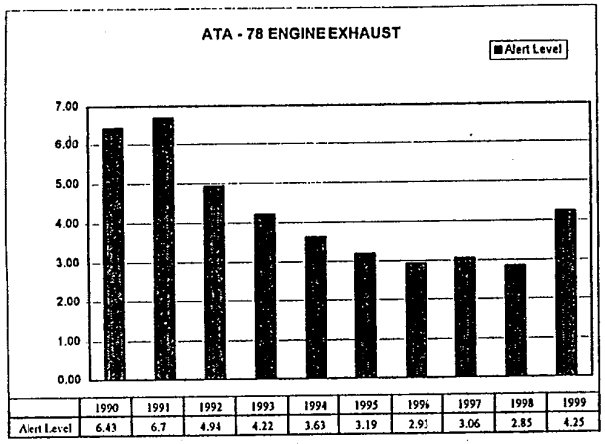


	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Alert Level	1.36	2.22	1.38	1.27	1.29	1.23	1.16	1.27	1.11	1.26

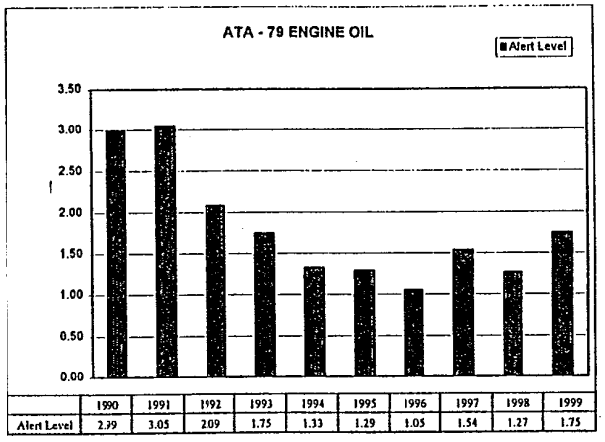


	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Alert Level	3.84	4.14	3.84	3.28	3.46	2.64	2.59	2.33	2.30	3.51

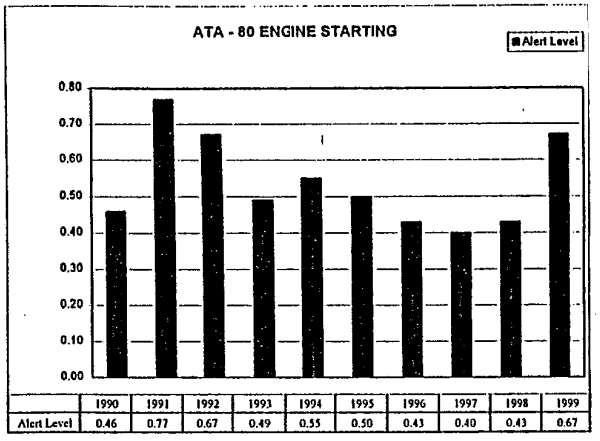
PILOT PERFORMANCE REPORT



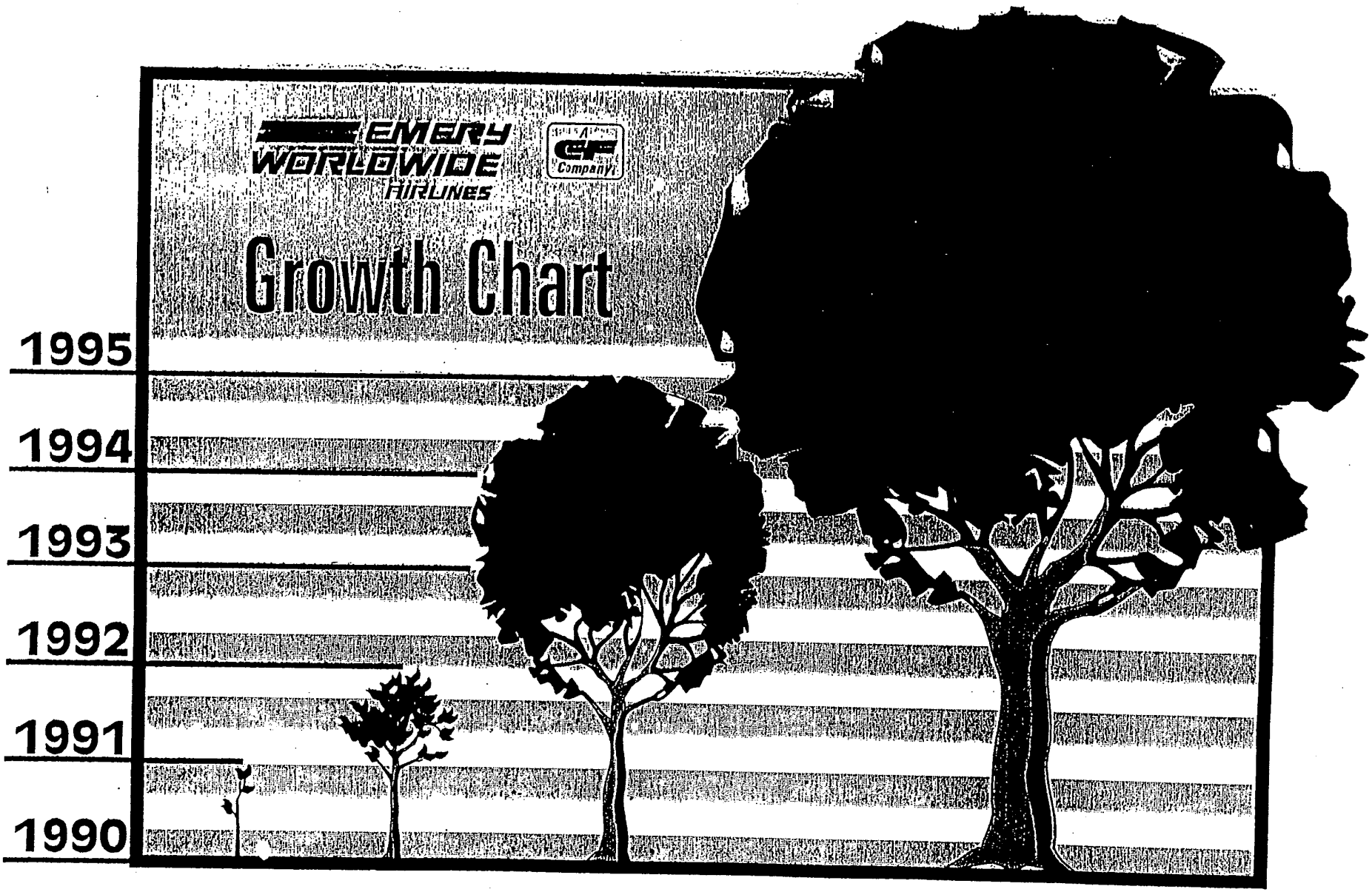
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Alert Level	6.43	6.7	4.94	4.22	3.63	3.19	2.91	3.06	2.85	4.25



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Alert Level	2.99	3.05	2.09	1.75	1.33	1.29	1.05	1.54	1.27	1.75



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Alert Level	0.46	0.77	0.67	0.49	0.55	0.50	0.43	0.40	0.43	0.67



A Pictorial Representation of the Growth Pattern of Emery Worldwide Airline's Management Structure, Fleet Size, and Operating Revenues from 1990 to 1995.

THE GROWTH

OF

EMERY WORLDWIDE

AIRLINES

1990 ------- 1995

PRESENTATION

Purpose: To present further substantiation to support EWA's position with regard to Mr. John Howard's letter to EWA dated December 1, 1994.

EWA will provide substantiation to support Mr. John Howard's decision to approve the subject D74 Ops Spec, Maintenance Policy and Procedures Manual and Reliability Manual revisions, that are currently in place, by applicable FAR's, A/C and a snap shot to reflect a "Recognized Air Carrier Precedence Currently Operating in the 121 Airline Industry".

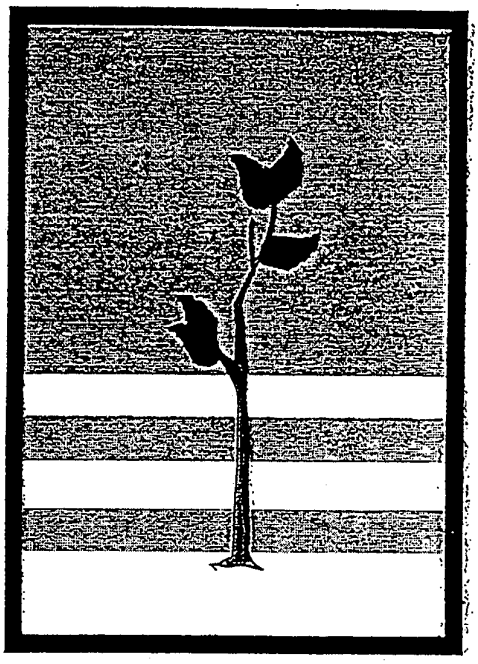
1990 - 1991

STAGE 1 - (SEEDLING)

The very young tree needs daily supervision. It's fragile root system requires a good soil base with added water, and an abundant amount of sunlight. The seedling with it's underdeveloped exterior is under constant pressure from the elements.

EMERY WORLDWIDE AIRLINES

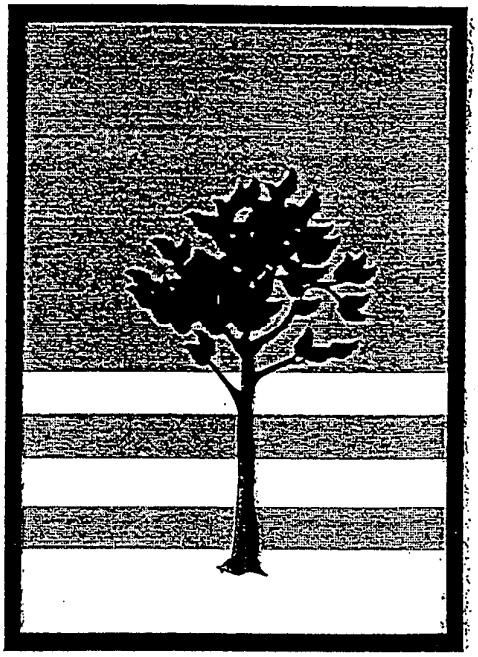
A CF Company



1991 - 1993

STAGE 2 - (SAPLING)

As the root system grows, the trunk thickens, and the number of leaves multiply, the young tree requires less maintenance and supervision.



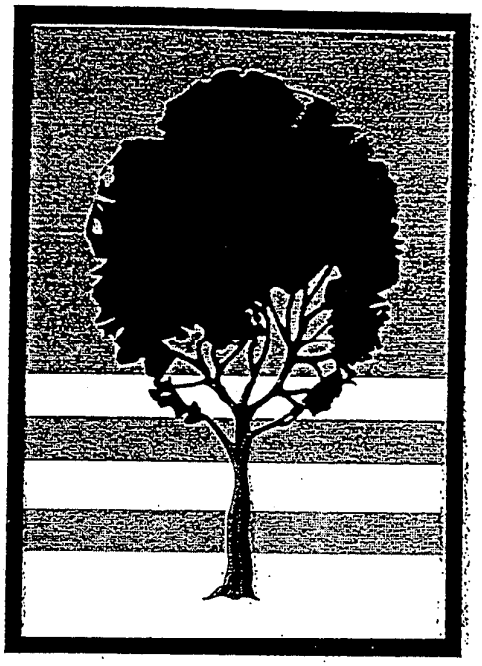
EMERY WORLDWIDE AIRLINES

A GF Company

1993 - 1995

STAGE 3 - (YOUNG ADULT)

The young tree now requires very very little maintenance and care. It can withstand harsh winters and long periods of time without rainfall because of its deep root system and strong trunk.



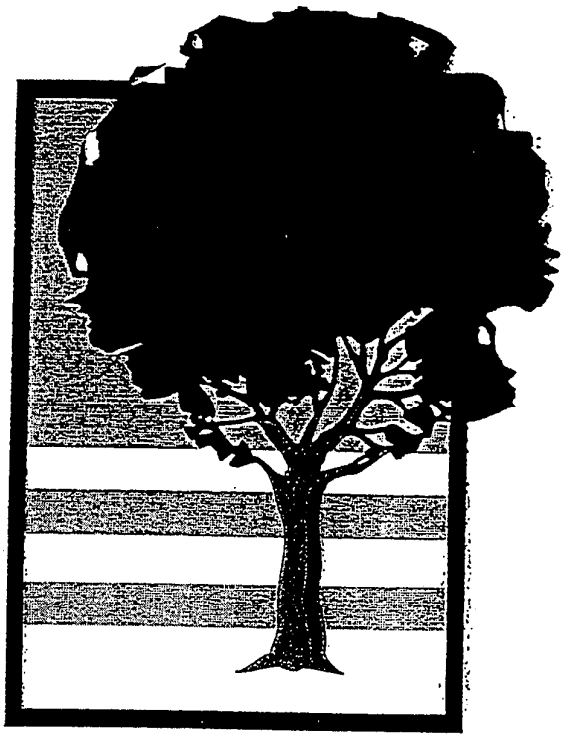
EMERY WORLDWIDE AIRLINES

A CF Company

1995 -

STAGE 4 - (MATURE)

The tree is fully grown. There is nothing more to do but observe and enjoy the fruits of your labor.



EMERY WORLDWIDE AIRLINES

A CF Company

EWA'S GROWTH
SYMBOLIZED BY
THE GROWTH OF A TREE

A small tree requires special care to correctly plant it, then continued care and watering to insure it's initial growth. The FAA PMI provided this same supportive role for Emery Worldwide Airlines as it was developing and establishing it's Maintenance Reliability Program (MRP).

As the tree grows, its size increases, as does it's stability and experience with the elements, thereby requiring less care and surveillance.

Upon reaching maturity the tree has developed size, strength, and a large covering. It is now able to stand without undue concerns about it's stability or growth. It has now reached a period where it produces fruit and makes a positive contribution to the earth's environment and to the public.

EWA's growth made strides from full FAA surveillance of all programs to progressive self sufficiency. During EWA's growth process the FAA decreased prior approval/acceptance policies as the airline increased staffing and established proven compliance performance. A management structure developed that was capable of performing the process of control and surveillance.

The following examples exhibit EWA's growth toward self reliance, when FAA approval was no longer required for changes to the cited documents and programs:

- 03/24/93 Maintenance Policy and Procedure Manual
- 06/27/94 Time Limits Manual
- 07/15/94 Inspection Program Manual

EWA'S GROWTH CHART

I. MRB Upper Management

EWA's Maintenance Reliability Program (MRP) was established with a specific maintenance organizational structure to provide effective control of EWA's fleet performance. A specific growth plan was put in place by management to continue the development of the MRP and of staffing requirements to gradually incorporate all conditions that the program affords, as established by the Major Carriers. The following is a summary of the MRB's growth from inception to present:

- **1990** The MRB was comprised of two (2) directors and five (5) managers.
- **1991** The MRB was increased to include three (3) directors, ten (10) managers, and the chief pilot. EWA included the Director of Operations as a MRB judicial member and, while it is rare in the industry for Operations to be involved in the MRP, EWA has experienced great success with this involvement.
- **1995** The MRB is currently represented by six (6) directors, thirteen (13) managers, the chief pilot, the assistant chief pilot, and the chief flight engineer.

The MRB upper management structure has grown by 200% in the past five years. The current board represents a population of individuals with a high degree and considerable number of years of experience. The directors average 18 years and the managers 15 years of heavy aircraft maintenance experience.

II. Reliability Department Growth

EWA's Reliability Department staff has grown by 500% in the past five years in order to support the company's requirements and the growth of the EWA fleet. The staff has grown from a single individual to a manager and four (4) analysts. Experienced technical positions have been established to provide a nucleus for future growth requirements. All analysts are provided manufacturers training courses to enable them the skills and qualifications to perform technical mechanical evaluations of systems and components.

III. Quality Control Department Staffing Growth

The EWA Quality Control staff has increased by 300% over the past five years. Technically Qualified and experienced personnel were hired to provide a high level of experience and industry knowledge which supplies a stable foundation for future growth requirements.

EWA's Quality Control personnel are involved in manufacturers committees and industry support technical groups. Examples of these support groups are listed below:

Director Quality Control:

- Douglas DC-8 SS1D - Co-Chairperson
- Coordinating Agency for Supplier Evaluation group (CASE) - Assistant Treasurer
- DC-8 FOEB

Manager Reliability:

- Transportation System Consulting Corporation.
- Douglas DC-8 Model Task Group.
- Aging Aircraft Development Program CPCP and Repair Assessment Programs.

Manager Quality Control

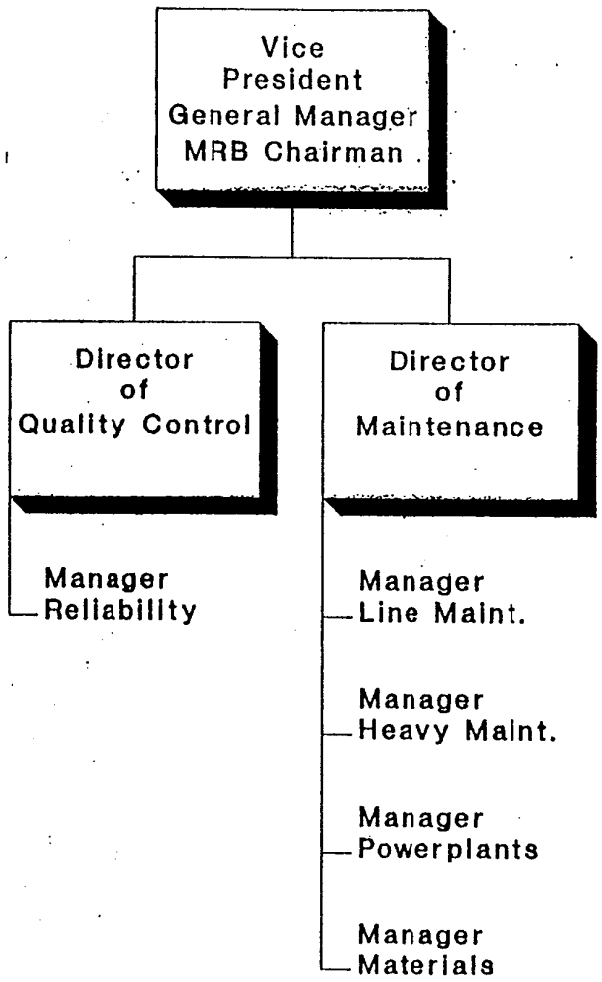
- CASE sustaining voting member

Manager Quality Assurance

- DC-8 SS1D Coordinator

Maintenance Review Board

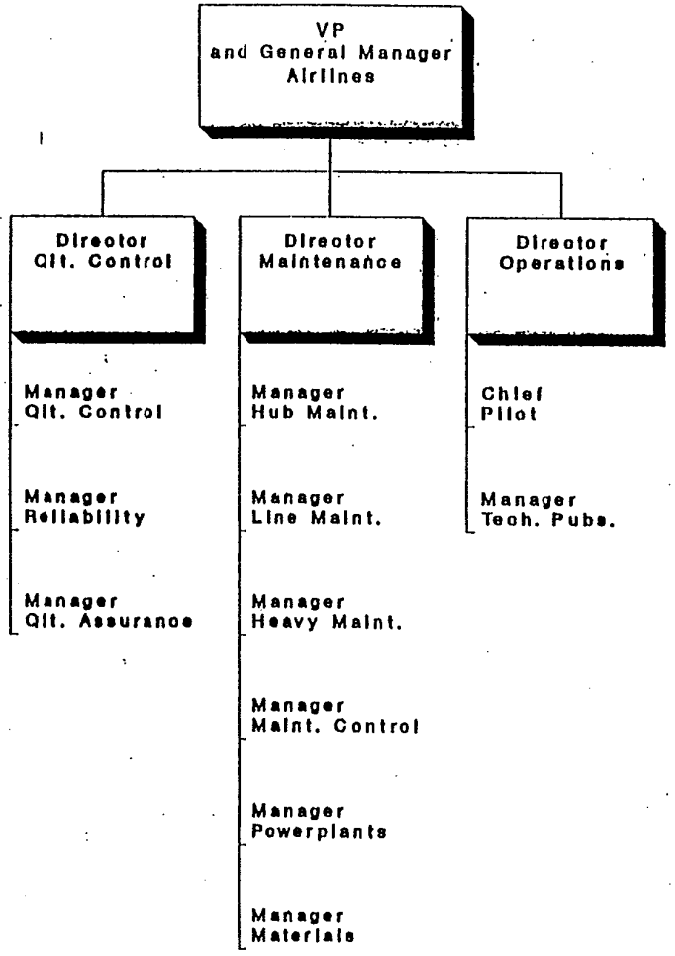
Organizational Chart



Original MRB & Management Organization

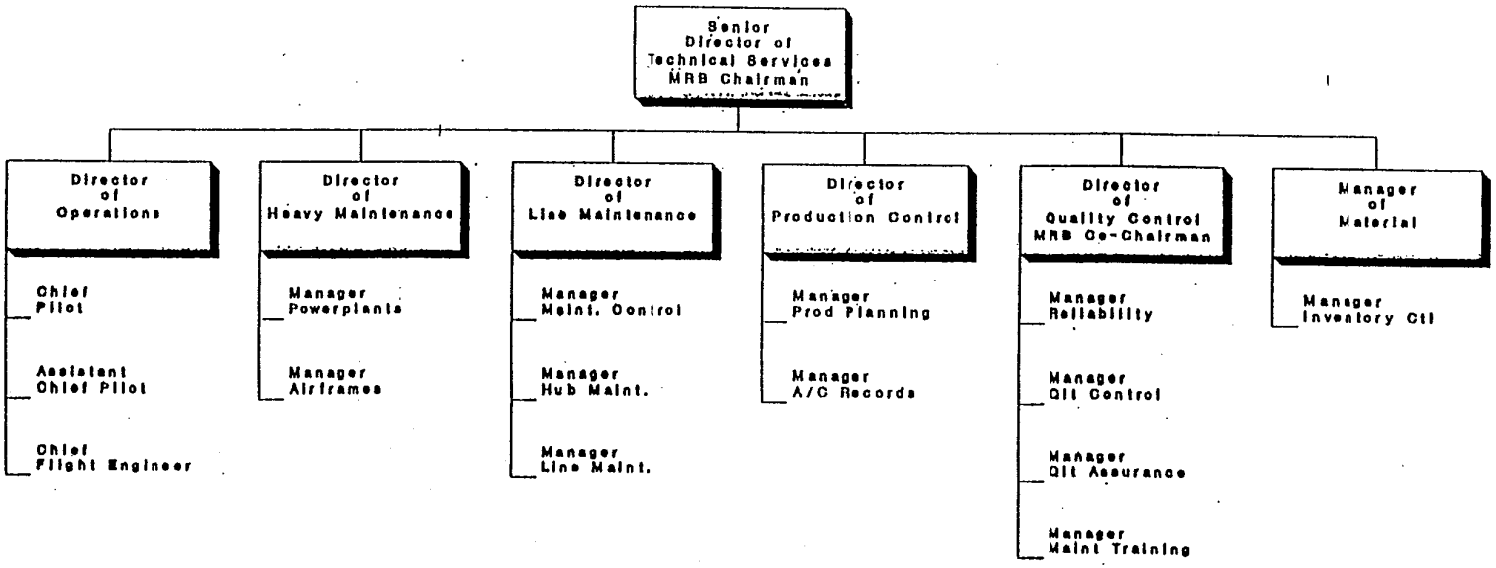
Maintenance Review Board

Organizational Chart



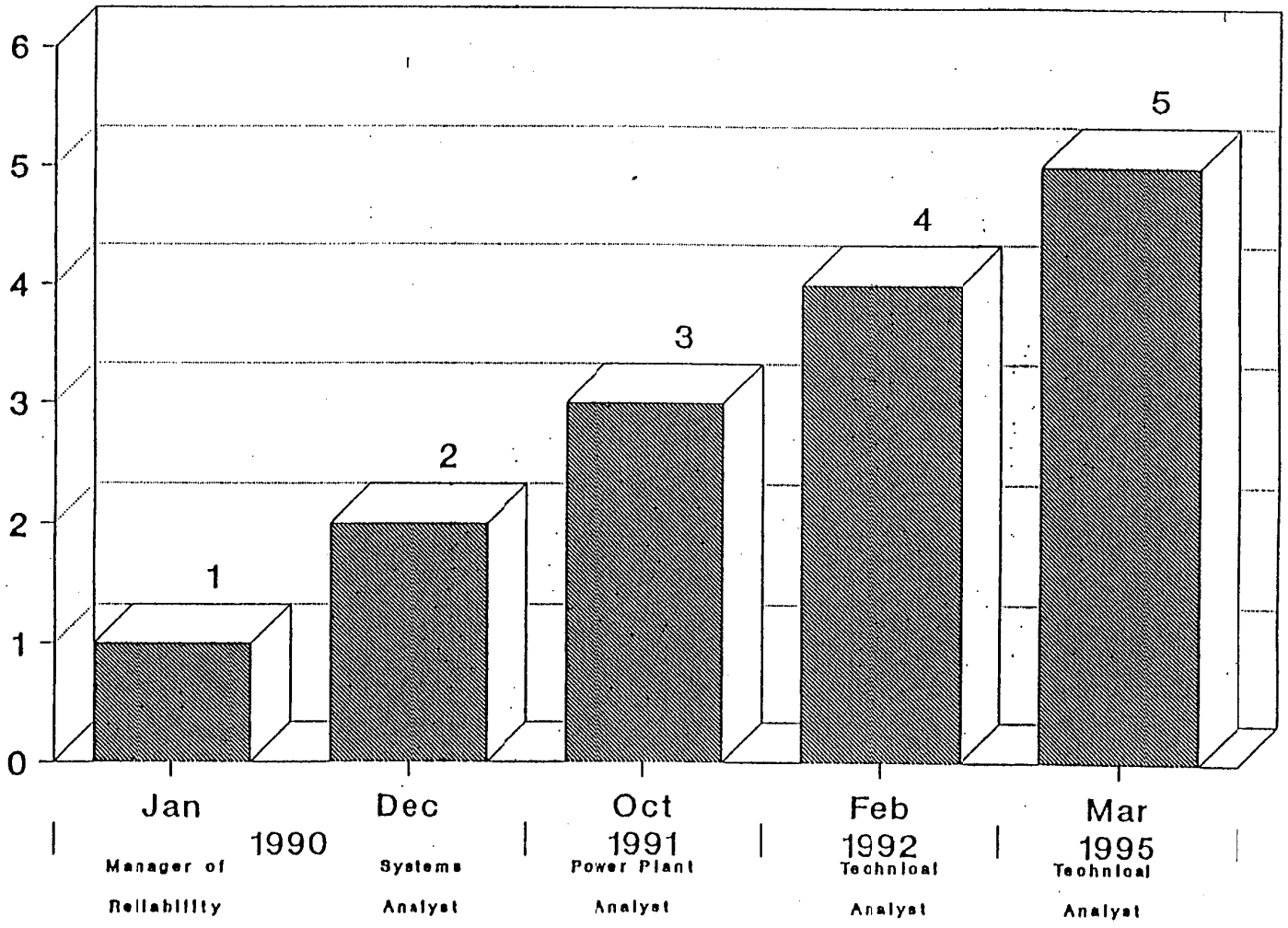
1st. MRB & Management Reorganization

Maintenance Review Board
Organizational Chart

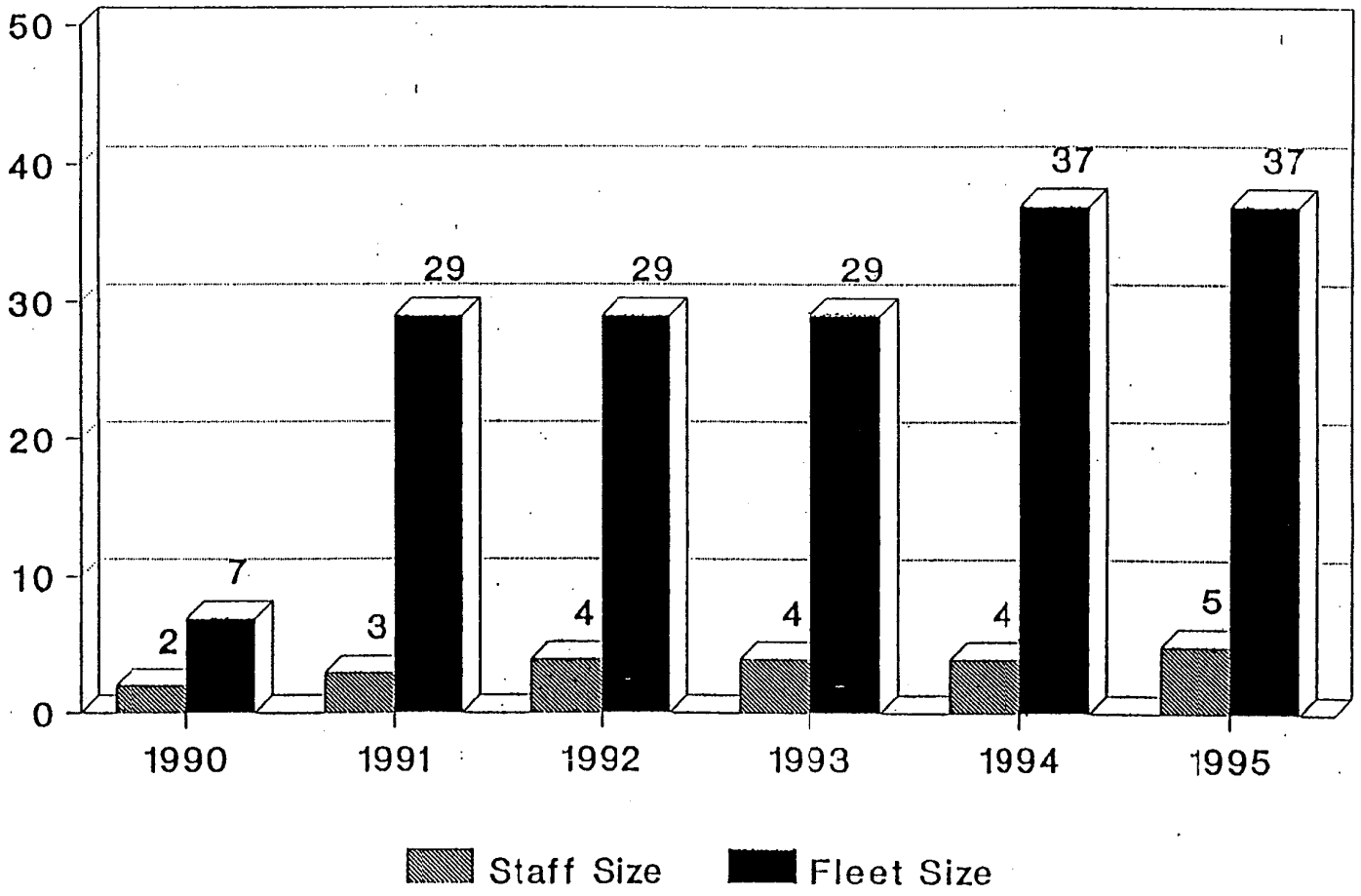


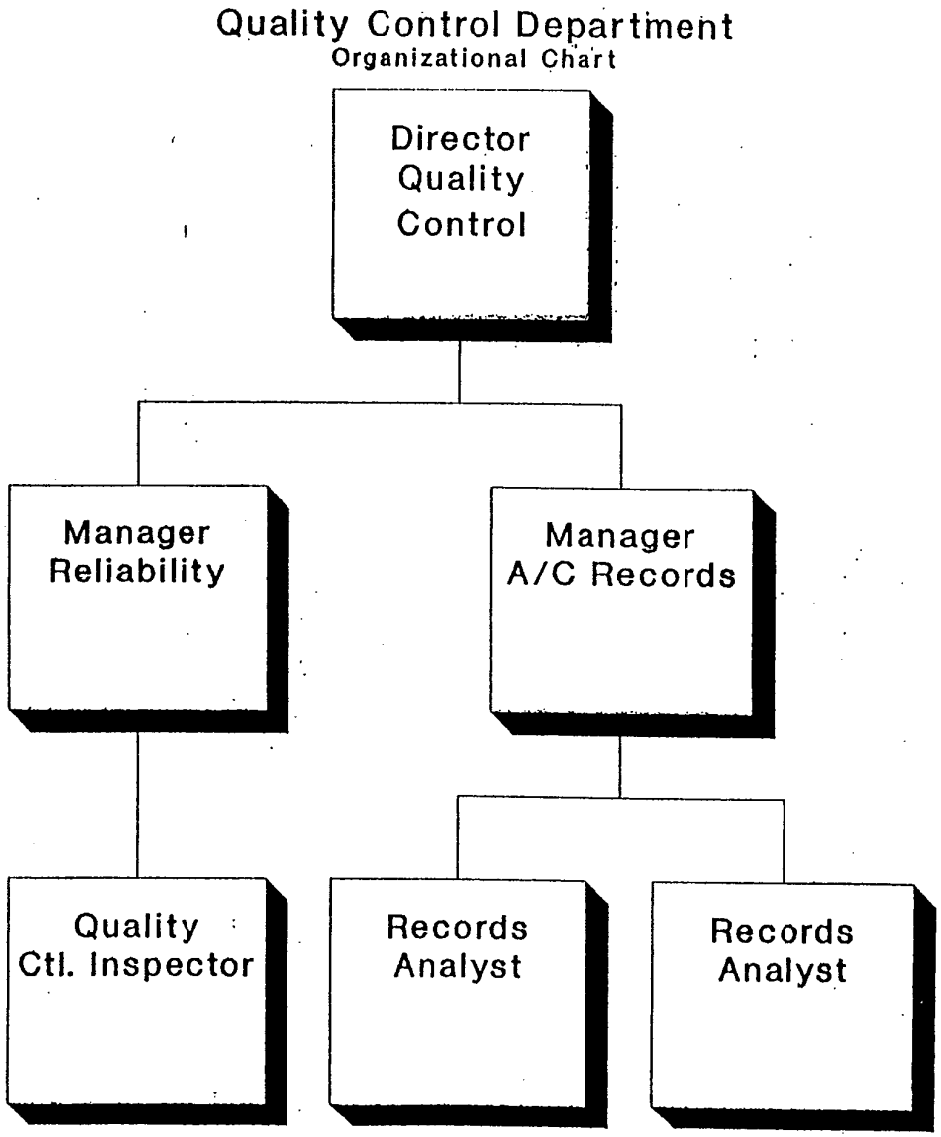
Current MRB & Management Organization

Reliability Staffing Growth



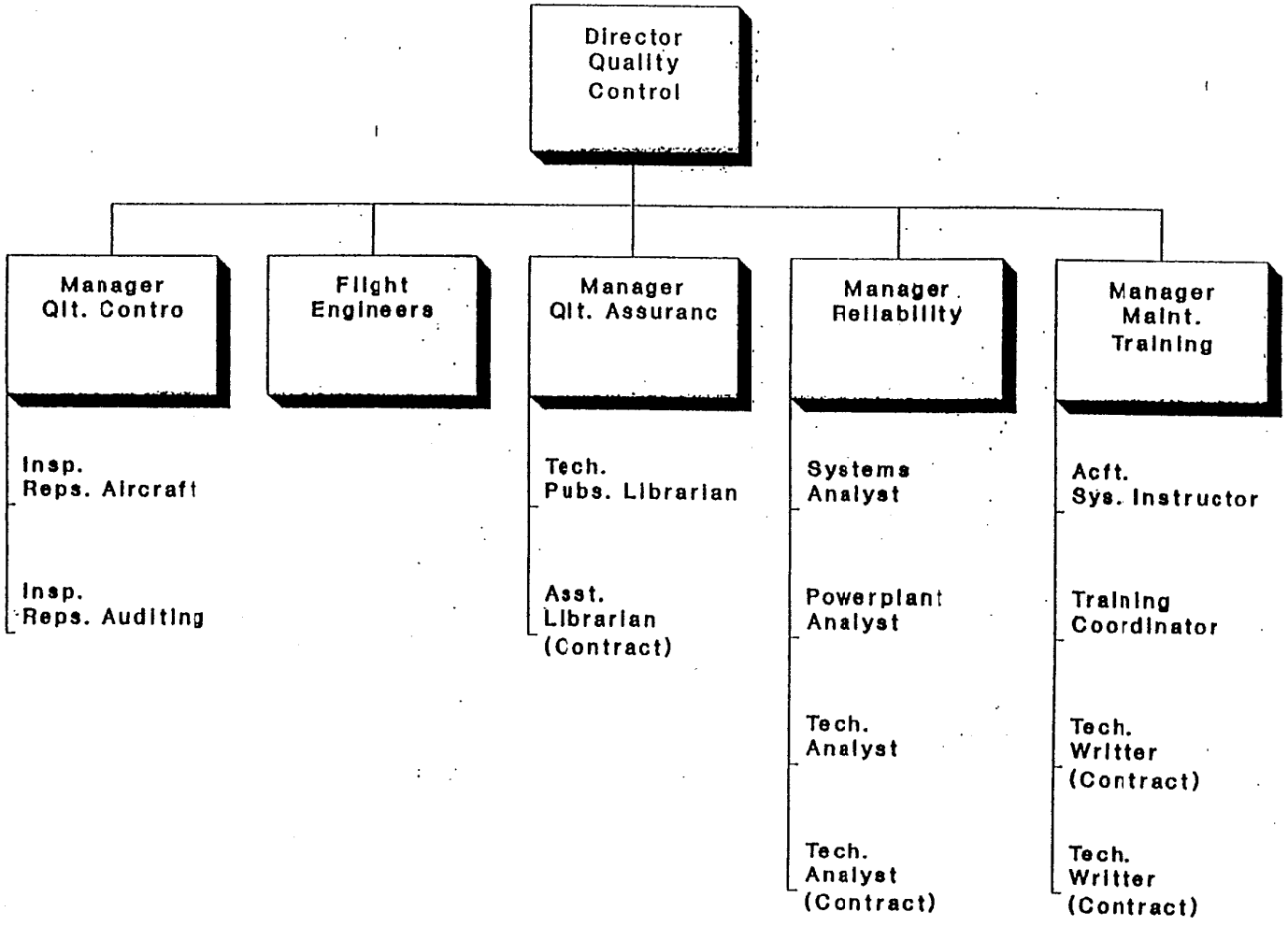
Reliability Staffing & Fleet Comparison





Origional Quality Control Organization

Quality Control Department
Organizational Chart



Current Quality Control Organization

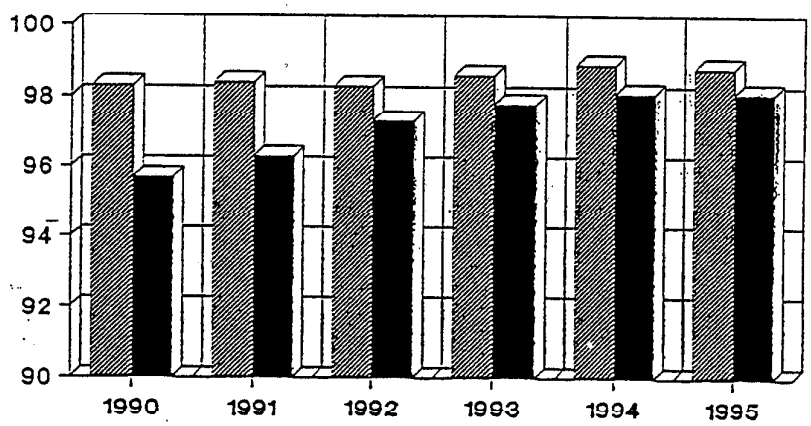
IV. Mechanical Dispatch Reliability

EWA has consistently maintained a 98.5 percent average mechanical dispatch reliability performance factor for five consecutive years. This outstanding performance factor is desired by many air carriers and is especially appreciated by EWA's customers.

EWA's Maintenance Reliability Board has provided an effective continuous analysis and surveillance program that supports a fleet of twenty year old aircraft. This important accomplishment enabled the EWA management team to achieve optimum performance levels.

EMERY WORLDWIDE AIRLINES
OPERATIONAL RELIABILITY
JANUARY 1995

MECHANICAL DISPATCH RELIABILITY	**98.8%**
YEAR TO DATE	98.8%
SYSTEM PERFORMANCE	**98.1%**
YEAR TO DATE	98.1%



	1990	1991	1992	1993	1994	1995
Mechanical	98.3	98.4	98.3	98.6	98.9	98.8
System	95.7	96.3	97.3	97.8	98.1	98.1

Mechanical System

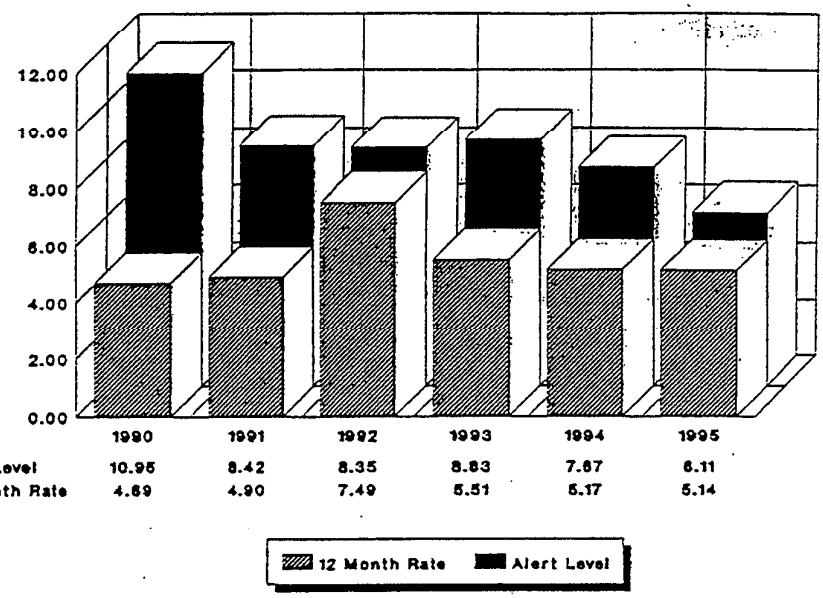
V. Performance Standards Vs System Performance

A significant element in EWA's performance is represented in the following graphs which provide a visual comparison of average system performance rates with established performance standards. The graphs presented in this section represent average system performance for each calendar year 1990 through 1995 year to date.

EWA has effectively maintained the average performance rates below the annual performance standards in all ATA systems, with the exception of ATA 73, which only slightly exceeded the standard in 1994.

Pilot Report Performance

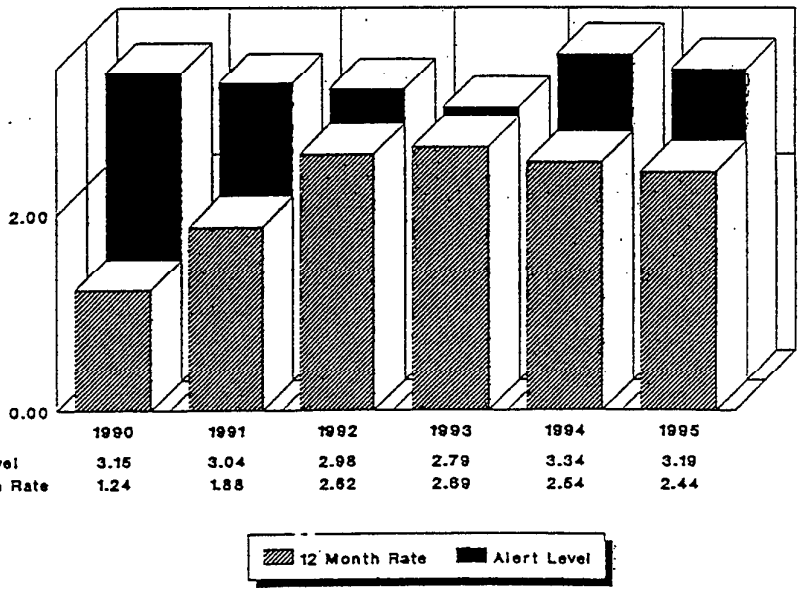
ATA 21 - Air Conditioning



	1990	1991	1992	1993	1994	1995
Alert Level	10.95	8.42	8.35	8.83	7.87	6.11
12 Month Rate	4.69	4.90	7.49	5.51	5.17	5.14

Pilot Report Performance

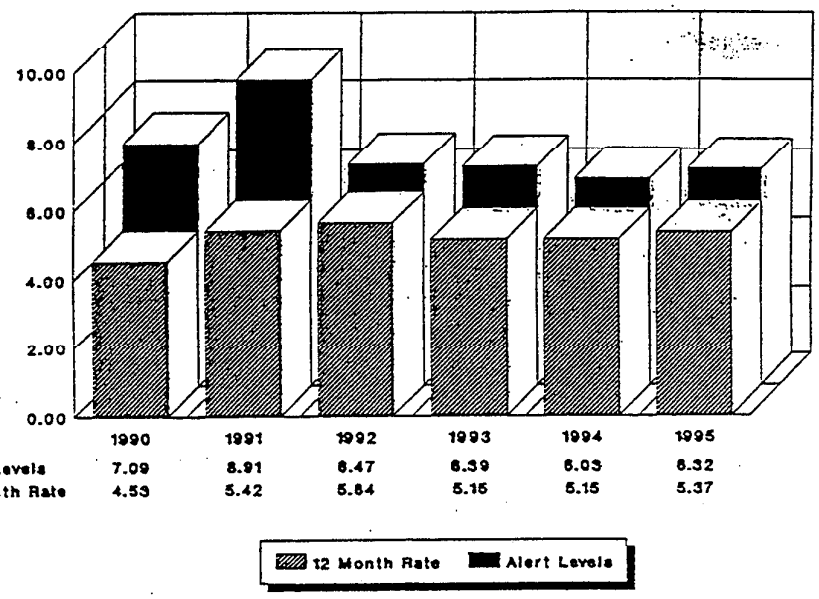
ATA 22 - Auto Flight



	1990	1991	1992	1993	1994	1995
Alert Level	3.15	3.04	2.98	2.79	3.34	3.19
12 Month Rate	1.24	1.88	2.62	2.69	2.54	2.44

Pilot Report Performance

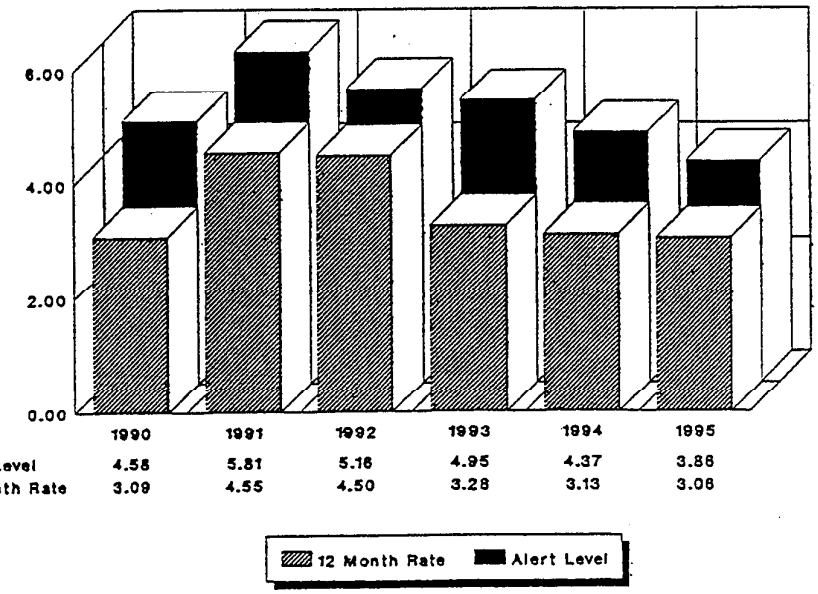
ATA 23 - Communications



	1990	1991	1992	1993	1994	1995
Alert Levels	7.09	8.91	6.47	6.39	6.03	6.32
12 Month Rate	4.53	5.42	5.84	5.15	5.15	5.37

Pilot Report Performance

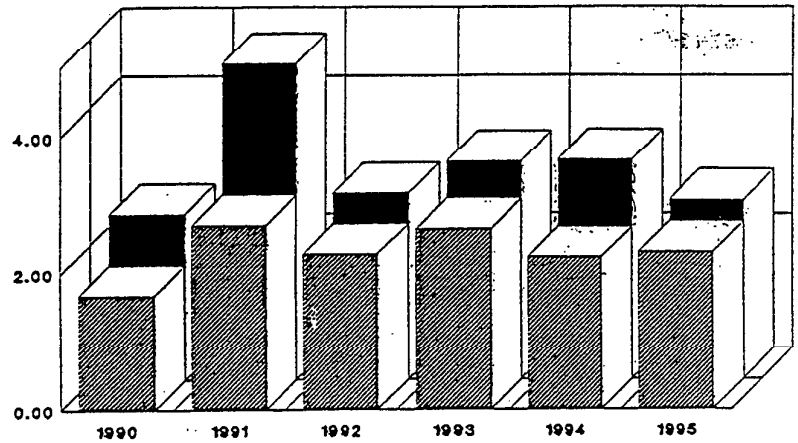
ATA 24 - Electrical Power



	1990	1991	1992	1993	1994	1995
Alert Level	4.58	5.81	5.16	4.95	4.37	3.88
12 Month Rate	3.09	4.55	4.50	3.28	3.13	3.08

Pilot Report Performance

ATA 25 - Equipment and Furnishings

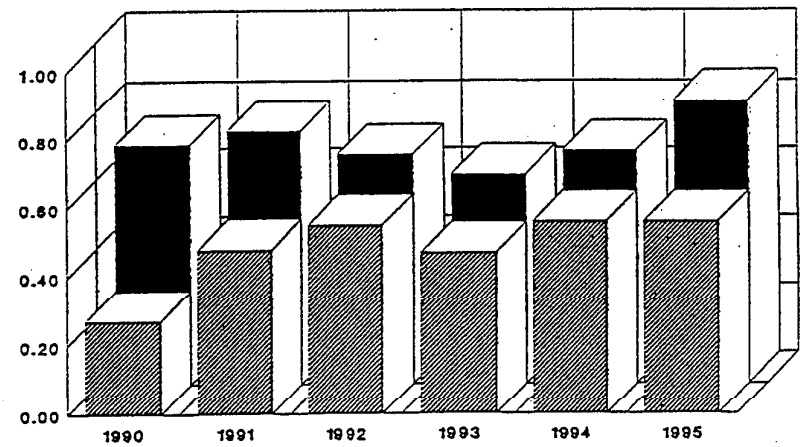


	1990	1991	1992	1993	1994	1995
Alert Level	2.44	4.62	2.74	3.20	3.23	2.65
12 Month Rate	1.68	2.72	2.29	2.66	2.25	2.33

12 Month Rate Alert Level

Pilot Report Performance

ATA 26 - Fire Protection

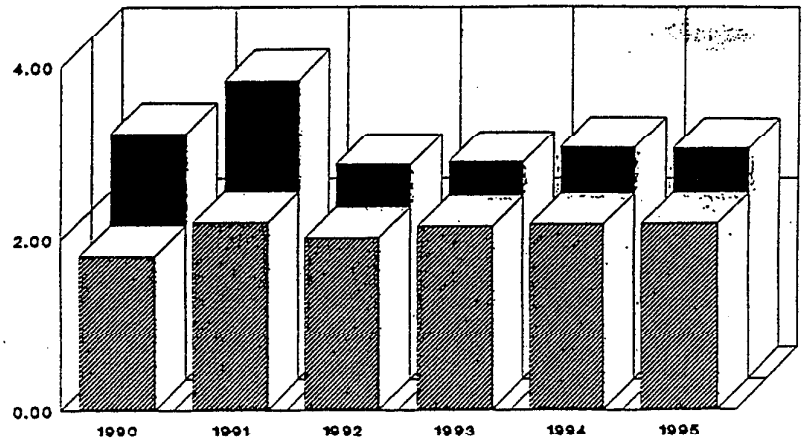


	1990	1991	1992	1993	1994	1995
Alert Level	0.70	0.74	0.67	0.61	0.68	0.83
12 Month Rate	0.27	0.48	0.55	0.47	0.56	0.56

12 Month Rate Alert Level

Pilot Report Performance

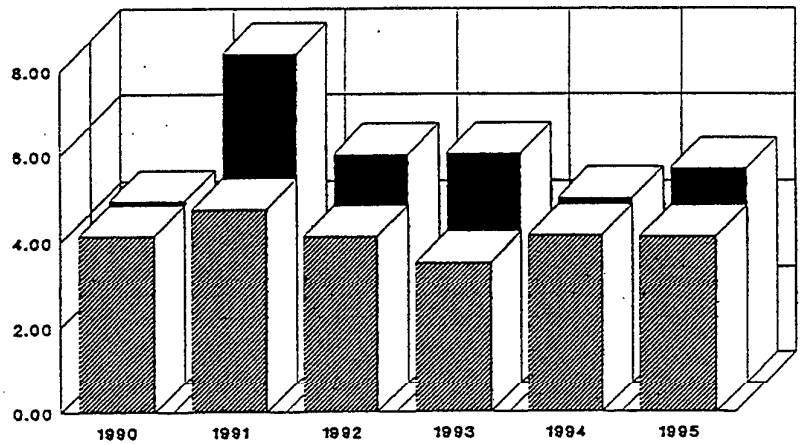
ATA 27 - Flight Controls



	1990	1991	1992	1993	1994	1995
Alert Level	2.89	3.49	2.52	2.55	2.72	2.71
12 Month Rate	1.81	2.20	2.02	2.15	2.18	2.19

Pilot Report Performance

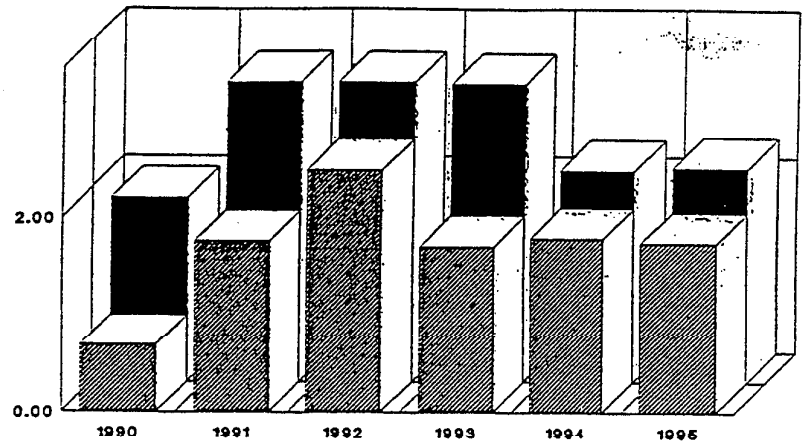
ATA 28 - Fuel



	1990	1991	1992	1993	1994	1995
Alert Level	4.25	7.68	5.31	5.33	4.31	4.99
12 Month Rate	4.15	4.76	4.13	3.52	4.15	4.13

Pilot Report Performance

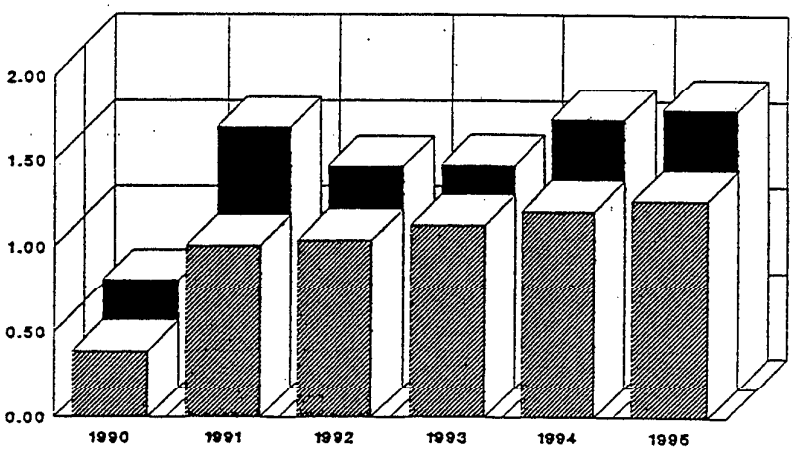
ATA 29 - Hydraulic Power



	1990	1991	1992	1993	1994	1995
Alert Level	1.89	3.05	3.05	3.03	2.17	2.20
12 Month Rate	0.59	1.76	2.48	1.71	1.79	1.75

Pilot Report Performance

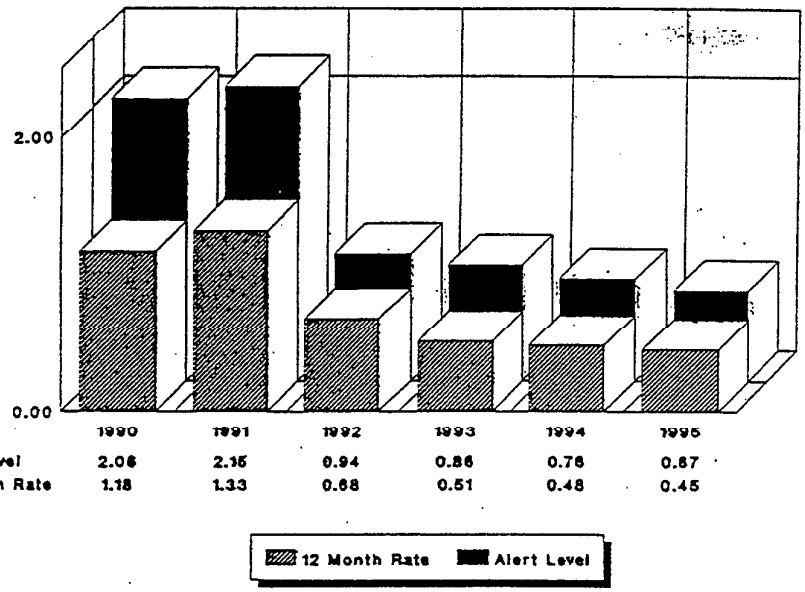
ATA 30 - Ice and Rain Protection



	1990	1991	1992	1993	1994	1995
Alert Level	0.63	1.52	1.29	1.30	1.57	1.63
12 Month Rate	0.39	1.01	1.04	1.13	1.21	1.27

Pilot Report Performance

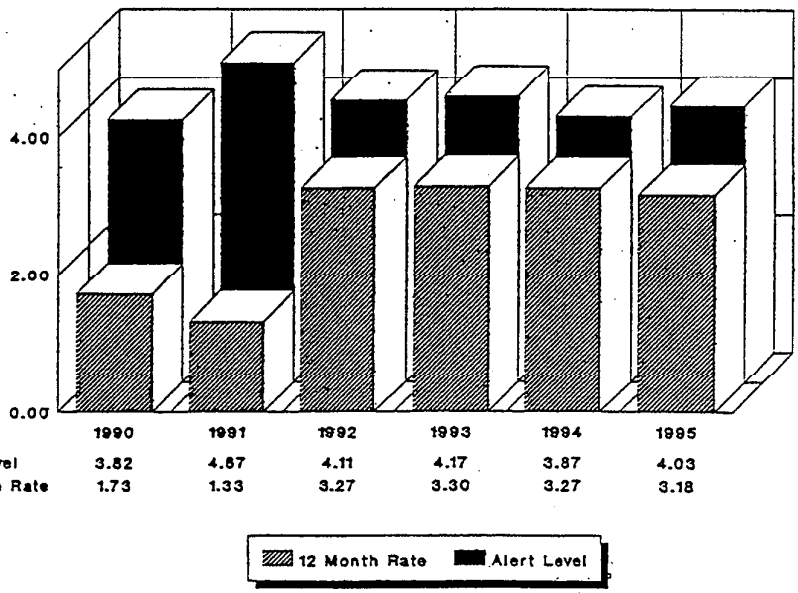
ATA 31 - Indicating/Recording



	1990	1991	1992	1993	1994	1995
Alert Level	2.06	2.15	0.94	0.86	0.76	0.67
12 Month Rate	1.18	1.33	0.68	0.51	0.48	0.45

Pilot Report Performance

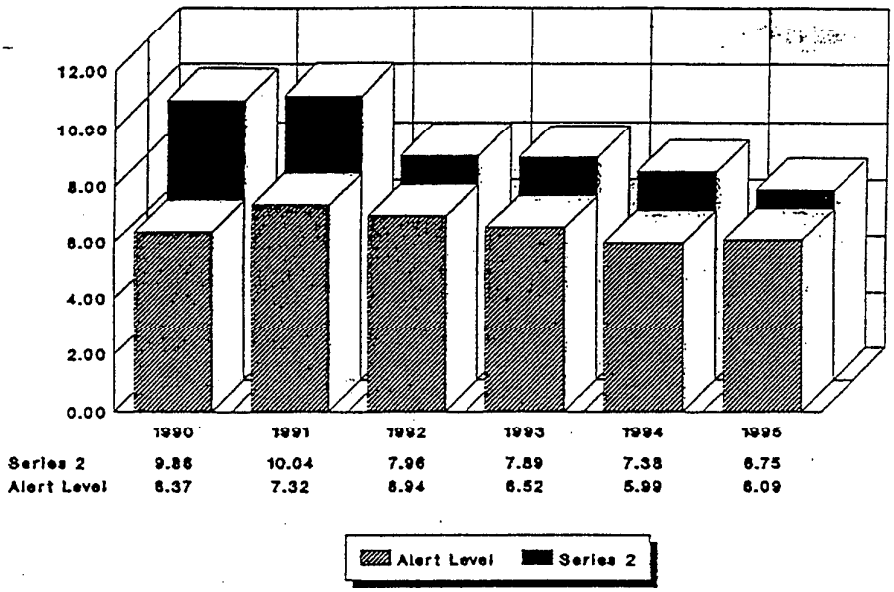
ATA 32 - Landing Gear



	1990	1991	1992	1993	1994	1995
Alert Level	3.82	4.67	4.11	4.17	3.87	4.03
12 Month Rate	1.73	1.33	3.27	3.30	3.27	3.18

Pilot Report Performance

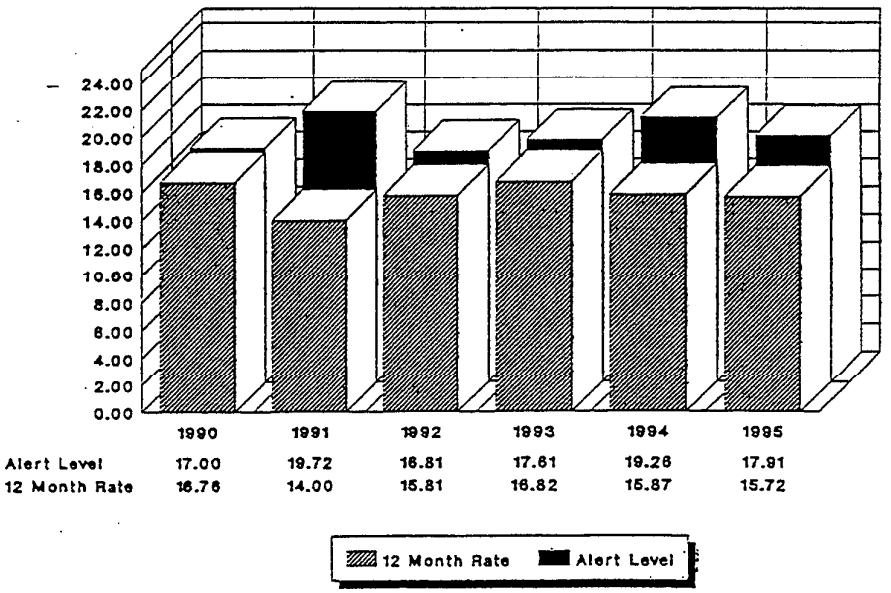
ATA 33 - Lights



	1990	1991	1992	1993	1994	1995
Series 2	9.86	10.04	7.96	7.89	7.38	6.75
Alert Level	6.37	7.32	6.94	6.52	5.99	6.09

Pilot Report Performance

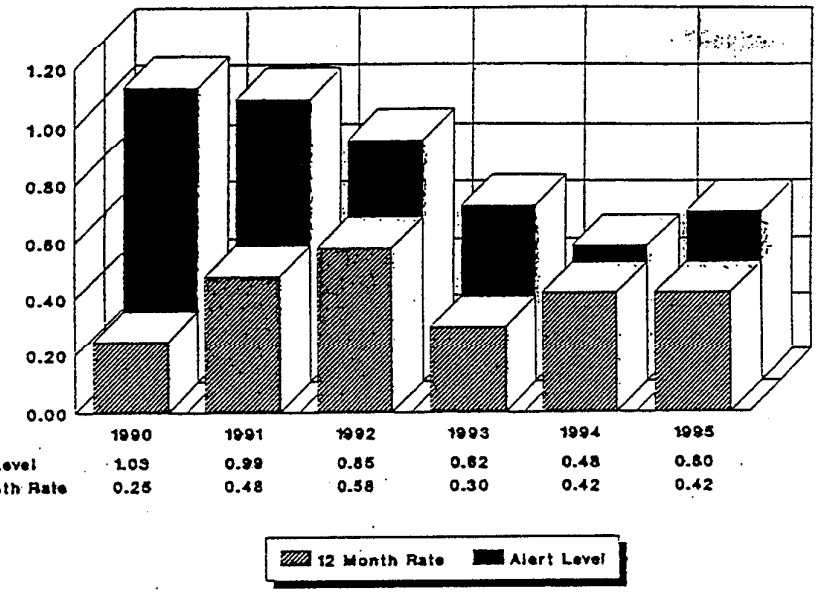
ATA 34 - Navigation



	1990	1991	1992	1993	1994	1995
Alert Level	17.00	19.72	16.81	17.61	19.26	17.91
12 Month Rate	16.76	14.00	15.81	16.82	15.87	15.72

Pilot Report Performance

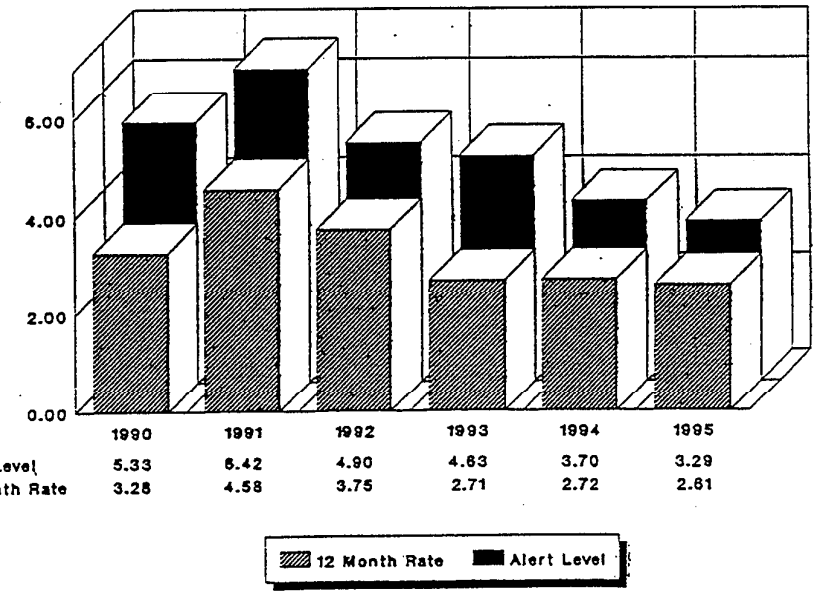
ATA 35 - Oxygen



	1990	1991	1992	1993	1994	1995
Alert Level	1.03	0.99	0.85	0.62	0.48	0.60
12 Month Rate	0.25	0.48	0.58	0.30	0.42	0.42

Pilot Report Performance

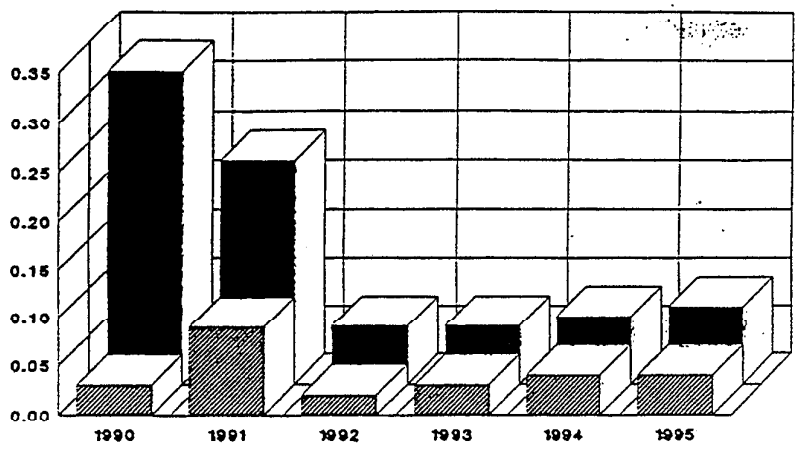
ATA 36 - Pneumatic



	1990	1991	1992	1993	1994	1995
Alert Level	5.33	6.42	4.90	4.63	3.70	3.29
12 Month Rate	3.28	4.58	3.75	2.71	2.72	2.61

Pilot Report Performance

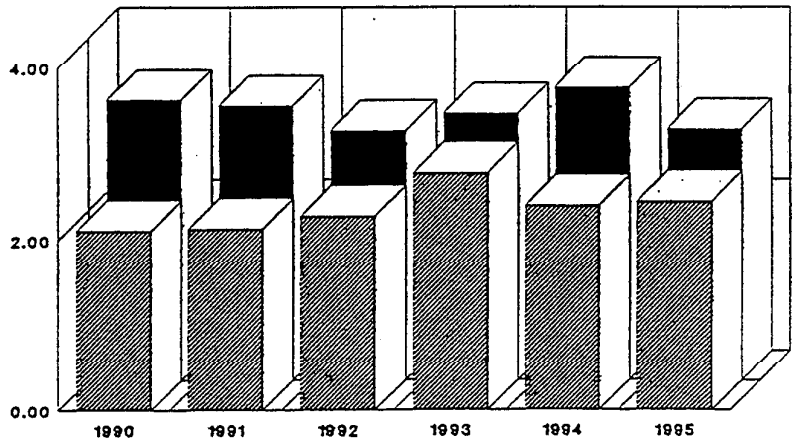
ATA 38 - Water/Waste



	1990	1991	1992	1993	1994	1995
Alert Level	0.32	0.23	0.06	0.06	0.07	0.08
12 Month Rate	0.03	0.09	0.02	0.03	0.04	0.04

Pilot Report Performance

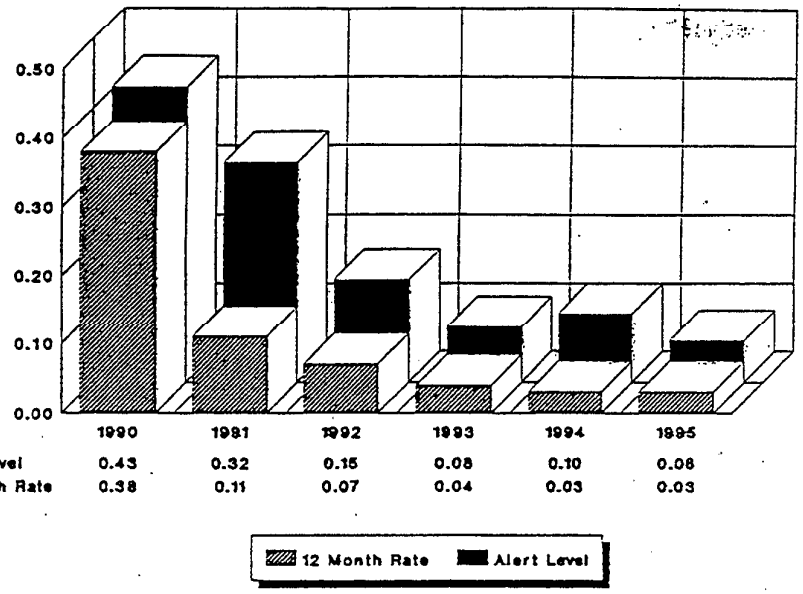
ATA 52 - Doors



	1990	1991	1992	1993	1994	1995
Alert Level	3.27	3.20	2.91	3.11	3.42	2.93
12 Month Rate	2.11	2.13	2.28	2.78	2.40	2.45

Pilot Report Performance

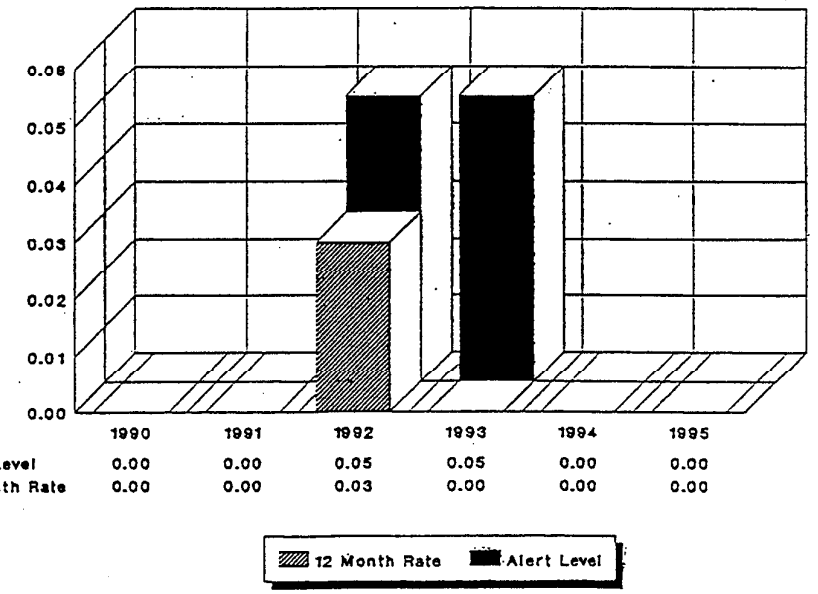
ATA 53 - Fuselage



	1990	1991	1992	1993	1994	1995
Alert Level	0.43	0.32	0.15	0.08	0.10	0.08
12 Month Rate	0.38	0.11	0.07	0.04	0.03	0.03

Pilot Report Performance

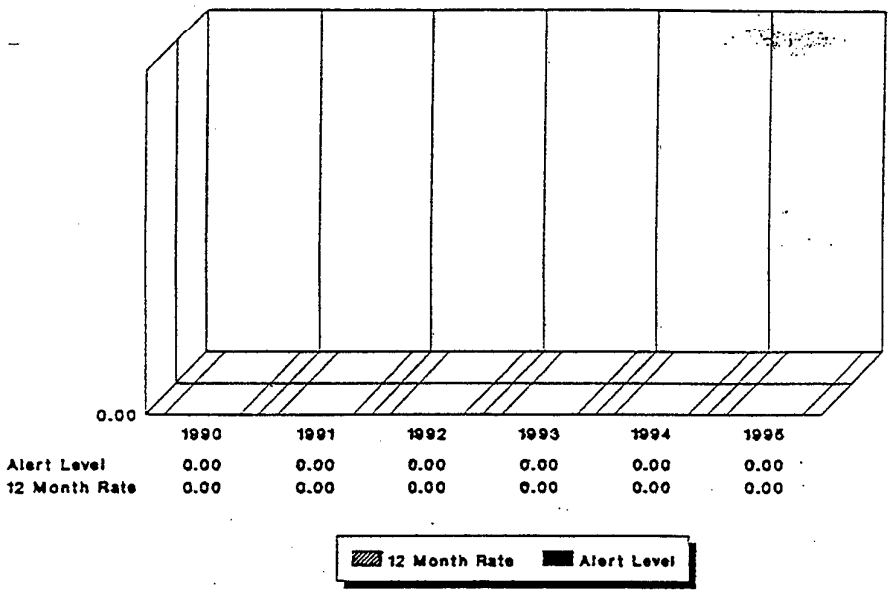
ATA 54 - Nacellese/Pylons



	1990	1991	1992	1993	1994	1995
Alert Level	0.00	0.00	0.05	0.05	0.00	0.00
12 Month Rate	0.00	0.00	0.03	0.00	0.00	0.00

Pilot Report Performance

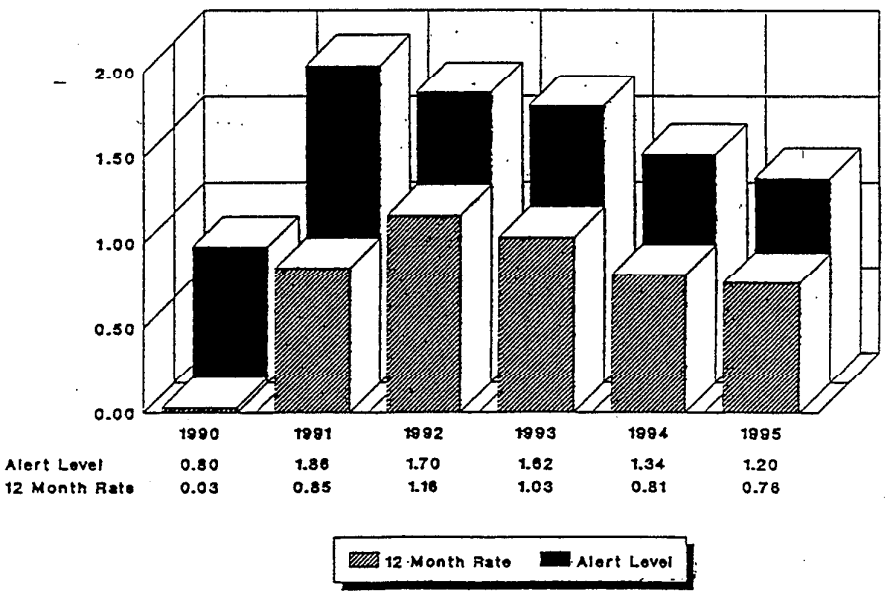
ATA 55 - Stabilizers



	1990	1991	1992	1993	1994	1995
Alert Level	0.00	0.00	0.00	0.00	0.00	0.00
12 Month Rate	0.00	0.00	0.00	0.00	0.00	0.00

Pilot Report Performance

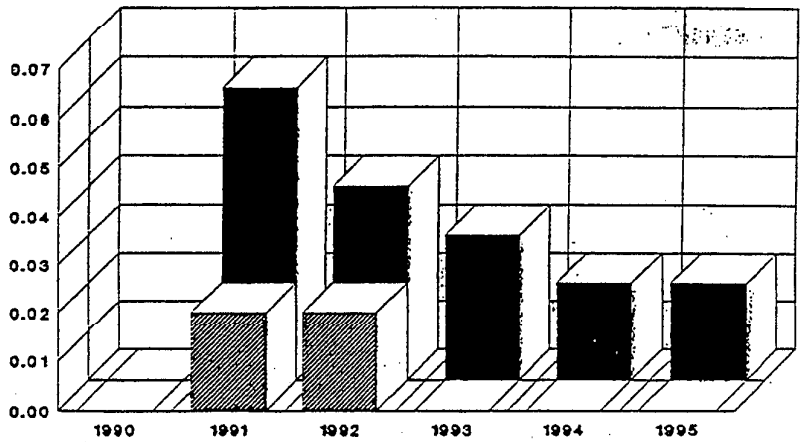
ATA 56 - Windows



	1990	1991	1992	1993	1994	1995
Alert Level	0.80	1.86	1.70	1.62	1.34	1.20
12 Month Rate	0.03	0.85	1.16	1.03	0.81	0.76

Pilot Report Performance

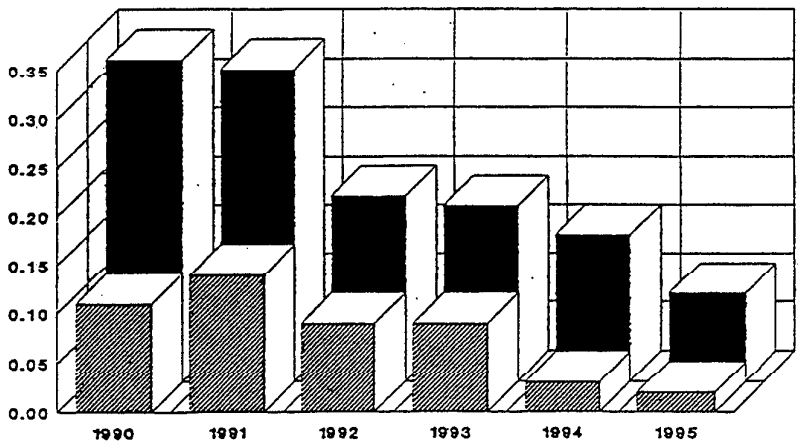
ATA 57 - Wings



	1990	1991	1992	1993	1994	1995
Alert Level	0.00	0.06	0.04	0.03	0.02	0.02
12 Month Rate	0.00	0.02	0.02	0.00	0.00	0.00

Pilot Report Performance

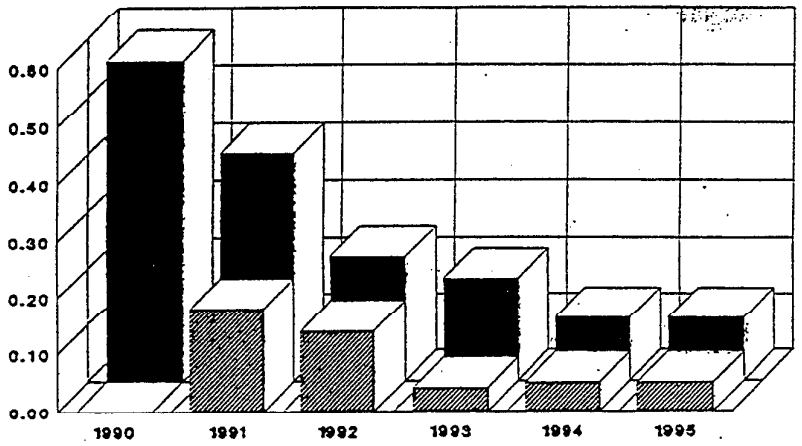
ATA 71 - Power Plant



	1990	1991	1992	1993	1994	1995
Alert Level	0.33	0.32	0.19	0.18	0.15	0.09
12 Month Rate	0.11	0.14	0.09	0.09	0.03	0.02

Pilot Report Performance

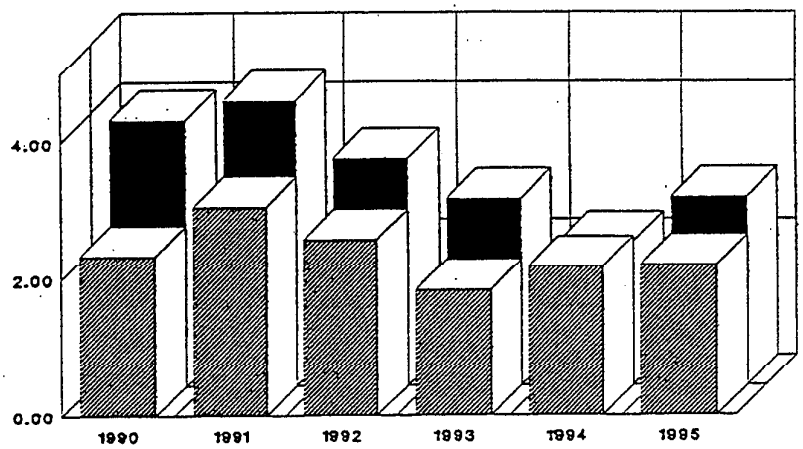
ATA 72 - Engine (Turbine/Turboprop)



	1990	1991	1992	1993	1994	1995
Alert Level	0.58	0.40	0.22	0.18	0.11	0.11
12 Month Rate	0.00	0.18	0.14	0.04	0.05	0.05

Pilot Report Performance

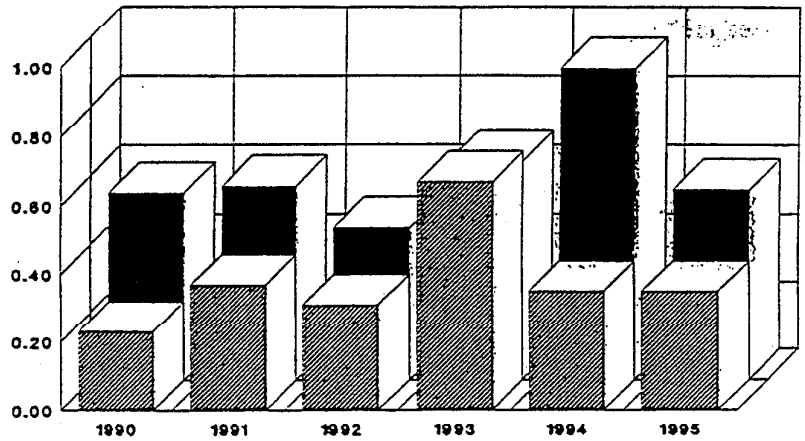
ATA 73 - Engine Fuel and Control



	1990	1991	1992	1993	1994	1995
Alert Level	3.89	4.17	3.32	2.74	2.11	2.77
12 Month Rate	2.35	3.07	2.59	1.84	2.19	2.21

Pilot Report Performance

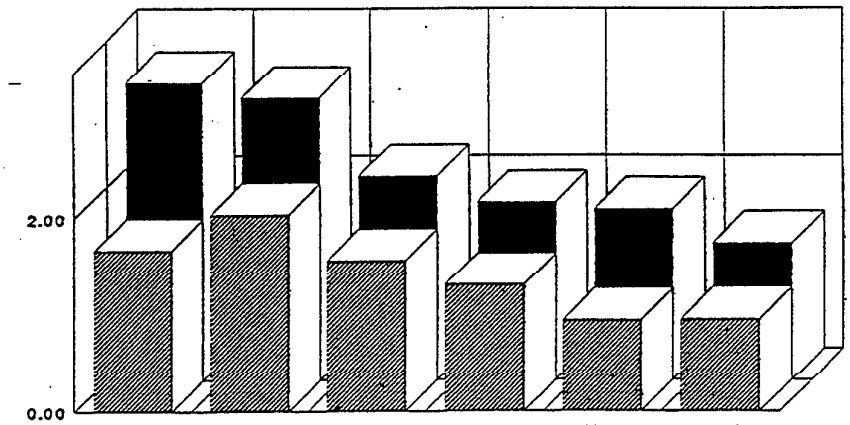
ATA 74 - Engine Ignition



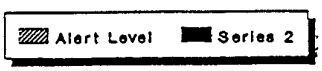
	1990	1991	1992	1993	1994	1995
Alert Level	0.55	0.57	0.45	0.64	0.91	0.58
12 Month Rate	0.23	0.37	0.31	0.67	0.35	0.35

Pilot Report Performance

ATA 75 - Engine Air

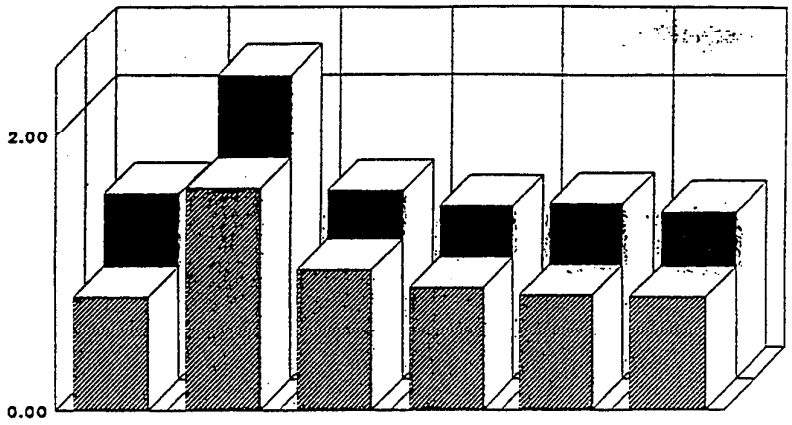


	1990	1991	1992	1993	1994	1995
Series 2	3.07	2.92	2.11	1.84	1.77	1.42
Alert Level	1.87	2.04	1.56	1.31	0.94	0.95



Pilot Report Performance

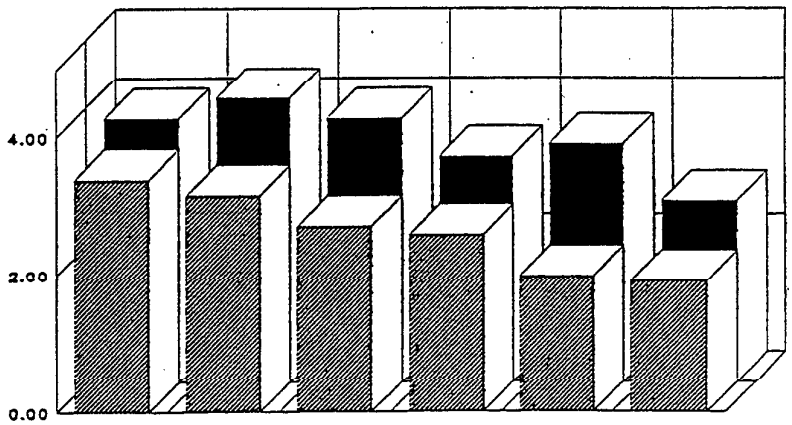
ATA 76 - Engine Controls



	1990	1991	1992	1993	1994	1995
Alert Level	1.36	2.22	1.38	1.27	1.29	1.23
12 Month Rate	0.83	1.62	1.03	0.90	0.84	0.83

Pilot Report Performance

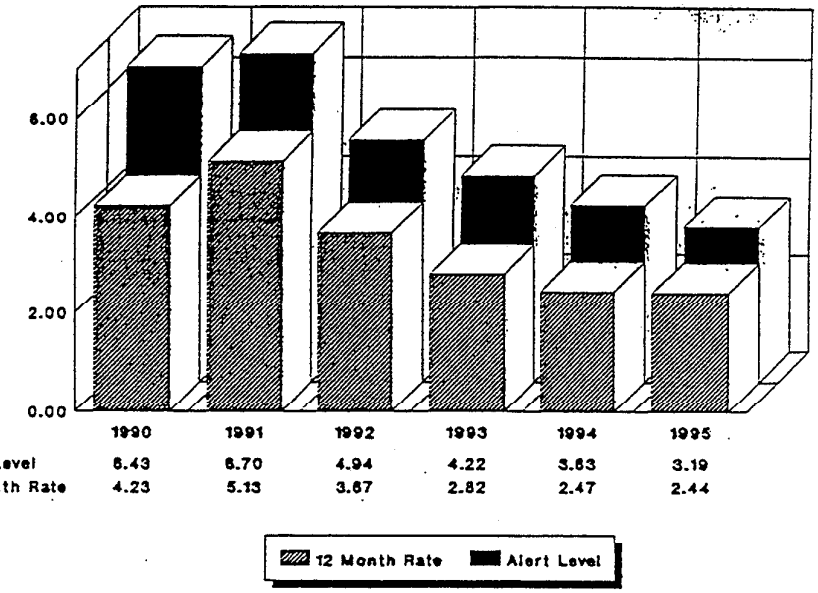
ATA 77 - Engine Indicating



	1990	1991	1992	1993	1994	1995
Alert Level	3.84	4.14	3.84	3.28	3.46	2.64
12 Month Rate	3.39	3.16	2.71	2.59	1.98	1.91

Pilot Report Performance

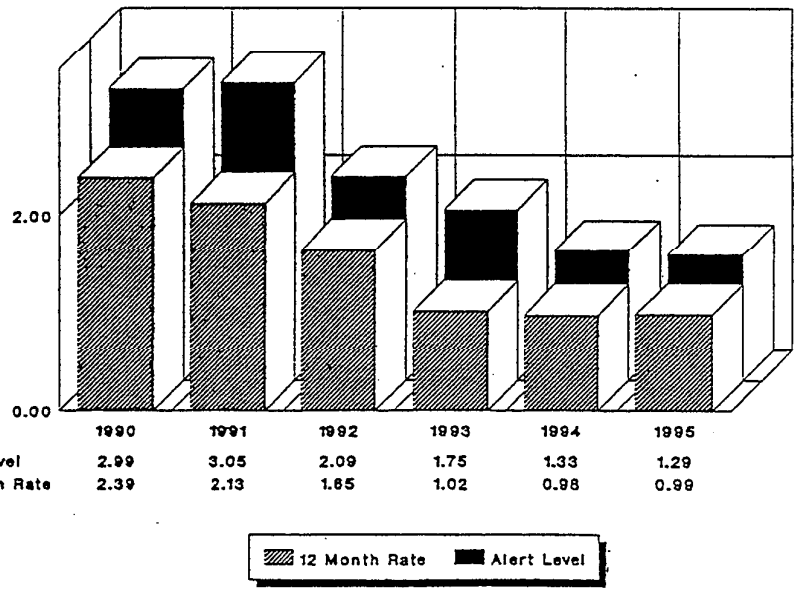
ATA 78 - Engine Exhaust



	1990	1991	1992	1993	1994	1995
Alert Level	6.43	6.70	4.94	4.22	3.63	3.19
12 Month Rate	4.23	5.13	3.67	2.82	2.47	2.44

Pilot Report Performance

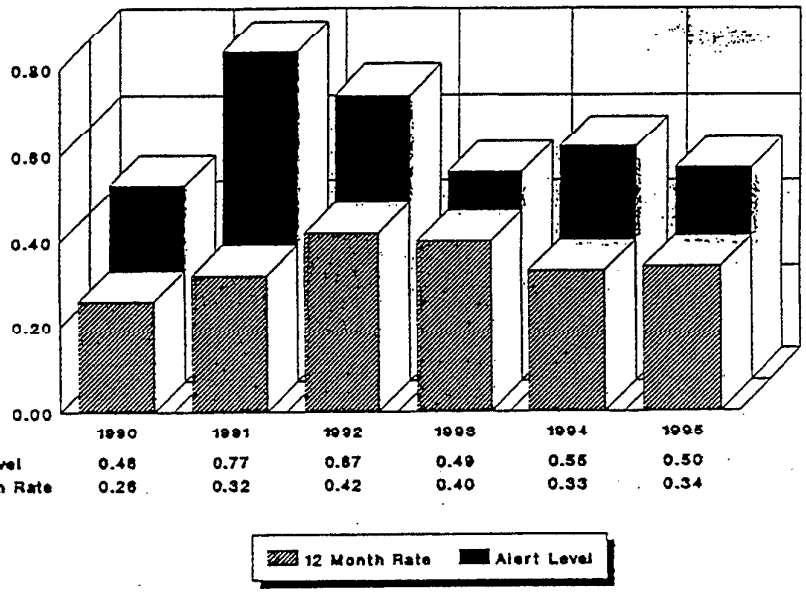
ATA 79 - Engine Oil



	1990	1991	1992	1993	1994	1995
Alert Level	2.99	3.05	2.09	1.75	1.33	1.29
12 Month Rate	2.39	2.13	1.65	1.02	0.98	0.99

Pilot Report Performance

ATA 80 - Engine Starting



	1990	1991	1992	1993	1994	1995
Alert Level	0.46	0.77	0.67	0.49	0.55	0.50
12 Month Rate	0.26	0.32	0.42	0.40	0.33	0.34

EWA RELIABILITY PROGRAM

ACCOMPLISHMENTS AND RECOGNITION

Emery Worldwide Airlines
Reliability Program Accomplishments
1990-1994

- 10/90 Cabin Compressor moved from Hard Time to On-Condition approved.
- 12/90 A, B, and C check calendar limits removed.
- 01/91 Freon Compressor moved from Hard Time to On-Condition approved.
- 02/91 Out Flow Valves moved from Hard Time to On-Condition approved.
- 09/91 D check calendar limits removed.
- 12/91 10% landing gear interval escalation for fleet approved.
- 02/92 10% A, B, and C check interval escalation approved.
- 02/93 10% A, B, and C check interval escalation approved.
- 06/93 "In House" A.D.E.P.T. program approved.
- 07/93 Removal of the S.O.A.P. program approved.
- 01/94 Replacement of Freon System with Cockpit A/C System
- 12/94 Operation Specification D74 approved.

Emery Worldwide Airlines
Reliability Program Recognition

- EWA's Maintenance Reliability Program is utilized by the FAA Training Academy as a positive program in the Reliability Program Development training classes.
- EWA's Maintenance Reliability Program is utilized by DAC Product Support Group training classes.

INDUSTRY

SURVEY

OF

FAA APPROVED

RELIABILITY PROGRAMS

SURVEY FINDINGS

1. Twelve (12) 121 Air Carriers Surveyed.

2. Air Carriers not requiring FAA prior approval to alert level performance standards - 8 each.

3. Air Carriers not requiring FAA prior approval to changes to Maintenance Inspection Program - 10 each.

4. There are four (4) FAA Regions represented.

Conclusion: EWA's Program is mirrored to other 121 Air Carriers.

121 AIR CARRIER RELIABILITY PROGRAM SURVEY

Performed by: Thomas M. Wood, Director Quality Control
1-19-95

QUESTIONS ASKED:

1. Does your FAA require prior approval to Reliability Program changes concerning alert level performance standards?

2. Does your FAA require prior approval to changes to Maintenance Inspection Program?

AIR CARRIER RESPONSES:

Airborne - Bob Zetney, Director Quality Control

1. Yes, the FAA reviews/approves annually, however, is formality only.
2. No, Reliability Program approved by Air Carrier.

UAL - John Youngblood, Manager Quality Assurance

1. No.
2. Yes, with only regards to time limitation changes. Reliability Program approves changes to the Inspection Program Manual (IPM).

TWA - Clay Kimsey, Manager Planning and Reliability Control

1. No.
2. No.

Zantop - John Liechty, Director Quality Control

1. Yes.
2. No.

NWA - Dave Nakata, Director Tech. Ops. Maintenance Program

1. No, only above three standard deviations.
2. No, only escalations above 15%.

America West - Tom Dowd, Reliability

1. No.
2. No.

(Continued)

121 AIR CARRIER RELIABILITY PROGRAM SURVEY

Performed by: Thomas M. Wood, Director Quality Control
1-19-95

Alaska Airlines - Wright McCartney, Manager Reliability
*NEW RELIABILITY SUBMITTED TO FAA

1. Yes, increase alert, decrease MRB approval.
2. Yes, only items above 10%.

Ryan - Clark Chambers, Manager Reliability

1. No.
2. No.

American Airlines - Paul Wilson, Manager Quality Assurance

1. Yes, only on increase alert, decrease MRB approval.
2. No, major changes are submitted to FAA 14 days prior to implementation for review.

Horizon Air - Ali Tabanshomal, Manager Reliability

1. No.
2. No, submit interval (15%) or content to FAA for concurrence.

Delta - Jim Maucery, Manager Technical Standards

1. No.
2. No.

Southwest - Bob Beckham, Manager Quality Assurance

1. Yes, notified.
2. Yes, notified.

SUMMARY

AIR CARRIER	RESPONSE	FAA REGION	AIR CARRIER	RESPONSE	FAA REGION
AIRBORNE	YES NO	GREAT LAKES	TWA	NO NO	SOUTHWEST
UAL	NO YES	WESTERN PACIFIC	NWA	NO NO	GREAT LAKES
ZANTOP	YES NO	GREAT LAKES	AMERICAN WEST	NO NO	SOUTHWEST
AMERICAN	YES NO	SOUTHWEST	RYAN	NO NO	SOUTHWEST
SOUTHWEST	YES YES	SOUTHWEST	HORIZON	NO NO	NORTHWEST MOUNTAIN
EWA	NO NO	WESTERN PACIFIC	DELTA	NO NO	SOUTHWEST

FIVE YEAR ANALYTICAL STUDY OF EWA PERFORMANCE

BASED ON FAA INSPECTION / ENFORCEMENT HISTORY

INCLUDING FAA NASIP AND DEPARTMENT OF DEFENSE INSPECTIONS

EMERY WORLDWIDE AIRLINES MAINTENANCE PERFORMANCE BASED ON FAA SAFETY INSPECTION/ ENFORCEMENT HISTORY

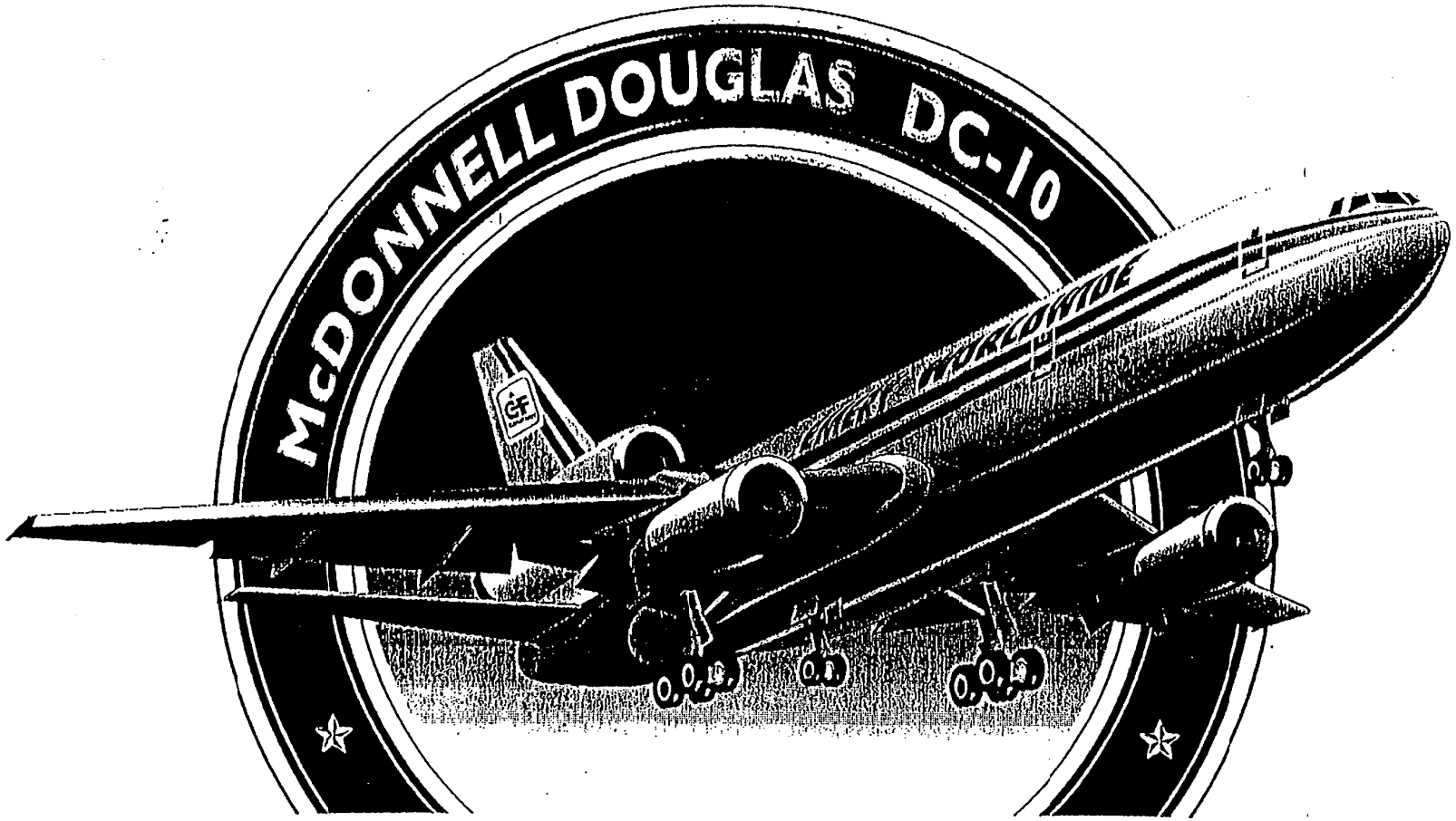
YEAR	#ADMIN. ENFORCEMENTS	FAA NPTRS	FLEET SIZE	FLT HOURS	CYCLES	PILOT REPORTS
1990	4	Ref. Total	7	11,070	4,732	3,679
1991	3	Ref. Total	29	28,095	12,565	10,512
1992	3	Ref. Total	29	40,606	20,559	17,196
1993	0	Ref. Total	29	42,473	20,718	15,443
1994	0	Ref. Total	37	52,465	23,704	16,667
TOTALS	10	*2,764		174,709	82,278	63,497

*EWA was not able to breakdown the # of NPTRs per year, as the FAA report did not reflect inspection dates.

EWA PERFORMANCE FACTORS - 1/90 thru 11/94

During the five (5) year period of Air Carrier Operations, EWA Maintenance experienced the following:

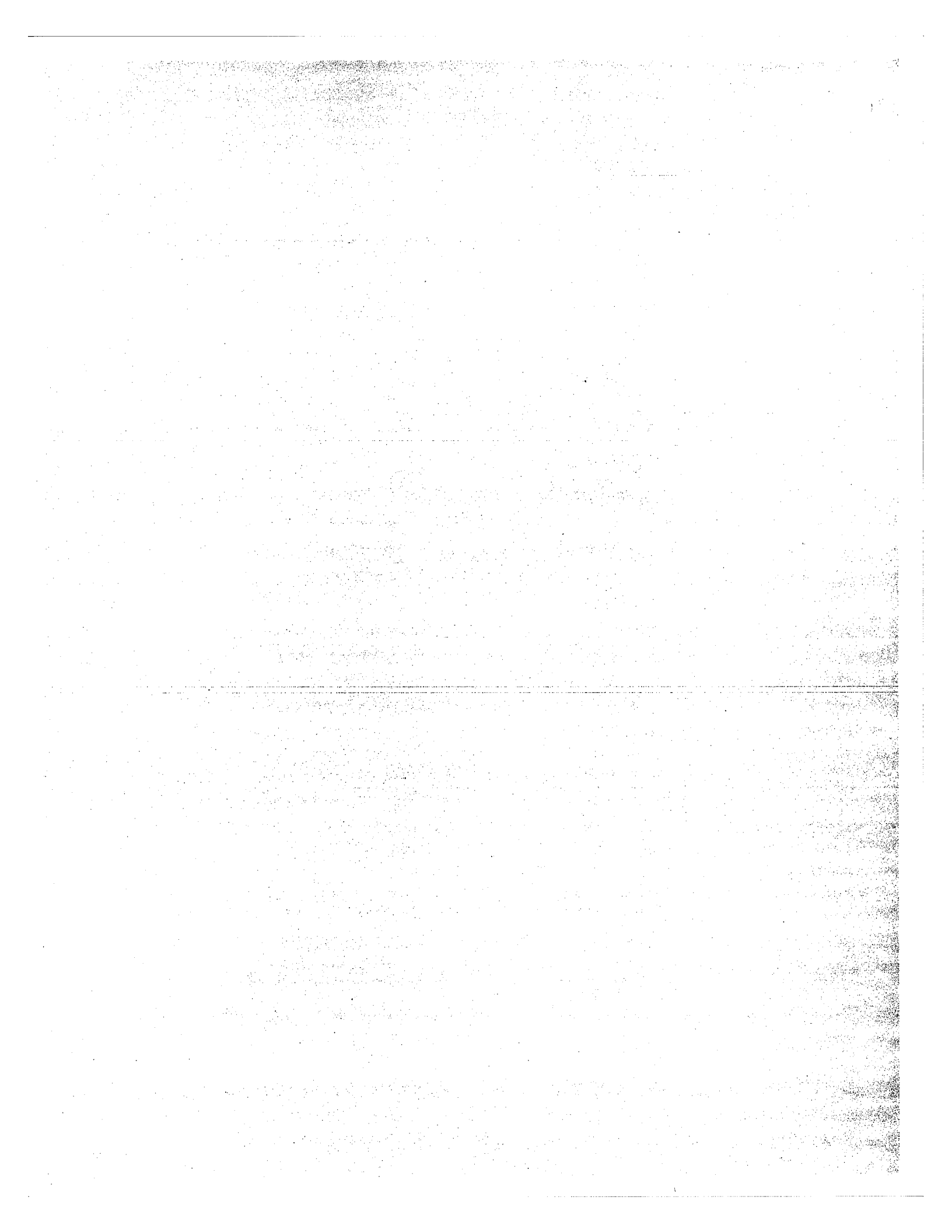
1. FAA Administrative Enforcements compared to # of Safety Inspections = .4%
2. FAA Administrative Enforcements compared to # of Flight Hours = .006%
3. FAA Administrative Enforcements compared to # of Flight Cycles = .01%
4. FAA Administrative Enforcements compared to # of Pilot Reports = .01%
5. Maintenance received no civil penalties.
6. Maintenance received no FAA Administrative Enforcements in reference to Airworthiness or Safety.
7. It is important to note that EWA went through a very indepth NASIP Inspection in 1992. To which EWA rated 64% higher than the Industry performance of the 121 Air Carriers.
8. EWA's FAA Administrative Enforcements minor in numbers during 1990, 1991 and 1992, reduced to 0 in 1993 with two open LOI's in 1994..
9. EWA increased it's fleet size by 22% in 1994 and decreased its number of PIREP's per flight hour by 5%.
10. The EWA Technical Services Department has gone through two Department of Defense (DOD) Inspections in the past five years. We received above average to excellent ratings on both inspections.



THE BEST IS GETTING EVEN BETTER!

EMERY WORLDWIDE AIRLINES

A CF Company



EMERY
WORLDWIDE AIRLINES
A CNF COMPANY

March 12, 1999

Mr. Joseph Abramski
FSDO-SJC
1250 Aviation Ave., Suite 295
San Jose, CA 95110

Dear Mr. Abramski:

On behalf of the Emery Worldwide Airlines, Inc.'s (EWA) Senior Management, it gives me great pleasure to announce the development of the Engineering Department. This addition and reorganization of the Quality Control Department responsibilities will promote an overall increased effectiveness of the Technical Services Department.

Interviews are being scheduled to hire the replacement Manager of Maintenance Training, and filled within thirty (30) days.

I am sure you share with us the excitement of this department expansion, and can appreciate the true economical contributions made by the Company.

I trust from your previously voiced concerns of EWA's lack of an Engineering Department, this development meets with your concurrence. I will formally submit the Maintenance Policy and Procedures Manual Revision to you that will incorporate these changes.

Thank you for your support and help in promoting the growth of the EWA Technical Services Department.

Please call if you have any questions.

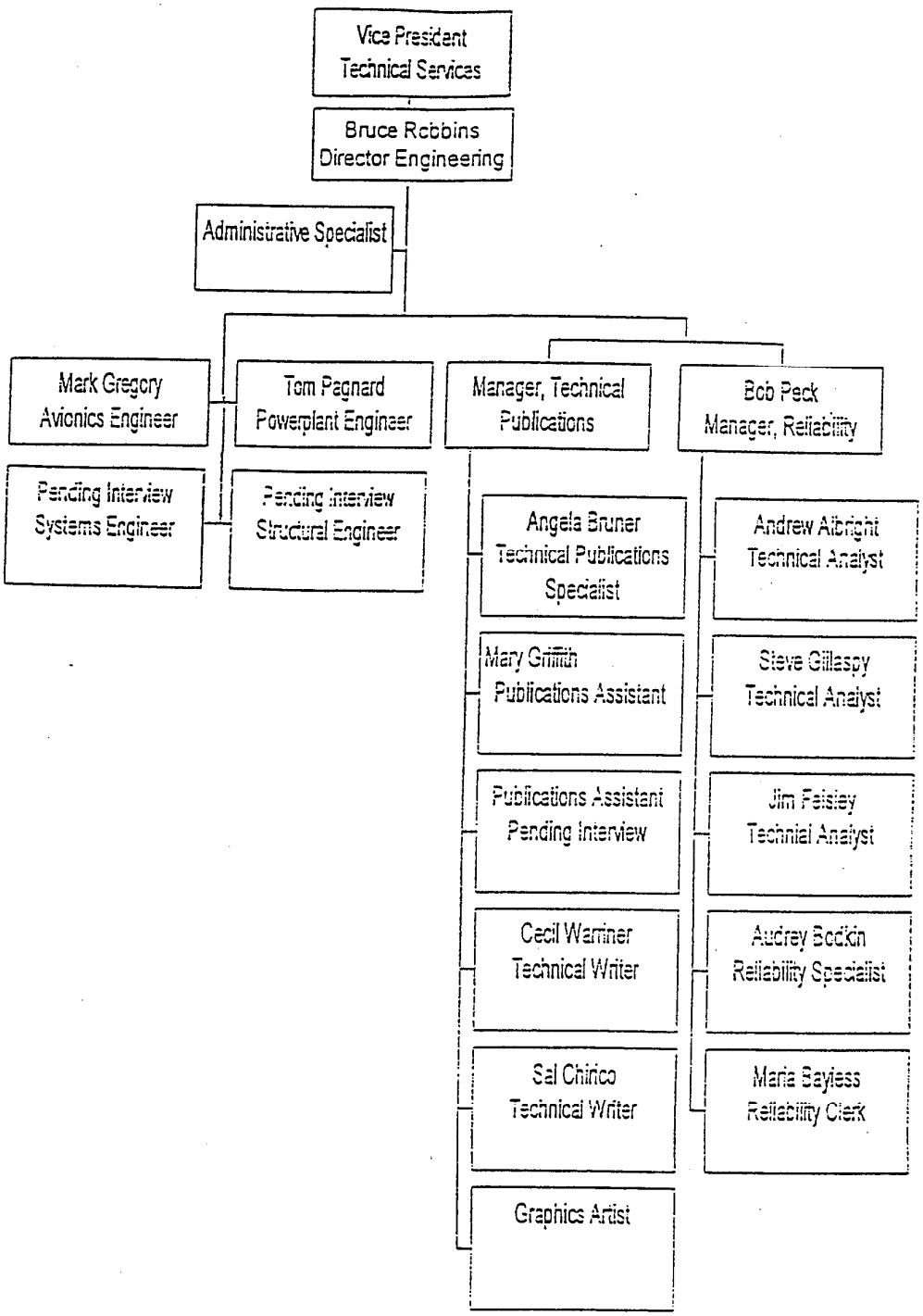
Sincerely,

Thomas M. Wood
Director Quality Control

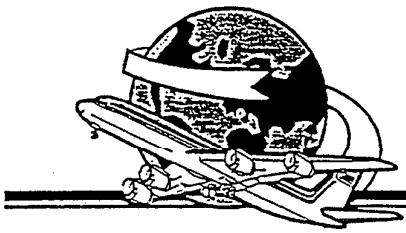
Attachments

TMW/csh

cc: Rene' Visscher
Jay Howard
John Howard
Bruce Robbins


Vice President
Technical Services
Bruce Robbins
Director Engineering
Administrative Specialist
Mark Gregory
Avionics Engineer
Tom Pagnard
Powerplant Engineer
Manager, Technical
Publications
Bob Peck
Manager, Reliability
Pending Interview
Systems Engineer
Pending Interview
Structural Engineer
Angela Bruner
Technical Publications
Specialist
Mary Griffith
Publications Assistant
Publications Assistant
Pending Interview
Cecil Warriner
Technical Writer
Sal Chirico
Technical Writer
Graphics Artist
Andrew Albright
Technical Analyst
Steve Gillaspy
Technical Analyst
Jim Paisley
Technial Analyst
Audrey Bodkin
Reliability Specialist
Maria Bayless
Reliability Clerk

EMERY WORLDWIDE AIRLINES



Thomas M. Wood
DIRECTOR QUALITY CONTROL

303 CORPORATE CENTER DR. VANDALIA, OH 45377
FAX: (937) 898-2803 PHONE: (937) 454-3940

FACSIMILE TRANSMISSION COVER SHEET

DATE: 3/12/99 SEND TO FAX #: [redacted]

DELIVER IMMEDIATELY TO:

NAME: JOE ABRAMSKI TELEPHONE #: [redacted]

COMPANY / DEPARTMENT: FAA SJC

This is page 1 of ___ pages sent in transmission regarding the following principal subject(s):

Joe: This fax is a follow-up to our telecon today. Have a nice weekend, see you next week.

Please copy Nick Pearson.

FACSIMILE MESSAGE FROM:

NAME: [redacted]

EMERY WORLDWIDE AIRLINES

A CF Company

December 12, 1996

Mr. John Howard
FSDO-SJC
1250 Aviation Ave.
Suite 295
San Jose, CA 95110

Dear Mr. Howard:

During your visit the week of December 9, 1996 accompanied by the new assistant Principal Maintenance Inspector and the new Principal Avionics Inspector, you received a brief indoctrination/introduction of the Maxi-Merlin System from a USAir Instructor, who was providing training that week to EWA.

To continue to keep you and your office informed of this process, I'm sending you a copy of a memo that presents the development and staff qualification of the newly developed Systems and Controls Section of EWA.

I'm sure you will agree this professional approach is commendable, and will provide professional results.

Sincerely,

[redacted]

Thomas M. Wood
Director of Quality Control

attachments

aee

SETTING STANDARD 50 YEARS

TO: EWA Management and Employees

FROM: Jeff McGlaun, Senior Project Manager, Systems & Controls JM

RE: New Employees/Organization Announcement

DATE: 25 November 1996

As you all are greatly aware, the nature of our business is ever-changing, and the need to apply dedicated resources to enable these changes is crucial. In May of this year, John Colletti established within the Finance and Administration division a new "project-oriented" organization known as Systems & Controls. This organization was established to create, improve, and support our various airline business functions through development and implementation of computer and non-computer related projects and to maintain the integrity of the systems and information produced.

One example of such a project is the Airline Maintenance and Materials System being conducted for the Technical Services organization. This system is a commercially available, integrated package which supports aircraft maintenance, engineering, inventory, and logistics operations. The system will replace and expand upon an existing, technologically-dated, non-integrated, home-grown system. To accomplish this project, several dedicated people with varying technical backgrounds were needed. Selected for this critical project were Andy Farrell, Paul Virgallito, Tom Kuty, Mike Shyne, and Pat (Patricia) Elliott.

- Andy is a Business Systems Analyst with a MBA in Logistics, a BS in Management Information Systems, and 8 years of professional experience. Andy most recently was the Deputy Project Manager for implementing a commercially-available facilities and equipment maintenance system for the Department of Defense (DoD). This assignment included business process improvement analysis, project planning and coordination, and daily interaction with the project team and customer. Prior to this assignment, Andy was responsible for the quality assurance function for a depot maintenance management information system, also for the DoD. Andy's first assignment was as a staff consultant where he focused on system selection, implementation, and system recovery. Andy has experience with a broad range of information systems platforms.

- Paul is a Business Systems Analyst with a BS in Industrial and Systems Engineering, and has 5 years of professional experience. Paul most recently was the lead test engineer for a facilities and equipment maintenance system and for a tool inventory management system, both for the DoD. This assignment included the evaluation of improved business processes and testing of software. Before this, Paul was responsible for analyzing information systems which performed material requirements determination, statistical demand forecasting, and parts cataloging. Paul's first assignment was as an analyst testing a depot maintenance management information system where he assisted shop floor personnel in learning system transactions. Paul is pursuing his APICS Certification in

Production and Inventory Management (CPIM). He successfully completed certification for Material and Capacity Requirements Planning (MCRP) and Just In Time (JIT).

- Tom is a Business Systems Analyst with a BS in Business Administration (dual major in Production and Operations Management, and Organizational Behavior), and has 2 years of professional experience. Tom most recently was a training analyst where he designed, developed, and delivered end-user training for a tool inventory management system and laboratory information management system for the DoD. Tom also developed training needs assessments which included analysis of business processes and developing user training profiles. Tom was a member of the APICS Chapter at his alma mater.

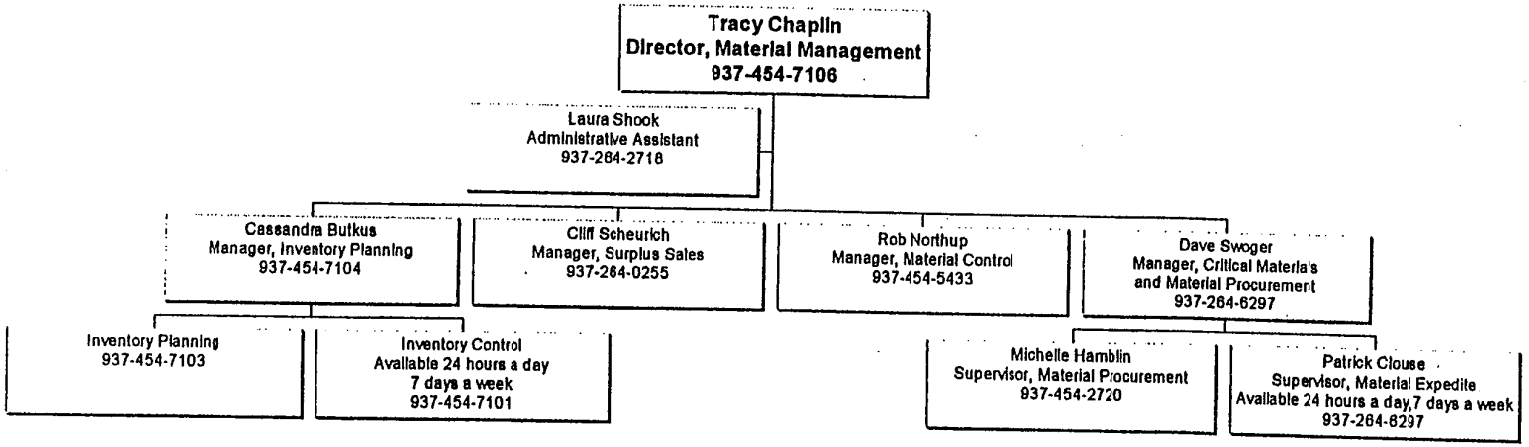
- Mike is a Systems Engineer with a BS in Computer Science, and has 23 years of professional experience, four of which were with the U.S. Army. Mike most recently was a systems engineer analyzing hardware and software requirements and configurations to resolve a variety of business objectives. He was responsible for implementing and integrating disparate hardware, software, and networking environments. Mike's prior assignments were: a systems programmer, a technical support manager, an application programmer, and a telecommunications specialist. Mike has a broad range of expertise with regards to computer operating environments and programming languages including: MVS, UNIX, Novell, NT, TCP/IP, SQL*Net, Oracle, C, and C++. He has successfully completed over 30 technical courses.

- Pat is a Project Administrator with an AS in Applied Business, and has 25 years of professional experience. Pat most recently was an executive assistant to the Program Manager of a DoD depot maintenance system integration project. Pat developed and tracked project budgets, coordinated and tracked travel and other direct costs to projects for over 150 people, constructed periodic status reports, prepared management briefings, coordinated conferences, schedules, and communications, and conducted various other research tasks. In a prior assignment Pat worked as a Financial Analyst where she tracked labor, material, and other direct charges, prepared financial reports, and processed invoices and POs. Pat has also worked as a graphics specialist and technical illustrator. Pat has extensive skills with the Microsoft Office suite of software.

Please join me in welcoming these new employees to EWA.

Material Management Organizational Chart

EMERY WORLDWIDE AIRLINES
A CNF COMPANY



EMERY
WORLDWIDE AIRLINES
A CNF COMPANY

TO: Tim Alman, David Bell, Andy Farrell, Ed Jones, Shelley Liddy, Abraham Michael, Karen Price, Art Vandergoot, Tom Wood

Rick Mansfield - Project Manager, Commodore Aviation
B.J. Allison - Project Manager, Tennessee Technical Services
James Schofield - Project Manager, TIMCO

FROM: Cassandra Butkus

DATE: February 25, 1999

CC: Tracy Chaplin

Effective immediately, the responsibility of Remove/Install of all aircraft parts into the MERIT system will be transferred from the Aircraft Records department to Inventory Planning. Seven Inventory Controllers staffed 24 hours a day/7 days a week will perform the function. The transition will provide increased traceability on all aircraft parts. Following are the NEW procedures in regards to the routing of parts change documentation.

- All part change tags, vendor tags/certification (8130's), component control sheets, non-routines or log pages should be faxed to Inventory Planning at (937) 454-9189. It is CRITICAL that all vendor certification/tags are faxed with part change tags.
- Units, which are bad from stock, require the same documentation as above and must be faxed to Inventory Planning.
- ALL part changes should be filled out in accordance with the Emery Worldwide Airlines Maintenance Policies and Procedures Manual (attached), and recorded on EWA part change tags (Form ME034).
- It is CRITICAL that all component swaps are documented on a Non-Routine or Log Page, with the part numbers and serial numbers listed, and faxed to Inventory Planning.
- Please make sure that all parts change information (tags and component control sheets), including bad from stock units, are COMPLETE and LEGIBLE. This will eliminate unnecessary phone calls for verification of information.
- When verification is needed, please respond to the Inventory Controllers as soon as possible so they can keep parts moving.
- All documentation should be faxed DAILY. Failure to comply with this will prevent the Inventory Controllers from entering the data in "real time" resulting in parts not moving.
- All ROBBED parts tags should be faxed to IMMEDIATELY to Inventory Control. This will enable Material Expedite to create an ICT and track all movement on that unit from the Heavy Maintenance facility to the Line Station in need.

EMERY
WORLDWIDE AIRLINES
A CNF COMPANY

Attached please find part tag policies and procedures from the Emery Worldwide Airlines Maintenance Policy and Procedures Manual. Revision # 18 is the current policy. However, I have also included Revision #14 as I realize Heavy Check Facilities are still using the "old" style Emery tags.

The main goal of the Inventory Controllers is to maintain the data integrity of the inventory by processing "real time" information into the MERIT system. This will reduce the time it takes to get unserviceable units out for repair and back into our serviceable stock. Your cooperation in this transition is appreciated. If you have any questions please contact the Inventory Controllers at (937) 454-7101 or (937) 454-7105.

303 CORPORATE CENTER DRIVE, VANDALIA, OH 45377

Serviceable Information Section

12. CPN	Company Part Number for the serviceable part. Automatically printed by MERIT.
13. CSN	Company Serial Number for the serviceable part. Automatically printed by MERIT.
14. MPN	Manufacturer's Part Number for the serviceable part. Automatically printed by MERIT.
15. MSN	Manufacturer's Serial Number. Automatically printed by MERIT.
16. Shelf Life Date	Shelf life expiration date. Entered by Receiving Inspector and automatically printed by MERIT.
17. Tag Complete Date	The date the tag was printed.
18. EMP NBR	The employee number of the inspector performing the inspection.
19. Approval	This space to be signed or stamped by the Receiving Inspector certifying that all entries are correct. If the Receiving inspector stamps the tag, the second copy must also be stamped.
20. Bar Code	Area for Bar Code Identification Stickers to print.
21. Removal Codes	List of approved removal codes to use in block 6.

Note 1: When a rotable/repairable part is received from the manufacture/ vendor the stores clerk or line station mechanic is required to complete the following item numbers on the Part Change Tag:

Item numbers 12 through 17.

The Receiving Inspector will complete blocks 18 and 19.

Note 2: When a rotable/repairable is Removed Serviceable (Robbed) the mechanic will complete the following item numbers on the Part Change Tag:

Item Numbers 1 through 10, Item Number 6 (Reason Code) will reflect a number 4 for robbed part.

Note 3: When a rotable/repairable part is removed/installed the mechanic will complete the following item number on the Part Change Tag:

Item Numbers 1 through 10

Removal Reason Codes

CODE	REMOVAL REASON	USAGE
01	Time Controlled Removal	Component removed because of Time Limits criteria.
02	Removed for Cause/Defect	Component removed for defect or suspected defect.
03	Bad from Stock	Component was installed on aircraft , but failed ops check.
04	Robbed/Cannibalized Part	Component was removed serviceable from one aircraft and installed in another aircraft to complete a maintenance action.
07	Component Swap	Component is moved from one position to another on the same aircraft.
08	Troubleshooting	Component is removed from the aircraft for troubleshooting.
09	Unit to Shop for Modification	Component is removed so a modification can be completed on the component.
17	Unit created Unserviceable	Component is determined unserviceable during receiving inspection.

C. Control Number Procedure

1. EWA Dayton Aircraft Material Control will print part tags as components are received and processed. Items 1-9 and 11-14 will be printed by the computer. This information will be obtained from the Rotable History Master Record File in the EWA1 Computer System in conjunction with the stores operator input from the vendor tag.

2. Control numbers and bar codes will be printed on the top right corner of the tag and on the three vertical strips. This Control Number is the number assigned to the component in the Rotable History Master Record File which is a unique number for a given part number and serial number.

3. When components are received at Dayton Aircraft Material Control, the Stores personnel will affix a Control Number bar code sticker to the component as applicable. Components that are to small, or that will be in an environment not conducive to retaining the sticker (i.e. fuel system, dirt, grease hydraulic fluids, engine parts, etc.) will not require the application. Place sticker on the vendor tag or certificate.

PART CHANGE TAG – FORM MEO34

EMERY WORLDWIDE AIRLINES

PART CHANGE TAG

MPN REMOVED: (1) MSN REMOVED: (2)

ACN: (3) POS: (4) BORROWED FROM: (5) REASON: (6)

LOCN: (7) DATE: (8) EMP: (9)

TEXT: (10)

(11)

CPN: (12)

CSN: (13)

MPN: (14)

MSN: (15)

SHELF LIFE DATE: (16)

TAG COMPLETE DATE: (17)

EMP NBR: (18)

APPROVAL: (19)

(11)

CODE	REMOVAL REASON
01	TIME CONTROLLED REM
02	REM FOR CAUSE/DEFECT
03	BAD FROM STOCK
04	ROBBED/CANNIBALIZED PART
07	COMPONENT SWAP
08	TROUBLESHOOTING
09	UNIT TO SHOP FOR MOD
17	UNIT CREATED UNSERVICEABLE

MEO34 (REV 4) 2/01/97

(20)

BAR CODING AREA

D. Material Certification Form

1. Policy

EWA has developed a Material Certification Form that may be used when requested by customers purchasing EWA inventoried material.

This will be provided as a second or third document for certification. A FAA approved serviceable parts tag from a FAA 121 Air Carrier, or 145 Domestic or Foreign approved Repair Station 129, 135 will always be the primary document.

This document if requested, will only provide additional traceability verification.

2. Procedure

Completion of this form is self explanitory.

EMERY WORLDWIDE AIRLINES

MEMORANDUM

TO: Quality Control Department

FROM: Thomas M. Wood TMW

SUBJECT: Tiger Team Development

DATE: September 11, 1998

As you all are aware, the 98% mechanical dispatch reliability that EWA has achieved for over eight years consistently, has decreased to an average year to date 96%.

Mr. Rene Visscher has established a Tiger Team lead by Bruce Robbins, Manager Maintenance Training, who are working daily with Maintenance Control on repeat and chronic write-ups.

Bruce has assembled a team of in-house and contract technicians to administer this program. To date, the results of this team has been positive in addressing and correcting chronic auto pilot problems.

The Maintenance Training requirements for the remaining 1998 year, to include the DC-10 training is being contracted.

Please support this process with the highest priority. Contact me if you have any questions.

TMW/re

Attachment

303 CORPORATE CENTER DRIVE, VANDALIA, OH 45377

(1)

To: Rene Visscher

From: Bruce Robbins BR

Re: Update on; Tiger Team, a.k.a. Maintenance SWAT Team, Rapid Action Maintenance Team (RAM), Maintenance Action Group (MAG) or Chronic Alert and Trouble Shooting Team (CATS)

Date: Sep. 1, 1998

Following is a list of individuals that are now assigned to this effort.

Name	Assigned Task Group	Position/Dept. Consulting	Expertise	Full Time (FT) As Needed (AN)
Courtney Bledsoe	Avionics	Instructor, Maintenance Training	General Avionics	FT
Mark Gregory	Avionics	Instructor Maintenance Training	Engineering	FT
Rich Buczak	Avionics	Avionics Representative	General Avionics	FT
Chris Thomas	Avionics	FLL Line Maintenance	Fuel Qty. And A/P	AN
Mark Lebovitz	Avionics	L2Consulting	Engineering A/P, Avionics	FT
Kenny Cooper	Systems	Instructor Maintenance Training	Hydraulics Pneumatics	FT
Rob Northup	Systems	Supervisor, Dayton Line	General Systems	FT
Dana Andrews	Systems	Supervisor, Dayton Line	General Systems	AN
Dean Rudolf	Systems	L2Consulting	General Systems	FT
Brian Piper	Systems	L2Consulting	General Systems	FT
Jerry Edsen		L2Consulting	General Systems	FT

Jeff Rex	Systems	L2Consulting	General Systems	FT
Allen Cook	Systems	Heavy Maint. Representative MCN	Rigging General Systems	AN
Joel Putnam	Engines	Putnam Aerospace Consulting	General Engines JT3, CFM And CF6	I need to discuss Joel's proposal with you before we use him.
The Wood Group	Engines	Consulting Group	Engines	AN
Dave Swoger	Research	Manager Aircraft Critical Material	General Systems	AN

Current Projects:

N795FT- Auto Pilot, pitch
N996CF- Auto Pilot, pitch
N998CF- Auto Pilot, pitch
N797AL- Auto pilot, roll
N602AL- Bleed over heat
N796FT- Bleed over heat
N606AL- Bleed over heat
EGT limited and over temp. engines
N870TV- Generator system

We are developing a process to collect real-time data from the morning meeting and pilot reports via Merit and EWA01. A tracking and documentation process for trouble shooting, aircraft surveillance, publication of results and problem resolutions are also being worked.

Wayne Farnsworth has provided two stations that can be used on the weekdays for both long and short DC-8's, KDFW and KBSM. Aircraft scheduled for work in KRDU were limited due to the hurricane but will continue until fixed.

Research has been going full time to identify aircraft and/or system problems. Some newly developed testing procedures will be published soon to use some test equipment we have designed and tests that we have

developed. A flow limiter that is listed in the maintenance manual should be purchased to trouble shoot the reported bleed over heat problems.

EMERY WORLDWIDE AIRLINES

September 17, 1998

Mr. Joseph Abramski
FSDO-SJC
1250 Aviation Avenue, Suite 295
San Jose, CA 95110

Dear Mr. Abramski:

On behalf of the Emery Worldwide Airlines (EWA) Maintenance Review Board (MRB) Judicial Members, I am pleased to announce that EWA will implement the new Douglas DC-8 MSG-3 Maintenance Inspection Program upon FAA approval.

As you know, the EWA Maintenance Reliability Program (MRP) provides a means of implementing improvements to its Continuous Airworthiness Maintenance Program (CAMP) with the objective for achieving maximum levels in safety, performance, and reliability of the EWA fleet of aircraft. This program enables EWA to manage and control it's own maintenance program by providing approved and acceptable means for adjusting maintenance/inspection intervals, component overhaul limits, and changing primary maintenance processes and/or tasks.

Robert Peck, Manager Reliability is a formal member of the Maintenance Steering Group (MSG) that is currently developing the MSG-3 Maintenance Program for the DC-8 Aircraft.

This Steering Group consists of the FAA Aircraft Certification Office, Boeing, DHL, ABX, EWA, UPS and Arrow Air. The results of the development of this state-of-the-art maintenance process that is currently applied to newly manufactured aircraft, will elevate the maintenance processes to an aged fleet, improving aircraft reliability and safety.

As a result of the meeting last week at Longbeach, the MSG-3 DC-8 Group announced the completion by May 1999, and FAA approval by July 1999. EWA is scheduled to revise our heavy maintenance inspection program to implement this new MSG-3 processes upon FAA approval.

I am sure you will agree this will continue to elevate EWA's Continuous Airworthiness Maintenance Program, as will the recently submitted "B" Check and below program that is awaiting your review and acceptance for immediate implementation.

Sincerely,

Thomas M. Wood
Director Quality Control

TMW/re

cc: Rene Visscher
Ted Graves

PROPOSAL

FOR

EMERY WORLDWIDE AIRLINES

Submitted by:
Avitech Ltd.
1040 Bayview Drive, Suite 420
Ft. Lauderdale, FL 33304
954-566-0080 FAX 954-566-1180
email: avitech@earthlink.net

November 13, 1998

DC-8 PROGRAM PROPOSAL
FOR
Emery Worldwide Airlines

The following proposal for developing a Maintenance Program and Maintenance Task Cards for the DC-8 aircraft is presented for approval.

Avitech Ltd. will furnish the following services:

1. Avitech will perform a technical review and analysis of EWA's current program and develop a new program that will be streamlined and indicate a critical path that will reduce duplication of effort by the Maintenance Base. The program will be designed to reduce the workload of the planning department at the Maintenance provider which will result in savings of man-hours and a reduction of out-of-service time for the aircraft.

2. A Maintenance Program work package will be developed using the Emery Worldwide Airlines work card text. This program will account for the "C" and "D" maintenance checks for the DC-8 Series 60 and 70 aircraft.

3. Task cards will be developed to address reliability issues such as wiring discrepancies and any additional items that cause excessive delays and cancellations.

4. All work cards will be audited to insure that the latest revision of the CPCP program is integrated into the current work cards. The research work required to ensure that the necessary information is contained in the work cards will be the responsibility of Avitech Ltd.

5. The graphics used will be provided by Emery Worldwide Airlines. These graphics will be of first generation quality and, after being processed by Avitech Ltd., will be submitted to Emery Worldwide Airlines for approval.

6. This text will be placed into the Microsoft Access database provided by Emery Worldwide Airlines. The numbering system used will be the Work Card Numbering System that has been adopted by Emery Worldwide Airlines.

7. The completed program will be prepared for FAA approval and considered a complete revision. Any changes and corrections that may be required to obtain approval from the FAA will be completed at no additional cost to Emery Worldwide Airlines.

8. After the program has been approved a CD-ROM will be produced. Avitech will then provide three CD-ROM and three Laser printed copies to be delivered to Emery Worldwide Airlines.

9. After the completion and acceptance of the proposed program, Avitech will monitor two major checks to further verify that the program is in fact performing as intended. Should there be any additional changes or revisions, they will be done at no cost to EWA.

DC-8 PROGRAM PROPOSAL
FOR
Emery Worldwide Airlines

TIMING:

A draft of the completed project will be delivered within 60 days from the date this proposal is accepted and the Microsoft Access data base is received. All necessary corrections and changes will be accomplished within 20 days after Avitech Ltd. receives the revisions from ***Emery Worldwide Airlines.***

PRICING:

Maintenance Program Items 1 through 9 ..... $125,000.00

TERMS:

Upon acceptance of this proposal, there will be a one-time payment of $41,000.00. The balance of $84,000.00 will be due when the completed program is delivered to ***Emery Worldwide Airlines.***

ACCEPTANCE:

The terms and conditions, as outlined in this Proposal by Avitech Ltd. are valid for 30 days, understood and agreed upon.

This Proposal is accepted and acknowledged by:

[redacted]
Signature of Authorized Officer

11/19/98
Date Signed

Vice President
Title

RENE VISSCHER
Printed Name

Avitech Ltd.

[redacted]
Marvin Ruthenberg
President & CEO

November 13, 1998
Date Signed

V. JT3D-7 (LONG DUCT) POWER PLANT REMOVAL AND INSTALLATION (MEO77)

EMERY WORLDWIDE AIRLINES JT3D-7 (LONG DUCT) POWER PLANT REMOVAL AND INSTALLATION INSTRUCTIONS	Page 1 of 17
Acft. No. TAT: TAC: STA: Date:	
Model: Pos.: S/N On: S/N Off:	
Reason for Removal:	

I. General

A. The procedures in this subject apply to both of the following conditions:

1. Unserviceable engine to be replaced by serviceable engine.
2. Serviceable engine to be removed and reinstalled in the same position on the same airplane.

B. Some steps apply only when engine is being replaced; others apply when engine is re-installed. These steps are so identified.

C. Prior to beginning engine change verify that the correct bleed system ducting is installed for the type system installed in the aircraft (ie. Auto System or Throttle Activated System). Reference Maintenance Manual Chapter 36.

D. Engines installed on Stage III Hush Kit equipped aircraft MUST meet Stage III requirements.

II. Special Tools and Materials

A. Special Tools (and Equipment)

1. Shipping/Transfer Stand, 15SF378
2. Engine Handling Sling, HFH1
3. Engine Adapters
   a. Forward Adapter (2 each), HFH9
   b. Aft Adapter (2 each), HFH10
4. Engine Covers
   a. Nose Cowl Inlet
   b. Exhaust Nozzle (Use from replacement engine)
   c. Exterior Cover – Size "B" (Use from replacement engine)
5. Torque Wrench - to 1500 inch-pounds
6. Torque Wrench, Proto 6017
7. Torque Wrench Adapters
   a. Front 4897253
   b. Rear 4889553

MEO 77 (Rev. 3 10/20/98)

16. Date

Date of approvals in block 15.

17. FAA Acceptance/Approval

EWA's Principal Maintenance Inspector or his designee will sign this block if the M.A. was submitted per paragraph A "Policy", sub-paragraphs a. & b. on page 130.

18. Date

Date of approvals in block 17.

19. Kit List

The Kit List shall consist of a detailed list of all parts, and equipment required to accomplish the MA. Parts /Components shall be listed by part number and nomenclature. Equipment may be described by part number or nomenclature.

A list of recommended spares to be manufactured, purchased, or procured, sufficient to maintain normal maintenance operation shall be included. This recommendation shall take into account the number of units times number of affected aircraft.

20. Strip List

All stripped parts shall be listed in this area by part number and nomenclature.

21. Disposition

For the disposition of the stripped parts refer to instruction given in the MA Form MEO24. No item shall be labeled "JUNK".

C. Handling of Approved MA's

1. During the preparation of the MA, the Quality Control department shall obtain a Task Code No. from Aircraft Record Section and enter it in the block provided in the MEO24. Then as soon as it is completed and approved, copies of the MA are distributed to Aircraft Records Section for their file and follow-up, Production Planning/Maintenance Control for scheduling and accomplishment, and Repair Orders in case of component repair, overhaul or modification.

Note:	A copy of all Major Alteration MAs will be sent to EWA's FAA Principal Maintenance Inspector and maintained on file for inspection.

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

San Jose Flight Standards District Office

San Jose International Airport
1250 Aviation Avenue, Suite 295
San Jose, CA 95110-1130
Phone: (408) 291-7681
FAX: (408) 279-5448

March 16, 1999

CERTIFIED-RETURN RECEIPT

Kent T. Scott,
President and Chief Operating Officer
Emery Worldwide Airlines, Inc.
One Lagoon Drive
Redwood City, CA 94065

Dear Mr. Scott:

FAA EIR Consolidation Notification

This letter is to inform you that the San Jose Certificate Holding Office has determined that administratively, it is advantageous to the Administrator to consolidate, into one Enforcement Investigation Report (EIR), the following several EIR's:

EIR 99WP150023 is incorporated into EIR 99WP150028
EIR 99WP150025 is incorporated into EIR 99WP150028
EIR 99WP150029 is incorporated into EIR 99WP150028
EIR 99WP150032 is incorporated into EIR 99WP150028
EIR 99WP150033 is incorporated into EIR 99WP150028

Any correspondence relating to any of the above EIR's listed should be referenced to EIR 99WP150028 as shown above. All Emery Worldwide Airlines, Inc. (EWA) responses received to date, have been incorporated into EIR 99WP150028.

If you have any questions, please advise.

Sincerely,

[redacted]

John R. Howard
Asst. Manager, A/W

U.S. Department
of Transportation
Federal Aviation
Administration

San Jose Flight Standards District Office

San Jose International Airport
1250 Aviation Avenue, Suite 295
San Jose, CA 95110-1130
Phone: (408) 291-7681
FAX: (408) 279-5443

January 27, 1999

File Number: 99WP150028

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kent Scott
President & Chief Operating Officer
Emery Worldwide Airlines, Inc.
One Emery Plaza
Dayton International Airport
Vandalia, OH 45377

Dear Mr. Scott:

This letter is to inform you that Emery Worldwide Airlines, Inc., (EWA), the holder of Air Carrier Certificate Number RRXA558B, may be in violation of Federal Aviation Regulations, in that EWA has not conducted the monthly Maintenance Reliability Program meeting and review of its continuous airworthiness maintenance program as required in its D74 Operations Specifications Document EWA-51990, for the months of September, October, and November, 1998; and that this matter is under investigation by the Federal Aviation Administration.

We offer you the opportunity to submit a written statement to this office regarding this matter, which should be accomplished within ten (10) working days following receipt of this letter. Your response should contain all pertinent facts and extenuating or mitigating circumstances that you believe may have a bearing on this matter. Should you elect not to respond within the specified time, our report will be processed without the benefit of your statement.

Sincerely,

ORIGINAL SIGNED BY

Joseph A. Abramski
Principal Maintenance Inspector

cc: Rene P. Visscher - EWA
Thomas M. Wood - EWA

EMERY
WORLDWIDE AIRLINES
A CNF COMPANY

February 11, 1999

Mr. Joe Abramski
FSDO-SJC
1250 Aviation Ave., Suite 295
San Jose, CA 95110

Dear Mr. Abramski:

This letter is a follow-up to my letter dated February 8, 1999, formal response to your LOI #99WP150028 dated January 27, 1999, and Robert Peck's letter to you dated February 2, 1999 advising you of the scheduled EWA Reliability Meeting dates.

I am forwarding you the completed September, October and November Reliability Reports that will be covered in the scheduled meeting tomorrow, February 12, 1999.

Sincerely,

Thomas M. Wood
Director Quality Control

TMW/re

Attachments

cc: Rene' Visscher
Robert Peck

EMERY
WORLDWIDE AIRLINES
A CNF COMPANY

February 8, 1999

Mr. Joe Abramski
FSDO-SJC
1250 Aviation Ave., Suite 295
San Jose, CA 95110

Dear Mr. Abramski:

This letter constitutes Emery Worldwide Airlines Inc., (EWA) formal response to your letter of investigation (99WP150028) addressed to EWA's President and Chief Operating Officer, dated January 27, 1999 (See Attachment).

At the outset, I would like to assure you that your letters have merited EWA's immediate and undivided attention. EWA, as a certificated air carrier, and its management and employees are fully appreciative of their responsibility arising under pertinent laws and under the Federal Aviation Regulations (FAR's) and strive to fulfill these responsibilities in a professional and conscientious manner.

Upon immediate receipt of your referenced letter February 2, 1999, EWA's Manager of Reliability Robert Peck discussed this with you by telephone, and then responded in writing the same day by a letter faxed to you. (See Attachment).

Mr. Peck discussed during this conversation on February 2, 1999, the previous phone call on January 15, 1999 to which he informed you the Reliability Meetings had not been held due to the MERIT data system problem. This discussion was previously held due to the LOI file number 99WP150025 (See Attachment) concerning the late submission of the Mechanical Interruption Summary reports that is included in the monthly Reliability Report. Mr. Peck's January 18, 1999 letter provided you the root cause of this isolated problem and a comprehensive fix that is in place to date (See Attachment). My letters dated January 15, 1999 and January 18, 1999 provided the Delay Reports for September, October and November, and a comprehensive fix and action plan represented in Mr. Peck's January 18, 1999 letter.

The two letters of investigation 99WP150025 and 99WP150028 pertain to the same subject matter with regard to EWA's procedure of control. EWA can appreciate the FAA's voicing of its possible concerns with the EWA Reliability Meetings not held, we question whether two separate letters of investigation and two separate files, each bearing a different File Number, were required or even appropriate. This is not, and should not be an enforcement matter, rather it is a technical issue. I have enclosed EWA Septembers Fleet Reliability Report which reflects the information referenced (See Attachment).

A detailed review of EWA's Maintenance Reliability Program Document No. EWA-51990, dated June 13, 1997 Revision #7, and Temporary revision #7a, dated 1-2-98 was performed to evaluate compliance of EWA continuous airworthiness maintenance program during this reference period of not producing the report and having the meetings.

All aspects of this program to ensure continuous airworthiness was performed on a daily basis as is referenced in the Document Chapter 4, Data Collection System. In addition daily/weekly scheduled meetings are held with the Technical Services Management to address all aspects of EWA's continuous maintenance program including daily corrective actions.

Chapter 6, "Corrective Action System" was in non-compliance as is referenced on page 4, item D. System Over-Par Reports.

Based on the day-to-day interactive support of this system, no information was relayed that would or did cause non-compliance to the continued airworthiness program.

I trust that this has been responsive to your letter. Should you wish to discuss this matter more fully, EWA's Senior Management and I would be more than willing to meet with you an address your concerns. If this is the case, please contact me to arrange this meeting.

Sincerely,

[redacted]

Thomas M. Wood
Director Quality Control

TMW/re

Attachments

cc: Kent Scott
Rene' Visscher
Robert Conlon
Michael Dworkin

EMERY WORLDWIDE AIRLINES

February 2, 1999

Mr. Joseph Abramski
FSDO-SJC
1250 Aviation Avenue, Suite 295
San Jose, CA 95110

Dear Mr. Abramski

This letter is the initial response to your Letter of Investigation, File Number: 99WP150028 which was received today. The topic of the Maintenance Reliability Program meeting was discussed during our telephone conversation on the 15th of January, 1999. At that time we were discussing the Letter of Investigation, File Number: 99WP150025, concerning the late submission of the Mechanical Interruption Summary reports for the same time frame, September, October, and November 1998. During that conversation you asked about the Reliability meetings, and I advised you that they had not been held do to the problem that we were experiencing with the MERIT data system.

The cause for not having the Maintenance Reliability Program meetings is the same as for the late submission of the Mechanical Interruption Summary Reports; Reliability being heavily involved in the development of the DC-10 Inspection Program, and the unforeseen problem with the MERIT data system. The MERIT problem being the driver.

Emery Worldwide Airlines, elected to go to the U.S. Airways Maxi Merlin data system (MERIT). This data system ties all aspects of airline operation together. With the implementation of a new system, there will always be unforeseen problems. The problem experienced with the September data is a prime example of the type of problems that can occur. The problem has been aggressively attacked, and by February 5th all backlog should be eliminated.

The failure to hold the monthly Maintenance Reliability Meeting has not hindered the EWA Reliability program, as can be evidenced by the improving trend in the Mechanical Dispatch Rate for these three months. The rate for the three months was 96.1%, 97.1% and 97.5% respectively.

303 CORPORATE CENTER DRIVE VANDALIA OH 45377

At the present time all data has been entered in the MERIT data system, has been checked, and all necessary download runs have been received. Septembers Monthly Report is at the copy center, and completion of October and Novembers Reports should be by Friday, February the 5th. A Meeting has been scheduled for the 12th of February to review September, October and November 1998 Reliability Program, and a second meeting is scheduled for February 26th to review December and January data. This will get us back on schedule.

[redacted]

Bob Peck
Manager of Reliability

cc: Rene P. Visscher, Vice President Technical Services
Thomas M. Wood, Director of Quality Control

EMERY WORLDWIDE AIRLINES

303 CORPORATE CENTER DR.
VANDALIA, OH 45377

FAX: (937) 898-2803 PHONE: (937) 454-3940

THOMAS M. WOOD
DIRECTOR QUALITY CONTROL

FACSIMILIE COVER SHEET

DATE February 3, 1999 SEND TO FAX#: 264-6072

DELIVER IMMEDIATELY TO:

NAME: Kent Scott TELEPHONE NO: [redacted]

COMPANY / DEPARTMENT: Emery Worldwide Airlines

This is page 1 of 3 pages sent.

Kent:

Here is the initial response on the LOI for the Reliability Meeting. I will formally respond this week.

FACSIMILE MESSAGE FROM:

NAME: Thomas M. Wood/re

EMERY WORLDWIDE AIRLINES

MEMORANDUM

TO: Thomas Wood, Director of Quality Control

FROM: Bob Peck, Manager of Reliability

SUBJECT: LOI 99WP150025

DATE: 18 January, 1999

The Following is a list of events that contributed to the late reporting of the Mechanical Interruption Summary Reports for the months of September , October, and November 1998, and the detailed corrective actions that have been implemented to prevent this from happening again in the future.

Beginning in September, the completion of the DC-10 Inspection Program became a high priority. The Reliability Section currently has three technical analyst assigned, one Reliability specialist, one Data entry clerk, and the Manager. In September, Reliability had one technical analyst assigned full time to the DC-10 tasking, one assigned 70% of the time to the DC-10 tasking, and 30% to completion of the Fleet Monthly Reliability Report. The third technical analyst was assigned to providing CPCP training to newly contracted Heavy Maintenance facilities, and reviewing completed heavy maintenance packages. The reliability Specialist is responsible for entering data for the Engine Condition Monitoring Program. Mr. Feisley, the technical analyst that was assigned full time to the DC-10 program was lost for 3 weeks in September for surgery on his neck.

In October when preparing for September Monthly Fleet Reliability Report, an unforeseen problem was found with the MERIT data base system. When programs were being run to collect the Pilot Report (PIREP) Data, it was suspected that only about 50% of the reported PIREPs for September were in MERIT. This was determined by comparing previous monthly counts of PIREPs with what was being shown for September. To verify, a complete audit of the log page information to MERIT information was performed. This audit began a snowball affect, and has carried through Decembers data. If the MERIT problem had not been there, the Fleet Reliability Reports would have been on time.

An extensive corrective action program has been initiated to eliminate the MERIT backlog, and prevent this from happening again. The program has two separate actions; one is to assign two people to clear the remaining backlog. These two people are solely responsible for eliminating the MERIT backlog. The second part of this program has two people from aircraft records assigned to monitoring and correcting the current MERIT log

page entries on a daily basis. Also in conjunction with the current month monitoring and correcting, a copy of the log page with the MERIT discrepancy will be forwarded to the Manager of Line Maintenance for his action. The corrective action steps to prevent this from happening in the future, and the current backlog will be completed by 1 March, 1999.

With the addition of the data entry clerk, the Mechanical Interruption Summary Report information will be processed on a daily basis. The MISR information will be reviewed the first full week following the end of the month and forwarded to the FAA/PMI by the end of that week or before, if the current procedure of receiving this information at the end of each month in the Reliability Report is now not acceptable.

[redacted]

Bob Peck
Manager of Reliability

U.S. Department
of Transportation
Federal Aviation
Administration

San Jose Flight Standards District Office

San Jose International Airport
1250 Aviation Avenue, Suite 295
San Jose, CA 95110-1130
Phone: (408) 291-7681
FAX: (408) 279-5448

December 15, 1998

File Number: 99WP150023

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kent Scott
President & Chief Operating Officer
Emery Worldwide Airlines, Inc.
One Emery Plaza
Dayton International Airport
Vandalia, OH 45377

Dear Mr. Scott:

On December 14, 1998, inspectors in this Certificate Holding District Office (CHDO) for Emery Worldwide Airlines, Inc. (EWA), were informed through internal FAA communications, that an EWA DC-8-73 series aircraft, N105WP, located in Los Angeles, California, had incurred structural failure to the main cargo door. An inspection of that aircraft on this same day by an inspector from this office, revealed that aircraft N105WP had indeed incurred structural failure to the main cargo door, and that repairs were in progress. It was further revealed that according to the aircraft log, the structural failure occurred on November 27, 1998.

This letter is to inform you that Emery Worldwide Airlines, Inc., the holder of Air Carrier Certificate Number RRXA558B, may be in violation of Federal Aviation Regulations, and that this matter is under investigation by the Federal Aviation Administration. We offer you the opportunity to submit a written statement to this office regarding this matter, which should be accomplished within ten (10) working days following receipt of this letter. Your response should contain all pertinent facts and extenuating or mitigating circumstances that you believe may have a bearing on this matter. Should you elect not to respond within the specified time, our report will be processed without the benefit of your statement.

Sincerely,

ORIGINAL SIGNED BY

Joseph A. Abramski
Principal Maintenance Inspector

cc: Rene P. Visscher - EWA
Thomas M. Wood - EWA

EMERY WORLDWIDE AIRLINES

January 11, 1999

Mr. Joseph Abramski
FSDO-SJC
1250 Aviation Ave., Suite 295
San Jose, CA 95110

Dear Mr. Abramski:

This letter constitutes Emery Worldwide Airlines, Inc. (EWA)'s formal response to your letter of investigation (991NP150023), addressed to EWA's President and Chief Operating Officer, dated December 15, 1998. (See Attachment 1).

EWA reported this damage to the Los Angeles Aircraft Certification office to Mr. Greg Delibero on December 17, 1998. (See Attachment 2).

As a result of an initial/indepth inspection of the subject cargo door and previous maintenance history, it was concluded that the door was damaged due to human factors.

EWA's Reliability Section reported the closed status of this subject which required a major repair to return the aircraft to service, by faxing the Operational Difficulty Report to you on January 3, 1999. (See Attachment 3).

A comprehensive review was performed by EWA Technical Service Management to determine why the SDR Report was not reported per the accepted EWA Maintenance Policy and Procedure Manual. The following is a summary of events and a Comprehensive Fix to prevent future occurrences.

1. On November 26, 1998, aircraft N105WP was taken out of service and removed from the operation during a schedule inspection, to perform unscheduled maintenance to repair the cargo door. Maintenance Control did not process the EWA ME028 Mechanical Interruption and MRR Advisory form and submit to Reliability as it was removed from service. At this time Maintenance Control had no knowledge of the requirement of a major repair.

2. The Manager of Reliability submitted the required MRR Report upon receipt of the repair package from the FAA DER. This report was delayed due to the Thanksgiving and Christmas Holiday period.

Comprehensive Fix:

1. The Manager of Reliability will provide re-current training to all Staff members on the Maintenance Policy and Procedure Manual, Chapter 4, Section X, Mechanical Interruptions and MRR Reporting. He will also focus on the timeliness of reporting to prevent future delay reporting occurrences.

2. The Manager of Maintenance Control will provide re-current training to all Staff members on the Maintenance Policy and Procedure Manual, Chapter 4, Section X, Mechanical Interruptions and MRR Reporting. A copy of this letter will be addressed in this training.

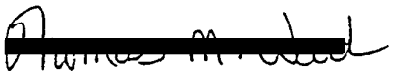
3. The Manager of Quality Control in addition to auditing the submitted ME028 forms to Reliability, will add to the daily audit of all log pages, the review of discrepancies sign-off indicating a major repair was performed. The Quality Control Inspection Rep. will contact the Manager of Reliability and ensure that a MRR has been reported.

4. The Manager of Line Maintenance will provide re-current training to all Line Station Supervisors/Mechanics on the Maintenance Policy and Procedure Manual Chapter 4, Section X, Mechanical Interruptions and MRR Reporting, specifically to the reporting responsibility of the Maintenance personnel. A copy of this letter will be addressed in this training.

EWA submitted one MRR Report in 1998 that resulted in a major repair performed during line maintenance. All other major repairs MRR's were reported routinely through heavy maintenance visits, C and D checks. The isolation of this one line maintenance occurrence is representative in the isolated occurrence of the MRR not reported in a timely manner, even though it was only a few days.

I trust EWA's correction action taken is satisfactory to your concerns. Should you wish to discuss this matter more fully, EWA's Senior Management and I would be more than willing to meet with you and address your concerns.

Sincerely,



Thomas M. Wood
Director Quality Control

Attachments

cc: Kent Scott
Rene Visscher
Wayne Farnsworth
Jack Smith
Roger Rosher
Robert Peck
Edward Jones

DCQ:mlb

EMERY WORLDWIDE AIRLINES

December 17, 1998

Mr. Greg Delibero
Federal Aviation Administration
Los Angeles Aircraft Certification Office
3960 Paramount Drive
Lakewood, CA 90712-4137

Dear Mr. Delibero:

This letter is a follow-up to our telephone conversation today regarding the DC-8 Rosenbalm STC SA1802SO Cargo Door repair performed on a Emery Worldwide Airlines (EWA) DC-8-73, Serial Number 46095, Production Number 497, N105WP at LAX.

The subject aircraft received a repair to the cargo door due to a crack found during preflight. The following details are pertinent to this aircraft.

I. STC Door Installation
   - March 17, 1989
   - Installer, Zantop Macon, Georgia
   - Aircraft TAT 45,890 and TC 14,988

II. Aircraft TAT/TC as of 11-27-98
   - TAT 65,843
   - TC 21,197

III. TAT/TC on Cargo Door STC Installation
   - TAT 19,953
   - TC 6,209
   - 9 years and 8 months

Per our conversation, you informed me that the FAA considers this to be as safety concern and is preparing an Airworthiness Directives (AD)for a one-time inspection of the cargo door.

As I discussed with you, EWA issued a Fleet Campaign Directive No. 52-6 (attached) to inspect the Rosenbalm and Monarch Cargo Doors in this specific area.

303 CORPORATE CENTER DRIVE, VANDALIA, OH 45377

Per our agreement, this letter is being copied to the DC-8 JTF members for their initial notification and opportunity to perform inspections on their aircraft. Please advise me if the EWA FCD inspection will comply with the proposed AD inspection.

I would like to thank you for your support in this matter.

Sincerely,

Thomas M. Wood/re
Thomas M. Wood
Director, Quality Control

Attachment

cc: Rene' Visscher
JTF Members

U. S. Department of Transportation

Operational Difficulty Report

Federal Aviation Administration

OPERATOR CONTROL NUMBER: RRXA98959

ATA CODE: 5230

MAJOR EQUIPMENT IDENTITY

Enter pertinent data	MANUFACTURER	MODEL	SERIAL NO.	TOT. TIME	TOT. CYC.
AIRCRAFT	DOUG	DC873	46095	65,847	21,199
POWERPLANT					
PROPELLER					

PROBLEM DESCRIPTION

DATE	STATUS	OPER. DESIG.	OPER. TYPE	A/C N NUMBER	PREC. PROCED.	NATURE	STAGE OF FLIGHT	STATION	FLIGHT #
981215	C	RRXA	01	105WP	K	J	IN	KLAX	835

Discrepancy/Corrective Action:

DURING FLIGHT FROM KALT TO KLAX CARGO DOOR (OPEN) LIGHT ILLUMINATED, NO CABIN PRESSURE CHANGE, LOCK BAR APPEAR TO BE AT FULL TRAVEL (CLOSED). FLIGHT CONTINUED TO KLAX WITHOUT INCIDENT ///// GROUND INSPESTION ///// FOUND DOOR LOCKING MECHANISMS OUT OF SEQUENCE, TORQUE TUB DAMAGED (PN: 23630352). DOOR HYDRAULIS SYSTEM, VALVE UNSERVICEABLE (PN:1629-3-24) AND CYLINDER ASSEMBLY (PN: 8520008009) MISSING BEARING. STRUCTURE DAMAGE, ALL 12 DOOR FRAMES CRACKED AT LOWER SECTION. ///// CORRECTIVE ACTION///// REMOVED AND REPLACED THE FOLLOWING COMPONENTS; TORQUE TUB (PN: 23630352), VALVE (PN:1629-3-24) AND CYLINDER ASSEMBLY (PN: 8520008009). STRUCTURE DAMAGE; REMOVED DAMAGES FROM 12 FRAMES, FABRCATED AND INSTALLED REPAIR DOUBLER IAW FAA DER COTNEY APPROVED ENGINEERING SKETCH F84-R01.

SPECIFIC PART CAUSING PROBLEM

PART NAME	MFG. PART NUMBER	SERIAL #	PART CONDITION	PART/DEFECT LOC.
MAIN CARGO DOOR			DAMAGED	FUSELAGE

PART TOTAL TIME	PART TOTAL CYCLES	PART TIME SINCE:	Overhaul / Repair / Inspection

COMPONENT NAME	COMPONENT MANUFACTURER	COMPONENT PART #	COMPONENT SERIAL #

COMPONENT TOTAL TIME	COMPONENT TOTAL CYCLES	COMPONENT TIME SINCE:	Overhaul / Repair / Inspection

SUBMITTED BY

NAME	SUB. CODE	DIST. OFF.	ALERT	FILM
EMERY WORLDWIDE AIRLINES INC	A	WP15		

U.S. Department
of Transportation
Federal Aviation
Administration

San Jose Flight Standards District Office

San Jose International Airport
1250 Aviation Avenue, Suite 295
San Jose, CA 95110-1130
Phone: (408) 291-7681
FAX: (408) 279-5448

January 7, 1999

File Number: 99WP150025

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kent Scott
President & Chief Operating Officer
Emery Worldwide Airlines, Inc.
One Emery Plaza
Dayton International Airport
Vandalia, OH 45377

Dear Mr. Scott:

This letter is to inform you that Emery Worldwide Airlines, Inc., the holder of Air Carrier Certificate Number RRXA558B, may be in violation of Federal Aviation Regulations, in that this office has not received the required Mechanical Interruption Summary Reports for the months of September, October, and November, 1998; and that this matter is under investigation by the Federal Aviation Administration.

We offer you the opportunity to submit a written statement to this office regarding this matter, which should be accomplished within ten (10) working days following receipt of this letter. Your response should contain all pertinent facts and extenuating or mitigating circumstances that you believe may have a bearing on this matter. Should you elect not to respond within the specified time, our report will be processed without the benefit of your statement.

Sincerely,

ORIGINAL SIGNED BY

Joseph A. Abramski
Principal Maintenance Inspector

cc: Rene P. Visscher - EWA
Thomas M. Wood - EWA

EMERY WORLDWIDE AIRLINES

January 18, 1999

Mr. Joe Abramski
FSDO-SJC
1250 Aviation Ave., Suite 295
San Jose, CA 95110

Dear Mr. Abramski:

This letter constitutes Emery Worldwide Airlines Inc. (EWA)'s follow-up (initial letter sent 1-15-99 attached) formal response to your letter of investigation (99WP150025), addressed to EWA's President and Chief Operating Officer, dated January 7, 1999.

The Manager of Reliability has prepared a comprehensive fix and action plan to prevent future occurrence of this inadvertent isolated event (See Attachment).

It is equally important to consider and review the overall performance of EWA's Approved Maintenance Program over the past nine (9) years. I have provided a score card (See Attachment) that demonstrates the overall above average performance of EWA's Technical Services Department.

The very achievement of a 98% Mechanical Dispatch Reliability average for the past nine (9) years of an aging fleet reflects the overall achievement of an effective maintenance program under sincere management oversight and leadership.

EWA has maintained an average of two (2) pilot reports per flight hour since 1990. It is important to note that EWA increased its flight hours by 9% in 1998 and decreased the number of PIREP'S per flight hour by 25%.

This performance measurement also demonstrates the effectiveness of EWA's training program and manual system as the mechanics performance is a direct result of EWA's program administration.

I trust EWA's comprehensive fix is satisfactory. Should you wish to discuss this matter more fully, EWA's Senior Management and I would be more than willing to meet with you and address any concerns.

Sincerely,

Thomas M. Wood
Director Quality Control

TMW/re

Attachment

cc: Kent Scott
Rene' Visscher
QC Managers

EMERY WORLDWIDE AIRLINES

MEMORANDUM

TO: Thomas Wood, Director of Quality Control

FROM: Bob Peck, Manager of Reliability

SUBJECT: LOI 99WP150025

DATE: 18 January, 1999

The Following is a list of events that contributed to the late reporting of the Mechanical Interruption Summary Reports for the months of September , October, and November 1998, and the detailed corrective actions that have been implemented to prevent this from happening again in the future.

Beginning in September, the completion of the DC-10 Inspection Program became a high priority. The Reliability Section currently has three technical analyst assigned, one Reliability specialist, one Data entry clerk, and the Manager. In September, Reliability had one technical analyst assigned full time to the DC-10 tasking, one assigned 70% of the time to the DC-10 tasking, and 30% to completion of the Fleet Monthly Reliability Report. The third technical analyst was assigned to providing CPCP training to newly contracted Heavy Maintenance facilities, and reviewing completed heavy maintenance packages. The reliability Specialist is responsible for entering data for the Engine Condition Monitoring Program. Mr. Feisley, the technical analyst that was assigned full time to the DC-10 program was lost for 3 weeks in September for surgery on his neck.

In October when preparing for September Monthly Fleet Reliability Report, an unforeseen problem was found with the MERIT data base system. When programs were being run to collect the Pilot Report (PIREP) Data, it was suspected that only about 50% of the reported PIREPs for September were in MERIT. This was determined by comparing previous monthly counts of PIREPs with what was being shown for September. To verify, a complete audit of the log page information to MERIT information was performed. This audit began a snowball affect, and has carried through Decembers data. If the MERIT problem had not been there, the Fleet Reliability Reports would have been on time.

An extensive corrective action program has been initiated to eliminate the MERIT backlog, and prevent this from happening again. The program has two separate actions; one is to assign two people to clear the remaining backlog. These two people are solely responsible for eliminating the MERIT backlog. The second part of this program has two people from aircraft records assigned to monitoring and correcting the current MERIT log

page entries on a daily basis. Also in conjunction with the current month monitoring and correcting, a copy of the log page with the MERIT discrepancy will be forwarded to the Manager of Line Maintenance for his action. The corrective action steps to prevent this from happening in the future, and the current backlog will be completed by 1 March, 1999.

With the addition of the data entry clerk, the Mechanical Interruption Summary Report information will be processed on a daily basis. The MISR information will be reviewed the first full week following the end of the month and forwarded to the FAA/PMI by the end of that week or before, if the current procedure of receiving this information at the end of each month in the Reliability Report is now not acceptable.

[redacted]

Bob Peck
Manager of Reliability

EMERY WORLDWIDE AIRLINES

January 15, 1999

Mr. Joe Abramski
FSDO-SJC
1250 Aviation Ave., Suite 295
San Jose, CA 95110

Dear Mr. Abramski:

This letter constitutes Emery Worldwide Airlines, Inc. (EWA)'s initial formal response to your letter of investigation (99WP150025), addressed to EWA's President and Chief Operating Officer, dated January 7, 1999.

I would like to assure you that your letter has merited EWA's immediate and undivided attention. EWA, as a certificated air carrier and its management and employees are fully appreciative of their responsibilities arising under pertinent laws and under the Federal Aviation Regulations (FAR's) and strive to fulfill these responsibilities in a professional and conscientious manner as successfully demonstrated over the past nine years.

Upon receipt of your letter January 11, 1999, the Manager of Reliability contacted you by telephone and acknowledged receipt of your letter and explained the basic details of the delay of the inadvertent failure of the Reliability Reports being sent to you, that provides you the Mechanical Interruption Summary Reports. This is the first occurrence since the FAA approval of the Reliability Program in 1990.

The Manager of Reliability has completed the September, October and November 1998 MISR reports that are enclosed with this letter.

A comprehensive review was performed by EWA Technical Services Management and a corrective action plan put in place to prevent future non-compliance. A comprehensive Fix will be submitted to you next week.

Sincerely,

[redacted]

Thomas M. Wood
Director Quality Control

TMW/re

Attachments

cc: Rene' Visscher
Robert Peck

FAA TRAINING AWARDS

EMERY WORLDWIDE AIRLINES
FOURTH ANNUAL FEDERAL AVIATION ADMINISTRATION
TECHNICAL AWARDS PRESENTATION 1997

EWA Accomplishment Overview

Emery Worldwide Airlines (EWA) is pleased to receive for the fourth consecutive year, the Federal Aviation Administration (FAA) Technical Awards presented to the EWA Mechanics, Technical Service Management, Senior Director Technical Services, and Vice President and General Manager. A chronological history of the awards received to date is presented for your review.

1994 FAA Awards

The awards received during a ceremony on May 11, 1994 were as follows:

1. Mechanical Technical Awards

   133 mechanics were presented these awards which represented 42% of the EWA mechanics.

   This 42% or 133 mechanics actually represent 96% of EWA's full-time mechanics.

2. Organizational Awards

   The highest award, the Diamond Certificate of Excellence was presented to Emery Worldwide Airlines.

3. Master Mechanic Award

   This prestigious aviation career accomplishment was presented to Mr. Roy Deeming. The requirement of selection for this award is fifty (50) years of serving as a certificate airframe and powerplant mechanic.

1995 FAA Awards

1. Mechanical Technical Awards

EWA employed 304 technicians/mechanics. Out of these, 228 or 75% have received awards. This was a 33% increase in training EWA personnel from the previous year.

This 75% or 228 mechanics actually represent 60% of EWA's full-time mechanics.

2. Organizational Awards

For the second consecutive year, required training percentage achieved by EWA surpasses the requirement stated in the Advisory Circular. The Diamond Certificate of Excellence requires 25% of eligible employees to be trained. Therefore in view of the great achievement of training rendered to its employees, EWA qualified itself to receive again the Diamond Certificate of Excellence.

1996 FAA Awards

1. Mechanical Technical Awards

EWA employment 320 technicians/mechanics. Out of these, 264 or 83% received awards. This is a 14% increase in training EWA personnel from the previous year.

2. Organizational Awards

For the third consecutive year, the required training percentage achieved by EWA surpassed the requirement stated in the FAA Advisory Circular. Therefore, in view of the great achievement of training rendered to its employees, EWA qualified and received the Diamond Certificate of Excellence Award.

1997 FAA Awards

1. Mechanical Technical Awards

EWA employed 338 technicians/mechanics. Out of these, 181 or 54% received awards. This is a 49% decrease in training EWA personnel from the previous year. This decrease reflects the previously accomplished extensive training provided in the previous seven years.

2. Organizational Awards

For the Fourth consecutive year, the required training percentage achieved by EWA surpassed the requirements stated in the FAA Advisory Circular. Therefore, in view of the great achievement of training rendered to its employees, EWA qualified for and received again the Diamond Certificate of Excellence Award.

Awards Summary:

This training is a direct contribution to the continued success of EWA. We have experienced for the past nine years an average of 98% Mechanical Dispatch Reliability performance, a standard desired by many Air Carriers.

These FAA awards exemplify EWA's professional approach to lead its employees to produce the highest level of safety possible and the most cost effective process to provide the customer the best product.

C. EWA'S Maintenance Program Continues to Produce Successful Results

Emery Worldwide Airlines Maintenance Program is tested by other means than it's Mechanical Dispatch Reliability that has maintained 98% average over the past nine years. EWA has gone through several very in-depth FAA/DOD/Outside Firms inspections over the past nine (9) years. The successful results of these inspections continued to reveal EWA's ratings to be higher than the Industry performance of the 121 Air Carriers and average to excellent ratings from the Department of Defense (DOD).

In 1992, EWA went through a very in-depth FAA NASIP Inspection to which EWA rated 64% higher than the Industry performance of the 121 Air Carriers. EWA received honorable recognition for this achievement from the San Jose FAA Certificating Holding Office Manager.

In 1995, EWA received a specific FAA inspection that was administered by FAA Washington, DC to be accomplished on all 121 Air Carriers in 1995. This inspection was titled a Regional Aviation Safety Inspection Program (RASIP). This inspection lasted ten days and covered the Operations/Maintenance Departments. On June 22, 1995, the FAA RASIP team provided EWA Senior Management a debrief of their findings. The team reported that their inspection did not reveal any major discrepancies and overall EWA was above average in performance.

In 1997, EWA received a comprehensive Internal Evaluation performed by the SH&E International Air Transport Consultancy. This evaluation was performed based on the FAA NASIP items to ensure EWA has adequate systems and controls in place to support the growth of the airline. A report was provided to EWA Senior Management from the SH&E team that reflected an excellent rating of the Technical Services Organization. Their report specifically reflected that all aspect of the necessary systems and controls were in place and performing excellent ratings.

EWA Technical Services Department has gone through four Department of Defense (DOD) inspections in the past nine years. We received average to excellent ratings on all inspections.

EWA's Maintenance Program success is a direct result of true team effort promoting synergy.

Another indicator for EWA's performance is reflected by the low number of FAA Enforcement Actions received. The following data provides an analytical summary of this performance.

EMERY WORLDWIDE AIRLINES MAINTENANCE PERFORMANCE
BASED ON FAA SAFETY INSPECTION/ENFORCEMENT HISTORY

YEAR	#ADMIN ENFORCEMENT'S	FAA NPTRS	FLEET SIZE	FLT HOURS	CYCLES	PILOT REPORTS
1990	4	Ref. Total	7	11,070	4,732	3,679
1991	3	Ref. Total	20	28,095	12,565	10,512
1992	3	Ref. Total	29	40,606	20,559	17,196
1993	2	Ref. Total	29	42,473	20,718	15,443
1994	1	Ref. Total	37	52,465	23,704	16,667
1995	2	Ref. Total	37	55,178	25,169	16,280
1996	1	Ref. Total	39	57,994	23,960	15,284
1997	0	Ref. Total	43	62,405	28,127	14,760
1998	1	Ref. Total	43	68,140	32,561	22,061
TOTALS	17	4,944		418,426	192,095	131,882

EWA PERFORMANCE FACTORS SUMMARY - 1/90 THROUGH 12/98

- During the nine (9) year period of Air Carrier Operations, EWA Technical Department experienced the following:

  FAA Administrative Enforcement's compared to # of Safety Inspections = .3%

  FAA Administrative Enforcement's compared to # of Flight Hours = .004%

  FAA Administrative Enforcement's compared to # of Flight Cycles = .008%

  FAA Administrative Enforcement's compared to # of Pilot Reports = .01%

- EWA's FAA Administrative Enforcement's are minor in numbers as represented during 1990 thru 1998.
- EWA increased its fleet size by 22% in 1994 and decreased its number of PIREP's per flight hour by 5%.
- EWA increased its fleet size by 6% in 1996 and decreased its number of PIREP's per flight hour by 3%.
- EWA increased its fleet size by 10% in 1997 and decreased its number of PIREP's per flight hour by 10%.
- EWA increased its flight hours by 9% in 1998 and decreased its number of PIREP'S per flight by 25%.

FAA/SPOT RAMP
INSPECTION RESULTS
1998

EWA incorporated an airline industry standard "FAA Spot/Ramp Inspection Procedures" into our Maintenance Policy and Procedure Manual (MPP) in 1995.

The purpose of this program was to enhance EWA's Continuing Analysis and Surveillance System (FAR 121.373) for the continuing analysis and surveillance of the performance and effectiveness of its inspection program and the program covering other maintenance, preventative maintenance, and alterations and for the correction of any deficiency in those programs.

It also provides direct support to FAR 119.59 to assure that EWA properly handles FAA Inspector contacts, and expedites the handling of any FAA request for information.

In 1998, 78 FAA Station Inspections of the EWA's 43 line stations were reported. A total of 173 minor findings was noted and corrected. This number of findings reflected 70% of the inspections resulted in an average of 2 write-ups per visit, and 30% no findings.

This audit performance continues to reflect EWA's compliance of FAA regulations and company policies and procedures.

U.S. Department
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San Jose Flight Standards District Office

San Jose International Airport
1250 Aviation Avenue, Suite 295
San Jose, CA 95110-1130
Phone: (408) 291-7681
FAX: (408) 279-5448

January 29, 1999

File Number: 99WP150029

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kent Scott
President & Chief Operating Officer
Emery Worldwide Airlines, Inc.
One Emery Plaza
Dayton International Airport
Vandalia, OH 45377

Dear Mr. Scott:

This letter is to inform you that Emery Worldwide Airlines, Inc., (EWA), the holder of Air Carrier Certificate Number RRXA558B, may be in violation of Federal Aviation Regulations, in that EWA, on November 6, 1998, authorized the Short Term Escalation of five (5) DC-8 aircraft "C" Check inspections contrary to the limitations and procedures governing its D76 Operations Specifications; and that this matter is under investigation by the Federal Aviation Administration.

We offer you the opportunity to submit a written statement to this office regarding this matter, which should be accomplished within ten (10) working days following receipt of this letter. Your response should contain all pertinent facts and extenuating or mitigating circumstances that you believe may have a bearing on this matter. Should you elect not to respond within the specified time, our report will be processed without the benefit of your statement.

Sincerely,

ORIGINAL SIGNED BY

Joseph A. Abramski
Principal Maintenance Inspector

cc: Rene P. Visscher - EWA
Thomas M. Wood - EWA

EMERY
WORLDWIDE AIRLINES
A CNF COMPANY

February 8, 1999

Mr. Joe Abramski
FSDO-SJC
1250 Aviation Ave., Suite 295
San Jose, CA 95110

Dear Mr. Abramski:

This letter constitutes Emery Worldwide Airlines Inc., (EWA) formal response to your letter of investigation (99WP150029) addressed to EWA's President and Chief Operating Officer, dated January 29, 1999 (See Attachment).

At the outset, I would like to assure you that your letter has merited EWA's immediate and undivided attention. EWA, as a certificated air carrier, and its management and employees are fully appreciative of their responsibility arising under pertinent laws and under the Federal Aviation Regulations (FAR's) and strive to fulfill these responsibilities in a professional and conscientious manner.

During October through November 1998 EWA added three additional C & D Maintenance Checks and Modifications vendors to the Operation Specifications D91. The heavy maintenance vendors were Commodore Aviation Inc., Miami Modification Center and Tennessee Technical Services. (See Attachment). The Technical Service Department organized a team made up of Heavy Maintenance Reps, Quality Control Inspection Reps and Reliability Technical Analysis to perform training to these new vendors on our Inspection Procedures, Corrosion Prevention and Control Program and to include direct oversight of these new vendors to ensure compliance of EWA's programs. Several man-hours and additional cost was incurred to aggressively eliminate this unforseen or controllable circumstance of our two heavy maintenance vendors experiencing manpower shortages, parts shortages and the manufacturers delay in providing repairs which were beyond EWA's control.

It was noted that 1998 was reported a record year for shortage of A & P mechanics in the United States. It was estimated to be 35% less than 1997. This mechanic shortage impacted EWA's Heavy Maintenance facilities specifically and resulted in longer down days to perform the check.

EWA escalated seven (7) aircraft in 1998 primarily due to this shortage of manpower, material, Douglas engineering support and utilizing the maximum capacity of EWA's two Heavy Maintenance facilities. This written information and several telephone calls with you on this subject, was provided during the year 1998. (See Attachments).

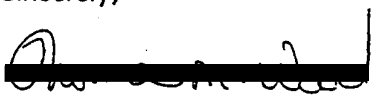
EWA escalated the aircraft in 1998 with your concurrence and under Technical Services controlled conditions that did not effect airworthiness or safety. The escalation utilized was in compliance with the Maintenance Policy and Procedure Manual Chapter 4, Section XXI. Short Term Escalation A. General items 1,2,3 and 4. (See Attachment).

The referenced escalation's time used beyond the approved check interval must be subtracted from the time interval of the next regularly scheduled inspection, therefore there is no loss inspection time to the continuous airworthiness maintenance program providing a conservatory approach to ensure airworthiness and safety.

At no time in the past nine (9) years of EWA history has there been repetitive abuse for cause for revocation of the Short Term Escalation Privilege, and as substantiated in this letter, continues to be in full compliance.

I trust this has been responsive to your letter. Should you wish to discuss this matter more fully, EWA's Senior Management and I would be more than willing to meet with you and address your concerns. If this is the case, please contact me to arrange this meeting.

Sincerely,



Thomas M. Wood
Director Quality Control

TMW/re

Attachments

cc: Kent Scott
Rene' Visscher
Robert Conlon
Michael Dworkin

EWA "C" Check Short Term
Escalation History

Previous escalation history for indication of abuse.

EWA has only used the escalation procedure a very few times in the past nine years. The last escalation was in November of 1996 for a component to align with a "C" Check inspection interval. This is no history of abuse with this program.

DATE	AIRCRAFT	REASON
February 9, 1998	N811AL	Heavy Maintenance Schedule Adjustment to meet FAR compliance of the RVSM Modification Program and schedule aircraft for FAA STC Cargo door inspection.
March 16, 1998	N603AL N964R	Heavy Maintenance escalation for the purpose of scheduling the "C" Check to be performed in conjunction with the "D" Check that are written reasonable proximity to one another.
April 20, 1998	N990CF	Heavy Maintenance delay of four aircraft due to the shortage of manpower, material, Douglas Engineering support, and utilizing the maximum capacity of EWA's two Heavy Maintenance facilities.
June 15, 1998	N602AL	This escalation is required to the grounding of aircraft N995CF that is being placed into "C" Check early and the current Heavy Maintenance schedule delay of four aircraft due to the shortage of manpower, material, Douglas engineering support, and utilizing the maximum capacity of EWA's two Heavy Maintenance facilities.
November 6, 1998	N8085U N797AL N997CF N996CF N959R	Heavy Maintenance Schedule delay of four aircraft due to the shortage of manpower, material, Douglas Engineering support, and utilizing the maximum capacity of EWA's two Heavy Maintenance facilities.

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FAX: (408) 279-5448

February 8, 1999

File Number: 99WP150032

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kent Scott
President & Chief Operating Officer
Emery Worldwide Airlines, Inc.
One Emery Plaza
Dayton International Airport
Vandalia, OH 45377

Dear Mr. Scott:

This letter is to inform you that Emery Worldwide Airlines, Inc., (EWA), the holder of Air Carrier Certificate Number RRXA558B, may be in violation of Federal Aviation Regulations, in that EWA performed a major alteration of EWA DC-8 fleet aircraft N996CF, N998CF, and N964CF by the installation of STC SA5455NM; and that this matter is under investigation by the Federal Aviation Administration.

We offer you the opportunity to submit a written statement to this office regarding this matter, which should be accomplished within ten (10) working days following receipt of this letter. Your response should contain all pertinent facts and extenuating or mitigating circumstances that you believe may have a bearing on this matter. Should you elect not to respond within the specified time, our report will be processed without the benefit of your statement.

Sincerely,

ORIGINAL SIGNED BY

Joseph A. Abramski
Principal Maintenance Inspector

cc: Rene P. Visscher - EWA
Thomas M. Wood - EWA

U.S. Department
of Transportation
Federal Aviation
Administration

San Jose Flight Standards District Office

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1250 Aviation Avenue, Suite 295
San Jose, CA 95110-1130
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FAX: (408) 279-5443

February 10, 1999

Mr. Thomas M. Wood
Director, Quality Control
Emery Worldwide Airlines, Inc.
303 Corporate Center Drive
Vandalia, OH 45377

Dear Mr. Wood:

Request for Information

This correspondence requests a copy of the completed work orders installing STC SA5455NM on Emery Worldwide Airlines (EWA) DC-8 aircraft N996CF, N998CF, and N964CF.

Please provide the requested information within ten working days after receipt of this letter. Should you require clarification on this matter, please call at your convenience.

Sincerely,

[redacted]

Joseph A. Abramski
Principal Maintenance Inspector

cc: Rene Visscher - EWA

EMERY
WORLDWIDE AIRLINES
A CNF COMPANY

February 25, 1999

Mr. Joseph Abramski
FSDO-SJC
1250 Aviation Ave., Suite 295
San Jose, CA 95110

Dear Mr. Abramski:

This letter constitutes Emery Worldwide Airlines, Inc. (EWA)'s initial formal response to your letter of investigation (99WP150032) addressed to EWA's President and Chief Operating Officer, dated February 8, 1999, and your letter (Request for Information) addressed to me dated February 10, 1999.

I have enclosed a copy of the Maintenance Authorization AM-7112-01:01 that installed the STC SA5455NM on the subject aircraft. I will overnight to you Monday, 3-1-99 a signed copy for aircraft N998CF. The other two requested aircraft N996CF and N964R paperwork has not yet been received from the heavy maintenance checks.

I have performed a review of the referenced STC accomplishment, to which was audited by the Quality Control Section, and we are not aware of any violation of Federal Aviation Regulations, pertaining to this subject.

Please contact me by telephone upon receipt of this letter to provide EWA the opportunity of the knowledge of your concerns. I can assure you that we will immediately address your concerns.

Sincerely,

Thomas M. Wood
Director Quality Control

TMW/re

Attachment

cc: Kent Scott
Rene' Visscher
Edward Jones

EMERY
WORLDWIDE AIRLINES
A CNF COMPANY

March 4, 1999

Mr. Joseph Abramski
FSDO-SJC
1250 Aviation Ave., Suite 295
San Jose, CA 95110

Dear Mr. Abramski:

This letter constitutes Emery Worldwide Airlines, Inc. (EWA)'s second follow up letter to the initial formal response to your letter of investigation (99WP150032) addressed to EWA's President and Chief Operating Officer, dated February 8, 1999, your letter (Request for Information) addressed to me dated February, and my initial letter to you dated February 25, 1999.

I am forwarding you a copy of the Maintenance Authorization, AM-7112-01:00 that installed the STC SA5455NM on Aircraft N998CF. Again, as I previously informed you, I will forward Aircraft N996CF and N964R paperwork, upon receipt.

I have again reviewed EWA manual revisions that have been previously accepted/approved by you, and still am not aware of any violation of the Federal Aviation Regulations pertaining to this subject.

I would hope that you would contact me by telephone, upon receipt of this letter, to provide EWA the opportunity of acknowledging your concerns. As EWA continually demonstrates, I can assure you that we will take immediate action in addressing your concerns.

Sincerely,

Thomas M. Wood
Director Quality Control

TMW/csh

Attachments

cc: Kent Scott
Rene' Visscher
Edward Jones

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Federal Aviation
Administration

San Jose Flight Standards District Office

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1250 Aviation Avenue, Suite 295
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FAX: (408) 279-5448

February 8, 1999

File Number: 99WP150033

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kent Scott
President & Chief Operating Officer
Emery Worldwide Airlines, Inc.
One Emery Plaza
Dayton International Airport
Vandalia, OH 45377

Dear Mr. Scott:

This letter is to inform you that Emery Worldwide Airlines, Inc., (EWA), the holder of Air Carrier Certificate Number RRXA558B, may be in violation of Federal Aviation Regulations, in that EWA elected to activate the MERIT database system of maintenance data collection; and that this matter is under investigation by the Federal Aviation Administration.

We offer you the opportunity to submit a written statement to this office regarding this matter, which should be accomplished within ten (10) working days following receipt of this letter. Your response should contain all pertinent facts and extenuating or mitigating circumstances that you believe may have a bearing on this matter. Should you elect not to respond within the specified time, our report will be processed without the benefit of your statement.

Sincerely,

ORIGINAL SIGNED BY

Joseph A. Abramski
Principal Maintenance Inspector

cc: Rene P. Visscher - EWA
Thomas M. Wood - EWA

U.S. Department
of Transportation
Federal Aviation
Administration

San Jose Flight Standards District Office

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FAX: (408) 279-5448

February 8, 1999

File Number: 99WP150028

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kent Scott
President & Chief Operating Officer
Emery Worldwide Airlines, Inc.
One Emery Plaza
Dayton International Airport
Vandalia, OH 45377

Dear Mr. Scott:

This letter is to inform you that Emery Worldwide Airlines, Inc., (EWA), the holder of Air Carrier Certificate Number RRXA558B, may be in violation of Federal Aviation Regulations, in that EWA has not conducted the monthly Maintenance Reliability Program meeting and review of its continuous airworthiness maintenance program as required in its D74 Operations Specifications Document EWA-51990, for the month of December, 1998, in addition to the months of September, October, and November, 1998, of which you were previously informed; and that this matter is under investigation by the Federal Aviation Administration.

We offer you the opportunity to submit a written statement to this office regarding this matter, which should be accomplished within ten (10) working days following receipt of this letter. Your response should contain all pertinent facts and extenuating or mitigating circumstances that you believe may have a bearing on this matter. Should you elect not to respond within the specified time, our report will be processed without the benefit of your statement.

Sincerely,

ORIGINAL SIGNED BY

Joseph A. Abramski
Principal Maintenance Inspector

cc: Rene P. Visscher - EWA
Thomas M. Wood - EWA

EMERY
WORLDWIDE AIRLINES
A CNF COMPANY

February 22, 1999

Mr. Joseph Abramski
FSDO-SJC
1250 Aviation Ave., Suite 295
San Jose, CA 95110

Dear Mr. Abramski:

This letter constitutes Emery Worldwide Airlines Inc., (EWA)'s formal response to your letters of investigation (99WP150028) dated February 8, 1999, and (99WP150033) dated February 8,1999 addressed to EWA's President and Chief Operating Officer (See Attachment #1).

At the outset, I would like to assure you that your letters have merited EWA's immediate and undivided attention. EWA, as a certificated air carrier, its management and employees are fully appreciative of their responsibilities arising under pertinent laws and the Federal Aviation Regulations (FAR's) and strive to fulfill these responsibilities in a professional and conscientious manner.

These two additional letters of investigation 99WP150028 and 99WP150033 dated February 8, 1999 pertain to the same subject matter of your previous letters 99WP150028 dated January 27, 1999 and 99WP150025 dated January 7, 1999. EWA appreciates the FAA's voicing of its possible concerns, but now questions why four separate letters of investigation and three separate files, each bearing a different File Number, were required or even appropriate.

As the initial response letter to 99WP150025 addressed all issues of your subsequent referenced letters, EWA does not understand these actions of enforcement and questions if they are reasonable or prudent. Attached is a chronological order of events that represent possible redundancy of enforcement action taken.

FAA Enforcement Action Sequence of Events

Date	Subject
January 7, 1999	FAA LOI 99WP150025 dated 1-7-99 sent by EWA PMI, regarding not receiving MISR reports for September, October and November 1998. (See Attachment #6)
January 15, 1999	EWA Manager Reliability contacted the EWA PMI by telephone to acknowledge receipt of the LOI 99WP150025, and explained the details of the delay and of the inadvertent failure to send to him the Monthly Reliability Reports which contained the MISR reports, and the comprehensive fix that was in place. (See Attachment #5)

Date	Subject
January 15, 1999	EWA Director Quality Control's initial response letter to PMI LOI 99WP150025, that included the completed MISR reports for September, October and November 1998. The letter provided initial notice of the delay and of the inadvertent failure to send the Monthly Reliability Reports which included the MISR reports. (See Attachment #8)
January 18, 1999	EWA Director Quality Control's follow-up letter to the initial response to PMI LOI 99WP150025, which included a formal response from the Manager Reliability, that detailed the delayed Reliability Reports, a comprehensive fix to the Reliability Reports and the Merit Program delays. (See Attachment #7)
January 27, 1999	FAA LOI 99WP150028 dated 1-27-99 sent by EWA PMI, regarding Reliability meetings for September, October and November 1998 not having been conducted. (See Attachment #4)
February 2, 1999	EWA Manager Reliability initial response letter to PMI LOI 99WP150028, dated 1-17-99, including reiterating their telephone conversation on 1-15-99 in which they discussed the delayed Reliability Reports, program meetings, MISR and the problems experienced with the MERIT data base. This letter provided the scheduled meeting dates for the Reliability meetings; 2-12-99 review of September, October and November 1998 to which this meeting was held; and 2-26-99 review December and January data. (See Attachment #5)
February 8, 1999	EWA Director Quality Control formal response letter to PMI LOI 99WP150028, providing details that support this LOI was addressed by the previously issued LOI 99WP150025. (See Attachment #4)
February 8, 1999	FAA LOI 99WP150028 dated 2-8-99 (continuation of LOI 99WP150028 dated 1-27-99) regarding Reliability meeting for December 1998 not having been conducted. (See Attachment #1)
February 8, 1999	FAA LOI 99WP150033 dated 2-8-99 regarding activation of the MERIT database system of maintenance data collection. (See Attachment #1)

Date	Subject
February 8, 1999	EWA Manager Reliability's letter to PMI to provide January 1999 MISR report, and an update of the scheduled Reliability meetings; 2-12-99 review September, October and November data; 2-26-99 review December and January data. (See Attachment #3) The completed December 1998 Reliability Report is attached.
February 11, 1999	EWA Director Quality Control's letter to PMI follow-up to LOI 99WP150028 informing him of Reliability Meeting dates and completed copies of the September, October and November Reliability Reports, to be addressed in the scheduled 2-12-99 meeting. (See Attachment #2)
February 12, 1999	EWA Director Quality Control received LOI 99WP150028 continuance and 99WP150033 both dated 2-8-99. (See Attachment #1)

EWA's continuous airworthiness maintenance program has received over nine years of internal evaluation programs that continually monitor company policies and procedures and have proven compliant to ensure that the highest level of safety and airworthiness have and are being maintained. (See Attachment #7). During the past nine (9) years of EWA's Air Carrier Operation, EWA Technical Services Department has only received seventeen (17) FAA Enforcement actions, which is an average of less than two a year.

EWA's FAA Approved Maintenance Reliability Program has successfully managed the Continuous Airworthiness Maintenance Program for over nine (9) years maintaining a consistent 98% mechanical dispatch reliability. An example of this performance is represented by the consistent decline of Reliability ATA Alert Levels (See Attachment #9).

EWA's DC-8 fleet arrival performance was compared favorably with Southwest, American Airlines and United Airlines from December 1997 to July 1998. EWA's DC-8 thirty (30) years plus aged aircraft fleet performance was comparable to the referenced major carriers with newer fleets. (See Attachment #10).

The FAA enforcement program has always been considered a means to promote compliance with the FAA's regulations, not an end in themselves. In addition to the deterrence achieved by the appropriate use of enforcement action, the public interest is also served by positive incentives to promote and achieve compliance. The Air Carrier Industry understands that the FAA believes that aviation safety is well served by incentives for certificate holders regarding compliance to identify and correct their own instances of noncompliance and to invest more resources in efforts to preclude their recurrence. EWA believes this process may not have been achieved by the aforementioned redundancy of LOI's.

In the subject alleged non-compliance issues, EWA has proven that the alleged violations were inadvertent, did not indicate a lack of qualifications, immediate corrective action was in place and now completed by the demonstration of the comprehensive fix.

With specific regard to LOI 99WP150033, EWA elected to upgrade the EWA01 computer software system in early 1996. The Maxi-Merlin software program was purchased from U.S. Airways to accommodate the growth of EWA's fleet, and provide a Major Carrier control system that has many years of proven effectiveness. EWA has invested over 2.5 Million Dollars in this program enhancement.

I have enclosed the correspondence to your office dating back to October 11, 1996 for your review (See Attachment #11). As you can see from this correspondence, EWA has provided extensive details regarding the implementation plan of the MERIT software.

The August 8, 1997 letter to you provided the transition plan regarding the log page data being entered into the MERIT software. Revisions to EWA's Maintenance Policy and Procedures Manual regarding the MERIT system in the appropriate Chapters have also been accepted by you in 1998. I have enclosed a transition letter for the log page discrepancies and corrective action, in continuance of notification of the Merit transition process.

<u>Summary of LOI Responses</u>

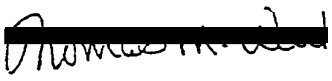
1. This isolated occurrence of delayed Maintenance Reliability Reports/meetings is the first since the FAA approval of the Reliability Program in 1990.
2. The failure to hold the monthly Maintenance Reliability Meeting has not hindered the EWA Reliability program, as can be evidenced by the improving trend in the Mechanical Dispatch Rate for the last four months of 1998. The rate for the four months was 96.3%, 97.0%, 97.4% and 97 for an average 97% for 1998.
3. EWA has maintained an average of two (2) pilot reports per flight hour since 1990. It is important to note that EWA increased its flight hours by 9% in 1998 and decreased the number of PIREP'S per flight hour by 25%.
4. All aspects of the Continuous Airworthiness Maintenance Program was performed on a daily basis as is referenced in EWA's Maintenance Reliability Program Document No. EWA-51990. In addition daily/weekly scheduled meetings are held with the Technical Services Management (MRB members) to address all aspects of EWA's continuous maintenance program including <u>daily</u> corrective action. Based on the day to day interactive support system, no information was relayed that would or did cause non-compliance to the Continuous Airworthiness Program.

5. EWA elected to go to the U.S. Airways Maxi Merlin (MERIT) data system. This data system ties all aspects of airline operation together. With the implementation of a new system, there can be unforeseen problems. The problem experienced with the September data is a prime example of the type of problems that can occur. The problem was aggressively attached, and was put back on track in a timely manner.

6. A comprehensive corrective action plan was in place since October 1998 to prevent future non-compliance of our program. Aircraft log page discrepancies/corrective action was entered into the Merit software commencing in September 1998. A monthly audit by Reliability in October revealed data entry discrepancies and report errors. Reliability and Aircraft Records worked in concert to audit and verify the data entered into the MERIT Program was correct from the original log page. The Information Management section worked to correct these problems of processing the data. These program changes were complete and verified correct by audits in November.

I trust that this has been responsive to your letters. Should you wish to discuss this matter more fully, EWA's Senior Management an I would be more than willing to meet with you and address your concerns. If this is the case, please contact me to arrange the meeting.

Sincerely,



Thomas M. Wood
Director Quality Control

TMW/re

Attachments

cc: Kent Scott
Rene' Visscher
Robert Conlon
Michael Dworkin