ORDER

8100.7A

AIRCRAFT CERTIFICATION SYSTEMS EVALUATION PROGRAM

9/30/99

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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RECORD OF CHANGES

DIRECTIVE NO. 8100.7A

CHANGE TO BASIC	SUPPLEMENT			OPTIONAL	CHANGE TO BASIC	SUPPLEMENTS			OPTIONAL

FAA Form 1320-5 (6-80) USE PREVIOUS EDITION

FOREWORD

This order provides guidance and assigns responsibility for the implementation of the Aircraft Certification Systems Evaluation Program. This program is a vital element within our mission of continued operational safety. This program utilizes a team of Federal Aviation Administration (FAA) engineering, flight test, and manufacturing inspection personnel to evaluate control of FAA-approved type design, subsequent to initial approval by the FAA or FAA-delegated representatives, production activities by production approval holders, and design approval systems in place at delegated facilities.

The program will determine whether production approval holders and delegated facilities are meeting the requirements of applicable Code of Federal Regulations (CFR) and complying with the procedures established to meet those requirements. It will also survey the application of standardized evaluation criteria not required by the CFR or FAA-approved data to identify national trends that may require development of new or revised regulations, policy, and guidance.

The program is dynamic and contains provisions for continuous improvement. All Aircraft Certification Service personnel participating in this program are strongly encouraged to identify difficulties in implementing this program, and to recommend improvements.

/s/ Frank Paskiewicz for

Elizabeth Erickson
Director, Aircraft Certification Service

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CHAPTER 1. GENERAL

1. **PURPOSE**. This order establishes and describes the Federal Aviation Administration (FAA) Aircraft Certification Systems Evaluation Program (ACSEP). This program is a vital element within the FAA mission of continued operational safety, and is therefore excluded from the Department of Transportation's plan to reduce internal regulations by 50 percent. Figure 1-1 depicts the ACSEP life cycle process. The ACSEP is a comprehensive evaluation program that:

a. **Applies** standardized systems evaluation to the continued integrity of the design data, subsequent to initial approval by the FAA or FAA-delegated representatives; to production activities at production approval holders, associate facilities, and their satellite Manufacturer's Maintenance Facilities; and to design approval systems in place at delegated facilities.

b. **Ascertains** whether production approval holders, associate facilities, and delegated facilities are meeting the requirements of applicable Code of Federal Regulations (CFR) and complying with procedures established to meet those requirements, including control of satellite Manufacturer's Maintenance Facilities.

c. **Surveys** the application of standardized evaluation criteria not required by applicable CFR or FAA-approved data to identify national trends which may require development of new or revised regulations, policy, and guidance.

d. **Provides customer focus** through the establishment of a database for analysis of evaluation results and for reporting of trends in continued operational safety upon which our customers may act.

e. **Provides continuous improvement** through the continual evaluation of lessons learned and customer feedback reports, through the submittal of proposed improvements by our internal and external customers, and by the establishment of permanent Continuous Improvement Teams.

f. **Provides for employee involvement** by establishing and maintaining a professional staff of trained evaluators composed of aviation safety inspectors, aerospace engineers, and flight test pilots.

2. **DISTRIBUTION**. This order is distributed to Washington headquarters branch levels of the Aircraft Certification Service; to the branch level in the regional Aircraft Certification divisions; to all Aircraft Certification Service Offices; to the Aircraft Certification branch at the FAA Academy; to the Brussels Aircraft Certification Division; to the Suspected Unapproved Parts Program Office; and to the Flight Standards Service Regulatory Support Division.

3. **CANCELLATION**. Order 8100.7, Aircraft Certification Systems Evaluation Program, dated March 30, 1994, is canceled.

4. **EXPLANATION OF CHANGES**. The following list identifies the significant changes contained in this revision:

a. Evaluation of delegated facilities has been incorporated into ACSEP, whereas evaluation of suppliers has been removed.

b. Risk assessment methodology has been incorporated through the application of a resource targeting model (chapter 3).

c. Paragraph 1 more fully defines the purpose of ACSEP.

d. Paragraphs 13 and 15 specify selection of engineers, flight test pilots, and aviation safety inspectors as candidates for appointment as ACSEP evaluators.

e. Paragraph 14 summarizes the directorate and headquarters managers who are authorized to select and appoint ACSEP evaluator candidates.

f. Paragraph 16 describes the role of the immediate supervisor in the team member/leader appointment process.

g. Paragraph 43 authorizes performance of ACSEP evaluations by one person when warranted by specified criteria. It also details principal inspector and assigned engineer participation in ACSEP evaluations.

h. Paragraph 44b clarifies responsibilities for changing the master schedule.

i. Paragraph 57 clarifies the responsibilities for coordinating multiple evaluations at international locations.

j. Paragraph 68 deletes reference to major systems and renames the subsystems as system elements.

k. Paragraph 69 and appendix 13 define in greater detail the application of findings and observations at the specific facilities to be evaluated.

l. Paragraph 80 clarifies the documents and forms required to compile the ACSEP evaluation report.

m. Paragraph 81 recommends quality review of the ACSEP evaluation report by each directorate.

n. Paragraph 82 specifies that a copy of the entire ACSEP evaluation report, with the exception of the objective evidence, will be sent to the Production & Airworthiness Certification Division, AIR-200.

o. Appendices 7, 8, and 9 describe the use of FAA Form 8100-7, ACSEP Evaluation Customer Feedback Report.

p. Appendix 8 describes the process for preparing notification letters to a satellite Manufacturer's Maintenance Facilities under surveillance hand-off procedures.

q. Appendix 14 modifies a number of evaluation criteria by more accurately reflecting the language of the applicable CFR requirements.

r. Appendices 17 and 18 delete the rating requirement for the system elements and replace it with a survey.

5. **DEFINITIONS AND ACRONYMS**. The following definitions apply to the conduct and administration of ACSEP. Acronyms are listed in appendix 1.

a. **Assigned Engineer** - An FAA engineer to whom the Aircraft Certification Office (ACO) manager has assigned responsibility relating to an ACSEP evaluation at a particular design approval facility. In the case of a delegated facility, the assigned engineer may be the engineer that is assigned oversight responsibility for the delegated facility.

b. **Associate Facility** - A facility which has been approved as an extension to an original production approval holder (PAH). The facility is owned and operated by the same corporate management as the original PAH that controls the design and quality of the product/part thereof, except for companies participating in joint-production and/or co-production business agreements. The associate facility must be listed as a manufacturing facility on the production certificate (PC) or letter of authorization for other production approvals, e.g., Parts Manufacturer Approval (PMA) or Technical Standard Order (TSO) authorization.

c. **Delegated Facility** - A facility that holds a Delegation Option Authorization (DOA), Designated Alteration Station (DAS), or a Special Federal Aviation Regulation (SFAR-36) authorization, and has primary responsibility to control the design approval system in place to produce a safe design in compliance with airworthiness requirements.

d. **Established Industry Practice** - A widely-followed method of operating that achieves consistent performance of specific functions. Examples of established industry practices include a calibration recall system, and an internal audit system.

e. **Evaluator** - An individual the FAA appoints to perform ACSEP evaluations.

f. **FAA-Approved Data** - Any data that is specifically approved by the FAA or FAA-delegated representatives, including any other document referenced therein. These data may include, but are not limited to, the following, as appropriate: design drawings, manuals, procedures, and specifications.

g. **Facility** - A physical location where a PAH, associate facility, delegated facility, or satellite Manufacturer's Maintenance Facility (MMF) performs all or part of the system element functions relevant to the approval authority granted by the FAA.

h. **Finding** - A finding is classified as a safety finding or a system finding. A safety finding is a safety-related noncompliance that the responsible PI/AE determines requires immediate action. A system finding, in general, is a noncompliance with an applicable CFR, FAA-approved data, or purchase order that indicates a system deficiency or breakdown.

i. **Lead Evaluation Office** - A directorate office or branch assigned to coordinate an ACSEP evaluation.

j. **Noncompliance** - A failure to comply with specified requirements, i.e., applicable CFR, FAA-approved data, or quality requirements from a parent MMF.

k. **Non-observance** - A failure to comply with self-imposed procedures that are related to, but not required by, the applicable production approval, delegated facility approval, or quality requirements from a parent MMF.

l. **Objective Evidence** - All the means by which any alleged fact tends to be established or disproven. These means must be factual, convincing, relevant, valid, reliable, and complete. Examples of evidence include interview statements, photographs, charts, maps, diagrams, documents, and records.

m. **Observation** - An observation is classified as a system observation, an isolated observation, or a CFR observation. A system observation is a non-observance to procedures that are not part of the FAA-approved data, and that indicates a system deficiency or breakdown. An isolated observation is a noncompliance with an applicable CFR, FAA-approved data, or purchase order that does not indicate a system deficiency or breakdown. A CFR observation is a noncompliance of the FAA-approved data with an applicable CFR.

n. **Principal Evaluator** - An FAA-appointed team leader who acts as the sole evaluator for the performance of an ACSEP evaluation at a specific facility.

o. **Principal Inspector** - A manufacturing inspector who has been assigned certificate management responsibility of a particular PAH or associate facility.

p. **Procedure** - A specified way to perform an activity or function. It is documented, and usually contains the purposes and scope of an activity or function; what is to be done and by whom; when, where, and how the activity or function is to be done; the materials, equipment, and documents to be used; and how the activity or function is to be controlled and recorded.

q. **Production Approval Holder** - The holder of a PC, Approved Production Inspection System (APIS), PMA, or TSO authorization, who has primary responsibility to control the design and quality of a product or part thereof.

r. **Requesting MIDO** - A Manufacturing Inspection District Office (MIDO) that requests satellite MMF surveillance from a MIDO having geographical responsibility of the area in which the facility is located.

s. **Resource Targeting** - A method of focusing FAA ACSEP evaluation resources based on the potential impact that facilities subject to ACSEP have on continued operational safety.

t. **Satellite MMF** - An MMF under Title 14 CFR part 145, § 145.1(c), that is located within the United States at other than the location of the PAH or "parent" MMF. The original PAH or "parent" MMF controls the satellite MMF.

u. **Standardized Evaluation Criteria** - Questions developed for each system element that FAA ACSEP evaluation teams use to plan and document the evaluation. The applicable CFR requirements, appropriate FAA advisory circulars and directives, international standards and specifications, and established industry practices are the basis for these questions. Refer to appendices 14 and 15.

v. **Surveillant MIDO** - A MIDO that performs surveillance of a satellite MMF located in its geographical area of responsibility based on a request from another MIDO.

w. **System** - An activity or function that can affect the maintenance of FAA-approved design, quality data, or the design approval system.

x. **System Element** - A specific activity or function that can affect the maintenance of FAA-approved design or quality data, such as design data control, special manufacturing processes, and airworthiness determination; or, that can affect how a design approval system at a delegated facility provides a product in compliance with airworthiness requirements; or, that may affect the delegation authority and approved procedures. Such activities are subject to evaluation of the adequacy and implementation of approved procedures.

6. **REQUESTS FOR INFORMATION**. All public requests for information regarding completed ACSEP and non-ACSEP evaluations and related database information will be processed in accordance with the Freedom of Information Act (refer to FAA Order 1200.23, Public Availability of Information).

7. **FORMS**. All forms used in the performance and administration of ACSEP evaluations are provided by AIR-200 in electronic format.

8. **SCOPE**. The ACSEP will evaluate holders of a DOA, DAS, SFAR-36 authorization, PC, APIS, PMA, TSO authorization, associate facilities, and satellite MMF's. Suppliers and holders of a letter of TSO design approval are not subject to ACSEP. The ACSEP will be implemented by the directorates of the Aircraft Certification Service, and supported by the Aircraft Engineering Division, AIR-100, and AIR-200.

9. **ASSIGNMENT OF ACSEP PROJECT COORDINATOR**. Many of the tasks identified in the following chapters for ACO managers, Manufacturing Inspection Office (MIO) managers, and MIDO managers are primarily administrative. A high degree of operational efficiency may be achieved by centralizing many of these tasks in a designated ACSEP project coordinator. Directorate managers should consider whether such an assignment would be beneficial for their organizations. The types of tasks that an ACSEP project coordinator could coordinate are as follows:

a. Candidate and evaluator appointment and training (refer to chapter 2).

b. Scheduling and team selection; obtaining additional resources when required (refer to chapter 4).

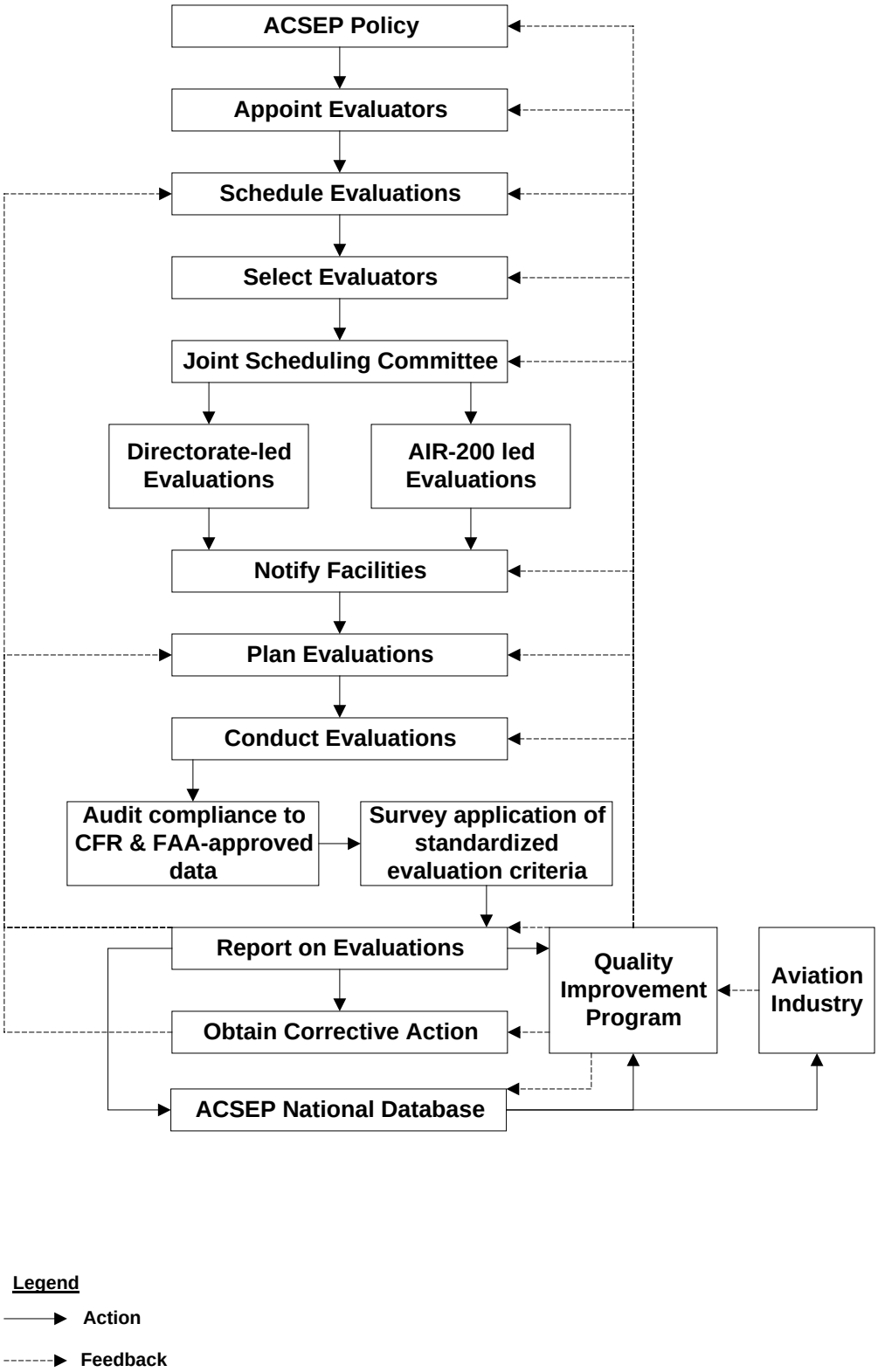
c. Quality improvement program (refer to chapter 5).

d. Dissemination of general ACSEP-related information.

10. **INFORMATION CURRENCY**. Any deficiencies found, clarifications needed, or improvements to be suggested regarding the content of this order should be forwarded to the Aircraft Certification Service, Automated Systems Branch, AIR-520, Attention: Directives Management Officer, for consideration. Your assistance is welcome. Federal Aviation Administration Form 1320-19, Directive Feedback Information, is located on the last page of this order for your convenience. If an interpretation is urgently needed, you may call the Technical Analysis Branch, AIR-120, at (202) 267-9574, or the Evaluation & Assessment Branch, AIR-230, at (202) 267-8361, for guidance, but you should also use the tearout sheet as a follow-up to verbal conversation.

11.-12. **RESERVED**.

FIGURE 1-1. ACSEP LIFE CYCLE PROCESS



CHAPTER 2. ACSEP EVALUATOR APPOINTMENT AND TRAINING

13. **GENERAL**. The appointing officials designated in paragraph 14 below will select ACSEP evaluator candidates who have attained a specified level of experience, or a combination of experience and education, as engineers, flight test pilots, or aviation safety inspectors, and who have demonstrated technical knowledge and skills. A candidate will receive formal classroom ACSEP evaluation training and serve as an evaluator-in-training during ACSEP evaluations, under the direct supervision of an appointed ACSEP team leader, prior to appointment as an ACSEP evaluation team member. A candidate for evaluation team leader will have participated in ACSEP evaluations as an appointed team member, and will perform as an acting evaluation team leader under the direct supervision of an appointed ACSEP team leader, prior to appointment. Both evaluation team members and leaders will be subject to periodic re-evaluation by the cognizant appointing official.

14. **APPOINTING OFFICIALS**. The following directorate and headquarters managers are authorized to select ACSEP evaluator candidates and to appoint qualified candidates as ACSEP team members or team leaders within their respective organizations:

a. ACO manager, in conjunction with ACO branch managers.

b. MIO manager, in conjunction with MIDO managers.

c. Directorate Standards Staff manager.

d. AIR-100 manager.

e. AIR-200 manager.

15. **CRITERIA FOR CANDIDATE SELECTION**. The appointing official will select engineering, flight test, or aviation safety inspector candidates based on the following criteria (see figure 2-1):

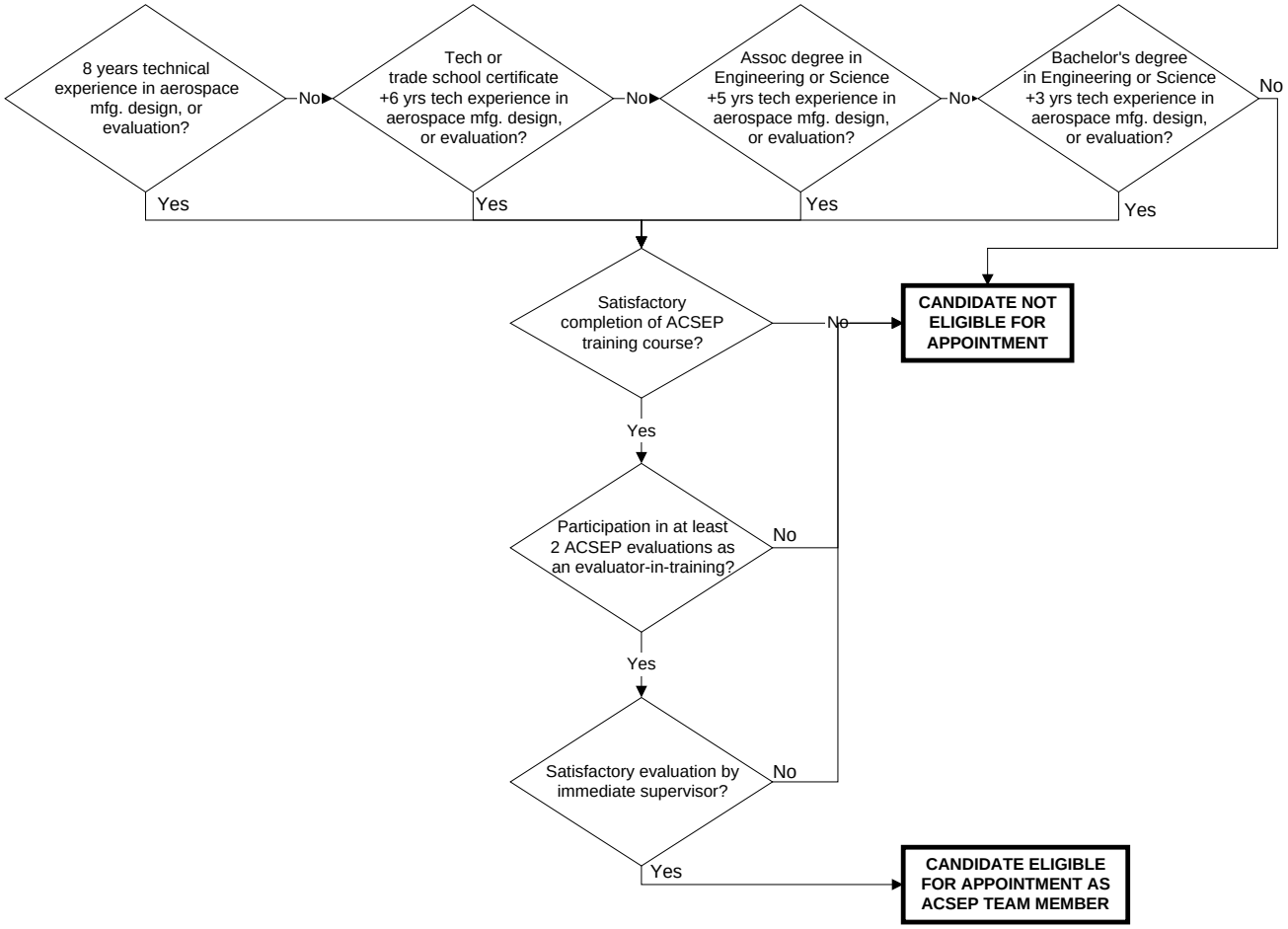
a. Candidates have attained a specified level of experience, or a combination of experience and education in their specific disciplines, as defined below:

(1) At least 8 years of technical experience in aerospace manufacturing or design, or in the evaluation thereof; or

(2) Technical or trade school certificate with 6 years of technical experience in aerospace manufacturing or design, or in the evaluation thereof; or,

(3) Associate's degree in Engineering or Science disciplines with 5 years of technical experience in aerospace manufacturing or design, or in the evaluation thereof; or

FIGURE 2-1. CRITERIA FOR CANDIDATE SELECTION AND TEAM MEMBER APPOINTMENT



(4) Bachelor's degree or higher in Engineering or Science disciplines with 3 years of technical experience in aerospace manufacturing or design, or in the evaluation thereof.

b. Candidates have demonstrated technical knowledge in aerospace manufacturing or design, conceptual understanding of FAA goals and objectives, effective communication and interpersonal skills, good human relations, and coherent writing ability.

16. **CRITERIA FOR APPOINTMENT**. Appointment is the formal process of certifying an ACSEP candidate as an ACSEP team member or team leader based on successful completion of all requirements (see figures 2-1 and 2-2).

a. **Team Member**. Candidates must meet the following minimum requirements prior to appointment as a team member (see figure 2-1):

(1) **Satisfactory completion of the ACSEP team training course** and written examination. The course will provide training in the policy established in this order, including the techniques for applying the standardized evaluation criteria contained in appendices 14 and 15, and in coordinating team member involvement.

NOTE: The Planning and Program Management Division, AIR-500, will ensure that classes are scheduled based on service priorities as delineated in the training requirements process.

(2) **Participation of the candidate**, and demonstration of knowledge and skills acquired during ACSEP team training, in at least two ACSEP evaluations as an evaluator-in-training.

NOTE: The candidate's immediate supervisor should schedule the candidate's participation as an evaluator-in-training to be completed in as short a time period as possible to maximize the candidate's use and retention of acquired knowledge and experience.

(3) **The candidate's immediate supervisor** is responsible to perform the following activities in evaluating the team member candidate:

(a) **Consideration** of candidate's previous experience and education.

(b) **Consideration** of the product complexity, facility size, and complexity of system elements evaluated in ACSEP evaluations in which the candidate participated.

(c) **Discussion** with team leader(s) of evaluations in which the candidate participated to determine candidate's ACSEP evaluation readiness.

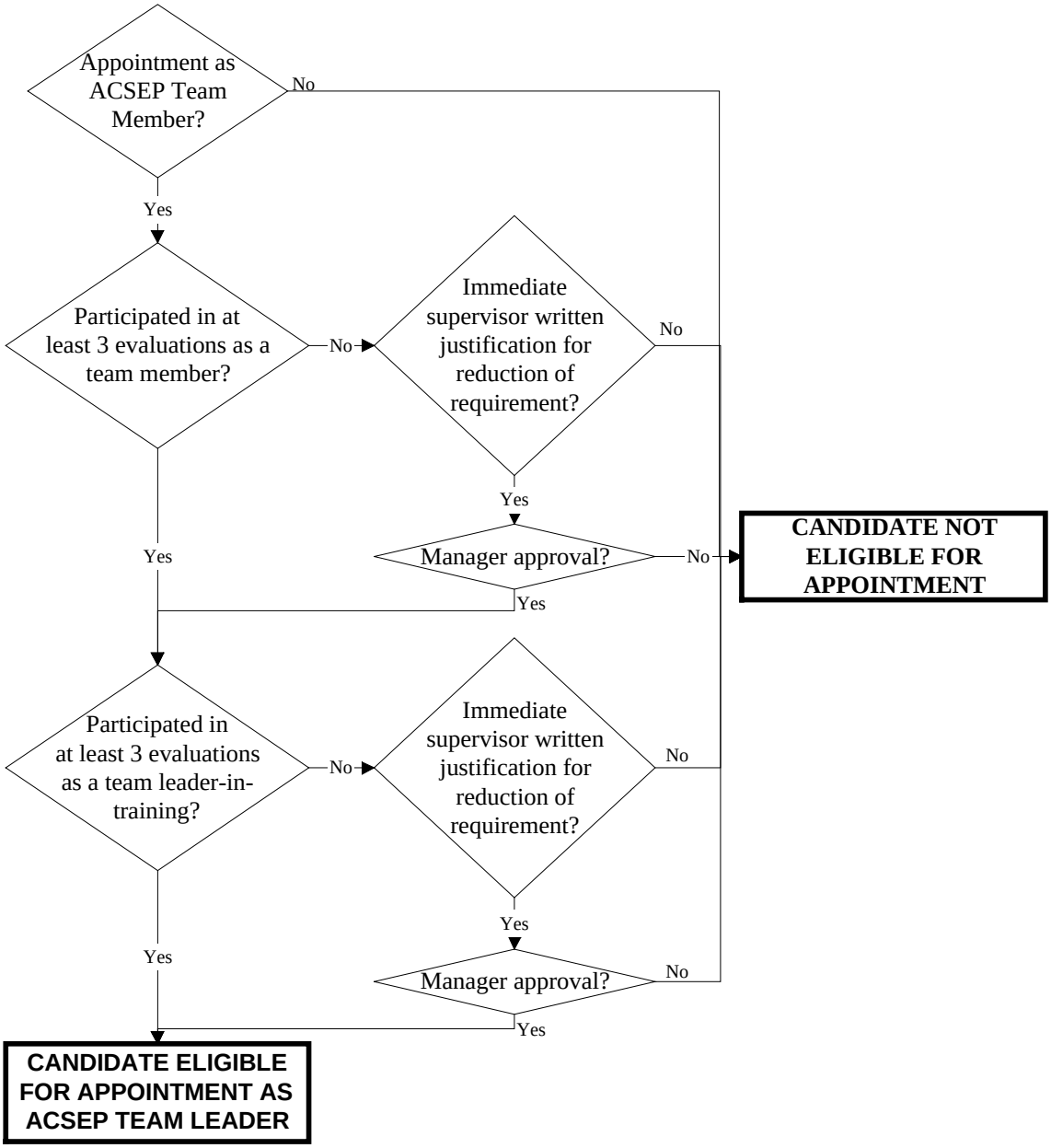
(d) **Review** of ACSEP evaluation reports for evaluations in which the candidate participated.

(e) **Review**, when necessary, FAA Form(s) 8100-7, ACSEP Evaluation Customer Feedback Report, for evaluations in which the candidate participated.

(f) **Interview** with the candidate.

(g) **Discuss** with the candidate any weaknesses or deficiencies in the candidate's evaluation readiness identified during the participation phase. Both parties will work to reduce or eliminate these weaknesses or deficiencies through additional training, additional ACSEP evaluations, National Aviation Safety Inspection Program (NASIP)/Regional Aviation Safety Inspection Program (RASIP) audits, or other similar activities that will increase the candidate's evaluation readiness.

FIGURE 2-2. CRITERIA FOR TEAM LEADER APPOINTMENT



(4) **Based on satisfactory results** of the evaluation of the candidate as listed in paragraph 16a(3) above, the candidate's immediate supervisor will recommend appointment of the candidate as a team member to the cognizant appointing official.

NOTE: In those instances when the cognizant appointing official is also the immediate supervisor of the candidate, the recommendation for appointment will be addressed to the next level of supervision.

b. **Team Leader**. Candidates must meet the following minimum requirements prior to appointment as a team leader (see figure 2-2):

(1) **Current appointment** as an ACSEP evaluation team member.

(2) **Participation** in at least three evaluations as an appointed ACSEP evaluation team member. The candidate's immediate supervisor may request reduction of the requirement by providing documented justification to the cognizant appointing official. The responsibility for requesting any reduction of the requirement rests solely with the candidate's immediate supervisor.

(3) **Participation** of the candidate as an acting evaluation team leader, and demonstration of knowledge and skills acquired during ACSEP team training, in at least three ACSEP evaluations under the direct supervision of an appointed ACSEP evaluation team leader. The candidate's immediate supervisor may request reduction of the requirement by providing documented justification to the cognizant appointing official. The responsibility for requesting any reduction of the requirement rests solely with the immediate supervisor.

NOTE: The candidate's immediate supervisor should schedule the candidate's participation as a team leader-in-training to be completed in as short a time period as possible to maximize the candidate's use and retention of acquired knowledge and experience.

(4) **The candidate's immediate supervisor** is responsible to perform the following activities in evaluating the team leader candidate:

(a) **Consideration** of candidate's previous experience and education.

(b) **Consideration** of the product complexity, facility size, and complexity of system elements evaluated in ACSEP evaluations in which the candidate participated.

(c) **Discussion** with team leader(s) for evaluations in which the candidate participated to determine candidate's team leadership abilities.

(d) **Review** of ACSEP evaluation reports for evaluations in which the candidate participated.

(e) **Review**, when necessary, FAA Form(s) 8100-7 for evaluations in which the candidate participated.

(f) **Interview** with the candidate.

(g) **Discuss** with the candidate any weaknesses or deficiencies in team leadership abilities identified during the participation phase. Both parties will work to reduce or eliminate these weaknesses or deficiencies through additional training, additional ACSEP evaluations, NASIP/RASIP audits, or other similar activities that will increase the candidate's evaluation readiness.

(5) **Based on satisfactory results** of the evaluation of the candidate as listed in paragraph 16b(4) above, the candidate's immediate supervisor will recommend appointment of the candidate as a team leader to the cognizant appointing official.

NOTE: In those instances when the cognizant appointing official is also the immediate supervisor of the candidate, the recommendation for appointment will be addressed to the next level of supervision.

c. The candidate's immediate supervisor will document and track the completion of the requirements in paragraphs 16a and 16b for ACSEP candidates under his or her supervision. Upon successful completion of the requirements, and recommendation of the candidate's immediate supervisor, the cognizant appointing official will appoint the candidates as ACSEP evaluation team leaders or team members, and will formally notify all candidates of their appointment in writing. Ensure the appointment document includes the individual’s discipline and office identification. Send a copy of the appointment document to AIR-200 for database input.

NOTE: Provide written notification of appointment prior to the evaluator's first scheduled ACSEP evaluation as a team member or team leader.

17. **REVIEW OF APPOINTMENT**. Cognizant appointing officials will review the participation in ACSEP evaluations by each evaluator under their appointment authority. Notify evaluators in writing of decisions not to continue their appointment, and provide a copy to AIR-200 for database input. Determine the currency and continued validity of appointments as follows:

a. **Evaluation Team Members**. Review evaluation team members' participation annually. Ensure team members have accomplished the following requirements, as a minimum:

(1) **Participated** as an ACSEP evaluation team member or team leader at an interval of 24 months or less between ACSEP evaluations.

(2) **Demonstrated** knowledge and skill in ACSEP evaluations, as determined from sources such as the ACSEP evaluation report, team leaders, cognizant managers, and satisfactory corrective action for any shortcomings in knowledge or skills noted and discussed with the team member during the interim period.

b. **Evaluation Team Leaders**. Review evaluation team leaders' participation annually. Ensure team leaders have accomplished the following requirements, as a minimum:

(1) **Participated** as an ACSEP evaluation team leader at an interval of 12 months or less between ACSEP evaluations.

(2) **Demonstrated** knowledge and skill in ACSEP evaluations, as determined from sources such as the ACSEP evaluation report, cognizant managers, and satisfactory corrective action for any shortcomings in knowledge or skills noted and discussed with the team leader during the interim period.

18. **REINSTATEMENT OF EVALUATORS FAILING TO MEET APPOINTMENT REVIEW CRITERIA**. Cognizant appointing officials may reinstate evaluators under their appointment authority who have not met the appointment review criteria listed in paragraph 17 above. Determine eligibility for reinstatement according to the following criteria:

a. Team members and leaders who have not met participation requirements may be reinstated after acceptable participation as an evaluator-in-training, or as acting team leader when applicable, in two ACSEP evaluations.

b. Team leaders who have not demonstrated ACSEP evaluation knowledge or skills may be reinstated as a team member after acceptable participation as an evaluator-in-training in two ACSEP evaluations. Consideration for reinstatement as a team leader must then follow the formal ACSEP team leader appointment program listed in paragraph 16b.

c. Team members who have not demonstrated ACSEP evaluation knowledge or skills may be considered for reinstatement by repeating the formal ACSEP team member appointment program listed in paragraph 16a.

19.-24. **RESERVED**.

CHAPTER 3. ACSEP RESOURCE TARGETING

25. **GENERAL**. In the interest of safety and effective resource allocation, a resource targeting model has been developed to identify critical impact indicators that serve to categorize facilities according to their potential impact on continued operational safety. Each facility subject to ACSEP resource targeting is to be assessed annually based on the critical impact indicators. As a result, the resource targeting model places each facility into one of four resource targeting groups according to the potential impact on continued operational safety. Each directorate will utilize the resource targeting model and its application procedures to provide a rational and justifiable basis for effective deployment of FAA resources on ACSEP evaluations.

26. **SCOPE**. Holders of an APIS, PC, PMA, and/or TSO authorization and their associate facilities are subject to resource targeting assessment. Suppliers, delegated facilities, satellite MMF's, and holders of a letter of TSO design approval are not subject to resource targeting.

> **NOTE: Facilities shall not be subject to resource targeting assessment until after an initial ACSEP evaluation is performed. For a production approval holder, the initial ACSEP evaluation would be the first evaluation following the granting of the production approval. An initial ACSEP evaluation should be accomplished within 24 months of the issuance of the production approval.**

27. **RESOURCE TARGETING GROUPS**. Resource targeting assessment of each applicable facility is based on 21 indicators that demonstrate a facility's increased potential for producing nonconforming products, parts, or services. The assessment is also based on the criticality of the product, part, or appliance. When taken collectively, the selected indicators and criticality category identify a facility's potential impact on continued operational safety and the appropriate evaluation interval of the ACSEP evaluation. Facility assessment results in placing facilities into one of the following resource targeting groups:

a. Group I: Facilities with greatest potential impact on continued operational safety.

b. Group II: Facilities with moderate potential impact on continued operational safety.

c. Group III: Facilities with low potential impact on continued operational safety.

d. Group IV: Facilities with little or no potential impact on continued operational safety.

28. **RESOURCE TARGETING ASSESSMENT OF FACILITIES**. Assessment of facilities shall be conducted annually. Documentation of the facility assessment will be accomplished using FAA Form 8100-9; refer to appendix 2. Do not assess facilities unless an initial ACSEP evaluation has been conducted. See paragraph 26 NOTE above.

a. Assessment of facilities and completion of Form 8100-9 shall be completed annually no later than April 30. All MIO managers should allow enough time prior to this date for uploading the automated files described in paragraphs 29 and 30 below, and for printing, distributing, and dispositioning the reports described in appendix 4 and paragraphs 30a through 30e below.

b. Each ACO manager will designate an ACSEP resource targeting focal point and an alternate to coordinate MIO/MIDO requests for consultation in completing Form 8100-9.

c. The validity of the information entered on Form 8100-9 is dependent upon the principal inspector's knowledge of the current status of each facility being assessed. To this end, the resource targeting model is designed to assign a resource targeting group to a facility only if a principal inspector (PI) has performed certificate management functions on site at the facility within the 12 months prior to the date the Form 8100-9 is completed. Certificate management functions are defined in the current version of Order 8120.2. In other words, if there has been no recent on-site PI activity, no assessment is performed and consequently no group is assigned. The result is a lack of structured guidance on how to effectively target resources at that facility. At least 90 to 120 days prior to the April 30 completion date, each MIDO manager, in coordination with the PI's, is strongly encouraged to identify facilities where no on-site activity will have been performed in the 12 months prior to the completion of Form 8100-9. Every effort should be made to schedule on-site activity at those facilities identified prior to completion of Form 8100-9.

d. When performing certificate management functions at a facility, it is recommended that the PI take along a blank printout of Form 8100-9 in order to facilitate the scheduled completion process.

e. The PI will coordinate with those facilities where certificate management functions were performed on site within the previous 12 months in order to obtain current or clarifying information relevant to the resource targeting company/facility indicators being assessed.

f. The PI will complete Form 8100-9 in accordance with appendix 2, paragraph 2. When ACO consultation is considered to be of value in determining the appropriate assessment for the 21 indicators and/or the unit criticality, contact the ACO resource targeting focal point or alternate. The ACO resource targeting focal point, or alternate, will refer the request to the appropriate ACO staff member.

g. Upon completion of the requirements of appendix 2, paragraph 2, for all assigned facilities, the PI will discuss each completed form with the MIDO manager. For this purpose, the PI may print a copy of each Form 8100-9 or use an electronic copy. To the greatest extent possible, the PI and MIDO manager should agree on the final assessment ratings for each indicator and unit criticality. At the conclusion of the discussion, the PI will incorporate any changes in the automated file. The PI will then print each Form 8100-9, and sign and date each form. The PI will provide the signed forms to the MIDO manager, who will also sign and date the forms. The MIDO manager will return the signed Form(s) 8100-9 to the PI. The PI should file the signed forms in a single folder until the forms are finalized in accordance with paragraph 30e below.

29. **COLLECTION OF FACILITY ASSESSMENT DATA**. Each MIDO manager should designate an individual to collect and collate the completed automated assessment files and transmit them to the MIO. For the purpose of this order, the MIDO designated individuals will hereinafter be referred to as a MIDO resource targeting administrator (RTA).

a. Upon receipt of all applicable signed Form(s) 8100-9, the PI will:

(1) If the automated files are located on an individual PI's workstation, provide a copy of the respective automated files to the MIDO RTA; OR

(2) If the automated files are located on the MIDO RTA workstation, notify the MIDO RTA that Form(s) 8100-9 have been signed.

b. When all automated files have been received and compiled, the MIDO RTA will combine the automated files into a single automated file. If a single automated file was initially established, the MIDO RTA will ensure that all the supporting Form(s) 8100-9 have been signed. The MIDO RTA will then transmit the single automated file electronically to the directorate MIO and to AIR-200.

NOTE: The automated files transmitted by the MIDO RTA contain only the data entered as required by appendix 2, paragraph 2. Conversion of this data into the appropriate resource targeting groups identified in paragraph 27 above is accomplished by the software provided to the MIO.

30. **IDENTIFICATION OF RESOURCE TARGETING GROUPS**. Each MIO manager should designate an individual to collect and collate the completed automated assessment files transmitted from the MIDO RTA. For the purpose of this order, the MIO designated individuals will hereinafter be referred to as a MIO resource targeting administrator (RTA).

a. The MIO RTA will upload the automated files received from the MIDO RTA to the resource targeting database. When all automated files have been received and uploaded, the MIO RTA will simultaneously print and distribute a draft Directorate Report and an Office Report; refer to appendix 4. The draft Directorate Report will list all facilities assessed within the directorate and the respective resource targeting group assigned by the resource targeting model. The draft report will be distributed to the MIO manager and all directorate ACO managers for review. The Office Report will list the facilities assessed within each MIDO and their group assignments. It will be distributed to the respective MIDO manager for review. Electronic versions of the Office Report and the draft Directorate Report may be used to perform the reviews outlined in paragraphs 30b through 30e below. See appendix 4, paragraph 3.

b. Upon receipt of the draft Directorate Report, the ACO managers will review the resource targeting group assignments for the facilities for which they are responsible. Since each resource targeting group assignment is associated with a specific evaluation interval, the ACO Manager review is basically a verification that the evaluation interval assigned is appropriate based on any specific

knowledge or experience that the ACO may have concerning a specific facility. Any inconsistency found should be noted, and a recommendation for the appropriate group assignment should be prepared, including a written justification for the recommendation. When the review is complete, the ACO manager will sign and date the draft report and return it to the MIO RTA, including any written justification for a change in group assignment. Every effort should be made to complete the review within 15 working days of receipt. When an electronic version of the draft report is used, the electronic mail message to the MIO RTA will include a statement that the ACO manager has coordinated on the draft report, and will also include any applicable adjustments to the group assignments.

c. Upon receipt of the Office Report, each MIDO manager, in conjunction with the respective PI's, will review the resource targeting group assignments. Since each resource targeting group assignment is associated with a specific evaluation interval, the MIDO manager review is basically a verification that the evaluation interval assigned is appropriate based on any specific knowledge or experience that the MIDO may have concerning a specific facility. Any inconsistency found should be noted, and a recommendation for the appropriate group assignment should be prepared, including a written justification for a change in group assignment. When the review is complete, the MIDO manager will sign and date the report and return it to the MIO RTA. Every effort should be made to complete the review within 15 working days of receipt. When an electronic version of the report is used, the electronic mail message to the MIO RTA will include a statement that the MIDO manager has coordinated on the report, and will also include any applicable adjustments to the group assignments.

d. The MIO manager will review any recommendations received for changing group assignments, and coordinate with the respective ACO and MIDO managers to determine a mutually acceptable group assignment. When all group assignments are mutually acceptable, the MIO RTA will prepare a final Directorate Report by updating the draft Directorate Report with the revised group assignments. The MIO RTA will submit the final Directorate Report to the MIO manager. The MIO manager will sign and date the final Directorate Report, and submit it to the MIO RTA for distribution to the ACO and MIDO managers. When an electronic version of the final Directorate Report is used for distribution to the ACO and MIDO managers, the electronic mail message will include a statement that the MIO manager has approved the report.

e. Upon receipt of the signed final Directorate Report, the PI will finalize Form 8100-9. Obtain the signed printed form and write in or type the original assigned resource targeting group and the adjusted resource targeting group, if applicable. Ensure that the justification for any group assignment adjustment is included. When adjustment is made to the resource targeting group assignment, send a copy of the completed Form 8100-9 to AIR-200. File the completed Form 8100-9 in the respective project folder.

NOTE: Any adjustment to the assigned resource targeting group after the MIO manager has approved the Directorate Report must be coordinated with the MIO manager. Document the adjustment and the relevant justification on Form 8100-9 and send a copy to AIR-200.

31. **DISPOSITION OF AUTOMATED FILES**. Database tables from the MIO roll-up (File "C:\Target2\Risktbl2.mdb") will be sent to AIR-200 to perform resource targeting model validation after the ACSEP evaluation schedule for the next fiscal year is finalized. All automated resource targeting files created by the PI, MIDO RTA, and MIO RTA to identify resource targeting groupings may be deleted after the files are received (and viable receipt confirmed) by AIR-200. It is important to not delete any files until AIR-200 has confirmed that the files can be read on their computer. The finalized schedule is generally the schedule that is published following the ACSEP Joint Scheduling Committee meeting, i.e., when the nationally-led evaluations are identified.

32. **ACSEP RESOURCE TARGETING MODEL VALIDATION PLAN**. The objective of ACSEP resource targeting is to effectively deploy FAA resources to those facilities that have the greatest potential impact on continued operational safety. In order to ensure that this objective remains viable, several validation efforts are planned. The details of the validation plan are described in appendix 5.

33. **MODIFICATION OF THE ACSEP RESOURCE TARGETING MODEL**. The resource targeting model is comprised of several quantitative factors that result in categorizing facilities according to their potential impact on continued operational safety. Many of these factors are periodically reviewed by the ACSEP resource targeting model validation plan. Any proposed modifications to the resource targeting model as a result of validation, or other source, will be processed in accordance with the ACSEP quality improvement program referenced in paragraph 86 of this order, and any relevant supplemental policy. All substantive proposed changes to the resource targeting model that result from the ACSEP quality improvement program, i.e., changes to indicator assessment criteria, indicator point weights, factor level rating scales, factor level combinations, and resource targeting group assignment decision rules, require formal Aircraft Certification Management Team approval. AIR-100/200 will coordinate the implementation of any changes to the model, including development and dissemination of revised program guidance or other documentation, updated resource targeting application software, and revised resource targeting program training materials.

34. -39. **RESERVED**.

CHAPTER 4. SELECTION AND SCHEDULING OF ACSEP EVALUATIONS

40. **ACSEP EVALUATION INTERVALS**. Evaluation intervals have been established for facilities subject to ACSEP resource targeting and for delegated facilities. The following paragraphs specify the applicable evaluation intervals.

a. **Facilities Assessed by ACSEP Resource Targeting**. Evaluation intervals have been established for each resource targeting group based upon the criteria indicated in chapter 3 of this order. The evaluation intervals are designed to allow facilities with lower potential impact on continued operational safety to be evaluated less frequently. The evaluation intervals are established as follows:

(1) Group I: ACSEP evaluation scheduled at 16- to 24-month interval.

(2) Group II: ACSEP evaluation scheduled at 24- to 36-month interval.

(3) Groups III and IV: ACSEP evaluation scheduled at 32- to 48-month interval.

NOTE 1: Group IV has been retained for planning purposes. Further study will determine the feasibility of longer intervals or alternate evaluation methods.

NOTE 2: The evaluation interval for each resource targeting group is intended to provide flexibility in scheduling a facility selected for an ACSEP evaluation. Once selected, a facility may be scheduled at any time during the fiscal year, as long as the period of time since the facility's last ACSEP evaluation does not exceed the maximum interval for that facility's resource targeting group.

NOTE 3: Satellite MMFs should be evaluated at the same evaluation interval as the parent MMF.

b. **Delegated Facilities**. These facilities will be evaluated at the following intervals:

(1) DOA: every 24 months.

(2) DAS: every 24 months.

(3) SFAR-36: every 36 months.

41. **SELECTION OF FACILITIES TO BE EVALUATED**. Procedures for selecting facilities to be evaluated are based on whether a facility requires an initial ACSEP evaluation, is subject to ACSEP resource targeting, or is a delegated facility. The following paragraphs specify the applicable selection procedures:

a. **New Production Approval Facilities**. The MIDO managers will select the new production approval facilities to be evaluated for whom they have certificate management responsibility. Selection of facilities for initial ACSEP evaluation should be accomplished within 24 months of the issuance of the production approval. After the initial ACSEP evaluation has been conducted, use the procedures in paragraph 41b below for subsequent selection.

b. **Facilities Assessed by ACSEP Resource Targeting**. Selection of these facilities is based on whether the facility is located in the United States (U.S.) or in a country or jurisdiction other than the U.S. The following paragraphs specify the applicable selection procedures.

(1) **Facilities located in the U.S.** will be selected for evaluation based upon a statistical method within the structure of ACSEP resource targeting. Selection of U.S. facilities will be based on the final ACSEP resource targeting Directorate Reports, the national Production Approval Holder database maintained by the Small Airplane Directorate MIO, and the applicable evaluation interval listed in paragraph 40a above. Facilities selected for evaluation will be documented in a facility selection list for each directorate.

(2) **Facilities located in countries or jurisdictions other than the U.S.** will be selected for evaluation by each directorate. Selection of facilities will be based upon the completed Form 8100-9 for each applicable facility, the applicable evaluation interval listed in paragraph 40a above, and the date of the last ACSEP evaluation.

c. **Delegated Facilities**. The ACO managers, in coordination with MIDO managers when appropriate, will select delegated facilities to be evaluated for whom they have oversight responsibility. Selection of facilities will be based upon the applicable evaluation interval listed in paragraph 40b above and the date of the last ACSEP evaluation.

42. **SCHEDULING OF ACSEP EVALUATIONS**. After all facilities have been selected for evaluation in accordance with paragraph 41 above, each directorate will be responsible for scheduling ACSEP evaluations at the selected facilities. Use the following procedures:

a. **Estimate the on-site duration** of each evaluation according to the evaluation interval listed in paragraph 40, the quality and/or engineering procedures and processes required to be in place, the number of applicable system elements, when known (see appendices 14 and 15), the size and physical layout of the facility to be evaluated (single or multiple locations), and product complexity. Allow enough time to achieve confidence that compliance to the applicable CFR and FAA-approved data will be fully evaluated. Use the following list as a guide for estimating, in terms of facility size only, the on-site duration of the evaluation (excluding travel times):

(1) Small facility with less than 100 total full-time persons: 1 to 5 days on site.

(2) Medium facility with 100 to 400 total full-time persons: 3 to 5 days on site.

(3) Large facility with 400 to 2000 total full-time persons: 5 to 10 days on site.

(4) Very large facility with over 2000 total full-time persons: 7 to 15 days on site.

NOTE: When estimating the number of full-time persons, include only those persons who are used to support PAH, satellite MMF, or delegated facility activity.

b. **Assign all scheduled evaluations a distinct ACSEP number**, consisting of the fiscal year, directorate code (NE-Engine and Propeller Directorate, CE-Small Airplane Directorate, SW-Rotorcraft Directorate, or NM-Transport Airplane Directorate), and the evaluation order sequence. For example, 00CE123 represents the 123d evaluation planned for completion by the Small Airplane Directorate during FY 2000. Some of the scheduled evaluations will be identified at the Aircraft Certification Service Joint Scheduling Committee meeting as evaluations to be led by AIR-200, in accordance with paragraph 44.

NOTE: Do not reassign ACSEP numbers from canceled evaluations. Each scheduled evaluation must be uniquely identified.

c. **Identify the lead office for each evaluation**. This office will normally be the one that regularly performs certificate management or surveillance, or has delegation oversight responsibility, at the facility to be evaluated. For a delegated facility that is also a PAH, the lead evaluation office will be the ACO having oversight responsibility for the delegated facility. For a satellite MMF subject to surveillance only under the hand-off procedure described in Order 8120.2, chapter 8, the lead evaluation office will be the surveillance MIDO receiving the hand-off. The lead evaluation office will be responsible for the following functions:

(1) Coordinating the notification letter (see paragraph 45).

(2) Notifying selected evaluators (see paragraph 55).

d. **Prepare a one-fiscal year evaluation schedule** based upon the facility selection criteria in paragraph 41 above and the duration of each evaluation. Prepare annually no later than July 31.

(1) Prepare the schedule in quarterly increments using the following guidelines:

(a) ACSEP number.

(b) Scheduled start date of each evaluation.

(c) Duration of each evaluation.

(d) Facilities and types of approvals or delegated facilities to be evaluated.

(e) ACSEP resource targeting group assignment, as applicable.

(f) Product lines or authorized functions at the facilities to be evaluated.

(g) Number and disciplines of evaluators assigned to each evaluation.

(h) Additional evaluators required beyond the directorate's resources.

(i) Number and disciplines of evaluators-in-training and team leaders-in-training.

(j) Total number of evaluations scheduled by quarter and for the fiscal year.

(2) In order to facilitate the merging of directorate schedules into a master schedule, as required by paragraph 44, AIR-200 will provide a common software format to the ACO, MIO, and MIDO managers for documenting the items listed in paragraph 42d(1).

(3) The ACO, MIO, and MIDO managers should schedule approval holders and delegated facilities having multiple approvals and/or delegations, such as both a PC and a PMA, or a PMA and a DAS, so as to evaluate all approvals and/or delegations during one evaluation.

(4) When an approval holder or delegated facility has multiple facilities that require significant resources and time to evaluate, the ACO, MIO, and MIDO managers should consider scheduling the facilities individually.

(5) When evaluations are scheduled at international facilities, the responsible directorates shall utilize the method developed in accordance with Order 8120.2 to minimize duplication and effectively utilize resources.

e. **Designate an assigned engineer.** Based on the data collected for paragraphs 40 through 42d above, the ACO manager will determine the need to assign an FAA engineer (assigned engineer) responsibility relating to a scheduled ACSEP evaluation at a particular design approval facility or delegated facility. In the case of a delegated facility, the assigned engineer (AE) may be the engineer that is assigned oversight responsibility for the delegated facility. The AE will be responsible to answer questions from the evaluators regarding the FAA-approved design, or the design approval system in place at a delegated facility, and will coordinate any corrective action required regarding the approved design or the design approval system.

43. **SELECTION OF ACSEP EVALUATORS**. The ACO, MIO, and MIDO managers of the directorate that has certificate management, surveillance, or delegation oversight responsibility will select appointed ACSEP evaluators from the directorate to perform each scheduled evaluation. The number and types of evaluators required for each evaluation should be determined according to the following criteria:

a. **Number of Evaluators Required**. Determine the total number of evaluators required to achieve confidence that compliance to the applicable CFR and FAA-approved data will be fully evaluated.

(1) **Estimate** the number of evaluators required according to the following minimum criteria:

(a) ACSEP resource targeting group assigned or type of delegated facility.

(b) Quality, engineering, flight test, and delegated facility procedures and processes required to be in place.

(c) Number of applicable system elements, when known (see appendices 14 and 15).

(d) Size and physical layout of the facility to be evaluated (single or multiple locations).

(e) Product or design approval system complexity.

(2) **Use the following list as a guide** for estimating, in terms of facility size only, the number of ACSEP evaluators required:

(a) Small facility with less than 100 full-time persons: 1 to 3 evaluators (including team leader).

(b) Medium facility with 100 to 400 total full-time persons: 1 to 5 evaluators (including team leader).

(c) Large facility with 400 to 2000 total full-time persons: team leader + 5 to 10 evaluators.

(d) Very large facility with over 2000 total full-time persons: team leader + up to 10 evaluators.

NOTE: When estimating the number of full-time persons, include only those persons who are used to support the PAH, satellite MMF, or delegated facility activity.

(3) **If it is determined that one evaluator is required**, select an appointed team leader to perform the evaluation; this evaluator shall hereinafter be referred to as the principal evaluator. If two or more evaluators are selected for an evaluation, they will constitute an ACSEP evaluation team. Select an appointed team leader and the required number of appointed team members.

b. **Types of Evaluators Required**. The types of evaluators required should be determined using the criteria identified in paragraph 43a(1)(a) through (e) above, and the following criteria:

(1) **Select** appointed ACSEP evaluators who have appropriate knowledge of the evaluation criteria identified in appendices 14 and 15 applicable at the facility to be evaluated, and, when appropriate, of the product(s) authorized by the approval; for example, select a propulsion engineer when an engine manufacturer is to be evaluated, and select a flight test pilot when a flight test program is to be evaluated. When making this determination, consider the following:

(a) **It is not necessary to select** both engineers and inspectors for a small facility that does not have both engineering and manufacturing capabilities.

(b) **Select** appointed ACSEP evaluators as appropriate to maintain continued appointment in accordance with paragraph 17.

(c) **Do not include** any appointed evaluators who were previously employed by the facility to be evaluated within 2 years of the scheduled evaluation.

(d) **Determine** whether evaluators will be made available throughout the duration of the evaluation. Full participation by each evaluator is the expected norm for each evaluation. Any decision to limit participation should be based on the established Aircraft Certification Service priorities. Notify the team leader of any limited participation by evaluators.

(2) **For evaluation of a facility for which surveillance has been requested** in accordance with Order 8120.2, chapter 8, the surveillant MIDO manager should coordinate with the requesting MIDO manager(s) to allow the requesting MIDO the opportunity to provide evaluators.

(3) **For evaluations led by AIR-200**, the Aircraft Certification Service Joint Scheduling Committee will identify general team compositions during its annual meeting or telephone conference, based on the ACSEP Master Schedule (refer to paragraph 44). The ACO, MIO, MIDO, and AIR-200 managers will select appointed ACSEP evaluators to fill these requirements using the criteria listed in paragraph 43b(1).

c. **Selection of Principal Inspector and AE as Team Leaders or Evaluators**. To the greatest extent practicable, the principal inspector (PI) and the AE will not be selected as team leaders on ACSEP evaluations of facilities for which they have certificate management, surveillance, or delegation oversight responsibilities. The following guidelines will be used for selection of the PI and/or AE as evaluators:

NOTE: The ACO, MIO, and MIDO managers, to the greatest extent practicable, will select as evaluators the PI, or assistant PI as appropriate, and/or the AE. The ACO, MIO, and MIDO managers should assess the logistical and personal burden of selecting the PI and/or AE for all applicable evaluations, and assign the PI and/or AE to those evaluations where the greatest benefit can be obtained.

(1) **One-or Two-Person Evaluation**.

(a) **PAH Facility**. Do not select the responsible certificate management PI. Do not select the AE if the AE is the engineer assigned design responsibility for the facility to be evaluated.

(b) **Satellite MMF**. Do not select the responsible certificate management or surveillance PI.

(c) **Delegated Facility**. Do not select the AE if the AE is the engineer assigned oversight responsibility for the delegated facility.

(2) **Three- or Four-Person Evaluation**.

(a) **PAH Facility**. Select as a team member either the responsible certificate management PI or the AE, if the AE is the engineer assigned design responsibility for the facility to be evaluated. If the AE is not assigned design responsibility, both the AE and the responsible certificate management PI may be selected as team members.

(b) **Satellite MMF**. Select as a team member either the responsible certificate management or surveillance PI, but not both.

(c) **Delegated Facility**. Select the AE as a team member, when practicable.

(3) **Five-Person or Greater Evaluation**:

(a) **PAH Facility**. Select as a team member either the responsible certificate management PI or AE, or both.

(b) **Satellite MMF**. Select as a team member either the responsible certificate management or surveillance PI, or both.

(c) **Delegated Facility**. Select the AE as a team member, when practicable.

NOTE: For a facility where surveillance has been requested, the manager of the MIDO to which the surveillance request was made (hereafter referred to as the surveillant MIDO) and the requesting MIDO manager should agree on whether the surveillant PI or the requesting office PI will be selected.

d. **Selection of Evaluators-in-Training and Team Leaders-in-Training**.

(1) **Determine the number of appointed evaluators required** for the ACSEP evaluation prior to assigning evaluators-in-training. Assign evaluators-in-training only to evaluations where a team is required. Do not assign evaluators-in-training to a principal evaluator. Evaluators-in-training will supplement appointed evaluators. Do not substitute evaluators-in-training for appointed ACSEP evaluators, nor evaluation team leaders-in-training for appointed ACSEP evaluation team leaders.

(2) **Do not assign** more than two evaluators-in-training or more than one team leader-in-training to any one evaluation. Try to assign each evaluator-in-training or team leader-in-training to different team leaders during the participation phase of the training.

(3) **In cases** where evaluators-in-training or team leaders-in-training from other directorates or AIR-100/200 are proposed to be used in an evaluation, coordinate with the appointing managers to establish their eligibility.

e. **Additional Resource Requirements**. Additional evaluators beyond the directorate's available resources may be required depending on the size of the facility, type and complexity of product, service, or design approval system, and overall evaluation objectives. Each directorate should present these additional resource requirements during the Joint Scheduling Committee meeting as indicated in paragraph 44 below. For resource requirements identified after the Joint Scheduling Committee meeting, the directorate should request additional support from other areas of the Aircraft Certification Service. If these sources of support are not available, the directorate may obtain outside support services to augment directorate resources. Criteria for obtaining support service personnel is included in paragraph 44a(2).

44. **AIRCRAFT CERTIFICATION SERVICE JOINT SCHEDULING COMMITTEE**. A Joint Scheduling Committee composed of the ACSEP headquarters project manager and an ACO and MIO manager from each directorate will be established. When a directorate has appointed an ACSEP project coordinator, the directorate may assign that coordinator to the committee in place of an ACO and MIO manager. However, the ACSEP coordinator must have the authority to commit resources and adjust schedules as necessary. The ACSEP headquarters project manager is the chairperson of the committee. The committee will coordinate the directorates' annual evaluation schedules into an ACSEP master schedule, coordinate additional resources required, and identify the general team compositions to support evaluations which will be led by AIR-200.

a. **After the updated annual evaluation schedule is prepared** by each of the directorates, the ACSEP headquarters project manager will convene a meeting or telephone conference of the Joint Scheduling Committee. The committee will accomplish the following tasks:

(1) **The committee will identify general team compositions** for evaluations to be led by AIR-200 as follows:

(a) Team leader from AIR-200.

(b) To the extent practicable, approximately 50 percent of the team members from the directorate responsible for the facility to be evaluated, based on the number of evaluators previously identified on the directorate's evaluation schedule.

(c) Balance of the team members from other areas of the Aircraft Certification Service, based on the ACSEP master schedule and budgetary considerations.

(2) **After the ACSEP master schedule is coordinated** and the AIR-200 led evaluations are staffed, the committee will review any directorate requests for additional evaluation team members required to support their evaluations. The committee will identify available resources from other areas of the Aircraft Certification Service. If these sources of support are not available, the committee may recommend the use of outside support services to augment directorate resources. Support service personnel will be qualified and creditable quality assurance experts and technology specialists, and will meet the criteria for candidate selection specified in paragraph 15. Directorates will obtain any required support service personnel in accordance with budgetary directives. Appendix 6 contains sample contract clauses relating to obtaining support services.

NOTE: The cognizant directorate will complete all necessary administrative measures required for facility access by support service personnel prior to the ACSEP scheduled evaluation. This will include such items as: obtaining any security clearances from the prospective facility if required; ensuring personnel have signed a certificate of nondisclosure for confidentiality of information (see Appendix 6); and ensuring personnel are aware of their limitations (as agreed to between the directorate and the facility to be evaluated) of access and entry to the facility's proprietary or sensitive processes or systems.

(3) **The Production & Airworthiness Certification Division will transcribe** all schedules and related decisions into written committee proceedings, and provide one copy to each directorate, and AIR-100.

b. **Changes to the Master Schedule**. Each directorate shall transmit schedule changes electronically to AIR-200 at least monthly. Evaluations added to the master schedule will be assigned a new ACSEP number in accordance with paragraph 42b above. The Production & Airworthiness Certification Division will maintain the master schedule, monitor scheduled activities and changes thereto, and update the master schedule quarterly.

45. **NOTIFICATION OF FACILITIES TO BE EVALUATED**. The lead evaluation office identified in accordance with paragraph 42c above will notify facilities using the sample formats in appendices 7, 8, or 9. Coordinate with the responsible PI, or the engineer assigned oversight responsibility for a delegated facility, to ensure the letter does not arrive during scheduled shutdown periods or during any other extended periods when the letter may not be acted upon. Attach one copy of all applicable ACSEP advisory material for notifications of first-time ACSEP evaluations. Appendix 12 provides a summary of notification letter requirements. Notify facilities as follows:

a. **Facility Located in the U.S.**

(1) **Production Approval Holder/Associate Facility**. The lead evaluation office will:

(a) **Prepare** the notification letter and send it to the facility to be evaluated no later than 50 days prior to the evaluation.

(b) **Provide a copy** of the notification letter to the designated evaluation team leader or principal evaluator, the PI, and the AE.

(2) **Delegated Facility**. The lead evaluation office will:

(a) **Prepare** the notification letter and send it to the facility to be evaluated no later than 50 days prior to the evaluation.

(b) **Notify** the cognizant MIO/MIDO via an internal FAA memorandum.

(c) **Provide a copy** of the notification letter to the designated evaluation team leader or principal evaluator, and the AE.

(d) **For DAS and SFAR-36,** send a copy of the notification letter to the FSDO that has certification responsibility for the repair station or operator where the delegated facility resides.

(3) **Delegated Facility that is also a Production Approval Holder**. The lead evaluation office will:

(a) **Prepare** the notification letter and send it to the facility to be evaluated no later than 50 days prior to the evaluation.

(b) **Notify** the cognizant MIO/MIDO via an internal FAA memorandum.

(c) **Provide a copy** of the notification letter to the designated evaluation team leader or principal evaluator, and the AE.

(d) **For DAS and SFAR-36,** send a copy of the notification letter to the FSDO that has certification responsibility for the repair station or operator where the delegated facility resides.

(4) **Satellite MMF Within Area of Responsibility**. The lead evaluation office will:

(a) **Prepare** the notification letter and send it to the responsible PAH or associate facility no later than 50 days prior to the evaluation.

(b) **Provide a copy** of the notification letter to the designated evaluation team leader or principal evaluator, the PI, and the AE.

(5) **Satellite MMF Subject to Surveillance Only** (Under the hand-off procedure described in Order 8120.2, chapter 8).

(a) **The lead evaluation office** will:

1 **Prepare** the notification letter and send it to the facility to be evaluated no later than 60 days prior to the evaluation.

2 **Provide a copy** of the notification letter to the designated evaluation team leader or principal evaluator, to the requesting MIDO, and to the PAH for which the hand-off request is applicable no later than 60 days prior to the evaluation.

b. **Production Approval Holders/Associate Facilities Located in Other Countries or Jurisdictions**. The lead evaluation office will:

(1) **Prepare the notification letter** and send it to the facility to be evaluated no later than 75 days prior to the evaluation.

(2) **Provide a copy** of the notification letter to the designated evaluation team leader or principal evaluator, the PI, and the AE.

(3) **Notify other appropriate offices** and organizations, including the civil aviation authority (CAA) of the host country or jurisdiction, no later than 75 days prior to the evaluation. See paragraph 46 below.

c. **Changes After Notification Letter is Sent**. As appropriate, notify the facility, responsible PAH or associate facility, requesting MIDO, AIR-200, and team leader or principal evaluator of any changes to the evaluation schedule or team composition after the notification letter has been sent.

46. **NOTIFICATION OF APPROPRIATE OFFICES AND ORGANIZATIONS**. Lead evaluation offices will notify other appropriate offices and organizations concerning ACSEP evaluations in other countries or jurisdictions. This includes the CAA of the host country or jurisdiction, the American Embassy in the country to be visited for country clearances, and any internal FAA offices requiring notification (e.g., Brussels Aircraft Certification Staff and Office of International Aviation) of the scheduled evaluation. Country clearances for groups or teams should be sent to the American Embassy as a single country clearance request. Prepare a formal letter signed by the directorate manager, or delegated signatory, to the CAA using the sample format in appendix 10. Send an electronic facsimile (FAX) of the letter 75 days prior to the evaluation, followed by the formal letter. Notify the CAA of any changes in the evaluation’s schedule. The CAA's participation in the evaluation is not mandatory, and the choice to provide an observer is at their discretion.

47. **MODIFICATIONS TO SCHEDULED EVALUATIONS**. Every effort will be made to maintain established evaluation schedules. However, modifications to the evaluation schedule should be considered under special circumstances. The ACO, MIO, or MIDO managers will jointly reschedule any affected evaluation in coordination with the PI, AE, and the team leader or principal evaluator, and notify AIR-200 of the change in schedule. Special circumstances that may warrant modifications to the evaluation schedule include:

a. Risk to evaluators' safety.

b. Change in a facility's production or delegation status from active to inactive.

c. Involvement of the FAA in a facility's labor-management dispute.

d. Reduction in the effectiveness of the evaluation.

e. A non-scheduled ACSEP evaluation is convened that requires scheduled resources (see paragraph 48).

48. **NON-SCHEDULED ACSEP EVALUATIONS**. The ACO, MIO, and MIDO managers may also conduct non-scheduled ACSEP evaluations when situations warrant, as determined by directorate offices or Washington headquarters. Non-scheduled ACSEP evaluations will be planned, conducted, and reported in accordance with this order to the greatest extent practicable. Appropriate emphasis on planning the evaluation should be provided despite the reduced time that may be available between the decision to conduct the non-scheduled ACSEP evaluation and the actual conduct of the evaluation. Situations which may warrant a non-scheduled ACSEP evaluation would include:

a. Accidents and incidents.

b. Deliberate violations.

c. Repetitive Service Difficulty Reports.

d. Excessive owner/operator complaints.

e. Production approval holder's, associate facility's, or delegated facility’s refusal/failure to take appropriate corrective action.

f. Production approval holder's, associate facility's, or delegated facility’s inability to control suppliers.

g. Renewal of a PAH's or associate facility's production activity after a prolonged period of inactivity.

h. Any other situation as deemed necessary in the interest of safety.

49.-54. **RESERVED**.

CHAPTER 5. ACSEP EVALUATION PROCEDURES

SECTION 1. ACSEP EVALUATION PREPARATIONS

55. **LEAD EVALUATION OFFICE**. The lead evaluation office will perform the following evaluation preparations, as a minimum:

a. **Notify** the selected evaluation team leader and team members, or principal evaluator, in writing at least 90 days prior to each directorate evaluation.

b. **Ensure** logistical support for an evaluation within the geographical area.

c. **Coordinate** any assistance that the principal evaluator or the evaluation team may require during evaluation of a facility located in another country.

56. **ACO, MIO, AND MIDO MANAGERS**. Notify in writing all evaluators within the directorate selected for AIR-200 led evaluations and evaluations in support of other directorates. Send notification at least 90 days prior to each evaluation. Send a copy of the notification to the lead evaluation office and AIR-200.

57. **EVALUATION TEAM LEADER/PRINCIPAL EVALUATOR**. The team leader, or principal evaluator, will coordinate evaluation preparation. The team leader will provide orientation to team members, and assign system elements to team members. These actions will, as appropriate, require coordination with the PI, AE, and the facility to be evaluated. The team leader, or principal evaluator, will, as appropriate:

> **NOTE: When multiple ACSEP evaluations having different team leaders are scheduled at a specific international location, communications between team leaders will be optimized. Responsible MIDO managers will agree to select one team leader as the overall lead to assure all requirements of this order are met.**

a. **Upon receipt of a copy of the notification letter**, contact the lead evaluation office to identify the responsible PI and AE. Obtain from the PI and AE such items as:

(1) Applicable FAA-approved procedures, including engineering and quality manuals, procedures manuals, or handbooks, when practical; or, applicable quality requirements from a parent MMF. Obtain documentation in electronic format, if available, to simplify copying and distribution to team members. If applicable data is only available electronically, work with the PI or AE to identify relevant documents and to obtain printed copies of only those pages necessary to support the ACSEP evaluation.

(2) Current FAA Form 8120-2, Production Project Control.

(3) Known or suspected problem areas, including any areas the PI and AE would like special emphasis on during the evaluation. This includes any requests to conduct a product audit in accordance with Order 8120.2, Chapter 15.

(4) Current self-disclosure items reported under Order 2150.3, Compliance/Enforcement Bulletin No. 92-2, that are in process of corrective action.

(5) Agreements made between the cognizant ACO, MIO, MIDO and the facility to be evaluated.

(6) Facility access information, including badges and security clearances.

(7) Lodging information.

(8) Any other items necessary to prepare for the evaluation.

b. **Prepare a written evaluation plan** for conducting the evaluation. The evaluation plan will include the following items:

(1) Name and address of facility to be evaluated.

(2) Dates of evaluation.

(3) Names of team leader and members (when more than one evaluator is selected).

(4) Evaluation Objectives. List the reason for the ACSEP evaluation, and what information is expected to be obtained during the evaluation (e.g., establish facility compliance with the procedures established to meet the requirements of the applicable CFR; or, establish cause of repetitive Service Difficulty Reports).

(5) Type(s) of approval.

(6) Type certificate (TC) or supplemental type certificate (STC) number, when applicable.

(7) Current product line.

(8) Number of employees associated directly with the production approval or delegated facility activity.

(9) List of top-level FAA-approved procedures(e.g., Quality Manual Index of Procedures, Procedures Manual, PMA Approval Letter, and TC Data Sheets) and/or quality requirements from a parent MMF.

(10) FAA/facility agreements in effect; e.g., agreement on frequency of submittal of minor design changes.

(11) Plant layout.

(12) Organizational chart.

(13) Major processes.

(14) Unusual features of the product, manufacturing and inspection methods, or design approval system.

(15) Self-disclosure items under Order 2150.3, Compliance and Enforcement Program, Compliance and Enforcement Bulletin No. 92-2, Reporting and Correction Policy and Implementing Guidance for Holders of Production Approvals.

(16) Special emphasis items recommended by the PI and AE.

(17) System element assignments (when more than one evaluator is selected).

(18) Access information, including facility point of contact.

(19) Lodging information.

(20) Information for other countries or jurisdictions as specified in appendix 11.

(21) Equipment required; e.g., notebook computer, safety shoes, and coveralls.

c. **The team leader shall coordinate** assignments, requirements, and arrangements with team members as far in advance of the evaluation as possible, but no later than 30 days prior to the evaluation. Notify team members immediately of changes in schedule, assignments, requirements, and arrangements. Provide copies of all relevant facility documents to team members, when feasible.

d. **The team leader shall forward** FAA certificate of nondisclosure (see appendix 6) to any outside support service personnel assigned no later than 35 days prior to the evaluation. Obtain signed statements no later than 25 days prior to the evaluation and forward to the facility via the PI or delegated facility AE.

e. **The team leader shall notify** the lead evaluation office immediately if there are any changes in team numbers or composition required.

f. **Coordinate** with the certificate management PI or AE, delegated facility AE, or surveillant PI when appropriate, to resolve specific planning problems relating to the facility to be evaluated.

g. **Arrange**, when appropriate, for the availability of a notebook computer and portable printer for the duration of the evaluation, and for the accomplishment of post-evaluation activities. Use of a notebook computer during the evaluation will allow for quick access and search of ACSEP documentation, and for preparation of high quality documents for presentation during the post-evaluation conference.

58. **EVALUATION TEAM MEMBER/PRINCIPAL EVALUATOR**. The team member, or principal evaluator, will:

a. **Upon notification** by the team leader, the team member will confirm availability for the evaluation, system elements assigned, and that travel arrangements have been initiated.

NOTE: Notify the team leader immediately if you become unavailable for the evaluation.

b. **Prior to the evaluation**, review all material provided by the team leader, the PI, or the AE appropriate to the assigned system elements. When possible, make a preliminary selection of the procedures you plan to evaluate.

59.-64. **RESERVED**.

SECTION 2. CONDUCT OF THE EVALUATION

65. **TEAM LEADER/PRINCIPAL EVALUATOR COORDINATION WITH FACILITY REPRESENTATIVE**. The team leader, or principal evaluator, will coordinate with the designated representative of the facility to be evaluated to ensure that administrative arrangements for items such as team access, escorts, meeting rooms, and safety and security requirements have been completed.

66. **PRE-EVALUATION TEAM MEETING**. The team leader and all team members shall meet in advance of starting the evaluation, normally at the facility to be evaluated. They shall review the following evaluation elements, as appropriate, for proper coordination and understanding:

a. Current quality system or design approval system, and corrective action history of the facility to be evaluated in the selected areas.

b. Team functional assignments.

c. Evaluation plan.

d. Evaluation objectives.

e. Working relationship of the facility to be evaluated with the FAA.

f. Organizational structure of the facility to be evaluated.

g. Approved quality system documents, including any quality manual or quality data submitted by APIS or PMA holders to describe their inspection systems.

h. Approved design approval system documents, including any procedures manual or handbook.

i. Agreements made between the cognizant ACO, MIO, or MIDO and the facility to be evaluated.

67. **PRE-EVALUATION CONFERENCE**. Soon after arrival at the facility to be evaluated, the evaluation team leader, or principal evaluator, shall conduct a pre-evaluation conference with appropriate senior management (which would include a representative from the PAH or associate facility for evaluation of a satellite MMF), cognizant supervisory personnel, and other appropriate personnel of the facility who will be associated with the evaluation, including escorts. The team leader, or principal evaluator, shall, as appropriate:

a. **Introduce** team members, and support service personnel when applicable.

b. **Give a brief overview** of ACSEP, highlighting the cooperative intention of the evaluation.

c. **Provide** the evaluation's scope and objectives.

d. **Review** details of the evaluation agenda, including the standardized evaluation criteria and procedures to be used.

e. **Review** administrative arrangements for the post-evaluation conference.

f. **Discuss** FAA Form 8100-7, ACSEP Evaluation Customer Feedback Report, sent with the notification letter to the facility being evaluated. Explain that this form is designed to obtain senior management assessment of the conduct of the ACSEP evaluation, and is used by the FAA as part of the ACSEP continuous quality improvement process. Encourage senior management to complete the form and send it to the address on the form within 30 days of the post-evaluation conference.

g. **Allow time** for a question and answer session.

68. **EVALUATION OF SYSTEM ELEMENTS**. The ACSEP evaluators will evaluate up to 17 system elements at production approval holders, associate facilities, and satellite MMFs. They will evaluate up to 10 system elements at delegated facilities. Each system element addresses a specific activity or function that can affect the maintenance of FAA-approved design or quality data, or the design approval system in place at a delegated facility. Each system element is defined in appendices 14 and 15. The ACSEP evaluators will, as appropriate:

a. **Review FAA-approved quality systems manuals or procedures manuals/handbooks** to determine if current data ensure regulatory requirements are met, that conforming product and parts are manufactured, and that design approval systems are maintained and controlled.

b. **Review design system, design approval system, and quality system data** to determine if current data are FAA-approved.

c. **Review other facility procedures** (related to the production approval or delegated facility) that are not part of the facility's FAA-approved data to determine if the current procedures impact any of the system elements.

d. **Review quality requirements** on a satellite MMF from a parent MMF to determine the applicability of the facility procedures and the scope of the system elements to evaluate.

e. **Evaluate compliance or observance** to facility procedures and requirements, or to quality requirements from a parent MMF. Prioritize evaluation according to any special concerns raised by the PI or AE. Use the standardized evaluation criteria in appendices 14 and 15 to determine the depth of the evaluation in the subject area. Evaluate to the degree necessary to determine that the system element meets or does not meet applicable requirements. Use a combination of document and product review that best achieves a balanced and effective evaluation.

NOTE: The standardized evaluation criteria are a list of questions and related statements of condition in appendices 14 and 15 used primarily to plan and document the results of the evaluation of each system element in a standardized manner. The criteria are designed to look across all the functional areas within a facility's organization that have the greatest potential to impact the integrity of the FAA-approved design and product quality, and the design approval system in place at a delegated facility. All responses to the questions are direct inputs to the database from which trend analysis will be accomplished. Each evaluator should be knowledgeable of all the criteria applicable to the system element assigned to be evaluated, and strive to evaluate as many of the procedures, requirements, and products related to the criteria as time allows.

f. **Request re-inspection** of manufactured products (e.g., characteristic dimensioning and physical examination) when appropriate to determine compliance with current system procedure, or quality requirements when applicable (refer to Order 8120.2, Chapter 15).

g. **Based on facility procedures or quality requirements from a parent MMF**, identify and document additional standardized evaluation criteria questions and statement of condition practices and principles not contained in appendices 14 and 15 that were required to document what was evaluated. Write or type additional criteria and statement of condition practices and principles, and include the appropriate reference to the facility procedures or quality requirements from a parent MMF, and the evaluator's recommendation of the system element to which the criteria and statements of condition apply. Team members will present new criteria and statement of condition practices and principles to the team leader as soon as they are completed.

h. **Detect and report** nonconformances and areas that may require improvement.

69. **RECORDING FINDINGS AND OBSERVATIONS**. Evaluators will record all findings and observations on FAA Form 8100-6, Record of Findings/Observations, or electronic equivalent, according to the guidelines in Order 8120.2, chapter 14 and appendix 8.

NOTE: Record as a CFR observation any condition, observed as a result of associated evaluation activities, that questions the certification basis. Address the observation as a special emphasis item in the evaluation report (refer to paragraphs 70b(2)(e) and 80 and appendix 19).

70. **EVALUATION MEETINGS**.

a. **Daily**. The team leader, or principal evaluator, will hold the following meetings daily, as appropriate:

(1) **Meeting with Evaluation Team Members**. The team leader will review and discuss with team members the following items:

(a) Status of the evaluation.

(b) Problems encountered.

(c) Plan of the next day's evaluation.

(d) All Form(s) 8100-6 prepared during the day to ensure correctness, adequacy, and completeness.

(2) **Meeting/Communication with PI and AE**. The team leader, or principal evaluator, will ensure the certificate management PI and AE, the delegated facility AE, and the surveillant PI, when applicable, are informed of all discussions concerning the status of the evaluation. This should occur daily when the PI and AE are part of the evaluation team. Otherwise, coordinate with the PI and AE to establish the method and frequency at which these discussions should occur.

(3) **Meeting with the Evaluated Facility's Designated Representative**. The team leader, or principal evaluator, will hold a brief meeting daily with the evaluated facility's designated representative to discuss the progress of the evaluation, including problems encountered, the status of actions requested by the team, schedule changes, and to coordinate further evaluation activities.

b. **Final Critique Meeting/Evaluation Wrap-Up**. At the conclusion of the evaluation, the team leader will hold a final critique meeting. The principal evaluator will allow time to finalize the details of the evaluation. The team leader and members, or the principal evaluator, shall do the following, as appropriate:

(1) **Team Members/Principal Evaluator**.

(a) **Complete all required Form(s) 8100-6**, or electronic equivalent. When using an electronic equivalent, print to paper when all information has been entered. Team members will discuss Form(s) 8100-6 with the team leader to determine if there are any possible violations of the applicable CFR. Any disagreement on any finding will be resolved by the team leader. The lead evaluation office, or requesting MIDO when applicable, is responsible to determine the level of corrective action required (see paragraph 83).

(b) **Ensure all true copies of objective evidence** are attached to the appropriate Form(s) 8100-6, appropriately referenced, and clearly identified in accordance with Order 2150.3, Compliance and Enforcement Program.

(c) **Complete FAA Form 8100-4 or FAA Form 8100-8**, or electronic equivalent, in accordance with appendix 16 or 17. When using an electronic equivalent, print to paper when all information has been entered. Prepare original forms as follows:

1 **Production Approval Holder, Associate Facility, or Satellite MMF**. Prepare one original Form 8100-4.

2 **Facility with Multiple Production Approvals**. Prepare one original Form 8100-4. Base the survey responses on the criteria for the highest level quality requirement; for the purposes of ACSEP, the quality levels, from highest to lowest, are PC, TSO authorization, APIS, PMA. For example, if a facility has a PMA and a TSO authorization, prepare one Form 8100-4 based on the TSO authorization criteria.

3 **Delegated Facility**. Prepare one original Form 8100-8 for each delegated facility approval. For example, if a facility has a DAS and an SFAR 36 authorization, prepare two Form(s) 8100-8 — one for the DAS and one for the SFAR 36 authorization.

NOTE: A facility may have several of the approvals and authorizations referenced in paragraph 70b(2)(c) above. In general, most combinations will require preparation of original forms for each approval or authorization. For example, if a facility has a PMA and a TSO authorization, and a DAS and SFAR-36 authorization, , three forms would be prepared — one Form 8100-4 for the PMA/TSO authorization, one Form 8100-8 for the DAS authorization, and one Form 8100-8 for the SFAR 36 authorization.

(2) **Team Leader/Principal Evaluator**.

(a) **Resolve team disagreements** on specific findings.

(b) **Discuss all findings** with the certificate management PI or AE, delegated facility AE, and the surveillant PI, when applicable.

(c) **Prepare** the ACSEP Evaluation Executive Summary (see appendix 18). Prepare original forms as follows:

1 **Production Approval Holder, Associate Facility, or Satellite MMF**. Prepare one original summary.

2 **Facility with Multiple Production Approvals**. Prepare one original summary. For example, if a facility has a PMA and a TSO authorization, prepare one original summary.

3 **Delegated Facility**. Prepare one original summary for each delegated facility approval. Include in each summary only those findings and observations applicable to the specific delegated facility approval. For example, if a facility has a DAS and an SFAR 36 authorization, prepare two original summaries — one for the DAS and one for the SFAR 36 authorization.

NOTE: A facility may have several of the approvals and authorizations referenced in paragraph 70b(2)(c) above. In general, most combinations will require preparation of original summaries for each approval or authorization. For example, if a facility has a PMA and a TSO authorization, and a DAS and SFAR-36 authorization, three summaries would be prepared — one for the PMA/TSO authorization, one for the DAS authorization, and one for the SFAR 36 authorization.

(d) **Identify** and record specific problems or concerns that the ACSEP evaluation team believes require further action and that should be brought to the attention of the ACO, MIO, and/or MIDO managers, the PI, the AE, and the Flight Standards Principal Maintenance Inspector (when appropriate). Use the instructions in appendix 19 to record these special emphasis items. Prepare original documents as follows:

1 **Production Approval Holder, Associate Facility, or Satellite MMF**. Prepare one original document.

2 **Facility with Multiple Production Approvals**. Prepare one original document.

3 **Delegated Facility**. Prepare one original document for each delegated facility approval.

(e) **Discuss** with team members, as appropriate, and record, any lessons learned during the ACSEP evaluation which may improve ACSEP policy or evaluation techniques. Use the instructions in appendix 20. Prepare only one original document.

(f) **Verify** that signed original Form(s) 8100-6 have been prepared for inclusion, when applicable, in each ACSEP evaluation report to be sent to the responsible certificate management MIDO's, or ACO's having delegation oversight. See paragraph 80 below. Each report to be sent must include all applicable Form(s) 8100-6. When a signed original Form 8100-6 is applicable to two or more reports , do the following:

(1) **Reproduce** the signed original Form 8100-6 as required for inclusion in the applicable ACSEP evaluation report(s) to be sent to the responsible certificate management MIDOs, or ACO's having delegation oversight.

(2) **Identify all true copies** of the signed form in accordance with Order 2150.3.

(g) **Provide** a copy of the completed final draft Form(s) 8100-6 to the certificate management PI or AE, the delegated facility AE, and the surveillant PI, as applicable, when they are present.

(h) **Verify** that the required number of true copies of objective evidence have been prepared for inclusion, as applicable, in each ACSEP evaluation report to be sent to the responsible certificate management MIDO's, or ACO's having delegation oversight.

(i) **Provide** all true copies of objective evidence to the certificate management PI or AE, or delegated facility AE, when present. When the PI or AE is not present, forward in accordance with the applicable instructions in paragraphs 82a(1) through 82a(3). If the objective evidence will be necessary as a reference during preparation of the evaluation report, make a separate copy and identify each page as "For Reference Only."

(3) **Certificate Management PI or AE, Delegated Facility AE, or Surveillant PI (When Present)**. When appropriate, consider providing a copy of the completed final draft Form(s) 8100-6 to the facility's management. Clearly mark each copy as "DRAFT" prior to release.

71. **POST-EVALUATION CONFERENCE**. The team leader, or principal evaluator, shall conduct a post-evaluation conference with appropriate senior management and cognizant supervisory personnel of the evaluated facility. If the evaluated facility is a satellite MMF, the post-evaluation conference should include any representatives from the parent MMF who may be present at the facility. The team leader, or principal evaluator, shall, as appropriate:

a. **Introduce** FAA personnel not previously introduced at the pre-evaluation conference.

b. **Give a brief presentation** of the overall results of the evaluation, using the completed ACSEP Evaluation Executive Summary(s) as a reference.

(1) **Provide a copy** of each completed ACSEP Evaluation Executive Summary to the evaluated facility's designated representative. When the facility is a satellite MMF, also provide a copy of the applicable completed ACSEP Evaluation Executive Summary to the parent MMF representative.

(2) **Summarize** all findings first, followed by observations. Do not introduce any new findings not previously discussed with the certificate management PI and AE, the delegated facility AE, the surveillant PI, when applicable, and facility personnel.

c. **Explain the purpose** and use of the ACSEP database.

d. **Explain** corrective action and follow-up procedures.

NOTE: Emphasize that the PI or AE may conduct further evaluations of observations contained in the ACSEP evaluation report. Any findings that may result may be included with the letter requesting corrective action for the ACSEP evaluation findings and observations. For an evaluation at a satellite MMF, advise the facility that the results of the evaluation could lead to a finding against the parent MMF.

e. **Remind senior management** about Form 8100-7 and encourage them to complete the form and send it to the address on the form within 30 days of the post-evaluation conference.

f. **Request** final comments. Clarify any misunderstandings or disagreements before departure.

g. **Adjourn** ACSEP evaluation.

72.-79. **RESERVED**.

SECTION 3. POST-EVALUATION ACTIVITIES

80. **PREPARING THE ACSEP EVALUATION REPORT**. The team leader, or principal evaluator, shall prepare the ACSEP evaluation report. When a facility has one or more production approvals, prepare one original evaluation report. When a facility has one or more delegated facility authorizations, prepare one original evaluation report for each authorization. When a facility is a satellite MMF, prepare one original evaluation report. For example, if a facility has a PMA and a TSO authorization, prepare one report; if a facility has a PMA, a TSO authorization, and a DAS authorization, prepare two reports — one for the PMA/TSO authorization activity and one for the DAS authorization. Format each original evaluation report as follows, and compile in the order listed:

NOTE: Ensure the evaluation report does not differ from the findings and observations presented at the post-evaluation conference.

a. **FAA Form 8100-3**, or printed copy of electronic equivalent (appendix 21). Each form or printed copy must be an original and signed. Prepare an original form or printed copy for each PAH, satellite MMF, and/or delegated facility affected.

b. **Executive Summary**, or printed copy of electronic equivalent (appendix 18). Each summary must be an original and signed. Prepare an original summary or printed copy for each PAH, satellite MMF, and/or delegated facility affected.

c. **Special Emphasis Items**, or printed copy of electronic equivalent (appendix 19). Each listing must be an original. Prepare an original list or printed copy for each PAH, satellite MMF, and/or delegated facility affected.

d. **Lessons Learned**, or printed copy of electronic equivalent (appendix 20). This listing may be either an original or a copy.

e. **FAA Form(s) 8100-4 or 8100-8**, or printed copy of electronic equivalent (appendix 16 or 17). Each summary must be an original. Prepare an original form or printed copy for each PAH, satellite MMF, and/or delegated facility affected.

f. **FAA Form 8100-6**, or printed copy of electronic equivalent. Include signed originals, or true copies of the signed form when identical signed original Form(s) 8100-6 are required for two or more reports. See paragraph 70b(2)(f). Each report must include all applicable Form(s) 8100-6 and any Objective Evidence. Each copy of the objective evidence must be a true copy of the original documents, identified as indicated in paragraph 70b(1)(b) above. Include true copies for each PAH, satellite MMF, and/or delegated facility affected.

NOTE: Do not include reproductions of true copies of objective evidence in an original evaluation report.

81. **QUALITY REVIEW OF THE ACSEP EVALUATION REPORT**. The ACSEP Evaluation Report contains the data that forms the basis of corrective action requests (see paragraph 83 below) and the ACSEP national database described in chapter 6 of this order. To this end, the evaluation report must be accurate and complete. Directorate managers are encouraged to establish a review process within their directorates that ensures accuracy and completion of the evaluation report prior to distribution.

82. **SENDING THE ACSEP EVALUATION REPORT**. The team leader, or principal evaluator, and the responsible ACO and MIO managers will process the evaluation report as follows (see appendix 22):

a. **Team Leader/Principal Evaluator**. The team leader, or principal evaluator, shall send the evaluation report as follows:

(1) **Production Approval Holder/Associate Facility**.

(a) **Send**, or transmit electronically, an original evaluation report to the review point, when established, within 15 working days of the post-evaluation conference. The review point shall return the report to the team leader/principal evaluator within 5 working days of receipt.

(b) **Send**, or transmit electronically, the original evaluation report to the responsible certificate management MIO manager within 5 working days of receipt of review point comments. If no review point is established, send the report within 15 working days of the post-evaluation conference.

(c) **Include** all true copies of the objective evidence with the original report when the certificate management PI was not present at the final critique meeting. When transmitting the report electronically, send the true copies of the objective evidence to the MIO manager under separate cover.

(d) **Send**, or transmit electronically, at the same time as the original report, one copy of the evaluation report to the cognizant ACO manager and to AIR-200. The copy for the ACO manager may be tailored to the requirements of the ACO manager, but will always include copies of any objective evidence that may be required by the ACO manager to investigate identified special emphasis items. Do not send copies of objective evidence to AIR-200.

(e) **Send**, or transmit electronically, at the same time as the original report, one copy of the evaluation report to the immediate supervisor of any evaluators-in-training assigned to the team.

(2) **Delegated Facility**.

(a) **Send**, or transmit electronically, an original evaluation report to the review point, when established, within 15 working days of the post-evaluation conference. The review point shall return the report to the team leader/principal evaluator within 5 working days of receipt.

(b) **Send**, or transmit electronically, the original evaluation report to the ACO manager that has oversight responsibility for the delegated facility within 5 working days of receipt of review point comments. If no review point is established, send the report within 15 working days of the post-evaluation conference.

(c) **Include** all true copies of the objective evidence with the original report when the delegated facility AE was not present at the final critique meeting. When transmitting the report electronically, send the true copies of the objective evidence under separate cover to the ACO manager that has oversight responsibility for the delegated facility.

(d) **Send**, or transmit electronically, at the same time as the original report, one copy of the evaluation report to AIR-200. Do not include copies of objective evidence to AIR-200.

(e) **Send**, or transmit electronically, at the same time as the original report, one copy of the evaluation report to the immediate supervisor of any evaluators-in-training assigned to the team.

(f) **For DOA and DAS facilities**, send, or transmit electronically, at the same time as the original report, one copy of the evaluation report to the MIDO manager that has geographic responsibility for the area in which the DOA or DAS facility is located. The copy for the MIDO manager may be tailored to the requirements of the MIDO manager, but will always include copies of any objective evidence that may be required by the MIDO manager to investigate identified special emphasis items.

(3) **Satellite MMF**.

(a) **Send**, or transmit electronically, an original evaluation report to the review point, when established, within 15 working days of the post-evaluation conference. The review point shall return the report to the team leader/principal evaluator within 5 working days of receipt.

(b) **Send**, or transmit electronically, an original evaluation report to the certificate management MIO manager cognizant of the responsible PAH or associate facility within 5 working days of receipt of review point comments. If no review point is established, send the report within 15 working days of the post-evaluation conference.

(c) **Include** all true copies of the objective evidence with the original report when the certificate management PI was not present at the final critique meeting. When transmitting the report electronically, send the true copies of the objective evidence to the MIO manager under separate cover.

(d) **Send**, or transmit electronically, at the same time as the original report, one copy of the evaluation report to the cognizant ACO manager, AIR-200, and the surveillant PI when applicable. The copy for the ACO manager may be tailored to the requirements of the ACO manager, but will always include copies of any objective evidence that may be required by the ACO manager to investigate identified special emphasis items. Do not send copies of objective evidence to AIR-200.

(e) **Send**, or transmit electronically, at the same time as the original report, one copy of the evaluation report to the immediate supervisor of any evaluators-in-training assigned to the team.

b. **Certificate Management MIO Manager**. The certificate management MIO manager shall send the original evaluation report as follows:

(1) **Send**, or transmit electronically, the original evaluation report to the certificate management PI within 3 working days of receipt of the report from the ACSEP team leader.

(2) **Include** all true copies of any objective evidence received. When transmitting the report electronically, send the true copies of the objective evidence under separate cover.

(3) **Include** any additional evaluation documents provided by the team leader.

c. **Certificate Management ACO Manager**. The certificate management ACO manager shall send the evaluation report copy as follows:

(1) **Send**, or transmit electronically, the evaluation report copy to the AE within 3 working days of receipt of the report from the ACSEP team leader.

(2) **Include** all copies of any objective evidence received. When transmitting the report electronically, send the true copies of the objective evidence under separate cover.

NOTE: ACO investigations of special emphasis items that were identified during the conduct of an ACSEP evaluation should be coordinated with the responsible MIDO.

d. **ACO Manager with Oversight Responsibility for the Delegated Facility**. The ACO manager that has oversight responsibility for the delegated facility shall send the original evaluation report as follows:

(1) **Send**, or transmit electronically, the original evaluation report to the delegated facility AE within three working days of receipt of the report from the ACSEP team leader.

(2) **Include** all true copies of any objective evidence received. When transmitting the report electronically, send the true copies of the objective evidence under separate cover.

(3) **Include** any additional evaluation documents provided by the team leader.

e. **MIDO Manager with Geographic Responsibility for a DOA or DAS Facility**. The manager of the MIDO that has geographic responsibility for the delegated facility shall send the original evaluation report as follows:

(1) **Send**, or transmit electronically, the evaluation report copy to the responsible PI within 3 working days of receipt of the report from the ACSEP team leader.

(2) **Include** all copies of any objective evidence received. When transmitting the report electronically, send the true copies of the objective evidence under separate cover.

NOTE: MIDO investigations of special emphasis items that were identified during the conduct of an ACSEP evaluation at a DOA or DAS should be coordinated with the ACO that has oversight responsibility.

f. **Delegated Facility AE.** For DAS and SFAR-36 facilities, send a copy of the evaluation report to the Flight Standards PI that has oversight responsibility for a repair station or operator in which the DAS or SFAR-36 delegation resides.

83. **REQUESTING CORRECTIVE ACTION**. The PI or delegated facility AE, as applicable, shall request corrective action as follows (see figure 5-1):

a. **Prepare a formal letter**.

(1) **Review of ACSEP Evaluation Report**.

(a) **When the evaluation report identifies findings**, prepare a letter of investigation (LOI) in accordance with Order 2150.3. Determine whether observations that indicate an isolated incident of noncompliance to an applicable CFR part or section will be included in the LOI. Do not include other types of observations in the LOI.

NOTE: If, during the time when the LOI is being written, the PI or delegated facility AE receives objective evidence from the evaluated facility that justifiably negates the basis of a finding from an ACSEP evaluation, the finding may be omitted from the LOI.

(b) **Findings resulting from subsequent PI or AE evaluation** of isolated observations contained in the ACSEP evaluation report may be included in the LOI. However, the subsequent evaluation must be completed within the time frame indicated in paragraph 83b below. Findings from evaluations conducted or completed after the time frame indicated should be included in a separate LOI.

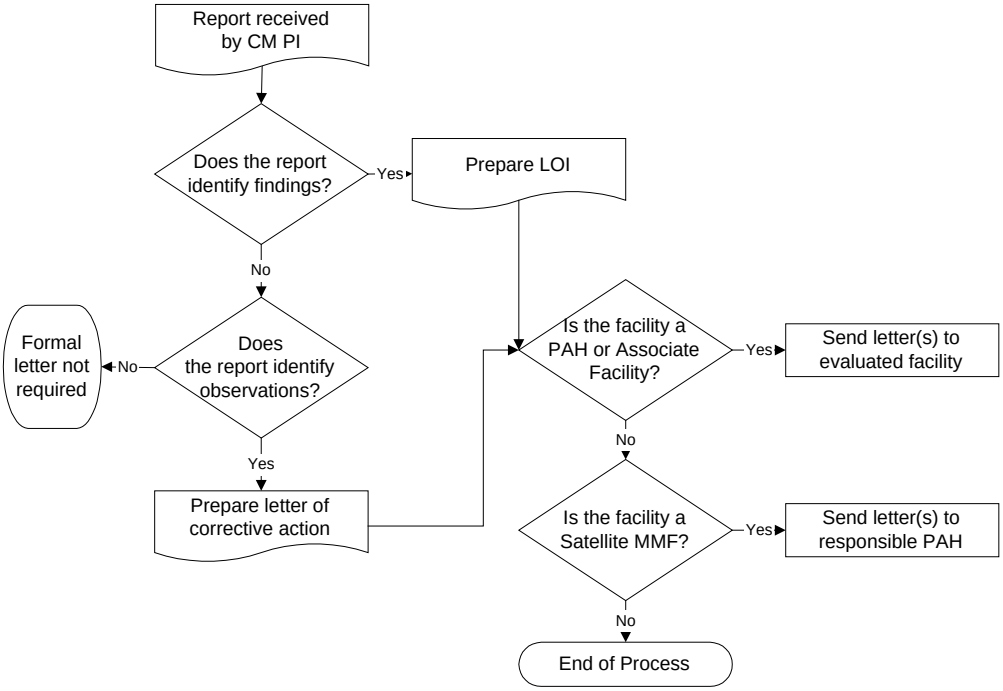
(c) **Prepare a separate letter** identifying observations not included in the LOI that may require corrective action.

b. **Send the formal letter** to the appropriate PAH, associate facility, or delegated facility listed below within 10 working days of receipt of the evaluation report from the MIO manager or ACO manager with oversight responsibility for a delegated facility.

(1) **Production Approval Holder, Associate Facility, or Delegated Facility**. Send the formal letter to the evaluated facility.

(2) **Satellite MMF**. Send the formal letter to the PAH that is the parent MMF.

FIGURE 5-1. PROCESS FOR REQUESTING CORRECTIVE ACTION



84. **CORRECTIVE ACTION FOLLOW-UP**. The PI or delegated facility AE, as applicable, will follow-up, or re-evaluate, if necessary, to verify that corrective actions proposed by the PAH, associate facility, or delegated facility in response to the formal letter from the PI or delegated facility AE requesting corrective action, have been taken. When any corrective actions are required to be verified at a satellite MMF located outside of the PI's geographical boundary, the verification should be accomplished by using the hand-off procedures in Order 8120.2, chapter 8.

85. **OTHER ACTIONS BASED ON ACSEP EVALUATION REPORT**. The ACSEP Evaluation Executive Summary, ACSEP Evaluation Lessons Learned, and Form(s) 8100-6 contained in the ACSEP Evaluation Report may be used to assist in decisions regarding future actions with each facility. The following decisions should be considered, as a minimum:

a. Adjustment to inspections or surveillance.

b. Adjustment to evaluation frequency.

c. Emphasis on weaker-rated system elements as identified in the latest ACSEP annual report.

86. **ACSEP QUALITY IMPROVEMENT PROGRAM**. Each FAA Aircraft Certification Directorate and AIR-100/200 shall establish a program to assess ACSEP evaluations, seek standardization and continuous improvement, counsel team leaders and members, and recommend policy and guidance changes to AIR-100 and AIR-200. Use Form 8100-7 and the ACSEP evaluation reports as the basis for the ACSEP quality improvement program. Send one copy of each Form 8100-7 to AIR-200 for database input.

87. **RECORD RETENTION**. The certificate management PI or the engineer assigned oversight responsibility for the delegated facility, as applicable, shall retain those sections of the original evaluation report that support planning for the next scheduled evaluation and any decisions for adjusting inspections or surveillance. As a minimum, the PI or the engineer assigned oversight responsibility for the delegated facility should consider retaining the ACSEP Evaluation Executive Summary and Form 8100-6. Surveillant MIDO's shall take similar action with copies of the evaluation report.

a. **Documents retained for planning purposes** shall be retained in all cases until the next scheduled evaluation has been completed.

b. **Documents retained to support adjustment decisions** shall be retained until new adjustment decisions are made and implemented.

88.-94. **RESERVED**.

CHAPTER 6. ACSEP NATIONAL DATABASE

95. **PURPOSE**. The ACSEP national database, when fully developed and established, will provide a capability to detect shifts in performance and statistically significant trends for the industry as a whole, and for different segments of the industry. It will also identify trends emerging in the performance of ACSEP evaluations.

96. **FILES**. The ACSEP national database will contain selected information from all evaluations conducted. It will contain four files:

a. **The evaluator file** maintains information on all ACSEP evaluator candidates and appointed evaluators.

b. **The facility file** maintains information on PAH's, associate facilities, delegated facilities, and satellite MMF's.

c. **The evaluation file** records the findings and observations for each ACSEP evaluation conducted.

d. **The security file** maintains information on the users given access to the ACSEP database. It is used to control access to the database and to limit data available depending on the user's location and security clearance.

97. **DATABASE MANAGEMENT**. The Evaluation & Assessment Branch, AIR-230, will manage the ACSEP national database and will, as appropriate:

a. **Review** the database by:

(1) **Examining** new entries.

(2) **Noting** shifting levels of performance in different segments of the industry, including any statistically significant differences in the system elements when compared at all approval holders, associate facilities, and delegated facilities.

(3) **Highlighting** potential trends emerging in particular aspects of the system elements.

(4) **Analyzing** trends emerging in particular aspects of the system elements.

(5) **Highlighting** trends emerging in the performance of ACSEP evaluations.

b. **Provide** selected data and reports.

NOTE: All report recipients will only use the information internally, and will not issue any reports outside of the FAA Aircraft Certification Service organization. Refer to paragraph 6 of this order.

c. **Obtain**, as required, outside support services to augment its resources with qualified and creditable experts and specialists to support database management and system analyses, in accordance with budgetary directives and in coordination with AIR-500. Sample contract clauses relating to obtaining support services are contained in appendix 6.

> **NOTE: The Evaluation & Assessment Branch will complete all necessary FAA administrative measures prior to assignment of support service personnel to database management and system analyses. This will include such items as ensuring personnel have signed a certificate of nondisclosure for confidentiality of information (see appendix 6).**

98. **USE OF THE DATABASE**. Directorates may use the ACSEP national database to obtain reports on findings and observations, frequently used CFR, and industry compliance. They may use the database to detect shifts in performance and statistically significant trends for different segments of the industry. Directorates may also use the database to assist in scheduling.

99.-105. **RESERVED**.

APPENDIX 1. ACRONYMS

AC	Advisory Circular
ACO	Aircraft Certification Office
ACSEP	Aircraft Certification Systems Evaluation Program
AE	Assigned Engineer
AFM	Airplane Flight Manual
AFMS	Airplane Flight Manual Supplement
AIR	Aircraft Certification Service
AIR-4	International Airworthiness Programs Staff
AIR-100	Aircraft Engineering Division
AIR-200	Production & Airworthiness Certification Division
AIR-500	Planning and Program Management Division
APIS	Approved Production Inspection System
CAA	Civil Aviation Authority
CFR	Code of Federal Regulations
DAS	Designated Alteration Station
DOA	Delegation Option Authorization
FAA	Federal Aviation Administration
LOI	Letter Of Investigation
MIDO	Manufacturing Inspection District Office
MIO	Manufacturing Inspection Office
MMF	Manufacturer's Maintenance Facility
MRB	Material Review Board
PAH	Production Approval Holder
PC	Production Certificate
PI	Principal Inspector
PLR	Production Limitation Record
PMA	Parts Manufacturer Approval
STC	Supplemental Type Certificate
TC	Type Certificate
TSO	Technical Standard Order

APPENDIX 2. PREPARATION INSTRUCTIONS FOR FAA FORM 8100-9, ACSEP RESOURCE TARGETING FACILITY ASSESSMENT SHEET

1. **PURPOSE**. This appendix provides instructions for completing FAA Form 8100-9.

2. **FACILITY ASSESSMENT**. Figure 1 shows sample data entry screens for the automated ACSEP Resource Targeting Facility Assessment Sheet. Blocks 1 through 8 provide the information required to assess the facility and to print a copy of Form 8100-9.

a. Using the ACSEP Resource Targeting Facility Assessment System software application, access the automated ACSEP Resource Targeting Facility Assessment Sheet by clicking on "Add New Record." Prepare the form as follows:

(1) **Block 1**. Enter the name of the facility being assessed. If there are several facilities with the same name, include a specific identifier, such as the location. The facility name entered should be consistent with other FAA documents listing the facility name.

(2) **Block 2**. Enter the Project Number (s). If there are several project numbers, all project numbers associated with the facility may be entered. Place an X in the primary block for that facility that is to be used for calculating the resource group. The data for all the projects will be maintained in the database, however only the primary project data will print and will be used for assigning resource targeting groups.

(3) **Block 3**. Enter the name of the PI assigned to the facility.

(4) **Block 4**. Enter the name of the MIDO to which the PI is assigned, or managed from. The MIDO manager should establish the standard name format to be used to ensure proper sorting of the Office Report.

(5) **Block 5**. Enter the date the data is being entered.

(6) **Block 6**. Click on "YES" if an initial ACSEP evaluation has been accomplished and certificate management functions were performed on site at the facility within the previous 12 months. Click on "NO" if an initial ACSEP evaluation has not been accomplished and certificate management functions were not performed on site at the facility within the previous 12 months.

NOTE: If "YES" is selected, continue to fill in the form. If "NO" is selected, the automated form will bring up the message "Print Report and DO NOT continue." Click on "OK" and "Print Record." Proceed to paragraph 3 below. Blocks 7 and 8 will not be filled in if "NO" is selected.

(7) **Block 7**. Click on one of the following boxes for each of the 21 indicators listed, based on the criteria in appendix 3. After selecting the appropriate block, click on "Next Indicator" to proceed to the next indicator. Continue until all 21 indicators have been assessed.

APPENDIX 2. PREPARATION INSTRUCTIONS FOR FAA FORM 8100-9, ACSEP RESOURCE TARGETING FACILITY ASSESSMENT SHEET (CONT'D)

(a) **A**: Click on this box when the indicator being assessed occurred or existed during the rating period, and there is, as a result, an increased potential for nonconforming products, parts, or services.

(b) **B**: Click on this box when the indicator being assessed occurred or existed during the rating period, but there is, as a result, no increased potential for nonconforming products, parts, or services.

(c) **C**: Click on this box when the indicator being assessed did not occur or exist during the rating period.

(8) **Block 8**. Click on the appropriate category block that best describes the criticality of the most critical product, part, or appliance at the facility.

b. When blocks 1 through 8 above have been completed, click on "Print Report" to obtain a printout of the entered data on Form 8100-9.

c. **Description of Data Entry Screen Buttons**. The primary data entry screen buttons used to perform the facility assessment have been addressed in paragraphs 2a and 2b above. Other buttons are used mainly for navigating or exiting the application. The complete list of buttons is described as follows:

(1) **A**: Described in paragraph 2a(7)(a) above.

(2) **B**: Described in paragraph 2a(7)(b) above.

(3) **C**: Described in paragraph 2a(7)(c) above.

(4) **Go to**: Allows selection of a specific indicator by entering a number between 1 and 21. This feature is useful for returning to an indicator that may have been deferred while waiting for additional information.

(5) **Add Record**: Provides a blank data entry screen for entry of data for another facility. Data entered on the screen displayed will be saved.

(6) **Previous Indicator**: Allows selection of the indicator that precedes the indicator currently displayed on the data entry screen. This feature allows for review of the previous indicator and for modifying any applicable entries when required.

APPENDIX 2. PREPARATION INSTRUCTIONS FOR FAA FORM 8100-9, ACSEP RESOURCE TARGETING FACILITY ASSESSMENT SHEET (CONT'D)

(7) **Next Indicator**: Allows selection of the indicator that follows the indicator currently displayed on the data entry screen. This feature allows for sequential data entry of each indicator, as well as a means to review completed entries.

(8) **New Record**: Provides a blank data entry screen for entry of data for another facility. Data entered on the screen displayed will be saved.

(9) **Print Record**: Allows printing of Form 8100-9 when the answer to the question addressed by paragraph 2a(6) above is "NO."

(10) **Main Menu**: Allows a return to the opening screen of the software application.

(11) **Cancel**: Allows for cancellation of the data entry for a facility prior to adding it to the record file. Canceling a record will delete all data entry for that record and force a return to the Main Menu.

(12) **Quit**: Allows for exiting the software application without returning to the Main Menu. Data entered on the screen displayed will not be saved.

(13) **Quit App**: Allows for exiting the software application without returning to the Main Menu. Data entered on the screen displayed will not be saved.

(14) **Print Report**: Allows printing of Form 8100-9 when all data entry is complete for a facility.

3. **FACILITY ASSESSMENT REVIEW**. Figure 2 shows a sample of Form 8100-9 based on the data entered in figure 1. Blocks 1 through 4 provide the information required to document the review process detailed in paragraph 28g of the text of this order. Prepare the form by inserting in:

a. **Block 1**. The typed or printed name and signature of the PI upon completion of the assessment.

b. **Block 2**. The date the form is completed.

c. **Block 3**. The typed or printed name and signature of the MIDO manager upon agreement with the completed assessment.

d. **Block 4**. The date the MIDO manager agreed with the completed assessment.

4. **REVIEW OF RESOURCE TARGETING GROUP ASSIGNMENT**. Blocks 5 through 7 of figure 2 provide information about the resource targeting group assignment after receipt and disposition of the Directorate and Office Reports. Insert in:

APPENDIX 2. PREPARATION INSTRUCTIONS FOR FAA FORM 8100-9, ACSEP RESOURCE TARGETING FACILITY ASSESSMENT SHEET (CONT'D)

a. **Block 5**. The original resource targeting group listed in the Office Report.

b. **Block 6**. The resource targeting group agreed upon by the responsible PI, MIDO manager, and/or MIO/ACO manager that is indicated in the final Directorate Report, if different than the original resource targeting group identified in block 5 of figure 2.

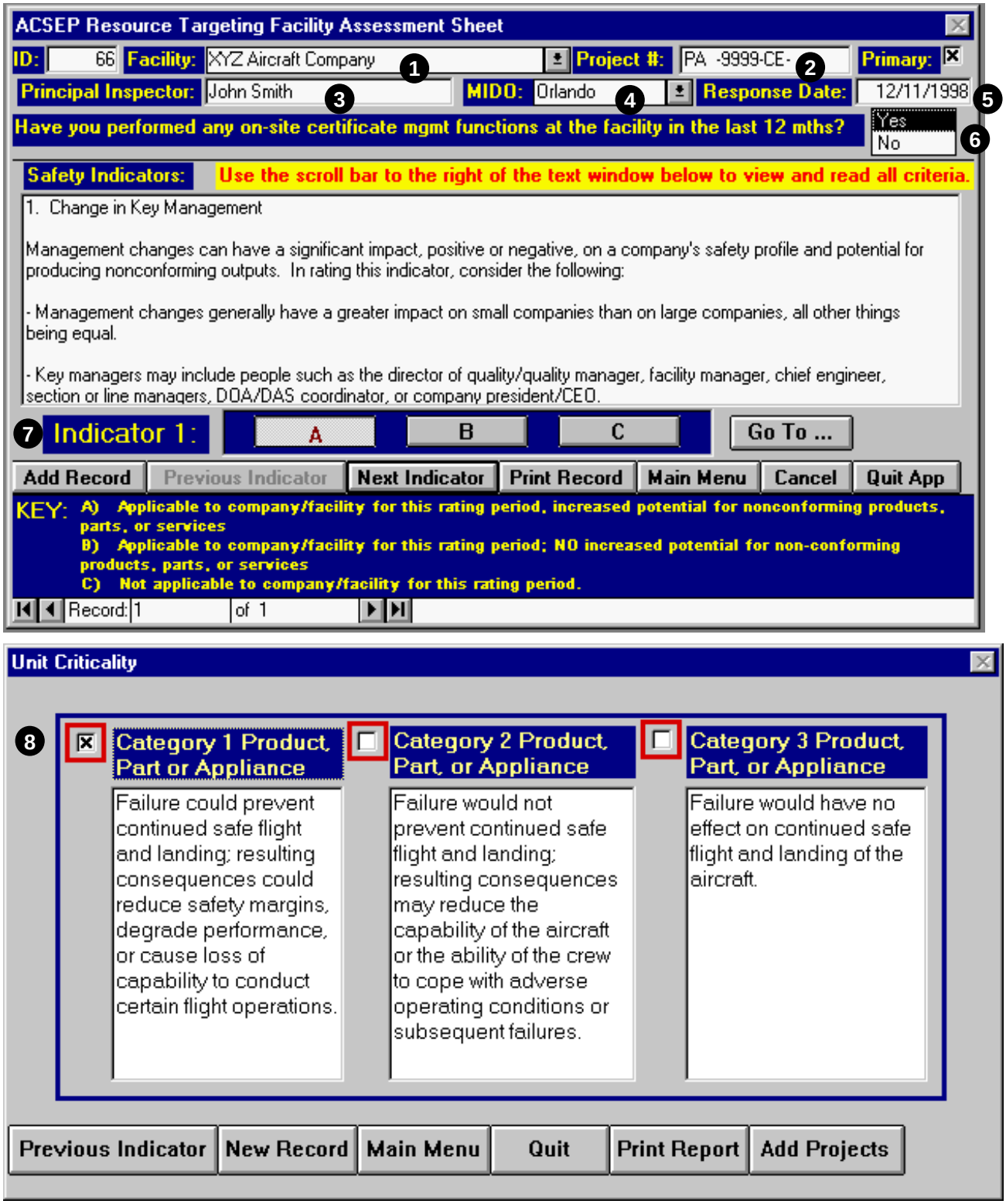
c. **Block 7**. The reason(s) for the adjusted rating entered in block 6. This should be typed.

NOTE: Any adjustment to the assigned resource targeting group after the MIO manager has approved the Directorate Report must be coordinated with the MIO manager. Document the adjustment and the relevant justification on Form 8100-9. Use the area indicated as block 7 in figure 2 for this purpose.

5. **FORM DISTRIBUTION**. Whenever blocks 6 and 7 of the form in figure 2 are completed, as described in paragraphs 4b, 4c, and 4c NOTE above, a copy of the form will be sent to AIR-200 to determine whether a change to the resource targeting model or the training material is required.

APPENDIX 2. PREPARATION INSTRUCTIONS FOR FAA FORM 8100-9, ACSEP RESOURCE TARGETING FACILITY ASSESSMENT SHEET (CONT'D)

FIGURE 1. SAMPLE FAA FORM 8100-9 ENTRY SCREEN



APPENDIX 2. PREPARATION INSTRUCTIONS FOR FAA FORM 8100-9, ACSEP RESOURCE TARGETING FACILITY ASSESSMENT SHEET (CONT'D)

FIGURE 2. SAMPLE FAA FORM 8100-9

U.S. Department of Transportation
Federal Aviation Administration

ACSEP Resource Targeting Facility Assessment Sheet

Facility Name: XYZ Aircraft Company **Response Date:** 12/11/97
Project #: PA9999CE
MIDO: Orlando **Principal Inspector:** Smith

Have you performed any on-site certificate management functions at the facility in the last 12 months? Yes

1.	Change in Key Management	C
2.	Turnover of Critical Staff	C
3.	Reduction in Workforce/Layoffs	C
4.	Expansion or Growth	B
5.	Merger or Takeover	C
6.	ACSEP or PI/CM Findings	C
7.	Civil Penalties	C
8.	Corrective Response History	C
9.	Cost of Quality	C
10.	Service Difficulties	C
11.	Complex Manufacturing Process	B
12.	Complex Product, Part, or Appliance	B
13.	New Manufacturing Process	C
14.	New/Emerging Technology	B
15.	Production Volume	B
16.	Product Continuity	B
17.	QC System Changes	C
18.	Engineering/Design Changes	B
19.	Increased Inspection Delegation to Suppliers	C
20.	Increased Use of Foreign Suppliers	A
21.	New Design in Production	B

Criticality: Category 1 Product, Part or Appliance

Key:
A) Applicable to company/facility for this rating period, increased potential for nonconforming products, parts, or services
B) Applicable to company/facility for this rating period, no increased potential for nonconforming products, parts, or services
C) Not applicable to company/facility for this rating period

FAA Form 8100-9 (10/97)

FOR OFFICIAL USE ONLY (when filled in)
Public availability to be determined under 5 U.S.C. 552

APPENDIX 2. PREPARATION INSTRUCTIONS FOR FAA FORM 8100-9, ACSEP RESOURCE TARGETING FACILITY ASSESSMENT SHEET (CONT'D)

FIGURE 2. SAMPLE FAA FORM 8100-9 (CONT'D)

Facility Name: XYZ Aircraft Company **Response Date:** 12/11/97

Project #: PA9999CE

MIDO: Orlando **Principal Inspector:** Smith

Have you performed any on-site certificate management functions at the facility in the last 12 months? Yes

Principal Inspector: *John Smith* ❶ **Date:** 1/7/98 ❷

MIDO Manager: Mary Doe ❸ **Date:** 1/7/98 ❹

❺ **Assigned resource targeting group:** II ❻ **Adjusted resource targeting group:** I

Justification for adjusted resource targeting group: ❼

This facility relies almost exclusively on foreign suppliers for the manufacture of the complex parts of the aircraft. The main activity of the facility is the assembly of these complex parts into the completed product. Few procedures are in place to monitor supplier activity. There is also minimal staff assigned to monitoring supplier control.

FAA Form 8100-9 (10/97)

FOR OFFICIAL USE ONLY (when filled in)
Public availability to be determined under 5 U.S.C. 552

APPENDIX 3. ACSEP RESOURCE TARGETING INDICATOR ASSESSMENT CRITERIA

1. **PURPOSE**. This appendix provides additional guidance to assist the PI in completing the assessment section of the automated ACSEP Resource Targeting Facility Assessment Sheet. Refer to appendix 2, paragraph 2a(7).

2. **SPECIFIC GUIDANCE**. There are 21 resource targeting indicators in the automated ACSEP Resource Targeting Facility Assessment Sheet. These indicators are listed in figure 1 below. Each of these indicators must be assessed by the PI. The criteria listed below provide guidance to assist the PI in completing this assessment. The criteria are intended to prompt the PI to consider a variety of elements and issues that may be applicable to the facility being assessed, and to make an informed judgment about the facility. The number assigned in parentheses to each criteria corresponds directly with the indicator number on the automated ACSEP Resource Targeting Facility Assessment Sheet.

Figure 1. Resource Targeting Indicators

1.	Change in Key Management
2.	Turnover of Critical Staff
3.	Reduction in Workforce/Layoffs
4.	Expansion or Growth
5.	Merger or Takeover
6.	ACSEP or PI/CM Findings
7.	Civil Penalties
8.	Corrective Response History
9.	Cost of Quality
10.	Service Difficulties
11.	Complex Manufacturing Process
12.	Complex Product, Part, or Appliance
13.	New Manufacturing Process
14.	New/Emerging Technology
15.	Production Volume
16.	Product Continuity
17.	QC System Changes
18.	Engineering/Design Changes
19.	Increased Inspection Delegation to Suppliers
20.	Increased Use of Foreign Suppliers
21.	New Design in Production

a. **Change in Key Management (1)**. Management changes can have a significant impact, positive or negative, on a company and its production/quality profile. In rating this indicator, consider the following:

APPENDIX 3. ACSEP RESOURCE TARGETING INDICATOR ASSESSMENT CRITERIA (CONT'D)

(1) Management changes generally have a greater impact on small companies than on large companies, all other things being equal.

(2) Key managers may include people such as the director of quality/quality manager, facility manager, chief engineer, section or line managers, DOA/DAS coordinator, or company president/CEO.

(3) The background of new management personnel is key. In general, internal selections are less problematic than external hires, although a solid aviation or product background may compensate. Similarly, civil experience is often preferable to a military aviation background, since knowledge of the FAR and experience with the FAA are important.

(4) The reason behind any change(s) is also important. If it's performance-based, then the change may be an improvement. On the other hand, downsizing, streamlining, and reorganizations can reduce the amount of production/quality oversight within the company. New programs or product lines may alter existing lines of authority and supervision. Ownership changes may result in wholesale replacement of managers.

(5) Management changes can also affect overall company philosophy or operational priorities. A shift to a more aggressive sales focus may lead to reduced emphasis on compliance to the FAR and on quality. Cost-cutting and greater "bottom line" pressure can undermine or dilute a company's quality orientation.

b. **Turnover of Critical Staff (2)**. Loss of staff members who play a critical role in ensuring quality can dramatically impact the production of conforming products, parts, or services. Consultation with the appropriate ACO may be helpful in identifying these people and assessing the effect of their departure. Think about these issues if turnover of this type has occurred:

(1) Critical staff turnover generally has a greater impact on small companies than on large companies, all other things being equal.

(2) Critical staff may include people such as quality inspectors, foremen, engineers, test technicians, audit staff, designees; any one-of-a-kind specialty (e.g., level III NDT); or any key FAA contact.

(3) If losses are replaced or backfilled, consider the background of new staff. As with key managers, internal selections are preferable to external hires, although a solid aviation or product background may compensate. Similarly, civil experience is generally better than military, due to FAR/FAA familiarity. Technical expertise, however, is paramount for individuals in these key positions.

APPENDIX 3. ACSEP RESOURCE TARGETING INDICATOR ASSESSMENT CRITERIA (CONT'D)

(4) If losses are not replaced or backfilled, consider the context. If the company is downsizing, streamlining, or reorganizing, losses of this type will almost always impact quality. If, on the other hand, the changes result from the end of a major project or program, there may be no cause for alarm.

(5) In any event, consider the strength of the company's quality system. If it's well established, with fully documented procedures, then it may be able to absorb the loss of key people without affecting quality. Consider whether the quality program remains intact, and is not being scaled back as these individuals leave.

c. **Reduction in Workforce/Layoffs (3)**. Workforce reductions and layoffs may or may not have an impact on quality; it depends on how and why they occur, and who's involved. Consider the following in assessing this indicator:

(1) Workforce reductions can generally be managed/absorbed more easily by large companies than by small companies, all other things being equal.

(2) The pace or rate of any reduction is important. If it's gradual, steady, and implemented over time, then there may be no cause for concern. On the other hand, if it's abrupt, haphazard, or uncoordinated, and/or occurs over a short timeframe, that's probably a sign of potential trouble.

(3) Obviously who is being downsized or laid off is critical. Assemblers and line staff may be of concern, while administrative and support staff probably won't be. Reductions in quality, engineering, or other areas key to FAA's interests should always raise a red flag.

(4) Another key consideration is the reason(s) for the reduction. If it's due to the end of a major program, or part of a normal industry cycle, it may not be problematic. Downsizing, streamlining, and reorganizations, by contrast, may be of concern depending on how they're handled. Any deemphasis on aviation work should be viewed with caution. In some cases, reductions may primarily involve the military versus the civil side of the house, and pose no great concern to the FAA.

(5) Whether or not the remaining staff are being retrained or cross-trained to perform new functions is also a factor here. The basic qualifications of staff performing key functions or roles, as well as the adequacy and effectiveness of any training provided to people assuming new or expanded duties, should be factored into your determination.

d. **Expansion or Growth (4)**. A company's expansion or growth can also raise potential quality concerns. Again, the how and why of these events is what you should look at when evaluating this indicator:

(1) The speed and breadth of growth are critical. If it's controlled and steady, as opposed to rapid, "overnight" expansion, there's generally less potential for problems. If the growth involves opening

APPENDIX 3. ACSEP RESOURCE TARGETING INDICATOR ASSESSMENT CRITERIA (CONT'D)

a new facility or facilities, or results in new or additional geographic dispersion of the workforce, there could be quality issues.

(2) The nature of any growth also needs to be considered. More of what they've already been doing is generally not a problem. But if they're expanding into new business areas, product lines, technology, or production methods, watch out. Likewise, if they're acquiring new/additional approvals, heightened concern may be warranted.

(3) Don't overlook proxy growth, or internal growth, i.e., things that may not be immediately obvious. Greater use of outsourcing, subcontracting, or suppliers can expand a company's business without changing its staff or facility size. Similarly, an internal shift from military to civil work can significantly affect the quality picture. Generating more output with the same or fewer resources, through process streamlining or productivity enhancements, can also create de-facto growth.

(4) The extent to which staff size and capability have kept pace with any growth is also important. If they've added people, particularly designees, and/or provided appropriate training to staff in any new areas, that's a sign of well managed growth. The absence of such actions should probably raise a red flag.

e. **Merger or Takeover (5)**. Mergers and takeovers have become increasingly common in the aviation industry. Who's buying and what they are doing to or with the acquired company and its system should drive your rating here:

(1) A key question is whether or not the buyer (company or individual) has an aviation background; if not, you may be in for problems, at least initially. If they do, prior FAA experience and knowledge of the FAR is an additional plus, since they'll know the ropes better and also have a compliance track record you can check.

(2) A second key consideration is the impact on quality system(s). If the companies' products are substantially different, integrating their quality systems may be challenging and problematic. If a current PAH is taken over, keeping the core system approved by the FAA intact is of prime concern. Retaining key people, or replacing them with qualified staff, is also important here.

(3) Some merger or takeover transactions have no real impact in terms of quality. The outcome may simply be a name change, and/or it may occur at a very high level, e.g., mega-mergers among major DOD contractors. In these cases there's often no impact on the civil side of the company, or the changes don't "trickle down" to affect the production approval holder level.

f. **ACSEP or PI/CM Findings (6)**. Findings resulting from prior FAA evaluations of an approval holder are a key part of any company's quality track record. In evaluating this indicator, consider the following variables:

APPENDIX 3. ACSEP RESOURCE TARGETING INDICATOR ASSESSMENT CRITERIA (CONT'D)

(1) Critical system elements generally include, but are not limited to, supplier control, manufacturing processes, special manufacturing processes, and design data control.

(2) Multiple findings from any single ACSEP evaluation, or over the course of a year as a result of PI/district audits, may be a signal of systemic problems. One or more safety-related findings, or evidence that any system element is not under control, are also usually grounds for heightened concern.

(3) Any repeat findings, either in ACSEP evaluations or PI/district audits, should raise a red flag. It's important, though, to consider how many full ACSEP evaluations the company has been through, and what the general trend in evaluation results has been. Companies that have been through multiple evaluations should, in general, perform better than first-timers. If they're not improving or holding steady, beware.

(4) Any sudden and/or significant negative change in a company's performance (e.g., from a single, minor finding to multiple findings, and/or the occurrence of safety issues) should be viewed with apprehension.

g. **Civil Penalties (7)**. Assessment of a civil penalty against a production approval holder is a significant sanction by the FAA. In evaluating this indicator for a given company, however, consider the following circumstances:

(1) The number, frequency, and nature of civil penalty actions is important. A single, isolated incident which resulted in a civil penalty may not be cause for alarm. Two or more civil penalties within one year, however, or any civil penalty based on safety related items, generally should be considered problematic.

(2) The company's civil penalty history is also important in assessing this indicator. In particular, any repeat civil penalty items, or any civil penalty issued due to failure to comply with an earlier administrative action, should raise a red flag.

(3) The overall magnitude or impact of the violation(s) may also be relevant to your assessment. For example, if an infraction involved a large number of products or units in service, and/or a high dollar value of materials, its quality impact may be more significant. Likewise, civil penalties which resulted from a suspected unapproved part investigation may also signal more serious problems.

h. **Corrective Response History (8)**. An approval holder's corrective response history is an indication of how seriously the company takes its quality responsibilities. Key variables associated with this indicator include the following:

APPENDIX 3. ACSEP RESOURCE TARGETING INDICATOR ASSESSMENT CRITERIA (CONT'D)

(1) PAH responsiveness to problems is an important consideration. Some hallmarks of responsiveness include: demonstrated understanding of the issue(s) involved; timely, thorough, and complete action to fix problems; and taking steps to avoid repetition, e.g., by making changes to their system. The absence of one or more of these attributes is generally cause for concern.

(2) In some cases non-responsiveness may be unintentional, or due to mitigating circumstances. Relatively new companies, for example, and/or companies with inexperienced staffs may not meet the standards defined above, at least initially. Non-responsiveness from companies which have held their approvals for more than a couple of years, however, should be considered a quality issue.

(3) The level of trust and quality of communication between the company and the FAA are also relevant to this indicator. Fast, professional, and thorough responses to inquiries or information requests should be the norm. Frequent contact and interaction with the PI, initiated by the company, should also be viewed positively. Negativity toward the FAA, on the other hand, particularly on the part of management, can impede communication and cooperation.

i. **Cost of Quality (9)**. Cost of quality information can be difficult to interpret and evaluate in terms of quality impact. Factors to bear in mind in assessing this indicator include the following:

(1) At present, cost of quality information is not generally available to the FAA. Most small companies don't track it in detail, and many others who do may be reluctant or unwilling to share it for proprietary reasons.

(2) One evaluation method is to look at the percentage distribution of quality costs among the three major cost categories of prevention, appraisal, and failure/rework. While there is no ideal distribution, in general the commitment of resources to up-front, preventive measures may indicate a more deliberate and proactive approach to quality control.

(3) Trends in a company's cost of quality over time may also be relevant. Sharp movement, either up or down, is often a warning sign. Changes in a particular area, as opposed to overall, may point to specific problems. What's behind the cost changes may also be important. New technology, new production systems or methods, or outsourcing/offshore operations can all drive cost of quality up or down.

(4) In addition to formal cost of quality data, there are also several "proxy" indicators of quality costs. High scrap or rework rates during routine production runs, for example, may be a signal of problems in the system. A high volume of warranty returns may also indicate problems, as can a high level of MRB activity.

APPENDIX 3. ACSEP RESOURCE TARGETING INDICATOR ASSESSMENT CRITERIA (CONT'D)

j. **Service Difficulties (10)**. In-service difficulties caused by manufacturing defects or poor quality control can be an indication of serious system problems. Consideration of the following points can assist you in evaluating this indicator. Discussion of specific points with the ACO resource targeting focal point may also be beneficial.

(1) Overall very few service difficulties are traced back or attributed to manufacturing or quality problems; the vast majority are due to maintenance or operational factors.

(2) Generally, in-service problems are more common for large companies that manufacture long-life service parts, or entire aircraft and engines. For these kinds of approval holders, the key consideration is repetitive problems, and/or if a pattern of discrepancies emerges over time.

(3) For service difficulties which are attributable to manufacturing, the overall magnitude or impact of the problem may be relevant to your assessment. For example, if a service difficulty involved a particularly severe or dangerous problem, or a large number of products or units in service, its quality impact may be more significant. A single isolated incident, on the other hand, may not always be cause for alarm.

(4) Significant service difficulties will generally trigger an immediate response, which can include an emergency or special ACSEP evaluation, as appropriate.

k. **Complex Manufacturing Process (11)**. Evaluating the complexity of an approval holder's manufacturing process requires consideration of a number of variables. Major criteria to apply in this regard include the following:

(1) The number and type of steps involved in a process often drive complexity. Generally, the more things that must be tracked, controlled, and/or sequenced, and the more special processes involved, the more complex the process. In particular, the number of process elements which must be critically controlled is a complexity driver.

(2) The latitude or lack thereof afforded to system operators is also frequently linked to complexity. Other characteristics to look for include detailed and intricate process specifications, and/or frozen or limited process changes subject to engineering source approval. Similarly, the more frequently the process is audited or validated, the greater its probable complexity.

(3) Multiple, indepth, and expensive testing requirements for the end item or product can also be a reflection of manufacturing process complexity. Intricate and sophisticated test procedures are sometimes, but not always, required based on how the product was manufactured.

(4) The qualifications and skill level of both company and FAA staff relative to the process(es) are also important. Even a simple, well-established process can be complex to those who aren't experienced

APPENDIX 3. ACSEP RESOURCE TARGETING INDICATOR ASSESSMENT CRITERIA (CONT'D)

in or knowledgeable of the technology involved. In most cases, the longer a company has been working with a technology, the less need for concern. Evidence that skill levels are being maintained or upgraded is also important.

(5) Outsourcing of manufacturing processes, both production and testing, is also an element to consider. If, for example, key complex elements of the process are subcontracted to highly expert firms, the potential risk may be lessened.

l. **Complex Product, Part, or Appliance (12)**. Evaluating the complexity of an approval holder's product, part, or appliance likewise involves a number of variables. Consideration of the following points can assist you in evaluating this indicator. Discussion of specific points with the ACO resource targeting focal point may also be beneficial.

(1) The number of components, subsystems, or subassemblies in the end item often drives its complexity. Any dynamic or rotating parts or assemblies, as well as if the item or any of its elements is life limited, are also strongly linked to complexity. Similarly, the more functions the item performs, and/or the more failure modes it has, the greater its probable complexity.

(2) The degree of integration and/or interdependence of the end item with other parts or systems is also a complexity driver. In general, clear functional boundaries between the item and other components or systems create less complexity than overlapping, integrated, or fuzzy relationships. If any other systems are dependent on the end item, that typically increases overall complexity.

(3) The materials used in the end item are also relevant to complexity. If it includes any non-traditional, exotic, or revolutionary materials, and/or material(s) which haven't been used in this way before, then its complexity is probably heightened. As with process complexity, the company's experience and skill with the material or product is also a factor. Limited knowledge or expertise can make simple things complicated.

(4) Another good indicator of complexity is the item's certification basis. If defining the rule(s) and/or finding compliance with the FAR was difficult, or if multiple exemptions or special conditions were required, that may also reflect the item's complexity.

m. **New Manufacturing Process (13)**. Introduction of a new manufacturing process, whether truly original or just new to the company, can create potential quality issues. Consider the following for this indicator:

(1) Approval of the quality manual change or update incorporating any new process is a major milestone; however, it is generally not the end of PI concern and interest.

APPENDIX 3. ACSEP RESOURCE TARGETING INDICATOR ASSESSMENT CRITERIA (CONT'D)

(2) How well the new process is understood by the company, the FAA, and industry in general is an important consideration. If company staff are trained or certified in the new process, and if industry standards exist, the potential for difficulties is generally lessened. If, on the other hand, the company is implementing a one-of-a-kind process, heightened concern is probably warranted.

(3) The extent to which the company has demonstrated control of any new process is also key. An acceptable or normal rejection rate and limited MRB activity are generally positive signs of control. Documented repeatability and reliability should also be expected. In-service experience with no quality problems in evidence is likewise a sign of full process integration and control.

n. **New/Emerging Technology (14)**. Often what's considered new or emerging technology is in reality an extension or iteration of existing knowledge and methods. Evaluate the following criteria with respect to this indicator for companies employing new technology. Discussion of specific points with the ACO resource targeting focal point may also be beneficial.

(1) The history of the technology can help determine if the new/emerging designation is really appropriate. If it's never been used at all, by anyone in civil aviation, or if it's never been used in this type of application, product, or system, then it should be considered new, and a potential quality system issue.

(2) The breadth of the technology's usage may also be relevant. If it's specific to this manufacturer, or perhaps to only a small number of companies, then there may be cause for concern. The absence of an established body of knowledge, e.g., industry standards, is also a good indicator that heightened FAA interest may be appropriate.

(3) The product or item's certification basis can likewise tell you if the technology is truly new. If the end item or core technology was not covered by the CFR, or if any new or revised rules resulted from its certification, it should probably be considered new technology.

(4) The technology's service history should also be considered. If it has a substantial number of service hours or cycles, such that failures are explainable, understood, and predictable to some extent, then in general it would not be considered new or emerging technology.

o. **Production Volume (15)**. Changes or fluctuations in a company's production volume may or may not be cause for concern. Circumstances or influences to think about for this indicator include the following:

(1) The magnitude and rate of any volume changes are important. A fractional increase or decrease is generally not an issue, but a multiple change probably should be cause for concern. Gradual and steady adjustments can usually be managed well, while rapid and/or haphazard movement, either up or down, often indicates underlying problems.

APPENDIX 3. ACSEP RESOURCE TARGETING INDICATOR ASSESSMENT CRITERIA (CONT'D)

(2) The reason for the change is likewise critical. New orders or product lines can drive up production quickly, as can short or special product runs. On the other hand, downsizing, mergers, or takeovers can move the numbers rapidly in the opposite direction. Normal industry cycles may produce predictable volume changes.

(3) When and how often changes occur is also important. If the company is pushing to meet end of month/quarter/year production targets, or to meet contract due dates and possibly avoid penalties for late deliveries, watch out. If these kinds of fluctuations are repetitive, however, the company may have enough experience with them to manage effectively.

(4) The bottom line consideration should be the company's capacity to handle the changes. If they acquire or maintain an adequate number and type of staff, including a sufficient number of designees, then concern may not be warranted. Likewise, if their quality system is revised to handle any changes, up or down, volume fluctuation may not be problematic.

p. **Product Continuity (16)**. Product continuity is generally regarded as positive, but there can be a down side. Consider the following when evaluating this indicator:

(1) Determine if the continuity has had any negative consequences. Risks include complacency, lax adherence to procedures, and corner-cutting. Companies may go on "automatic pilot" after a period of time. If the product has been totally static, without even minor improvements or enhancements, that may be grounds for concern.

(2) The context of the product's continuity is also important. If suppliers and material sources have been stable as well, that's generally positive. However, if they've been constantly in flux, the continuity may be illusory. Similarly, if the company's key staff/internal knowledge base been depleted, there may be potential for problems.

(3) The reasons for any continuity or discontinuity should be examined. Resistance to change or limited resources/capabilities are often behind static continuity. Purchase of certificates, addition of product lines, and downsizing, mergers, or takeovers, by contrast, frequently create discontinuity. In either event, heightened FAA interest may be appropriate.

q. **Quality System Changes (17)**. Quality system changes are a regular, recurring, and expected part of the production approval holder program. Circumstances or factors, however, which might provide grounds for concern in this area include the following:

(1) In general, large companies make more frequent, proactive changes to their quality systems, while smaller companies tend to make fewer, more reactive (i.e., FAA driven) changes.

APPENDIX 3. ACSEP RESOURCE TARGETING INDICATOR ASSESSMENT CRITERIA (CONT'D)

(2) The reasons behind any system changes are critical. Process improvements or enhancements are often positive, provided they're not motivated primarily by cost-cutting and CFR compliance is maintained. Changes based on FAA recommendations/findings are likewise to be encouraged. Changes initiated in pursuit of ISO-9000/9001 certification may warrant concern in light of CFR compatibility issues. Wholesale changes instituted by a new quality manager may trigger subsequent problems.

(3) The overall nature and magnitude of changes to the system should be considered. Minor, administrative changes are probably not an issue, but major, substantive changes, e.g., transitioning to TQM, SPC, etc., may give rise to potential quality system issues. If the FAA has not fully reviewed these changes, additional concern is probably warranted.

(4) If transitioning to team approach (TQM), look for characteristics of a good program: implementation plan, not rushing into it; thorough training program for affected staff; interim review and oversight of process during transition period; final inspection retained, with a unique stamp; and no diminution of "quality focus/mindset" once new methods are in place.

r. **Engineering/Design Changes (18)**. Engineering or design changes are likewise not uncommon or necessarily problematic; why they're initiated and how they're handled is the key. Look at the following criteria with respect to this indicator. Discussion of specific points with the ACO resource targeting focal point may also be beneficial.

(1) The strength and adequacy of the design data control system is paramount. All design changes should be well described and fully documented, in a timely and consistent manner. If they're not, be concerned. Look for positive characteristics such as simplicity and ease of administration. Automated systems, e.g., CAD, require qualified staff to manage them.

(2) The predominant nature of the changes is also important. Product enhancements, improvements, or customizing generally are not cause for concern. Changes made to correct problems, by contrast, may be. Customer-driven changes may reflect potential problems more frequently than self-generated ones. Major changes generally should cause greater concern than minor ones.

(3) Also consider the company/product context. Large companies building type-certificated products against newer designs will often have many design changes. Likewise, supplemental type certificates may also generate many changes. Newer, less experienced companies with many changes may raise a red flag.

s. **Increased Inspection Delegation to Suppliers (19)**. Increased delegation of inspection authority to suppliers can raise potentially serious quality concerns. Key considerations in evaluating this indicator include the following:

APPENDIX 3. ACSEP RESOURCE TARGETING INDICATOR ASSESSMENT CRITERIA (CONT'D)

(1) The strength and adequacy of the company's supplier control system is critical. The system should be well documented and stable, not subject to constant changes. How often they get out to their suppliers is also key. If the buyer doesn't visit or audit on a regular basis, that should be a red flag. If the company "qualifies" or trains its suppliers, that's often a definite plus.

(2) Look at methods/systems used by the company. If they've implemented dock-to-stock or just-in-time delivery programs, the potential for problems may be greater. Damage and content inspection alone, as opposed to receiving inspections or source sampling, can also be cause for concern. Delegation of testing is also a potential red flag.

(3) The suppliers themselves should have a quality system in place, either the buyer's or their own, with written procedures. There should also be documentation that procedures are followed. Absent these conditions, heightened concern is warranted.

(4) Any surveillance hand-offs between MIDO's should also be considered. If the local MIDO doesn't or can't oversee the supplier(s), and/or if information and reports aren't exchanged with the responsible PI on a regular basis, the potential for problems is usually much greater.

t. **Increased Use of Foreign Suppliers (20)**. Substantial growth in the number of foreign suppliers in recent years has raised a variety of new issues and concerns. In assessing this indicator, the following considerations should be paramount:

(1) The extent of control and oversight exercised by the approval holder is critical. Use of dock-to-stock or just-in-time delivery methods with foreign suppliers may be cause for concern. Infrequent visits to foreign suppliers by the prime should also raise a red flag. If the FAA is able and allowed to perform surveillance, that's a definite plus, provided any hand-offs are well managed.

(2) What the suppliers are doing or making is also important in assessing potential impact. If it's assembly only, there may be less cause for concern. If, on the other hand, they're producing major components or subsystems, or entire end products, the potential for quality issues is much greater. The priority or criticality of what they're producing is also of obvious importance.

(3) Look at the approval holder's rationale for using foreign suppliers. If it's primarily cost-cutting, or the result of an offset contract stipulation, there may be a basis for concern. On the other hand, joint ventures or agreements to gain access to specialized expertise or technology may be less problematic.

(4) The impact of any bilateral agreement should also be considered. If an agreement is in place, the civil aviation authority of the supplier's country conducts appropriate surveillance, and the information is shared with FAA, this may offset other concerns. If not, 100 percent incoming inspection of critical/priority items should be performed by the production approval holder.

APPENDIX 3. ACSEP RESOURCE TARGETING INDICATOR ASSESSMENT CRITERIA (CONT'D)

u. **New Design in Production (21)**. The introduction of a new design into the production system usually proceeds without major difficulty. Consider the following in assessing this indicator. Discussion of specific points with the ACO resource targeting focal point may also be beneficial.

(1) In most cases, new designs represent an evolution or iteration of what companies have already been building. Seldom is the change revolutionary or a major technological leap forward.

(2) The company's experience with related product lines is important. If the new design is a major departure from what they've done before, and the end item is really "new" to the company, then heightened concern is prudent. If, on the other hand, it's simply the latest version of something they've been building, there's likely to be little impact.

(3) The degree of change or adaptation required in the existing production system is perhaps most critical. Some new designs require no or minimal changes, while others involve major alterations or essentially new process(es). Either of these is potentially less problematic than one that requires many small, specialized, intricate, or easily missed changes.

(4) The origin of the new design may be a factor as well. Buying the design/approval, as opposed to developing an original in-house, in some cases may create transition or integration issues. Acquiring a new design through a merger or takeover likewise may create potential safety concerns.

APPENDIX 4. ACSEP RESOURCE TARGETING REPORTS

1. **PURPOSE**. This appendix explains the layout of the Directorate Report and the Office Report.

2. **TYPES OF REPORTS**. Two types of reports will be printed and distributed: the Directorate Report and the Office Report. The Directorate Report will list all facilities assessed within the directorate. An Office Report will be prepared for each MIDO, or MIO as applicable, and will list the facilities assessed within each MIDO, or MIO as applicable. Each type of report is formatted as follows:

a. **Facility Name**: Self-explanatory.

b. **Principal Inspector**: The name of the PI who completed the form.

c. **System Strength**: A rating of "Optimal," "Adequate," or "Marginal" will be indicated. System strength encompasses factors over which a facility generally has more direct control or influence, i.e., the stability of the organization, its performance history, and the various elements and influences which drive its production dynamics. A rating of "Optimal" indicates that the strength of the system in place has been assessed as having little potential impact on the integrity of FAA-approved design and product quality. A rating of "Adequate" indicates that the strength of the system in place has been assessed as having an average potential impact on the integrity of FAA-approved design and product quality. A rating of "Marginal" indicates that the strength of the system in place has been assessed as having a substantial potential impact on the integrity of FAA-approved design and product quality.

d. **Inherent Risk**: A rating of "Substantial," "Moderate," or "Minimal" will be indicated. Inherent risk encompasses factors which are generally associated with the type of business the facility has chosen to be in, and remain constant unless the facility changes its business. These factors are the level of technology with which the facility is working, and the criticality of the end unit or units of production. A rating of "Substantial" indicates that a facility's level of technology has been assessed as having a substantial potential impact on the integrity of FAA-approved design and product quality, and the unit criticality has a substantial potential impact on continued operational safety. A rating of "Moderate" indicates that a facility's level of technology has been assessed as having a moderate potential impact on the integrity of FAA-approved design and product quality, and the unit criticality has a moderate potential impact on continued operational safety. A rating of "Minimal" indicates that a facility's level of technology has been assessed as having little potential impact on the integrity of FAA-approved design and product quality, and the unit criticality has no potential impact on continued operational safety.

e. **Resource Targeting Group Assigned**: Self-explanatory.

3. **ELECTRONIC REPORTS**. The Office Report and the Directorate Report may be saved as Microsoft Excel files in order to facilitate the review process detailed in paragraphs 30b through 30e of the text of this order. Using the ACSEP Resource Targeting Facility Assessment System Roll Up software, the MIO RTA may convert the reports using the following method, and forward them via electronic mail:

APPENDIX 4. ACSEP RESOURCE TARGETING REPORTS (CONT'D)

a. **Report Conversion**. Each of the reports may be converted as follows:

(1) At the Main Menu, click on "Reports."

(2) Double click on "rptDirectorate" to view the Directorate Report, or on "rptMIDO" to view the Office Report.

(3) Enter the data requested on the screen.

(4) With the selected report on screen, click on "File/Output To."

(5) Click on "Microsoft Excel (*.xls)."

(6) Click on "OK."

(7) Choose the directory and file name where the report will be saved.

b. **Using the Electronic Report**. When converted to a Microsoft Excel spreadsheet, each report will list the applicable facilities, the assigned groups, the responsible MIDO, system strength, and inherent risk. When using this file during the MIO/ACO/MIDO review of the assigned groups, recommended adjustments to the assigned group can be entered in column A of the spreadsheet. The recommended adjustment should be annotated within parentheses in order to differentiate it from the assigned group. Written justification for the recommended adjustment can be entered in column F. See figure 1 below.

FIGURE 1. SAMPLE ELECTRONIC REPORT

A	B	C	D	E	F
Priority Group Conv	**Company**	**Office**	**System Strength**	**Inherent Risk**	
II	ABC Tire Corporation	Orlando	Adequate	Moderate	
II	Better Aircraft Parts	Orlando	Adequate	Moderate	
II (I)	XYZ Aircraft Company	Orlando	Optimal	Substantial	Foreign suppliers manufacture majority of complex parts. Facility has minimal staff assigned to monitor supplier control.

APPENDIX 5. ACSEP RESOURCE TARGETING MODEL VALIDATION PLAN

1. **PURPOSE**. This appendix explains the structure and application of the ACSEP resource targeting model validation plan. The objective of the plan is to ensure that the model consistently and accurately identifies those production approval holders presenting the greatest potential impact to continued operational safety. It also defines a basis for continually refining and modifying the model as required to achieve this objective. The plan utilizes several validations to accomplish these objectives.

2. **ACSEP RESOURCE TARGETING VALIDATIONS**. Each validation listed below identifies the data source(s) required for each validation element, the individuals or groups responsible for validating the element, and a brief description of the process for each validation element.

a. The following validations are conducted as integral parts of the annual assessment of facilities described in Chapter 3 of this order. They include elements built directly into the core structure of the model and its basic application processes. As such, these validations provide real-time validity checks on the ratings for the resource targeting indicators and unit criticality, and on the initial resource targeting group assignments generated by the model. As described in paragraphs 2a(1) and 2a(2) below, the various levels of input and review not only provide managerial oversight for the process but also allow for different perspectives in determining the final resource targeting group assignments for production approval holders.

(1) **Validation of Ratings for the Resource Targeting Indicators and Unit Criticality**.

(a) **Data Source(s)**: Form(s) 8100-9.

(b) **Parties Responsible for Validation**: Facility PI and MIDO manager.

(c) **Description**: Chapter 3 of this order requires that the PI discuss all facility assessments documented on Form 8100-9 with the MIDO manager prior to finalizing the ratings for the 21 resource targeting indicators and unit criticality. In so doing, the MIDO manager is provided an opportunity to help ensure consistency between and among PI's in the application of the model, and to provide a second opinion for complex or ambiguous cases.

(d) **Expected Outcome**: This validation provides a first level, normative validity check of the assessments entered on Form 8100-9.

(2) **Validation of Assigned Resource Targeting Groups and Associated Evaluation Intervals**.

(a) **Data Source(s)**: ACSEP resource targeting Office Reports and Directorate Reports.

(b) **Parties Responsible for Validation**: PI's, MIDO managers, ACO managers, and MIO managers.

APPENDIX 5. ACSEP RESOURCE TARGETING MODEL VALIDATION PLAN (CONT'D)

(c) **Description:** Chapter 3 of this order requires PI's, MIDO managers, and ACO managers to review the Office Reports and the draft Directorate Reports. It also provides the opportunity to recommend to the MIO manager a resource targeting group assignment which differs from that generated by the model for a particular facility.

(d) **Expected Outcome**: This validation seeks to determine that the knowledge and experience of the directorate staff is adequately reflected in an acceptable resource targeting group assignment for each facility assessed. This review and subsequent MIO manager approval validates that the evaluation interval assigned is appropriate based on any specific knowledge or experience that the PI, MIDO manager, or ACO manager may have concerning a specific facility.

b. The following validations are conducted annually following the completion of all scheduled ACSEP evaluations for the fiscal year. Since these validations are primarily data-driven, and aimed at the adequacy of the ACSEP resource targeting model elements, detailed planning for analysis and reporting will be required. Performance of the following validations is a primary responsibility within the scope of the quality improvement program identified in chapter 5 of this order. On an annual basis, the data identified below for each validation will be reviewed, analyzed for trends, and recommendations developed for modification or revision to the ACSEP resource targeting model when necessary to maintain or enhance its reliability as a predictor of potential safety impact.

(1) **Validation of the ACSEP Resource Targeting Model's Ability to Predict the Results of Future ACSEP Evaluations**.

(a) **Data source(s):** ACSEP database and ACSEP resource targeting Directorate Reports.

(b) **Parties Responsible for Validation**: AIR-100 and AIR-200.

(c) **Description:** AIR-100 and AIR-200 will collect the relevant data, design and perform the required analyses, and submit a report for deliberation under the ACSEP quality improvement program.

(d) **Expected Outcome**: This validation seeks to determine the degree to which the model's resource targeting group assignments predict the results of subsequent ACSEP's; e.g., did facilities assigned to resource targeting group I (greatest potential safety impact) yield the most significant findings and observations? Conversely, did group III and IV facilities produce no safety related findings?

(2) **Validation of the ACSEP Resource Targeting Model's Ability to Adequately Identify Appropriate Resource Targeting Groups**.

(a) **Data source(s)**: Chapter 3 of this order discusses how the impact indicator ratings are entered electronically to develop a resource targeting group. The individual impact indicator ratings are

APPENDIX 5. ACSEP RESOURCE TARGETING MODEL VALIDATION PLAN (CONT'D)

stored in a database table for eventual conversion into a resource targeting group. This database table, the ACSEP database, ACSEP evaluation reports, and completed Form(s) 8100-9 that contain adjustments to the resource targeting group and relevant written justifications are the data sources for this validation.

(b) **Parties Responsible for Validation**: AIR-100 and AIR-200.

(c) **Description**: AIR-100 and AIR-200 will collect the relevant data, design and perform the required analyses, and submit a report for deliberation under the ACSEP quality improvement program.

(d) **Expected Outcome**: This validation seeks to determine the degree to which the rating plan for the model's impact indicators predicts the appropriate resource targeting group assignments. Chapter 3 of this order requires PI's, MIDO managers, and ACO managers to review the ACSEP resource targeting Office Reports and the draft Directorate Reports. It also provides the opportunity to recommend to the MIO manager a resource targeting group assignment which differs from that generated by the model for a particular facility. Approved changes to resource targeting group adjustments are recorded on Form 8100-9. A copy of the annotated form is provided to AIR-200. The changes to the resource targeting groups and the written justifications will be analyzed to detect any patterns or trends in the data, and to determine the adequacy of the model's impact indicator weights and the indicator assessment criteria in Appendix 3 of this order. A small number of changes to the resource targeting groups is a strong nominal indicator of model validity; i.e., if a large majority of the model's resource targeting group assignments are accepted, then the knowledge and experience of the directorate staff is adequately reflected in the model.

(3) **Validation of the Continued Relevance of the ACSEP Resource Targeting Model's Impact Indicators**.

(a) **Data source(s)**: Appendix 2 of this order discusses how the impact indicator ratings are entered electronically to develop a resource targeting group. The individual impact indicator ratings are stored in a database table for eventual conversion into a resource targeting group. This database table is the data source for this validation.

(b) **Parties Responsible for Validation**: AIR-100 and AIR-200.

(c) **Description**: AIR-100 and AIR-200 will collect the relevant data, design and perform the required analyses, and submit a report for deliberation under the ACSEP quality improvement program.

APPENDIX 5. ACSEP RESOURCE TARGETING MODEL VALIDATION PLAN (CONT'D)

(d) **Expected Outcome**: This validation seeks to identify the model's impact indicators that do not significantly contribute to the identification of the resource targeting group assignment. The database table referenced in paragraph 2b(2)(a) above will be analyzed to identify impact indicators that are predominantly rated as "c" (not applicable), and to determine whether or not such indicators should continue to be used in the model.

APPENDIX 6. PREPARATION OF CLAUSES FOR CONTRACTS FOR SUPPORT SERVICES

1. **PURPOSE**. This appendix provides sample contract clauses and a sample certificate of nondisclosure for use in contracts for obtaining services to support ACSEP evaluations, database management, and system analyses.

2. **SAMPLE CLAUSES AND ATTACHMENT**. The following sample clauses provide the minimum requirements to be included in a contract for support services. Figure 1 shows a sample attachment to the Confidentiality of Information clause effecting support service personnel agreement to its terms and conditions.

a. The following clause is applicable to all Contractors.

H.1 Confidentiality of Information.

a. To the extent that the work under this contract requires that the Contractor be given access to confidential or proprietary business or technical information belonging to the government or other Companies, Designees, Contractors, or competitors, or to the extent that in performing the work under this contract, the Contractor gains access to government data through any means, then the Contractor shall, after receipt thereof, treat such information as confidential and agree not to appropriate such information to its own use or to disclose such information to third parties unless specifically authorized by the Contracting Officer in writing. The foregoing obligations, however, shall not apply to:

(1) Information which, at the time of receipt by the Contractor, is in public domain;

(2) Information which is published after receipt thereof by the Contractor or otherwise becomes part of the public domain through no fault of the Contractor;

(3) Information which the Contractor has in its possession at the time of receipt thereof and was not acquired directly or indirectly from the government or other companies;

(4) Information which the Contractor can demonstrate was received by it from a third party who did not require the Contractor to hold it in confidence.

**APPENDIX 6. PREPARATION OF CLAUSES
FOR CONTRACTS FOR SUPPORT SERVICES(CONT'D)**

b. The Contractor shall execute the certificate set forth as Attachment 1 for each employee who will participate as an evaluator under this contract. The Certificate shall be presented by the contractor's employees or forwarded by the FAA to various companies who may be evaluated under the contract.

b. The following clause is applicable to support service personnel who will support ACSEP evaluations, and should be used in conjunction with clause H.1 above.

H.2 Relationships. Contractor shall provide support to the government by completing work assigned under this contract. Support shall be provided in the following areas: auditing of quality and engineering functions; collection, evaluation, and processing of data; and written documentation of incidents not in compliance with ACSEP evaluation criteria. The Contractor shall not provide technical direction under the Contract. The Contractor shall abide by any limitations of access and entry to proprietary or sensitive processes or systems that the government may stipulate. Although the effort under this contract may include the collection and processing of data, as well as the formulation of findings, observations, and recommendations, the final disposition of all information shall remain the sole province of the government.

c. The following clause is applicable to support service personnel who will support database management or system analysis, and should be used in conjunction with clause H.1 above.

H.2 Relationships. Contractor shall provide support to the government by completing work assigned under this contract. Support shall be provided in the following areas: input, analysis, and trending of data; compilation of analytical reports. The final disposition of all information shall remain the sole province of the government.

APPENDIX 6. PREPARATION OF CLAUSES FOR CONTRACTS FOR SUPPORT SERVICES(CONT'D)

FIGURE 1. SAMPLE CERTIFICATE OF NONDISCLOSURE

Attachment 1. Certificate of Nondisclosure

The undersigned hereby agrees to the terms and conditions set forth in the clause below:

H.1 Confidentiality of Information.

a. To the extent that the work under this contract requires that the Contractor be given access to confidential or proprietary business or technical information belonging to the government or other Companies, Designees, Contractors, or competitors, or to the extent that in performing the work under this contract, the Contractor gains access to government data through any means, then the Contractor shall, after receipt thereof, treat such information as confidential and agree not to appropriate such information to its own use or to disclose such information to third parties unless specifically authorized by the Contracting Officer in writing. The foregoing obligations, however, shall not apply to:

(1) Information which, at the time of receipt by the Contractor, is in public domain;

(2) Information which is published after receipt thereof by the Contractor or otherwise becomes part of the public domain through no fault of the Contractor;

(3) Information which the Contractor has in its possession at the time of receipt thereof and was not acquired directly or indirectly from the government or other companies;

(4) Information which the Contractor can demonstrate was received by it from a third party who did not require the Contractor to hold it in confidence.

(5) The Contractor shall execute the certificate set forth as Attachment 1 for each employee who will participate as an evaluator under this contract. The Certificate shall be presented by the contractor's employees or forwarded by the FAA to various companies who may be evaluated under the contract.

_____ _____
Authorized Contractor Agent Date Contractor Employee Date

APPENDIX 7. PREPARATION OF NOTIFICATION LETTER TO PAH OR ASSOCIATE FACILITY

1. **PURPOSE**. This appendix provides instructions and sample paragraphs for preparing a notification letter to a PAH or associate facility for a scheduled evaluation at its own facility, or at a satellite MMF that is not under surveillance hand-off procedures.

2. **SAMPLE PARAGRAPHS**. The following sample paragraphs provide the minimum information to be included in a notification letter to a PAH or associate facility. Additional paragraphs may be added as necessary to provide specific directorate or AIR-100/200 information.

a. **First Paragraph**. The first paragraph is introductory and serves to establish the regulatory basis for the evaluation, and to identify the facility and type of approval being evaluated. A sample paragraph applicable to all approval types follows:

"The Federal Aviation Administration (FAA), in accordance with its responsibilities under the recodified Federal Aviation Act of 1958 (as amended) and applicable Code of Federal Regulations, has selected (name of PAH/associate facility/satellite MMF), located in (city, state, country), for the conduct of an evaluation. Your certification as a (type of approval holder/MMF) has been approved by the FAA contingent upon the administrator's right to evaluate and inspect your organization, facilities, product, and records. This includes your entire network of suppliers and approval extensions, when appropriate, both in the United States and in other countries or jurisdictions."

b. **Second Paragraph**. The second paragraph identifies the dates of the evaluation, and provides a general outline of the functions to be evaluated. The following sample paragraphs may be used as applicable.

(1) **Production Approval Holder and Associate Facility in the U.S.**

"The evaluation of your facility is scheduled to be conducted from (start date) to (end date) under the FAA's Aircraft Certification Systems Evaluation Program (ACSEP). This evaluation will be broad based in nature, and will encompass elements such as design data control, manufacturing processes, testing, and supplier control. Procedures and records will be examined in addition to a "hands-on" witnessing of relevant system processes."

(2) **Associate Facility in Another Country or Jurisdiction**.

"The evaluation of your facility is scheduled to be conducted from (start date) to (end date) under the FAA's Aircraft Certification Systems Evaluation Program (ACSEP). This evaluation will be broad based in nature, and will encompass elements such as design data control, manufacturing processes, testing, and supplier control. Procedures and records will be examined in addition to a “hands-on” witnessing of relevant system processes. It is not an examination of the policies or practices of the civil air authority of (name of country or jurisdiction)."

APPENDIX 7. PREPARATION OF NOTIFICATION LETTER TO PAH OR ASSOCIATE FACILITY (CONT'D)

(3) **Satellite MMF in the U.S**.

"The evaluation of (name of satellite MMF) is scheduled to be conducted from (start date) to (end date) under the FAA's Aircraft Certification Systems Evaluation Program (ACSEP). This evaluation will be broad based in nature, and will encompass elements related to maintenance and return to service of articles for which you are rated, including preventive maintenance. Procedures and records will be examined in addition to a “hands-on” witnessing of relevant system processes."

(4) **Satellite MMF in Another Country or Jurisdiction**.

"The evaluation of (name of satellite MMF) is scheduled to be conducted from (start date) to (end date) under the FAA's Aircraft Certification Systems Evaluation Program (ACSEP). This evaluation will be broad based in nature, and will encompass elements related to maintenance and return to service of articles for which you are rated, including preventive maintenance. Procedures and records will be examined in addition to a “hands-on” witnessing of relevant system processes. It is not an examination of the policies or practices of the civil air authority of (name of country or jurisdiction)."

c. **Third Paragraph**. The third paragraph identifies the approximate number of evaluators who will be participating in the evaluation, the team leader or principal evaluator, and any support service personnel who may be supporting the team. The following sample paragraphs may be used as applicable.

(1) **Identification of Team Number/Team Leader**.

"The FAA evaluation team will consist of approximately (total number) members. The FAA team leader designated for this evaluation is Mr./Ms. (name) who may be reached at (telephone number). His/her address is: (office address)."

(2) **Identification of the Principal Evaluator**.

"The principal evaluator for this evaluation is Mr./Ms. (name) who may be reached at (telephone number). His/her address is: (office address)."

(3) **Identification of Support Service Personnel**. When support service personnel are used to support an evaluation, a statement should follow the sentences in paragraph 2c(1) above to state the general purpose of the support service personnel, advise of the FAA certificate of nondisclosure, request special requirements, and identify the support service personnel. The following sample may be used:

APPENDIX 7. PREPARATION OF NOTIFICATION LETTER TO PAH OR ASSOCIATE FACILITY (CONT'D)

"The evaluation team will be supported by a support service person who will be performing specific duties on behalf of the FAA. This person is identified below. This person will sign an FAA certificate of nondisclosure which will be forwarded to the facility via the FAA (principal inspector or assigned engineer) prior to the start of the evaluation. Please inform the FAA of any special requirements necessary for this person to access your facilities and restricted areas.

Support Service Person's Name	Company Affiliation
(Name)	(Company)"

d. **Fourth Paragraph**. The fourth paragraph requests notification to satellite MMF's, when appropriate. It also requests applicable security requirements and points of contact. The following sample paragraphs may be used as applicable.

(1) **Production Approval Holder and Associate Facility**.

"Please inform Mr./Ms. (name of team leader/principal evaluator) of all security requirements for this facility so that appropriate clearances can be obtained. In addition, please provide the name, title, address, and telephone number of an individual who will serve as the company point of contact for this evaluation."

(2) **Satellite MMF**.

"Please inform (name of satellite MMF) about the conduct of this planned evaluation. Please inform Mr./Ms. (name of team leader) of all security requirements for (name of satellite MMF) in order that appropriate clearances and other arrangements can be obtained. In addition, please provide the names, titles, addresses and telephone numbers of who will serve as your company's and (name of satellite MMF) points of contact for this evaluation."

e. **Fifth Paragraph**. The fifth paragraph requests appropriate senior management attendance at pre- and post-evaluation conferences, as well as cognizant technical and supervisory personnel. It also requests assignment of knowledgeable escorts. The following sample paragraphs may be used as applicable.

(1) **Production Approval Holder and Associate Facility**.

"Attendance by a representative of senior management responsible for the facility to be evaluated, and cognizant technical and supervisory personnel, is requested during the pre- and post-evaluation conferences. We further suggest that escorts who are knowledgeable of the various areas to be visited be provided to ensure the evaluation is conducted smoothly and with a minimum of disruption to your staff."

APPENDIX 7. PREPARATION OF NOTIFICATION LETTER TO PAH OR ASSOCIATE FACILITY (CONT'D)

(2) **Satellite MMF**.

"Attendance by a representative of (name of satellite MMF) senior management and cognizant technical and supervisory personnel is requested during the pre- and post-evaluation conferences. It is further suggested that escorts who are knowledgeable of the various areas to be visited be provided by (name of satellite MMF) to ensure the evaluation is conducted smoothly and with a minimum of disruption. A representative of your company is requested to be present at these conferences and throughout the evaluation."

f. **Sixth Paragraph**. The sixth paragraph requests senior management feedback to the cognizant ACO or MIO manager on the conduct of the ACSEP evaluation, utilizing FAA Form 8100-7. This form should be prepared electronically, and may be provided to the facility to be evaluated in either electronic or printed format.

(1) Prepare FAA Form 8100-7 (figure 1) by typing in:

(a) **Block 1**. The ACSEP number.

(b) **Block 2**. The name of the evaluated facility.

(c) **Block 3**. The beginning and end dates of the evaluation.

(d) **Block 4**. The address of the cognizant ACO or MIO manager. Enclose a prepaid self-addressed envelope in which the facility can return the customer feedback report.

(2) The following sample paragraphs may be used as applicable.

(a) **Production Approval Holder and Associate Facility**.

"One of the primary features of ACSEP is continuous quality improvement. As part of this process, it is important for us to know what your senior management thought about the conduct of the ACSEP evaluation. We therefore encourage senior management to complete the attached FAA Form 8100-7, ACSEP Evaluation Customer Feedback Report, and return it in the enclosed prepaid self-addressed envelope within 30 days of the post-evaluation conference."

(b) **Satellite MMF**.

"One of the primary features of ACSEP is continuous quality improvement. As part of this process, it is important for us to know what the senior management of (name of satellite MMF) thought about the conduct of the ACSEP evaluation. We therefore encourage you to include the

APPENDIX 7. PREPARATION OF NOTIFICATION LETTER TO PAH OR ASSOCIATE FACILITY (CONT'D)

attached FAA Form 8100-7, ACSEP Evaluation Customer Feedback Report, and prepaid self-addressed envelope when you inform (name of satellite MMF) about the conduct of this planned evaluation. We also encourage your representative, as appropriate, to coordinate with (name of satellite MMF) in submitting joint feedback. We would appreciate return of the feedback report within 30 days of the post-evaluation conference."

g. **Final Paragraph**. The final paragraph is a closing paragraph indicating to whom specific questions concerning the evaluation should be addressed. It directs that questions relative to scheduling be addressed to the lead evaluation office or requesting MIDO, and that questions relative to the conduct of the evaluation be addressed to the team leader/principal evaluator. The following sample paragraph may be used as applicable.

"If you have any questions concerning the scheduling of this evaluation, please feel free to contact me. If you have any questions concerning the conduct of the evaluation, please contact the (team leader/principal evaluator) Mr./Ms. (name of team leader/principal evaluator), at the above address and telephone number."

FIGURE 1. SAMPLE FAA FORM 8100-7, ACSEP EVALUATION CUSTOMER FEEDBACK REPORT

Form Approved
OMB No. 2120-0605

U.S. Department of Transportation
Federal Aviation Administration

ACSEP EVALUATION CUSTOMER FEEDBACK REPORT

ACSEP No. **(1)** _____

Name of Evaluated Facility: **(2)** _____

Dates Evaluated: **(3)** _____

As part of the Federal Aviation Administration (FAA) and industry continuous improvement efforts for the Aircraft Certification Systems Evaluation Program (ACSEP), this form is provided for your use in furnishing the FAA with comments regarding the conduct of the evaluation recently conducted at your facility. We sincerely encourage you to tell us how we did, and thank you for the time you will take to support our quality improvement and customer service objectives.

Please check the appropriate rating in each of the tables below, and provide any comments that you deem appropriate.

1. Pre-evaluation arrangements	Unsatisfactory	Poor	Satisfactory	Good	Excellent
• Timeliness	☐	☐	☐	☐	☐
• Coordination/Planning	☐	☐	☐	☐	☐

Comments/recommendations for improvement:

2. Pre-evaluation conference	Unsatisfactory	Poor	Satisfactory	Good	Excellent
• Communication	☐	☐	☐	☐	☐
• Presentation	☐	☐	☐	☐	☐
• Purpose of evaluation explained	☐	☐	☐	☐	☐

Comments/recommendations for improvement:

FAA Form 8100-7 (4-97)

FIGURE 1. SAMPLE FAA FORM 8100-7, ACSEP EVALUATION CUSTOMER FEEDBACK REPORT (CONT'D)

ACSEP EVALUATION CUSTOMER FEEDBACK REPORT, con't

3. Daily meetings	Unsatisfactory	Poor	Satisfactory	Good	Excellent
• Explanation of findings/observations	☐	☐	☐	☐	☐
• Resolution of issues	☐	☐	☐	☐	☐

Comments/recommendations for improvement:

4. Post-evaluation conference	Unsatisfactory	Poor	Satisfactory	Good	Excellent
• Communication	☐	☐	☐	☐	☐
• Explanation of executive summary	☐	☐	☐	☐	☐
• Explanation of follow-up actions	☐	☐	☐	☐	☐

Comments/recommendations for improvement:

5. Conduct of the evaluation	Unsatisfactory	Poor	Satisfactory	Good	Excellent
• Team professionalism	☐	☐	☐	☐	☐
• Overall technical skills of the ACSEP team	☐	☐	☐	☐	☐

Comments/recommendations for improvement:

Signature (optional) Date

Please return completed form to:

(4)

FAA Form 8100-7 (4-97)

APPENDIX 8. PREPARATION OF NOTIFICATION LETTER TO A SATELLITE MMF UNDER SURVEILLANCE HAND-OFF PROCEDURES

1. **PURPOSE**. This appendix provides instructions and sample paragraphs for preparing a notification letter to a satellite MMF under surveillance hand-off procedures for a scheduled evaluation at its own facility.

2. **SAMPLE PARAGRAPHS**. The following sample paragraphs provide the minimum information to be included in a notification letter to a satellite MMF under surveillance hand-off procedures. Additional paragraphs may be added as necessary to provide specific directorate or AIR-100/200 information.

a. **First Paragraph**. The first paragraph is introductory and serves to establish the regulatory basis for the evaluation, and to identify the facility and type of approval being evaluated. A sample paragraph follows:

"The Federal Aviation Administration (FAA), in accordance with its responsibilities under the recodified Federal Aviation Act of 1958 (as amended) and applicable Code of Federal Regulations, has selected (name of satellite MMF), located in (city, state, country), a (satellite MMF of) (name of parent MMF) for the conduct of an evaluation. The certification of the (parent MMF) has been approved by the FAA contingent upon the administrator's right to evaluate and inspect that organization, its facilities, product, and records. This includes the entire network of suppliers and approval extensions, when appropriate, both in the United States and in other countries or jurisdictions."

b. **Second Paragraph**. The second paragraph identifies the dates of the evaluation, and provides a general outline of the functions to be evaluated. The following sample paragraphs may be used as applicable.

"The evaluation of your facility is scheduled to be conducted from (start date) to (end date) under the FAA's Aircraft Certification Systems Evaluation Program (ACSEP). This evaluation will be broad based in nature, and will encompass elements related to maintenance and return to service of articles for which you are rated, including preventive maintenance. Procedures and records will be examined in addition to a “hands-on” witnessing of relevant system processes."

c. **Third Paragraph**. The third paragraph identifies the approximate number of evaluators who will be participating in the evaluation, the team leader or principal evaluator, and any support service personnel who may be supporting the team. The following sample paragraphs may be used as applicable.

APPENDIX 8. PREPARATION OF NOTIFICATION LETTER TO A SATELLITE MMF UNDER SURVEILLANCE HAND-OFF PROCEDURES (CONT'D)

(1) **Identification of Team Number/Team Leader**.

"The FAA evaluation team will consist of approximately (total number) members. The FAA team leader designated for this evaluation is Mr./Ms. (name) who may be reached at (telephone number). His/her address is: (office address)."

(2) **Identification of the Principal Evaluator**.

"The principal evaluator for this evaluation is Mr./Ms. (name) who may be reached at (telephone number). His/her address is: (office address)."

(3) **Identification of Support Service Personnel**. When support service personnel are used to support an evaluation, a statement should follow the sentences in paragraph 2c(1) above to state the general purpose of the support service personnel, advise of the FAA certificate of nondisclosure, request special requirements, and identify the support service personnel. The following sample may be used:

"The evaluation team will be supported by a support service person who will be performing specific duties on behalf of the FAA. This person is identified below. This person will sign an FAA certificate of nondisclosure which will be forwarded to the facility via the FAA (principal inspector or assigned engineer) prior to the start of the evaluation. Please inform the FAA of any special requirements necessary for this person to access your facilities and restricted areas.

Support Service Person's Name	Company Affiliation
(Name)	(Company)"

d. **Fourth Paragraph**. The fourth paragraph requests applicable security requirements and points of contact. The following sample paragraph may be used as applicable.

"Please inform Mr./Ms. (name of team leader/principal evaluator) of all security requirements for this facility so that appropriate clearances can be obtained. In addition, please provide the name, title, address, and telephone number of an individual who will serve as the company point of contact for this evaluation."

e. **Fifth Paragraph**. The fifth paragraph requests appropriate senior management attendance at pre- and post-evaluation conferences, as well as cognizant technical and supervisory personnel. It also requests assignment of knowledgeable escorts. The following sample paragraph may be used as applicable.

APPENDIX 8. PREPARATION OF NOTIFICATION LETTER TO A SATELLITE MMF UNDER SURVEILLANCE HAND-OFF PROCEDURES (CONT'D)

"Attendance by a representative of (name of satellite MMF) senior management and cognizant technical and supervisory personnel is requested during the pre- and post-evaluation conferences. It is further suggested that escorts who are knowledgeable of the various areas to be visited be provided to ensure the evaluation is conducted smoothly and with a minimum of disruption. It is recommended that a representative of (name of parent MMF) be requested to be present at these conferences and throughout the evaluation."

f. **Sixth Paragraph**. The sixth paragraph requests senior management feedback to the cognizant ACO or MIO manager on the conduct of the ACSEP evaluation, utilizing Form 8100-7. Complete the feedback report form as specified in appendix 7, paragraph 2f(1). The following sample paragraph may be used as applicable.

"One of the primary features of ACSEP is continuous quality improvement. As part of this process, it is important for us to know what your senior management thought about the conduct of the ACSEP evaluation. We therefore encourage senior management to complete the attached FAA Form 8100-7, ACSEP Evaluation Customer Feedback Report, and return it in the enclosed prepaid self-addressed envelope within 30 days of the post-evaluation conference."

g. **Final Paragraph**. The final paragraph is a closing paragraph indicating to whom specific questions concerning the evaluation should be addressed. It directs that questions relative to scheduling be addressed to the lead evaluation office, and that questions relative to the conduct of the evaluation be addressed to the team leader/principal evaluator. The following sample paragraph may be used as applicable.

"If you have any questions concerning the scheduling of this evaluation, please feel free to contact me. If you have any questions concerning the conduct of the evaluation, please contact the (team leader/principal evaluator), Mr./Ms. (name of team leader/principal evaluator), at the above address and telephone number."

APPENDIX 9. PREPARATION OF NOTIFICATION LETTER TO A DELEGATED FACILITY

1. **PURPOSE**. This appendix provides instructions and sample paragraphs for preparing a notification letter to a delegated facility for a scheduled evaluation at its facility.

2. **SAMPLE PARAGRAPHS**. The following sample paragraphs provide the minimum information to be included in a notification letter to a delegated facility. Additional paragraphs may be added as necessary to provide specific directorate or AIR-100/200 information.

a. **First Paragraph**. The first paragraph is introductory and serves to establish the regulatory basis for the evaluation, and to identify the facility and type of approval being evaluated. A sample paragraph applicable to all delegated facilities follows:

"The Federal Aviation Administration (FAA), in accordance with its responsibilities under the recodified Federal Aviation Act of 1958 (as amended) and applicable Code of Federal Regulations, has selected (name of facility), located in (city, state, country), for the conduct of an evaluation. Your authorization as a (type of delegated facility) has been approved by the FAA contingent upon the administrator's right to evaluate and inspect your organization, facilities, products, articles, and records. This includes your entire network of suppliers, when appropriate, both in the United States and in other countries."

b. **Second Paragraph**. The second paragraph identifies the dates of the evaluation, and provides a general outline of the functions to be evaluated. The following sample paragraph may be used as applicable.

"The evaluation of your facility is scheduled to be conducted from (start date) to (end date) under the FAA's Aircraft Certification Systems Evaluation Program (ACSEP). This evaluation will be broad based in nature, and will encompass elements such as project management, design control, testing, and conformity inspection. Procedures and records will be examined in addition to “hands-on” witnessing of relevant system processes."

c. **Third Paragraph**. The third paragraph identifies the approximate number of evaluators who will be participating in the evaluation, the team leader or principal evaluator, and any support service personnel who may be supporting the team. The following sample paragraphs may be used as applicable.

(1) **Identification of Team Number/Team Leader**.

"The FAA evaluation team will consist of approximately (total number) members. The FAA team leader designated for this evaluation is Mr./Ms. (name) who may be reached at (telephone number). His/her address is: (office address)."

APPENDIX 9. PREPARATION OF NOTIFICATION LETTER TO A DELEGATED FACILITY (CONT'D)

(2) **Identification of the Principal Evaluator**.

"The principal evaluator for this evaluation is Mr./Ms. (name) who may be reached at (telephone number). His/her address is: (office address)."

(3) **Identification of Support Service Personnel**. When support service personnel are used to support an evaluation, a statement should follow the sentences in paragraph 2c(1) above to state the general purpose of the support service personnel, advise of the FAA certificate of nondisclosure, request special requirements, and identify the support service personnel. The following sample may be used:

"The evaluation team will be supported by a support service person who will be performing specific duties on behalf of the FAA. This person is identified below. This person will sign an FAA certificate of nondisclosure which will be forwarded to the facility via the FAA (principal inspector or assigned engineer) prior to the start of the evaluation. Please inform the FAA of any special requirements necessary for this person to access your facilities and restricted areas.

Support Service Person's Name	Company Affiliation
(Name)	(Company)"

d. **Fourth Paragraph**. The fourth paragraph requests applicable security requirements and points of contact. The following sample paragraphs may be used as applicable.

"Please inform Mr./Ms. (name of team leader/principal evaluator) of all security requirements for this facility so that appropriate clearances can be obtained. In addition, please provide the name, title, address, and telephone number of an individual who will serve as the company point of contact for this evaluation."

e. **Fifth Paragraph**. The fifth paragraph requests appropriate senior management attendance at pre- and post-evaluation conferences, as well as cognizant technical and supervisory personnel. It also requests assignment of knowledgeable escorts. The following sample paragraphs may be used as applicable.

"Attendance by a representative of senior management responsible for the facility to be evaluated, and cognizant technical and supervisory personnel, is requested during the pre- and post-evaluation conferences. We further suggest that escorts who are knowledgeable of the various areas to be visited be provided to ensure the evaluation is conducted smoothly and with a minimum of disruption to your staff."

APPENDIX 9. PREPARATION OF NOTIFICATION LETTER TO A DELEGATED FACILITY (CONT'D)

f. **Sixth Paragraph**. The sixth paragraph requests senior management feedback to the cognizant ACO or MIO manager on the conduct of the ACSEP evaluation, utilizing Form 8100-7. Complete the feedback report form as specified in appendix 7, paragraph 2f(1). The following sample paragraph may be used as applicable.

"One of the primary features of ACSEP is continuous quality improvement. As part of this process, it is important for us to know what your senior management thought about the conduct of the ACSEP evaluation. We therefore encourage senior management to complete the attached FAA Form 8100-7, ACSEP Evaluation Customer Feedback Report, and return it in the enclosed prepaid self-addressed envelope within 30 days of the post-evaluation conference."

g. **Final Paragraph**. The final paragraph is a closing paragraph indicating to whom specific questions concerning the evaluation should be addressed. It directs that questions relative to scheduling be addressed to the lead evaluation office, and that questions relative to the conduct of the evaluation be addressed to the team leader/principal evaluator. The following sample paragraph may be used as applicable.

"If you have any questions concerning the scheduling of this evaluation, please feel free to contact me. If you have any questions concerning the conduct of the evaluation, please contact the (team leader/principal evaluator) Mr./Ms. (name of team leader/principal evaluator), at the above address and telephone number."

APPENDIX 10. PREPARATION OF NOTIFICATION LETTER TO THE CIVIL AIR AUTHORITY OF THE HOST COUNTRY OR JURISDICTION

1. **PURPOSE**. This appendix provides instructions and sample paragraphs for preparing a notification letter to the civil air authority in the country or jurisdiction where an ACSEP evaluation will be conducted. The notification letter should be addressed to the Production/ACSEP contact for the civil air authority being notified. A list of civil air authorities and respective contacts is available from AIR-4, International Airworthiness Programs Staff.

2. **SAMPLE PARAGRAPHS**. The following sample paragraphs provide the minimum information to be included in a notification letter to a civil air authority concerning a scheduled evaluation. Additional paragraphs may be added as necessary to provide specific directorate or AIR-100/200 information.

a. **First Paragraph**. The first paragraph is introductory and serves to establish the regulatory basis for the evaluation, and to identify the facility being evaluated. A sample paragraph that may be used is as follows:

"The Federal Aviation Administration (FAA), in accordance with its responsibilities under the recodified Federal Aviation Act of 1958 (as amended) and applicable Code of Federal Regulations, has selected (name of facility), located in (name of country or jurisdiction), for the conduct of an evaluation."

b. **Second Paragraph**. The second paragraph identifies the dates of the evaluation, and provides a general outline of the functions to be evaluated. It will emphasize that the evaluation is not an examination of the policies or practices of the civil air authority. The following sample paragraphs may be used as applicable.

"The evaluation of (name of facility) is scheduled to be conducted from (start date) to (end date) under the FAA's Aircraft Certification Systems Evaluation Program (ACSEP). This evaluation will be broad based in nature, and will encompass elements such as design data control, manufacturing processes, testing, and supplier control. Procedures and records will be examined in addition to a "hands-on" witnessing of relevant system processes. It is not an examination of the policies or practices of the civil air authority of (name of country or jurisdiction)."

c. **Third Paragraph**. The third paragraph identifies the approximate number of evaluators who will be participating in the evaluation, the team leader or principal evaluator, and any support service personnel who may be supporting the team. The following sample paragraphs may be used as applicable.

(1) **Identification of Team Number/Team Leader**.

"The FAA evaluation team will consist of approximately (total number) members. The FAA team leader designated for this evaluation is Mr./Ms. (name) who may be reached at (telephone number). His/her address is: (office address)."

APPENDIX 10. PREPARATION OF NOTIFICATION LETTER TO THE CIVIL AIR AUTHORITY OF THE HOST COUNTRY OR JURISDICTION (CONT'D)

(2) **Identification of the Principal Evaluator**.

"The principal evaluator for this evaluation is Mr./Ms. (name) who may be reached at (telephone number). His/her address is: (office address). "

(3) **Identification of Support Service Personnel**. When support service personnel are used to support an evaluation, a statement should follow the sentences in paragraph 2c(1) to state the general purpose of the support service personnel, advise of the FAA certificate of nondisclosure, and identify the support service personnel. The following sample paragraph may be used:

"The evaluation team will be supported by a support service person who will be performing specific duties on behalf of the FAA. This person is identified below. This person will sign an FAA certificate of nondisclosure which will be forwarded to (name of facility) prior to the start of the evaluation.

Support Service Person's Name	Company Affiliation
(Name)	(Company)"

d. **Fourth Paragraph**. The fourth paragraph serves to invite the civil air authority to participate in the evaluation as an observer, and to identify the personnel who may be involved. The following sample paragraph may be used:

"You are invited to have a member of your staff participate in the evaluation as an observer. Please provide to the FAA (team leader/principal evaluator) the name, title, address, and telephone number of who will serve as your observer for this evaluation, and whom we may contact for information and further coordination."

e. **Final Paragraph**. The final paragraph is a closing paragraph which encourages any questions concerning the evaluation to be addressed to the team leader/principal evaluator. The following sample paragraph may be used as applicable.

"If you have any questions concerning this evaluation, please feel free to contact Mr./Ms. (name of team leader) at the above address and telephone number."

APPENDIX 11. TEAM LEADER/PRINCIPAL EVALUATOR CHECKLIST FOR EVALUATIONS PERFORMED IN OTHER COUNTRIES OR JURISDICTIONS

1. **PURPOSE**. This appendix provides a team leader or principal evaluator with basic information to plan and coordinate an ACSEP evaluation in other countries or jurisdictions.

2. **SPECIFIC GUIDANCE**. The following checklist may be used to assist in planning and coordinating an evaluation in other countries or jurisdictions:

a. Obtain the following information for yourself, and from each team member when you are acting as team leader. Identify if visa is required for yourself, and for the evaluation team when you are acting as the team leader.

(1) Name.

(2) Position Title.

(3) Home Address and Phone Number.

(4) Passport No. and Expiration Date.

(5) Date of Birth.

(6) Whom to Notify in the Case of an Emergency.

b. Identify the PAH or associate facility contact.

c. Ensure that all security or other special requirements are cleared by the PAH or associate facility.

d. Identify the the precise location of any associate facility to be evaluated.

(1) Name of facility.

(2) Address.

(3) Telephone/FAX Number.

(4) Contact Individual.

(5) Map

e. Verify that a notification letter has been sent to the CAA.

APPENDIX 11. TEAM LEADER/PRINCIPAL EVALUATOR CHECKLIST FOR EVALUATIONS PERFORMED IN OTHER COUNTRIES OR JURISDICTIONS (CONT'D)

f. Make hotel reservations for yourself, and the evaluation team when you are acting as team leader. Obtain assistance from the area FAA Representative when necessary.

g. Obtain from the PI or AE of the PAH or associate facility all pertinent information on the facility to be visited.

h. Identify special requirements for the evaluation, such as baggage handling, immunizations, travel restrictions, safety shoes, etc. Notify each team member of these requirements when acting as team leader. Advise team members to make their own travel arrangements, and to provide their itineraries to the team leader.

i. As team leader, verify with all team members that visas have been obtained and travel arrangements completed.

j. Identify the nearest United States Embassy or Consulate, including telephone number.

k. Verify that a country clearance request has been sent to the United States Embassy.

l. Obtain the address and location of the nearest U.S. hospital. Obtain assistance from the area FAA Representative when necessary.

APPENDIX 12. NOTIFICATION LETTER REQUIREMENTS SUMMARY

1. **PURPOSE**. This appendix provides a tabular summary of the primary notification letter requirements identified in chapter 4 of this order.

2. **DESCRIPTION**. Figure 1 provides a summary of notification letter requirements for which the lead evaluation office is responsible according to facility type. It identifies the type of notification activity required and when the notification activity should be accomplished.

FIGURE 1. NOTIFICATION LETTER REQUIREMENTS SUMMARY

FACILITY TO BE EVALUATED	NOTIFICATION ACTIVITY	TIME TABLE (days prior to evaluation)	
		U.S.	OTHER COUNTRIES & JURISDICTIONS
♦ **PAH** ♦ **Associate Facility** ***(Within area of responsibility)*** Ref. paras. 45a(1), 45b(1), and 46	❶Letter to facility ❷Copy to designated team leader or principal evaluator ❸Copy to PI/AE ❹FAX/Letter to CAA	50 days 50 days 50 days N/A	75 days 75 days 75 days 75 days
♦ **Delegated Facility** ♦ **Delegated facility that is also a PAH** Ref. paras. 45a(2) and 45(a)3	❶Letter to facility ❷Memo to cognizant MIO/MIDO ❸ Copy to designated team leader or principal evaluator ❹ Copy to PI/AE	50 days 50 days 50 days 50 days	N/A N/A N/A N/A

APPENDIX 12. NOTIFICATION LETTER REQUIREMENTS SUMMARY (CONT'D)

FIGURE 1. NOTIFICATION LETTER REQUIREMENTS SUMMARY (CONT'D)

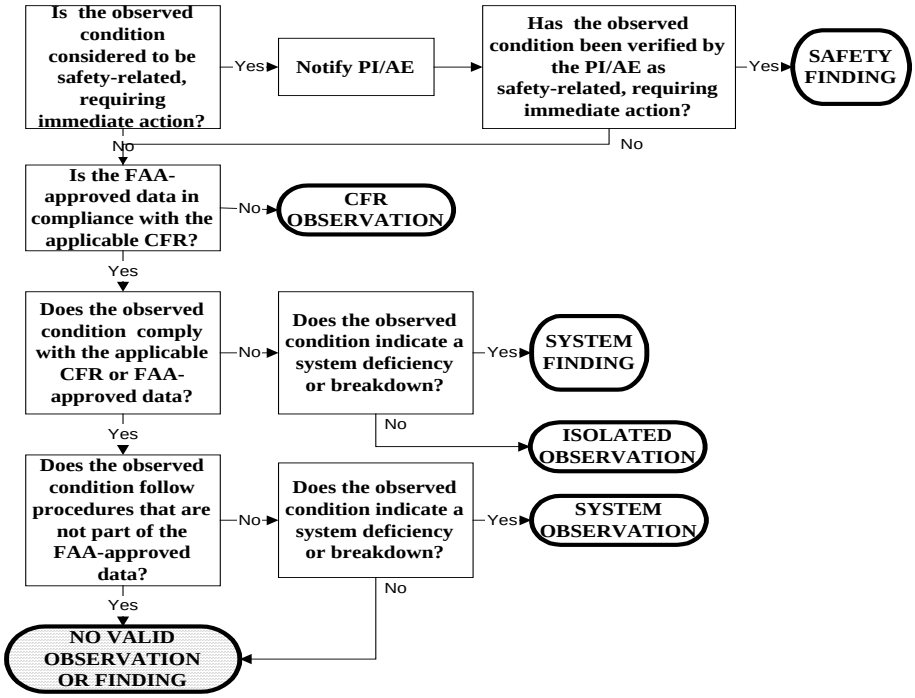
FACILITY TO BE EVALUATED	NOTIFICATION ACTIVITY	TIME TABLE (days prior to evaluation)	
		U.S.	OTHER COUNTRIES & JURISDICTIONS
(Continued) ♦ **Delegated Facility** ♦ **Delegated facility that is also a PAH** Ref. paras. 45a(2) and 45(a)3	❺Copy to the FSDO that has certification responsibility for the repair station or operator where the delegated facility resides (DOA/SFAR-36 only)	50 days	N/A
♦ **Satellite MMF** ***(Within area of responsibility)*** Ref. par. 45a(4)	❶Letter to PAH ❷Copy to designated team leader or principal evaluator ❸Copy to PI/AE	50 days 50 days 50 days	N/A N/A N/A
♦ **Satellite MMF** ***(Under hand-off Procedures)*** Ref. par. 45a(5)	❶Letter to facility ❷Copy to designated team leader or principal evaluator ❸Copy to requesting MIDO ❹Copy to PAH responsible for satellite MMF	60 days 60 days 60 days 60 days	N/A N/A N/A N/A

APPENDIX 13. PROCESS FOR IDENTIFYING FINDINGS AND OBSERVATIONS

1. **PURPOSE**. This appendix provides several flowcharts to assist the evaluator in identifying findings and observations during an ACSEP evaluation. It supplements the description provided in Order 8120.2, appendix 8.

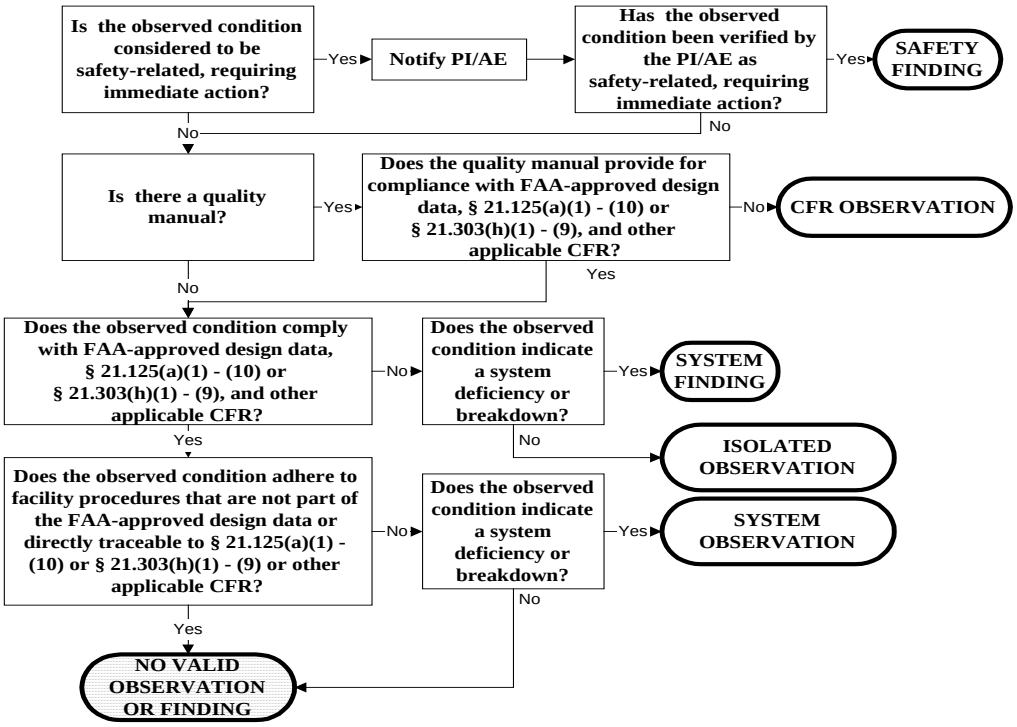
2. **DESCRIPTION**. Figures 1 through 3 provide flowcharts to identify findings and observations for the various facility types encountered during the ACSEP evaluation.

FIGURE 1. PC & TSO AUTHORIZATION HOLDERS, ASSOCIATE FACILITIES OF PC & TSO AUTHORIZATION HOLDERS, AND DELEGATED FACILITIES.



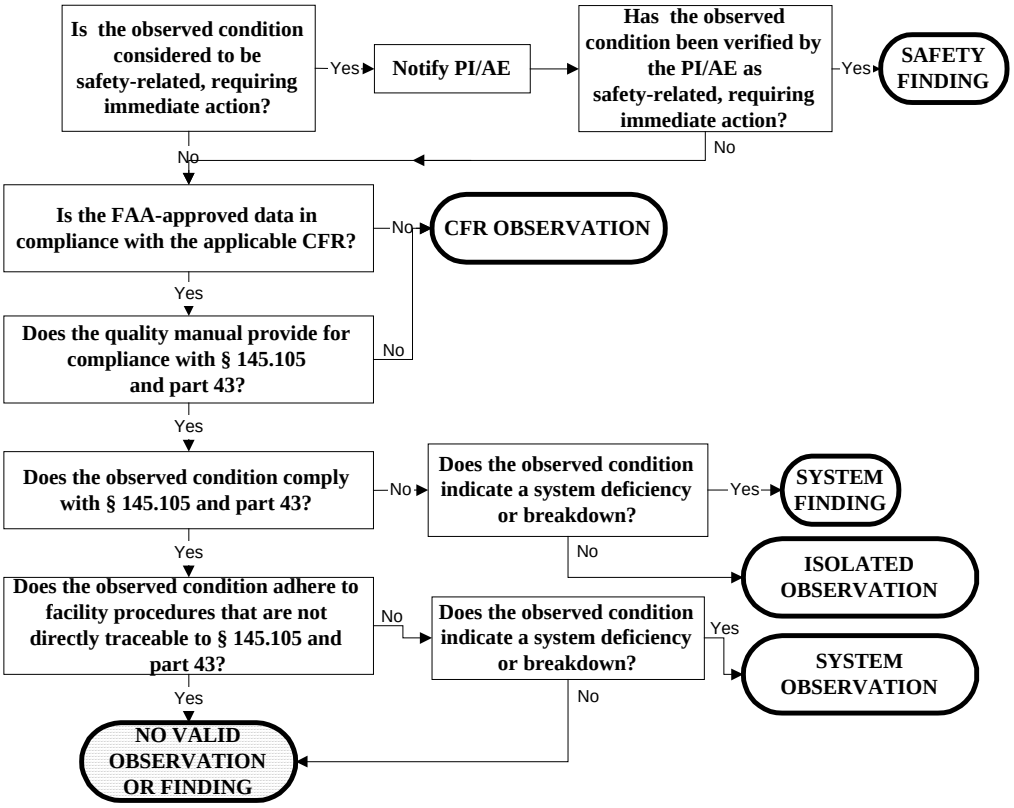
APPENDIX 13. PROCESS FOR IDENTIFYING FINDINGS AND OBSERVATIONS (CONT'D)

FIGURE 2. APIS & PMA HOLDERS, AND ASSOCIATED FACILITIES OF APIS & PMA HOLDERS.



APPENDIX 13. PROCESS FOR IDENTIFYING FINDINGS AND OBSERVATIONS (CONT'D)

FIGURE 3. SATELLITE MMF'S.



APPENDIX 14. STANDARDIZED EVALUATION CRITERIA FOR PRODUCTION APPROVAL HOLDERS, ASSOCIATE FACILITIES, AND SATELLITE MMF'S

1. **PURPOSE**. This appendix provides standardized evaluation criteria used in documenting the evaluation of the system elements listed in figure 1 for production approval holders and associate facilities, including their satellite MMF's.

FIGURE 1. SYSTEM ELEMENTS

Section	System Elements	Appendix 14 Page No.
1	Organization and Responsibility	5
2	Design Data Control	19
3	Software Quality Assurance	31
4	Manufacturing Processes	41
5	Special Manufacturing Processes	57
6	Statistical Quality Control (SQC)	63
7	Tool and Gauge	73
8	Testing	87
9	Nondestructive Inspection	97
10	Supplier Control	109
11	Nonconforming Material	121
12	Material Handling/Storage	131
13	Airworthiness Determination	141
14	FAA Reporting Requirements	147
15	Internal Audit	153
16	Global Production	157
17	Manufacturer’s Maintenance Facility	163

FIGURE 2. ACSEP DATABASE CODES

	Code
Management	M
Engineering	E
Manufacturing	P
Quality	Q
Service/Product Support	S
Communication with FAA	C

2. **DESCRIPTION OF SYSTEM ELEMENTS SECTION FORMAT**. Each section of this appendix addresses one of the 17 system elements listed in figure 1. Each section is formatted as follows:

APPENDIX 14. STANDARDIZED EVALUATION CRITERIA FOR PRODUCTION APPROVAL HOLDERS, ASSOCIATE FACILITIES, AND SATELLITE MMF'S

a. **System Element Description**. This is a brief description of what the system element is intended to accomplish or control.

b. **System Element Standardized Evaluation Criteria**. Each criteria is formatted as follows:

(1) **Standardized Evaluation Criteria**. Each criteria is identified by a numbered question within a box. The format of each question number is based on the specific system element section number identified in figure 1, the ACSEP database code identified in figure 2, and the sequence within the database code. For example, question 1E2 would be the second question [2] identified by the engineering ACSEP database code [E] under the organization and responsibility system element [1].

NOTE: The ACSEP database code is used by AIR-200 as a tool for data analysis only.

(2) **Applicability**. This identifies whether the criteria applies to a specific type of production approval (APIS, PC, PMA, and TSO authorization). A table format is used that identifies the type of facility across the top, and a code for the type of applicability in the first column. The codes for the types of applicability are defined as follows:

(a) **R**. This applicability code is used to identify criteria that reflect applicable CFR requirements. The applicability to a specific facility is indicated by the specific CFR part or section reference; e.g., § 21.143.

NOTE: The evaluator must determine the actual applicability of the CFR referenced, based on the encountered condition. For example, § 21.125(a)(2) requires an APIS holder to maintain material review board records for 2 years. However, it does not require the APIS holder to have written procedures on how the records will be maintained.

(b) **P**. This applicability code is used to identify criteria that reflect many of the industry practices and total quality management principles established to assist in meeting applicable CFR requirements. These practices and principles are often contained in FAA-approved data or other facility procedures. The evaluator must determine the actual level of application at each facility. The applicability to a specific facility is indicated with an "X."

(c) **N**. This applicability code is used to indicate that the criteria is not generally applicable at a specific facility. The evaluator must determine the actual level of application at each facility. The applicability to a specific facility is indicated with an "X."

APPENDIX 14. STANDARDIZED EVALUATION CRITERIA FOR PRODUCTION APPROVAL HOLDERS, ASSOCIATE FACILITIES, AND SATELLITE MMF'S

NOTE: Applicability indicated for a specific type of production approval includes any associate facilities or satellite MMFs established under that approval.

(3) **Statement of Condition**. The statement of condition provides specific indicators of criteria that have been satisfactorily implemented. These indicators may include documented procedures and adherence to those procedures. The procedures indicated in the statement of condition include some of the specific practices and principles that are often associated with the criteria. However, these practices and principles are not the only acceptable indicators of satisfactory implementation. Evaluators may identify additional practices and principles in FAA-approved data or other facility procedures. A practice or principle that reflects applicable CFR requirements is generally followed by the specific CFR part or section reference in brackets, e.g., {§ 21.143}. The statement of condition assists the evaluator to determine the following:

(a) The depth of the evaluation that may be required to satisfactorily evaluate the procedures, requirements, and products related to the criteria.

(b) The appropriate criteria on which to document evaluation results.

SECTION 1. ORGANIZATION AND RESPONSIBILITY

1. **SYSTEM ELEMENT DESCRIPTION**. The evaluated facility's design control and production management relating to a production approval.

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document the evaluation of this system element.

1M1. Is there an overall policy document to describe the management of production functions, including a description of responsibilities and authorities?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. The policy document includes:

(1) A current description of each functional organization in the production management system.

(2) A policy statement establishing the responsibilities and authorities of each of the functional organizations.

b. There is objective evidence of observance to established policy.

1M2. Are the organizations responsible for performing production management system functions described and their levels of authority defined?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

1M2 (continued)

Statement of Condition

a. The policy document includes, as a minimum:

(1) A current table of organization that describes the functional relationship of upper management to the various organizational components.

(2) The current purpose and objectives of the evaluated facility, and, as applicable, its function in relation to a PAH having multiple facilities.

(3) The use and functions of FAA designees within the facility.

(4) The role of FAA designees in the facility and their responsibilities as representatives of the Administrator, ensuring that no conflicting restraints are placed on the performance of their duties.

b. There is objective evidence of observance to established policy.

1M3. Is there a staff of engineering, flight test, production, and inspection personnel, as appropriate, to determine compliance to airworthiness requirements?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. There is objective evidence of a staff of engineering, flight test, production, and inspection personnel, as appropriate, to determine compliance to airworthiness requirements.

1M4. Have facility personnel performing as FAA designees been placed in an organizational position with sufficient authority to enable them to administer the pertinent CFR effectively?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

1M4 (continued)

Statement of Condition

a. Designees are in an organizational position with sufficient authority to enable them to administer the pertinent CFR effectively.

b. Designees are actively involved in production processes and quality activities defined by the evaluated facility in order to administer the pertinent CFR effectively.

1M5. Is the policy document reviewed periodically by the evaluated facility for adequacy and currency, and updated as warranted?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. The policy document provides for periodic review and update, when required.

b. There is objective evidence of observance to established procedures.

1M6. Are there provisions to make policies and procedures available to responsible personnel?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. The policy document provides for controlled distribution of policy and procedures.

b. There is objective evidence of observance to established policy.

1M7. Do the TC, PC, PMA, TSO authorization, and PLR documents accurately list all the products for which the evaluated facility holds approval?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. There is objective evidence that each type certificate TC, PC, PMA, TSO authorization, and production limitation record (PLR) has been updated to the current status.

1E1. Are the organizations responsible for performing engineering, and flight test functions when applicable, described and their levels of authority defined?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures include, as a minimum:

(1) A current table of organization that describes the functional relationship of the various organizational components.

(2) The current purpose and objectives of the engineering organization.

b. There is objective evidence of observance to established procedures.

1E2. Is an individual identified for managing the engineering program? Does that person have the necessary authority?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures include, as a minimum:

(1) A current table or organization chart that describes the chain of authority and responsibilities within the engineering organization.

(2) A list of the authority and responsibility of those who are authorized to make changes to the engineering system.

b. There is objective evidence of observance to established procedures.

1P1. Are the organizations responsible for performing manufacturing-related functions described and their levels of authority defined?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures include, as a minimum:

(1) A current table or organization chart that describes the functional relationship of the manufacturing organization to management and to the other organizational components.

(2) The current purpose and objectives of the manufacturing organization.

b. There is objective evidence of observance to established procedures.

1P2. Is an individual identified for managing the manufacturing program? Does that person have the necessary authority?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures include, as a minimum:

(1) A current table or organization chart that describes the chain of authority and responsibilities within the manufacturing organization.

(2) A list of the authority and responsibility of those who are authorized to make changes to the manufacturing system.

b. There is objective evidence of observance to established procedures.

1P3. Is there a requirement for the evaluated facility's manufacturing personnel to have training and skills appropriate to their assignments?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures define the method for establishing and maintaining personnel qualifications appropriate to the various manufacturing functions performed.

b. There is objective evidence of observance to established procedures.

1Q1. Are the organizations responsible for performing quality-related functions described and their levels of authority defined?

Applicability:

	APIS	PC	PMA	TSO
R		§ 21.165		§ 21.607
P	X		X	
N				

Statement of Condition

a. There is objective evidence that everyone in the PC or TSO authorization facility associated with the quality system is performing within their described assigned responsibilities and delegated authority. {§ 21.165; § 21.607}

b. For all other evaluated facilities, there is objective evidence of:

(1) A description of the assigned responsibilities and delegated authority of everyone in the evaluated facility's organization associated with the quality system, and in particular the quality organization.

(2) A table or organization chart that describes the functional relationship of the quality organization to management and to the other organizational components.

(3) The purpose and objectives of the quality organization.

1Q2. Is an individual identified for managing the quality program? Does that person have the necessary authority and organizational freedom?

Applicability:

	APIS	PC	PMA	TSO
R		§ 21.165		§ 21.607
P	X		X	
N				

Statement of Condition

a. There is objective evidence that the chain of authority and responsibilities within the PC or TSO authorization quality organization is performing as described. {§§ 21.165; 21.607}

1Q2 (continued)

b. For all other evaluated facilities, there is objective evidence of:

(1) A current table or organization chart that describes the chain of authority and responsibilities within the quality organization.

(2) A list of the authority and responsibility of those who are authorized to make changes to the quality system.

1Q3. Is there a requirement for the evaluated facility's quality personnel to have training and skills appropriate to their assignments?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures define the method for establishing and maintaining personnel qualifications appropriate to the various processes, tests, and inspection functions performed.

b. There is objective evidence of observance to established procedures.

1Q4. Does the evaluated facility have and use a Quality Manual to describe the management of quality-related subjects, including a description of responsibilities and authorities?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.123	§ 21.165		§ 21.607
P			X	
N				

Statement of Condition

a. There is objective evidence that the quality manual is available in the major quality and inspection areas, and is subject to periodic review and revision.

1Q5. Are tags, forms, and other documents described and controlled?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures include, as a minimum:

(1) A sample of each tag, form, and other document with instructions for use as applicable.

(2) A formal change control procedure.

b. There is objective evidence of observance to established procedures.

1Q6. Has the evaluated facility established a record retention schedule for technical data files and the various types of process, test, and quality/inspection system data?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.125		§ 21.303	§ 21.613
P		X		
N				

Statement of Condition

There is objective evidence that:

a. A record retention schedule has been established that complies with applicable CFR.

(1) For APIS, TSO authorization, and PMA inspection records, the period is at least 2 years. {§ 21.125; § 21.303; § 21.613}

(2) For TSO authorization technical data file, the period is until the article is no longer manufactured. {§ 21.613}

b. Compliance to retention requirements is periodically verified.

1Q7. Are records analyzed and used to adjust the quality/inspection program?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Method and frequency of analyzing records, and the method for adjusting the quality/inspection program when necessary.

(2) Documenting any quality/inspection system adjustment made that is based on analysis of inspection and test results.

b. There is objective evidence of observance to established procedures.

1S1. Are the organizations responsible for performing service/product support-related functions described and their levels of authority defined?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures include, as a minimum:

(1) A current table of organization that describes the functional relationship of the service/product support organization to management and to the other organizational components.

(2) The current purpose and objectives of the service/product support organization.

b. There is objective evidence of observance to established procedures.

1S2. Is an individual identified for managing the service/product support program? Does that person have the necessary authority?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures include, as a minimum:

(1) A current table or organization chart that describes the chain of authority and responsibilities within the service/product support organization.

(2) A list of the authority and responsibility of those who are authorized to make changes to the service/product support system.

b. There is objective evidence of observance to established procedures.

1S3. Is there a requirement for the evaluated facility's service/product support personnel to have training and skills appropriate to their assignments?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures define the method for establishing and maintaining personnel qualifications appropriate to the functions performed.

b. There is objective evidence of observance to established procedures.

1C1. Are the organizations responsible for managing and coordinating activities requiring FAA notification described and their levels of authority defined?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide, as a minimum, a current table of organization that describes the functional relationship of the notifying organizations to management and to the other organizational components.

b. There is objective evidence of observance to established procedures.

1C2. Is an individual identified for managing the notification program? Does that person have the necessary authority?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures include, as a minimum:

(1) A current table or organization chart that describes the chain of authority and responsibilities within the notification system.

(2) A list of the authority and responsibility of those who are authorized to make changes to the notification system.

b. There is objective evidence of observance to established procedures.

1C3. Is there a requirement for the evaluated facility's notification personnel to have training and skills appropriate to their assignments?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures define the method for establishing and maintaining personnel qualifications appropriate to the functions performed.

b. There is objective evidence of observance to established procedures.

SECTION 2. DESIGN DATA CONTROL

1. **SYSTEM ELEMENT DESCRIPTION**. The planning and integration of the evaluated facility's procedures for continuously maintaining the integrity of design data, as approved by the FAA or FAA-delegated representatives, in the completed product. This includes software used in type-certificated aircraft or related products (airborne software).

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

2E1. Are changes to product design (including airborne software) approved, documented, and controlled?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures include, as a minimum:

(1) Methods for documenting design changes.

(2) A description of the change approval cycle, including personnel authorized to approve changes.

(3) A means of controlling the issuance and distribution of design changes.

b. There is objective evidence of observance to established procedures.

2E2. Is there a drawing control system?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

2E2 (continued)

Statement of Condition

a. Procedures provide for:

(1) Drawings that are adequate, complete, and legible.

(2) Identification of drawings.

(3) Indication of drawing approval, including FAA approval.

(4) Maintenance and security of drawings.

(5) Use of current drawings.

(6) A list of drawings and specifications necessary to define configuration of the FAA-approved design.

(7) Control of preliminary/experimental drawings.

(8) Integration of software with hardware to specify a unique version for incorporation into the product.

(9) Combination of software for more than one processor within one product. That combination of software with associated hardware permits the specification of a unique version for incorporation into the product.

(10) Cross-reference of software documents to their associated software.

(11) Software identification methods that permit verification of the software configuration in the completed product. The drawing control system includes software identification methods at the media level and at the product level. The media level identification is incorporated into the software, and the product level identifications are marked on the outside of the product indicating software configuration.

b. There is objective evidence of observance to established procedures.

2E3. Are changes to technical data (specifications, installation instructions [when applicable], and airborne software documentation) appropriately documented and approved?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide that changes to technical data referenced on FAA-approved design data are documented and approved in the same way as changes to product design.

b. There is objective evidence of observance to established procedures.

2E4. Are corrective actions identified in Airworthiness Directives incorporated into the FAA-approved design, when applicable?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.130	§ 21.165	§ 21.303	§ 21.607
P				
N				

Statement of Condition

a. There is objective evidence that design changes necessary to correct unsafe conditions identified in AD's have been incorporated into the FAA-approved design.

2E5. Are design changes incorporated in Instructions for Continued Airworthiness, when appropriate?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.50	§ 21.50	§ 21.50	In each TSO
P				
N				

2E5 (continued)

Statement of Condition

a. There is objective evidence that design changes which affect the content of Instructions for Continued Airworthiness have been incorporated into the FAA-approved design, when applicable. {§ 21.50}

2E6. Are design documents and records stored, maintained, and protected?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures include provisions for:

(1) Storing, maintaining, and protecting design documents to preserve their integrity.

(2) Maintaining the integrity of magnetic storage media used as part of design documentation, if applicable.

b. There is objective evidence of observance to established procedures.

2E7. Are the issuance, retrieval, distribution, and currency of design and technical data documents controlled?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.125	§ 21.143	§ 21.303	§ 21.607
P				
N				

Statement of Condition

a. There is objective evidence of:

2E7 (continued)

(1) Control of design and technical data document issuance, including persons authorized to obtain documents, and for retrieval of obsolete documents.

(2) The method for making available to, or notifying, employees concerning changes in technical data. {§ 21.125; § 21.143; § 21.303; § 21.607}

(3) Verification that correct documents are in use for the product being produced.

(4) Current design and technical data document distribution lists.

2E8. Is a determination made as to whether a design change is major or minor?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.93	§ 21.93	§ 21.303	§ 21.611
P				
N				

Statement of Condition

a. There is objective evidence that design changes have been properly classified. {§ 21.93; § 21.303; § 21.611}

2E9. Has a technical data file been established and maintained?

Applicability:

	APIS	PC	PMA	TSO
R				§ 21.607; §21.613
P	X	X	X	
N				

Statement of Condition

a. There is objective evidence that a complete and current file of technical data is being maintained, including design drawings and specifications. {§ 21.607; § 21.613}

2E10. Are supplemental type designs submitted for approval only after the type certification process is completed?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X		
N			X	X

Statement of Condition

a. Procedures provide for submitting supplemental type designs for approval after type certification of that product is complete.

b. There is objective evidence of observance to established procedures.

2P1. Does the manufacturing organization participate in the review of design and technical data changes?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for the manufacturing organization to review design and technical data changes prior to release to ensure that the product can be produced in conformity to FAA-approved design.

b. There is objective evidence of observance to established procedures.

2Q1. Does the quality organization participate in the review of design and technical data changes?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

2Q1 (continued)

Statement of Condition

a. There is objective evidence that the quality organization reviews design and technical data changes prior to release to ensure that:

(1) The product can be properly evaluated and verified to be in conformity to FAA-approved design.

(2) Inspection equipment is available or can be procured which will adequately verify conformity to FAA-approved design, and which can be controlled for accuracy, when required.

2S1. Does the service/product support organization participate in the review of design changes?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for the service/product organization to review design data changes prior to release to ensure that appropriate airworthiness and service documents that are affected by the design change are revised as required.

b. There is objective evidence of observance to established procedures.

2S2. Are changes to Instructions for Continued Airworthiness made available to appropriate persons?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.50	§ 21.50	§ 21.50	In each TSO
P				
N				

2S2 (continued)

Statement of Condition

a. There is objective evidence that changes to Instructions for Continued Airworthiness are made available to appropriate persons. {§ 21.50}

2S3. Is descriptive data and information on FAA-approved design changes resulting from incorporation of AD's, or which contribute to the safety of the product, made available to users of the product?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.99	§ 21.99		
P			X	X
N				

Statement of Condition

a. There is objective evidence that all applicable descriptive data and information covering FAA-approved design changes made as a result of AD incorporation or improvements which contribute to the safety of the product are made available to product users. {§ 21.99}

2C1. Are minor design changes approved under a method acceptable to the FAA?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.95	§ 21.95	§ 21.303	
P				
N				*

* Reported under criteria 2C4.

Statement of Condition

a. There is objective evidence that minor changes in a type design are approved under a method acceptable to the FAA.

2C2. Are major design changes, including process specification changes, changes resulting from AD's, and changes made to contribute to the safety of the product, submitted to the FAA for approval?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.97 § 21.99 § 21.130	§ 21.97 § 21.99 § 21.165	§ 21.303	§ 21.611
P				
N				

Statement of Condition

There is objective evidence that:

a. Major design changes are submitted to the FAA for approval, including changes to manufacturing and special process specifications.

b. Design changes resulting from applicable AD's, and design changes which contribute to the safety of the product, are submitted to the FAA for approval.

2C3. Are changes to procedures for distributing changes to Instructions for Continued Airworthiness submitted to the FAA?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.50	§ 21.50		§ 21.50
P			X	X
N				

Statement of Condition

a. There is objective evidence that modifications to the program for distributing changes to Instructions for Continued Airworthiness have been submitted to the FAA. {§ 21.50 and Airworthiness Standards CFR Parts referenced therein}

2C4. Has the TSO authorization facility submitted to the FAA all necessary revised data resulting from a minor change to the TSO article?

Applicability:

	APIS	PC	PMA	TSO
R				§ 21.611
P				
N	X	X	X	

Statement of Condition

a. There is objective evidence that all necessary revised data is submitted to the FAA when minor changes are made to the TSO article. This data agrees with any part number plan specified in the original application. {§ 21.611}

2C5. Has the TSO authorization facility obtained a new TSO for major design changes to a previous TSO article?

Applicability:

	APIS	PC	PMA	TSO
R				§ 21.605 § 21.611
P				
N	X	X	X	

Statement of Condition

a. There is objective evidence that a new type or model designation has been assigned to a changed article and that there has been prompt application for a new TSO authorization. {§ 21.611}

SECTION 3. SOFTWARE QUALITY ASSURANCE

1. **SYSTEM ELEMENT DESCRIPTION**. The planning and integration of the evaluated facility's procedures for continuously maintaining the integrity of software used in type-certificated aircraft or related products (airborne software), and also the integrity of software which is used for product acceptance. Document DO-178, Software Considerations in Airborne Systems and Equipment Certification (current edition), of the Radio Technical Commission for Aeronautics (RTCA), or comparable means, should be used as guidance for control of airborne software.

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The criteria used to document the evaluation of this system element are divided into two parts: Part A, Airborne Software, and Part B, Product Acceptance Software.

Part A. Airborne Software

3AE1. Is there a Software Configuration Management Plan (SCMP) or procedure to control airborne software configuration?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Installation of the correct version of the software in the delivered product in accordance with the FAA-approved design.

(2) Method by which controlled software containing the FAA-approved design data is transitioned into production. The media containing the software installed in the product is directly traceable to the Software Configuration Management (SCM) library.

b. There is objective evidence of observance to established procedures.

3AE2. Is there a Configuration Index Document (CID) listing all software documents under configuration control and defining the hardware and software part numbers?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for traceability of hardware and software part numbers to the drawing control system.

b. There is objective evidence of observance to established procedures.

3AE3. Are there practices and procedures for reporting, tracking, and resolving software problems?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Corrective action procedures, for problems found subsequent to the FAA-approved design, include provisions for airborne software and hardware/software combinations. Procedures may parallel or be part of hardware corrective action procedures.

b. Problem reports addressing changes to software code are under change control.

c. The production test procedures have been modified to reflect the software change and successfully executed against the changed version.

d. There is objective evidence of observance to established procedures.

3AE4. Is obsolete and non-current software media recalled and purged, when applicable?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Configuration control procedures for airborne software include methods of purging software for removal of obsolete and non-current media, when applicable. Procedures may parallel or be part of hardware purging procedures.

b. Procedures include methods to identify, store, or dispose of obsolete and non-current media, when applicable.

c. There is objective evidence of observance to established procedures.

3AE5. Are there methods and facilities to protect computer programs from unauthorized access, inadvertent damage, or degradation?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide:

(1) Configuration control of the airborne software within the product design files.

(2) Limited access to software files and protection from unauthorized changes.

(3) Separate archives for masters and duplicates.

(4) That masters and duplicates are not revived by the same machine simultaneously.

3AE5 (continued)

(5) Minimized risk of deterioration and regeneration of errors on selected storage medium.

(6) Assurance that the reproduction of code occurs error free.

b. There is objective evidence of observance to established procedures.

3AE6. Are there procedures to ensure documentation and archival for each version of the delivered airborne software version?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures (i.e., version description document) provide for methods to identify, document and archive the software environment for each version of delivered airborne software.

b. There is objective evidence of observance to established procedures.

3AP1. Is software identified/marked externally/internally in accordance with the engineering drawing requirements?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Work instructions detail the identification/marking requirements.

b. There is objective evidence of observance to established instructions.

3AQ1. Is airborne software programmed media handled and stored properly (e.g., environmental controls and magnetic interference precautions)?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for special handling of programmed media.

b There is objective evidence of observance to established procedures.

3AQ2. Are build and load instructions established, maintained, and used?

Applicability

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide:

(1) Software build and load into hardware components.

(2) Successful testing of the hardware after the software load.

b. There is objective evidence of observance to established procedures.

Part B. Product Acceptance Software

3BE1. Is there a Software Configuration Management Plan (SCMP) or procedure to control product acceptance software configuration?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Identification of software for an application.

(2) Control of approved versions for product acceptance.

(3) Control of obsolete and non-current software.

(4) Identification of software with a Software Configuration Identification.

b. There is objective evidence of observance to established procedures.

3BE2. Are all changes to product acceptance software documented and approved?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for the method to change and approve product acceptance software. A procedure patterned after an engineering drawing change procedure is appropriate to provide a permanent record showing reason for change, revisions to the software, approvals, and effectivity.

b. There is objective evidence of observance to established procedures.

3BE3. Are there practices and procedures for reporting, tracking and resolving software-related product acceptance problems?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Corrective action procedures for product acceptance software may parallel or be part of manufacturing's general problem identification and corrective action procedures.

b. There is objective evidence of observance to established procedures.

3BE4. Are there methods and facilities to protect computer programs from unauthorized access, inadvertent damage, or degradation?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide:

(1) Configuration control of product acceptance software to prevent unauthorized changes to the software.

(2) Limited access to software files and protection from unauthorized changes.

(3) Separate archives for masters and duplicates.

(4) That masters and duplicates are not available for corruption in the same machine at the same time.

(5) Minimized risk of deterioration and regeneration of errors on selected storage medium.

3BE4. Continued

(6) Assurance that reproduction of code occurs error free.

b. There is objective evidence of observance to established procedures.

3BQ1. Is product acceptance software verified prior to use?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide:

(1) Independent means to verify product acceptance software, and subsequent revisions, to ensure that I t accomplishes its intended function.

(2) Means to verify software/firmware/hardware is capable of discriminating between conforming and nonconforming parts or assemblies.

(3) Formal means of identifying approved product acceptance software.

(4) Configuration control of the product acceptance software as it relates to the product being accepted.

b. There is objective evidence of observance to established procedures.

3BQ2. Are build and load instructions established, maintained, and used?

Applicability

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide:

(1) Software build and load into hardware components.

(2) Successful testing of the hardware after the software load.

b. There is objective evidence of observance to established procedures.

SECTION 4. MANUFACTURING PROCESSES

1. **SYSTEM ELEMENT DESCRIPTION**. Specific functions and operations necessary for the fabrication and inspection of parts and assemblies (e.g., machining, riveting, and assembling).

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

4M1. Is the evaluated facility operating within the production limitations of the production approval?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.123	§ 21.151	§ 21.303	§ 21.601
P				
N				

Statement of Condition

a. There is objective evidence that the evaluated facility is manufacturing, and identifying as FAA-approved, for sale or installation, only those products which it is authorized to manufacture under its production approval. {§ 21.123; § 21.151; § 21.303; § 21.601}

4M2. Is the production certificate displayed prominently in the main office of the evaluated facility in which the product is manufactured?

Applicability:

	APIS	PC	PMA	TSO
R		§ 21.161		
P				
N	X		X	X

Statement of Condition

a. There is objective evidence that the production certificate is prominently displayed as required. {§ 21.161}

4E1. Are manufacturing processes in accordance with FAA-approved design data?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Preparation and distribution of guidelines for the interpretation and application of approved data, standards, and specifications to product manufacture.

(2) Furnishing of guidelines for the interpretation and application of approved data, standards, and specifications to alternate sources that manufacture duplicate parts.

b. There is objective evidence of observance to established procedures.

4E2. Are new or changed manufacturing processes substantiated by a test program?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for verification/testing of new or changed manufacturing processes by responsible engineering personnel to ensure the process will produce what the design requires.

b. There is objective evidence of observance to established procedures.

4P1. Are manufacturing process changes approved by appropriate personnel?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Approval and control of all process changes by authorized personnel.

(2) Requirements for changing processes.

(3) Review and verification of process changes to ensure product quality is not negatively impacted.

(4) Documentation of change history by responsible personnel.

b. There is objective evidence of observance to established procedures.

4P2. Have work instructions been prepared for all applicable manufacturing processes?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Preparation of work instructions to ensure that the work functions to be performed are satisfactorily accomplished.

(2) Content of work instructions.

b. There is objective evidence of observance to established procedures.

4P3. Do work instructions reflect approved technical data?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for work instructions to:

(1) Reference the appropriate revision level of technical data documents.

(2) Incorporate specific requirements.

(3) Reflect design changes that correct unsafe conditions identified in ADs.

b. There is objective evidence of observance to established procedures.

4P4. Do work instructions adequately control the manufacturing process?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for detailing the following items:

(1) Function to be performed.

(2) Sequence of operations.

(3) Inspection points.

(4) Accept/reject criteria.

(5) Tools, gauges, and inspection equipment.

4P4 (continued)

(6) Drawing number and revision level.

(7) Workmanship criteria.

(8) Inspection methods.

(9) Tolerance limits.

(10) Environmental conditions.

(11) Sampling plans.

(12) Special drawing notes.

(13) Skilled personnel (certified) required.

(14) Special precautions for critical product protection.

(15) Part marking and identification, and part stamp location requirements, when defined by approved data.

b. There is objective evidence of observance to established procedures.

4P5. Are revisions to work instructions reviewed, approved, controlled, and documented?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Method by which temporary changes are approved by authorized personnel and controlled, and include a time interval for formal incorporation.

(2) Control of the number of temporary changes allowed before requiring complete incorporation and revision of work instructions.

(3) Control and documentation of revisions to work instructions.

(4) Method by which revisions are identified on the work instructions.

(5) Coordination of changes to work instructions with affected departments, such as Planning and Quality.

(a) Authorized quality organization personnel review work instructions prior to release to ensure that:

1 Inspection points are located in the manufacturing process at points that ensure conformity to FAA-approved design.

2 Adequate inspection equipment will be available and will be controlled for accuracy, as necessary.

(b) Authorized quality organization personnel authorize additions, deletions, or changes to inspection points in the work instructions, based upon inspection results.

(6) Record of work instruction changes.

(7) Control of obsolete work instructions.

b. There is objective evidence of observance to established procedures.

4P6. Are employees familiar with specifications (proprietary, industry, military) affecting jobs they perform?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Personnel performing manufacturing operations have applicable specifications available for use, and have a working knowledge of their content as appropriate to the operations being performed.

4P7. Are special identification and controls required if material or parts are introduced into production prior to full acceptance?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Special identification and controls for material or parts introduced into production prior to full acceptance or release.

(2) Conditions in which the pre-release of material or parts will be allowed.

(3) Obtaining appropriate documented approvals prior to pre-release.

(4) Documentation of each pre-release to show approvals, reasons for pre-release, and where in the production line material or parts are allowed to progress until full release is obtained.

(5) Identification of material or parts in such a manner that they can be retrieved if full release is not obtained.

b. There is objective evidence of observance to established procedures.

4P8. Is traceability for split lots maintained, including accountability for the completion of all manufacturing and inspection operations?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

4P8 (continued)

(1) Control of split lots.

(2) Accountability of products through each stage of the manufacturing process.

(3) Accountability for shortages/overages as successive operations are performed.

b. There is objective evidence of observance to established procedures.

4P9. Do completed products/parts have proper identification markings?

Applicability:

	APIS	PC	PMA	TSO
R	§§ 45.11, 45.14	§§ 45.11, 45.14	§§ 45.15, 45.14	§ 21.607, 45.14
P				
N				

Statement of Condition

There is objective evidence that completed products/parts are properly identified and legible:

a. Aircraft and aircraft engines are identified by means of a fireproof plate and have the required identification data. {§ 45.11}

b. Propellers, propeller blades, and hubs are identified by means of a plate, stamping, engraving, etching, or other approved method of fireproof identification, and have the required identification data. {§ 45.11}

c. Manned free balloons are identified by means of a fireproof plate and have the required identification data. {§ 45.11}

d. For TSO authorizations, articles are identified with the name and address of the manufacturer, the name, type, part number, or model designation of the article, the serial number or the date of manufacture or both, and the applicable TSO number. {§ 21.607}

4P9 (continued)

e. For PMA, parts are identified with the letters "FAA-PMA"; the name, trademark, or symbol of the approval holder; the part number; and the name and model designation of each type certificated product on which the part is eligible for installation. For parts that the FAA finds are too small or impractical to mark, a tag may be attached that must contain the information that can not be included on the part, or may refer to specific part manuals or catalogs. {§ 45.15}

f. For critical components, parts are permanently and legibly marked with a part number (or equivalent) and a serial number (or equivalent). {§ 45.14}

4P10. Have aircraft been identified with nationality and registration marks?

Applicability:

	APIS	PC	PMA	TSO
R	Part 45 Subpart C	Part 45 Subpart C		
P				
N			X	X

Statement of Condition

a. There is objective evidence that nationality and registration marks are displayed on fixed wing and non-fixed wing aircraft, and are properly located and sized. {Part 45 Subpart C}

4Q1. Are inspection methods and plans for each product/part thereof selected to ensure that parts will be inspected for conformity with FAA-approved design data?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.125	§ 21.143	§ 21.303	§ 21.607
P				
N				

a. There is objective evidence that parts, components, and assemblies are inspected during production.
{§§ 21.125, 21.143, 21.303, 21.607} The inspection plan should consider, as a minimum:

(1) Documentation and availability of criteria for determining appropriate inspection methods (attribute/characteristics).

4Q1 (continued)

Statement of Condition

(2) Physical inspection and process control methods whenever either method alone is not sufficiently capable of determining the quality of parts.

(3) Controls of the manufacturing system when physical inspection of parts or processed material is impossible or disadvantageous.

4Q2. Have lists or charts showing location and type of inspection stations been prepared?

Applicability:

	APIS	PC	PMA	TSO
R		§ 21.165		§ 21.607
P	X		X	
N				

Statement of Condition

a. There is objective evidence that lists or charts have been prepared identifying the location and types of inspection stations that have been established to determine conformity of the product to FAA-approved design data. {§ 21.165; § 21.607}

4Q3. Are inspection marking devices/stamps issued to authorized persons only?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Responsibility for control of stamps.

4Q3 (continued)

(2) A listing of stamps issued to personnel.

(3) Handling of lost or returned stamps.

(4) Periodic check of all stamps to ensure legibility of stamp impressions and possession of stamps by correct personnel.

b. There is objective evidence of observance to established procedures.

4Q4. Is there assurance that inspection stamps do not damage material?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures detail the type of stamps to use for the various materials that will require stamp impressions.

b. There is objective evidence of observance to established procedures.

4Q5. Are records generated and maintained for all significant provisions of the quality/inspection program which have an effect on control of the FAA-approved design data?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

4Q5 (continued)

(1) Contents of each record used, including, as a minimum, the nature and number of observations, the number and type of discrepancies found, lot identity and size, sample sizes, and resultant corrective action.

(2) Record legibility, completeness, and accuracy.

(3) Requirements that tape files, microfilm, etc., used for record retention exhibit legible data, acceptance stamps and/or signatures, as required.

(4) Generation of records of:

(a) Inspection and tests for product acceptance, and include, as a minimum, applicable drawing/specification number and revision levels.

(b) Results of inspection and tests for first production configuration articles.

(c) In-process inspections used to determine acceptability to FAA-approved design data.

(d) Final inspection acceptability of completed end items.

(e) Periodic inspection and control of tools used as a media of inspection, including check fixtures, inspection gauges, and measurement instruments.

(f) Test data directly traceable to the material, parts, or products tested.

b. There is objective evidence of observance to established procedures.

4Q6. Are cleaners, solvents, degreasers, etc., adequately identified and controlled to prevent potential product damage from misapplication?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

4Q6 (continued)

(1) Decanting and identifying cleaners, solvents, and other fluids used in the work area, specifying types of containers to be used, requirements for re-use, and method of identification.

(2) Identifying the methods to be used when potentially damaging fluids are misapplied to a product.

b. There is objective evidence of observance to established procedures.

4Q7. Are conditions in environmentally controlled areas, (e.g., temperature, humidity, or chemical contamination) established and maintained, when required?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Type of equipment for recording environmental conditions, when required.

(2) Monitoring environmental conditions and implementing corrective action for conditions exceeding specifications.

(3) Identification of manufacturing areas that require environmental controls (e.g., "temperature controlled," "no smoking," "gloves required for parts handling," or "signs").

(4) Responsibility for enforcement of environmental controls.

b. There is objective evidence of observance to established procedures.

4Q8. Are traceable components identified in assembly records?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for the identification of traceable components in assembly records.

b. There is objective evidence of observance to established procedures.

4Q9. Are completed parts traceable to raw material, when applicable?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Traceability of completed part to raw material through records.

(2) Marking traceable parts and record-keeping requirements.

(3) Handling reject and scrap traceable parts.

b. There is objective evidence of observance to established procedures.

4Q10. Is suitable inspection marking made of products and parts thereof throughout the manufacturing cycle, (e.g., acceptance, rejection, NDT process)?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide methods of marking that ensure:

(1) Conformance to the requirements of the FAA-approved design data.

(2) Positive identification throughout the manufacturing process.

b. There is objective evidence of observance to established procedures.

4Q11. Are assemblies inspected before closure to preclude inclusion of foreign objects?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Inspection of assemblies to detect inclusion of foreign objects prior to closure.

(2) Reinspection of parts and assemblies which are reopened, disassembled, or tampered with.

(3) Contamination control in hydraulic installations (e.g., purging, filtration, charging, and disposal).

b. There is objective evidence of observance to established procedures.

4Q12. Are all required inspections and tests satisfactorily accomplished and documented prior to final acceptance of the completed products/parts thereof?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for the inspections and tests required to be completed for final acceptance of the completed products/parts thereof.

b. There is objective evidence of observance to established procedures.

SECTION 5. SPECIAL MANUFACTURING PROCESSES

1. **SYSTEM ELEMENT DESCRIPTION**. The methods whereby materials, parts, or assemblies are worked or fabricated through a series of precisely controlled steps, and which undergo physical, chemical, or metallurgical transformation (e.g., heat-treating, brazing, welding, and processing of composite materials).

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

5E1. Are all special processes in use identified and defined by FAA-approved design data and detailed in process specifications?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.31	§ 21.31	§ 21.303	§ 21.607
P				
N				

Statement of Condition

a. There is objective evidence that: Special processes are identified and documented in FAA-approved design data and/or process specifications. [§§ 21.31, 21.303, 21.607} Process specifications detail personnel qualifications, material and equipment requirements, accept/reject criteria, etc.

5E2. Are new or changed special processes substantiated by a test program?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for verification/testing of new or changed special processes by responsible engineering personnel to ensure the process will produce what the design requires.

b. There is objective evidence of observance to established procedures.

5Q1. Is equipment required for special processing, such as tools, gauges, instruments, timers, ammeters, or voltmeters, available?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for identification and availability of all equipment required for controlling and monitoring special processes.

b. There is objective evidence of observance to established procedures.

5Q2. Are processes, equipment, and/or operators qualified and approved in accordance with the specification/manufacturer's procedures?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Periodic review of special processes to ensure specification compliance.

(2) Periodic review of personnel certifications to ensure only qualified operators perform special processing.

b. There is objective evidence of observance to established procedures.

5Q3. Are special processes accomplished in accordance with the established process specifications?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.125	§ 21.165	§ 21.303	§ 21.607
P				
N				

Statement of Condition

a. There is objective evidence that all requirements listed in applicable process specifications have been completed. {§§ 21.125, 21.165, 21.303, 21.607}

5Q4. Are records generated and maintained to reflect compliance with the specification requirements?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for use of records that indicate:

(1) Contents of each record used, including, as a minimum:

(a) Complete and continuous monitoring of special processes per specification requirements.

(b) Product identity and material traceability throughout the processing cycle.

(c) Special process inspection approval, such as unique special process inspection approval stamps.

(2) Record legibility, completeness, and accuracy.

(3) Requirements that tape files, microfilm, etc., used for record retention exhibit legible data, acceptance stamps and/or signatures, as required.

b. There is objective evidence of observance to established procedures.

5Q5. Is action taken to correct a special manufacturing process which is found to be out of control?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Action when there is loss of control.

(2) Investigation to ensure acceptability of products produced while the process was out of control.

(3) Corrective action as a result of the analysis of trends in process, to prevent nonconforming products.

b. There is objective evidence of observance to established procedures.

SECTION 6. STATISTICAL QUALITY CONTROL (SQC)

1. **SYSTEM ELEMENT DESCRIPTION**. A method which may be used by the evaluated facility to control product quality by statistical methods, and which may be used for continuous improvement and/or product acceptance. It includes techniques such as statistical sampling, PRE-control, and statistical process control (SPC).

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

6E1. Does the engineering organization participate in the review, implementation, and maintenance of SQC techniques?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for the engineering organization to review SQC planning prior to release to ensure the maintenance of FAA-approved design.

b. There is objective evidence of observance to established procedures.

6P1. Does the manufacturing organization participate in the review, implementation, and maintenance of SQC techniques?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

6P1 (continued)

Statement of Condition

a. Procedures provide for the manufacturing organization to review SQC planning prior to release to ensure that the product can be produced in conformity to FAA-approved design.

b. There is objective evidence of observance to established procedures.

6Q1. Has a statistical sampling inspection plan been established for acceptance of specified product characteristics at receiving inspection and during manufacture?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. There is objective evidence that:

(1) All characteristics essential to ensure compliance to FAA-approved design have been identified. Characteristics which, if not maintained, would, or may, cause an unsafe condition in the end product are identified separately.

(2) Product characteristics identified as having an impact on the safety of the end product have been 100 percent inspected.

(3) Samples have been selected which adequately represent the lot or process.

(4) Adjustments to the sampling plan are based on acceptance and quality history, and that the sampling plan is tightening to 100% inspection when nonconformances affecting safety are discovered.

(5) Statistical inspection conforms with sampling specifications or approved sampling plan requirements.

(6) Sampling plans do not allow the acceptance of "known defectives" in a lot, or Acceptable Quality Levels (AQLs) with known defectives, that would affect safety.

6Q2. Are pertinent personnel trained in statistical sampling techniques?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Responsibility for statistical sampling training.

(2) Training new, or newly transferred, employees in statistical sampling techniques.

b. There is objective evidence of observance to established procedures.

6Q3. Has a satisfactory PRE-control method been established for acceptance of specific product characteristics?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures should provide:

(1) Authority and responsibility for implementation and control of PRE-control.

(2) Scheduled independent evaluations of the PRE-control process to verify its continuing acceptability. This includes a conformity check of the product on a periodic basis.

(3) Identification of principal process characteristics, of the product to be controlled, and a determination as to the impact that a nonconformance would have on the safety of the end product.

6Q3 (continued)

(4) Capability studies using statistical techniques, ensuring process capability is less than the tolerance of the specific product characteristic to be measured.

(5) Test and measurement equipment study (e.g., a gauge study) to identify, eliminate, or adjust for, measurement errors that may contribute to process variability.

(6) Establishment of PRE-control limits, based on the tolerance of the specific product characteristic to be measured, to ensure maintenance of in-control processes.

(7) Qualification of the setup during production, ensuring that a minimum of five consecutive parts measured fall within the target area established by the PRE-control limits.

(8) Periodic measurement during production after the setup is qualified.

(9) Corrective action to adjust the process, requalify the setup, and recall and reinspect suspected products when PRE-control limits are exceeded.

b. There is objective evidence of observance to established procedures.

6Q4. Are pertinent personnel trained in PRE-control techniques?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Responsibility for PRE-control training.

(2) Training new, or newly transferred, employees in PRE-control techniques.

b. There is objective evidence of observance to established procedures.

6Q5. Has a satisfactory SPC method been established for acceptance of specific product characteristics?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Authority and responsibility for implementation and control of SPC.

(2) Scheduled independent evaluations of the SPC process to verify its continuing acceptability. This includes a conformity check of the product on a periodic basis.

(3) Identification of principal process characteristics, of the product to be controlled, and a determination as to the impact that a nonconformance would have on the safety of the end product.

(4) Identification of the types of control charts to be used to ensure maintenance of in-control processes. Variable control charts include charting for both range and variation around the mean.

(5) Capability studies to determine that the process can yield a product that conforms to FAA-approved design data.

(6) Test and measurement equipment study (e.g., a gauge study) to identify, eliminate, or adjust for, measurement errors that may contribute to process variability.

b. There is objective evidence of observance to established procedures.

6Q6. Are pertinent personnel trained in SPC techniques?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

6Q6 (continued)

Statement of Condition

a. Procedures provide for:

(1) Responsibility for SPC training.

(2) Training new, or newly transferred, employees in SPC techniques.

b. There is objective evidence of observance to established procedures.

6Q7. Are appropriate SPC control limits and subgroup selection being used?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Subgroups representative of the product lot.

(2) Avoidance of subgroup selection biases (e.g., patterns, ease of sampling, or pre-selection).

(3) Determination and adjustment of appropriate control limits for each process.

b. There is objective evidence of observance to established procedures.

6Q8. Are criteria defined for determining when an SPC process is considered to be out of control?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

6Q8 (continued)

Statement of Condition

a. Procedures define rules for out-of-control conditions and are available to operators or process checkers.

b. There is objective evidence of observance to established procedures.

6Q9. Is regular review of the SPC charts made to determine changes (e.g., shifts) in the process?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Review and retention of charts.

(2) Identification of personnel with the authority to stop the process when necessary.

b. There is objective evidence of observance to established procedures.

6Q10. Is corrective action required when an SPC control chart shows the process is out of control?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

6Q10 (continued)

(1) Corrective action for an out-of-control condition.

(2) Notification of functional areas when an out-of-control condition is found, their responsibilities, and response time.

b. There is objective evidence of observance to established procedures.

6Q11. Is additional inspection conducted to ensure product is acceptable, while corrective action is being taken, if acceptance has been made on the basis of SPC?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Continuous inspection during corrective action of the process.

(2) Implementing additional inspection, such as a designated level of increased inspection.

(3) Control charts to verify that the process continues to run within upper and lower control limits during corrective action procedures.

(4) Evaluation of the need for purge action, to remove suspected nonconforming products, when a control chart used for acceptance shows an out of control condition.

b. There is objective evidence of observance to established procedures.

SECTION 7. TOOL AND GAUGE

1. **SYSTEM ELEMENT DESCRIPTION**. The function which establishes control of precision measuring devices (e.g., tools, scales, gauges, fixtures, instruments, or automated measuring machines) used in fabrication, special processing, inspection, and test of detail parts, assemblies, and completed products to determine conformity to FAA-approved design.

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

7E1. Does engineering participate in the selection of precision measuring devices?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for engineering involvement in the selection of precision measuring devices used in fabrication, inspection, and test to ensure that the precision and accuracy required for each design feature are satisfactorily achieved.

b. There is objective evidence of observance to established procedures.

7P1. Are the precision measuring devices used for fabrication and special processing appropriate to determine the required design features?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

7P1 (continued)

Statement of Condition

a. Procedures provide for selection and use of only those measuring devices which will accurately determine the required design features. This includes appropriate determinations of, and adjustments for, the effects of tool wear.

b. There is objective evidence of observance to established procedures.

7Q1. Are tools and gauges initially approved and periodically inspected and calibrated?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Test and measurement equipment study (e.g., a gauge study) to identify, eliminate, or adjust for, measurement errors that may contribute to variability.

(2) Establishment of the accuracy of all measurement devices prior to initial use.

(3) Periodic inspection and calibration of all measurement devices at prescribed intervals, or just prior to use, that will ensure their continued accuracy.

(4) Assignment of calibration intervals to all measurement devices to ensure continued accuracy and reliability.

(5) Establishment of initial calibration intervals and allowable conditions for adjusting the interval.

b. There is objective evidence of observance to established procedures.

7Q2. Are procedures provided for the inspection and testing of all equipment and tooling used for the acceptance of drawing characteristics?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) A list of measurement devices and test equipment used to determine conformity of characteristics being inspected.

(2) Calibration methods for each measurement device.

(3) Environmental controls, standards, and equipment to be used.

(4) Calibration by qualified personnel.

b. There is objective evidence of observance to established procedures.

7Q3. Does a tool and gauge recall system exist?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) A documented mandatory recall system to ensure all measurement devices, calibration standards, and production tooling used for product acceptance are recalibrated at prescribed intervals.

(2) Control of measurement devices and standards that are overdue for calibration.

7Q3 (continued)

b. There is objective evidence of observance to established procedures.

7Q4. Are calibrations traceable to the National Institute of Standards and Technology or recognized international standards?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for calibrations traceable to recognized national standards. If no national standard exists, the basis for calibration is documented.

b. There is objective evidence of observance to established procedures.

7Q5. Do standards used for calibrating tools, gauges, and instruments have adequate accuracy (a minimum of 4 times more accurate than the calibrated gauge, if possible)?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Accuracy, stability, range, and resolution of the standard used for calibration appropriate for the measurement device characteristic being calibrated. The accuracy ratio of the standard is dependent on the evaluated facility's measurement requirements and may be limited by current state-of-the-art.

(2) Methodology to determine adequacy of the calibration standards.

(3) Certificates, reports, or data sheets attesting to the accuracy of all calibration standards.

7Q5 (continued)

b. There is objective evidence of observance to established procedures.

7Q6. Are tools and gauges calibrated and used in an acceptable environment, when specified?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Identification of environmental conditions that are necessary for use and calibration of measurement devices and standards.

(2) Appropriate use of measurement devices and standards in environmental conditions that might affect accuracy, stability, or calibration, such as: temperature, relative humidity, vibration, electrical interference, cleanliness, or other controllable factors.

(3) Compensating corrections to calibration or measurement results obtained in an environment that departs from acceptable conditions.

b. There is objective evidence of observance to established procedures.

7Q7. Does equipment used for inspection and test have the degree of accuracy necessary to determine conformity of the characteristic being inspected?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

7Q7 (continued)

(1) The degree of accuracy of all measurement devices and test equipment.

(2) Measurement devices and test equipment capable of the accuracy necessary and adequate for the intended purpose, including measurement devices and test equipment substituted for those specified.

b. There is objective evidence of observance to established procedures.

7Q8. Has a procedure been established for the use of personal gauges for product acceptance?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Inclusion in the calibration system of personally-owned gauges used for product acceptance.

(2) Assignment of a unique identifier.

b. There is objective evidence of observance to established procedures.

7Q9. Are tool control procedures applied to equipment required for special processing, such as tools, gauges, instruments, timers, ammeters, voltmeters, or bit pattern transfer hardware?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for periodic calibration of instrumentation used for controlling and monitoring special processes and for generation and maintenance of records.

7Q9 (continued)

b. There is objective evidence of observance to established procedures.

7Q10. Are tool control procedures applied to NDI equipment?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Periodic calibration of NDI equipment, and for generation and maintenance of records.

(2) Measurement of black light intensity on a periodic basis (preferably daily) using a calibrated black light meter.

(3) Measurement of white lights on a periodic basis using a calibrated white light meter.

b. There is objective evidence of observance to established procedures.

7Q11. Are tool control procedures applied to production tooling used as a media for acceptance?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Accuracy and repeatability of production tooling used for product acceptance prior to use.

(2) Inclusion in the calibration system.

7Q11 (continued)

(3) Assignment of unique identifiers.

(4) Availability of current applicable tool drawings.

b. There is objective evidence of observance to established procedures.

7Q12. Are calibration records generated and maintained on all equipment used for acceptance purposes?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for use of records that indicate:

(1) Contents of each record used, including, as a minimum:

(a) Nomenclature.

(b) Serial number.

(c) Location.

(d) Details of all adjustment.

(e) Repair or rework accomplished.

(f) Calibration history.

(g) Source and date next inspection is due.

(2) Record legibility, completeness, and accuracy.

(3) Requirements that tape files, microfilm, etc., used for record retention exhibit legible data, acceptance stamps and/or signatures, as required.

b. There is objective evidence of observance to established procedures.

7Q13. Are calibration intervals adjusted based on reliable data?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for adjustment of calibration intervals based on analysis of previous calibration results, wear, stability, purpose, and degree of usage.

b. There is objective evidence of observance to established procedures.

7Q14. Are gauges uniquely identified to show acceptability for use?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Unique identification of individual measurement devices and standards to provide traceability to the calibration records.

(2) Indication of the calibration status of measurement devices and standards. Typically, labels are used but other suitable controls can be provided.

(3) Use of the calibration status for monitoring adherence to calibration intervals.

b. There is objective evidence of observance to established procedures.

7Q15. Are tools and gauges protected, maintained, and replaced, as required, to ensure product conformity to FAA-approved design data?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Methods for handling, transporting, and storing measurement devices and standards to ensure required accuracy and reliability are maintained. Methods are usually in accordance with equipment manufacturer's recommendations and established industry practices.

(2) Actions taken when improper handling or storage occurs. As a minimum, an investigation is made to determine the adverse effects and action to be taken.

(3) Replacement of measurement devices and standards, as required, to ensure product conformity to FAA-approved design data.

(4) Storage of measurement devices and standards appropriate to maintain required accuracy and fitness for use. Vibration, shock, temperature variations, humidity and contamination are some of the detrimental factors the procedure considers.

b. There is objective evidence of observance to established procedures.

7Q16. Are standards, inspection tools, gauges, instruments, jigs, etc., that are inaccurate or beyond the scheduled calibration cycle identified and precluded from use until rework or recalibration is accomplished?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

7Q16 (continued)

Statement of Condition

a. Procedures provide for identification and control of measurement devices and standards that require rework or recalibration.

b. There is objective evidence of observance to established procedures.

7Q17. Is there a method to determine the percent of uncertainty contributed by a measurement device or standard when it is significantly out of tolerance?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Determination of what constitutes a significant out-of-tolerance (SOT) condition for each measurement device or standard. This should be when the out-of-tolerance condition could adversely affect product quality or safety.

(2) Determination of the degree of uncertainty contributed to the measurement by a significantly out-of-tolerance device or standard. This should not exceed 25%.

b. There is objective evidence of observance to established procedures.

7Q18. Is evaluation made of the need for action on a product which has been accepted by a significantly out-of-tolerance gauge?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

7Q18 (continued)

Statement of Condition

a. Procedures provide for:

(1) Documenting a significant out-of-tolerance condition, and investigating the validity of previous measurements.

(2) Notification of the significant out-of-tolerance condition to the user of the measurement device or standard.

b. There is objective evidence of observance to established procedures.

7Q19. Are there acceptable methods of tool and gauge rework and reinspection?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide appropriate methods for rework of measurement devices and standards, and include sufficient reinspections to ensure accuracy.

b. There is objective evidence of observance to established procedures.

7S1. Does the service/product support organization participate in the investigation of significant out-of-tolerance conditions?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

7S1 (continued)

Statement of Condition

a. Procedures provide for service/product support organization involvement in investigations of out-of-tolerance conditions to ensure that conditions which adversely affect product quality or safety are reported to the FAA and the user, as required.

b. There is objective evidence of observance to established procedures.

SECTION 8. TESTING

1. **SYSTEM ELEMENT DESCRIPTION**. The function which provides for static, destructive, and functional tests of production products/parts thereof to ensure conformity to FAA-approved design.

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

8E1. Are test procedures or instructions applicable to the product/parts thereof established, maintained, and used?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Preparation and maintenance of test procedures and instructions applicable to the products/parts produced to ensure that each article conforms to FAA-approved design data. Test documents include the following, as applicable:

(a) Original, and recurring, correlation and calibration (to an established standard or baseline determined by the facility and approved by the FAA) of aircraft engine test cells for the verification, validation, and repeatability of acceptance testing.

(b) Preparation and maintenance of a production flight test procedure and flight checkoff form(s) {§ 21.127; § 21.143}. A production flight test procedure includes, as a minimum {§ 21.127}:

1 An operational check of the trim, controllability, or other flight characteristics to establish that the production aircraft has the same range and degree of control as the prototype aircraft.

2 An operational check of each part or system operated by the crew while in flight to establish that, during flight, instrument readings are within normal range.

8E1 (continued)

3 A determination that all instruments are properly marked, and that all placards, required flight manuals, and supplements are installed after flight test.

4 A check of the operational characteristics of the aircraft on the ground.

5 A check on any other items peculiar to the aircraft being tested that can best be done during the ground or flight operation of the aircraft.

(c) Final test of the completed product/parts. {§ 21.143}

(2) Actions to be taken when tests fail.

b. There is objective evidence of observance to established procedures.

8E2. Are changes to test procedures/instructions adequately controlled?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Approval and control of all test procedure and instruction changes by authorized personnel.

(2) Requirements for changing test procedures and instructions.

(3) Review and verification of test procedure/instruction changes to ensure product quality is not negatively impacted.

(4) Documentation of test procedure/instruction change history by responsible personnel.

b. There is objective evidence of observance to established procedures.

8E3. In the case of aircraft, is the flight checkoff form properly completed?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.127	§ 21.165		
P				
N			X	X

Statement of Condition

a. There is objective evidence that:

(1) Flight checkoff form(s)have been prepared. {§ 21.127; § 21.165}

(2) Forms are legible, complete, and accurate.

(3) Flight test discrepancies and their correction have been documented.

(4) Satisfactory completion of all flight test requirements has been verified.

8E4. In the case of aircraft, is the evaluated facility using flight test pilots who have been fully qualified?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X		
N			X	X

Statement of Condition

a. Procedures provide for the use of flight test pilots with current FAA medical certificates, who have maintained aircraft currency requirements for the model(s) being flown, and who have necessary qualifications for any special procedures required.

b. There is objective evidence of observance to established procedures.

8E5. In the case of aircraft, does the evaluated facility have a flight safety program?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X		
N			X	X

Statement of Condition

a. Procedures provide for a flight safety program that includes, as a minimum:

(1) Monitoring of crew duty hours.

(2) Periodic review of accidents and incidents.

(3) Mandatory safety meetings.

b. There is objective evidence of observance to established procedures.

8P1. Does the manufacturing organization participate in the review of test instructions or procedures?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for the manufacturing organization to review test instructions or procedures prior to release to ensure that the product can be tested in conformity to FAA-approved design.

b. There is objective evidence of observance to established procedures.

8Q1. Does the quality organization participate in the review of test instructions or procedures?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Quality organization review of test instructions or procedures prior to release to ensure that:

(a) The product can be properly evaluated and verified to be in conformity to FAA-approved design. This includes the identification of inspection points that ensure conformity to FAA-approved design.

(b) Inspection equipment is available or can be procured which will adequately verify conformity to FAA-approved design, and which can be controlled for accuracy, when required.

(2) Approved quality organization personnel to authorize additions, deletions, or changes to inspection points in the test instructions or procedures, based upon inspection results.

b. There is objective evidence of observance to established procedures.

8Q2. Are engine inlets and test cells inspected for foreign objects before engine start?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X		
N			X	X

Statement of Condition

a. Procedures provide, as applicable:

(1) Preflight ground handling provisions that include foreign object controls.

8Q2 (continued)

(2) Careful inspection of ducts and cowlings for foreign objects (e.g., tools, hardware, wire, burrs, ties, dust, dirt, loose adhesive, and loose torque paint particles) before initial engine start.

(3) Periodic inspection of runways and taxiways to ensure pavement areas are maintained and debris that could be ingested are not present during engine run.

(4) Preventative maintenance and good housekeeping practices for test cells.

(5) Accomplishment of the following items, as a minimum, in the test cell before test article start-up:

(a) Test environment is clean and free from foreign objects.

(b) Hand tools are secured.

(c) Fixtures, dollies, and special test equipment are properly secured.

(d) Engine inlet screens, covers and engine components are properly secured to prevent ingestion.

(e) An engine review to verify that no loose hardware, wire, burrs, ties, dust, dirt, adhesive, torque paint particles, cotter pins, etc. exist.

(6) Inspection of the test article after test cell or aircraft operation has been completed for damage and reinstallation of all protective covers.

b. There is objective evidence of observance to established procedures.

8Q3. Are records of completed tests of aircraft, engines, or propellers generated and maintained?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X		
N			X	X

Statement of Condition

a. Procedures provide for:

8Q3 (continued)

(1) Contents of each record used, including, as a minimum:

(a) Test results.

(b) Test nonconformances.

(c) Corrective action.

(2) Record legibility, completeness, and accuracy.

(3) Requirements that tape files, microfilm, etc., used for record retention exhibit legible data, acceptance stamps and/or signatures, as required.

b. There is objective evidence of observance to established procedures.

8Q4. Are products/parts thereof which have been adjusted or reworked after test acceptance retested to approved procedures?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures outline the requirements for retest of products/parts adjusted or reworked after inspection acceptance when that adjustment or rework could have an impact on the performance of those products/parts.

b. There is objective evidence of observance to established procedures.

8Q5. Is post-test teardown inspection and retest conducted and recorded, as applicable?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

8Q5 (continued)

Statement of Conditions

a. Procedures provide for:

(1) A specified schedule of post-test teardown inspection to verify product quality, followed by rebuild and retest.

(2) A higher frequency of post-test teardown inspection for new products until the adequacy of assembly tooling, instruction, and techniques has been demonstrated.

(3) Preparing and maintaining records of post-test teardown inspection results.

(4) Notification of responsible manufacturing and engineering areas regarding noted nonconformances.

b. There is objective evidence of observance to established procedures.

8C1. Have the flight test procedures been approved by the FAA?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.127	§ 21.143		
P				
N			X	X

Statement of Condition

a. There is objective evidence that flight test procedures have been approved by the FAA prior to flight test. {§ 21.127; § 21.143}

8C2. Are changes to the approved production flight test procedure and flight checkoff form(s) submitted to the FAA?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.127	§ 21.147		
P				
N			X	X

8C2 (continued)

Statement of Condition

a. There is objective evidence that changes to approved production flight test procedures and flight checkoff form(s) are submitted to the FAA. {§ 21.127; § 21.147}

8C3. Has the established standard or baseline for aircraft engine test cell correlation and calibration been approved by the FAA?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X		
N			X	X

Statement of Condition

a. Procedures ensure that standards or baselines used for aircraft test cell correlation and calibration are approved by the FAA prior to using the test cell.

b. There is objective evidence of observance to established procedures.

SECTION 9. NONDESTRUCTIVE INSPECTION (NDI)

1. **SYSTEM ELEMENT DESCRIPTION**. The development and application of technical methods to examine materials or components in ways that do not impair future usefulness and serviceability in order to detect, locate, measure and evaluate discontinuities, defects, and other imperfections; to assess integrity, properties, and composition; and to measure geometrical characters. (Reference: ASTM E1316)

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

9E1. Are NDI processes reviewed for conformance with FAA-approved design data?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for engineering review of NDI processes to ensure that FAA-approved design is maintained.

b. There is objective evidence of observance to established procedures.

9E2. Are NDI processes, including changes, properly documented and controlled?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

9E2 (continued)

Statement of Condition

a. Procedures define a method of identifying and controlling revision levels of released NDI instructions.

b. There is objective evidence of observance to established procedures.

9Q1. Are operators qualified, certified, recertified, and decertified by the evaluated facility, as required, by specification/evaluated facility's procedures?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Initial qualification testing of inspectors before issuance of acceptance stamps.

(2) Requalification of inspectors on a prescribed periodic basis.

(3) Vision requirements and retest on a periodic basis.

(4) Inspectors to provide identification of various levels of qualifications and various fields of expertise.

(5) Qualification of inspectors by authorized personnel.

(6) Identification and notification when requalification and vision tests are required.

(7) Documentation of employee's qualification.

(8) Appropriate decertification methods for operators failing to maintain qualifications.

b. There is objective evidence of observance to established procedures.

9Q2. Are qualified operators performing within their limits of authorization?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide the limits of authority for conducting and interpreting test results, or writing test reports.

b. There is objective evidence of observance to established procedures.

9Q3. Are current applicable NDI procedures/process specifications readily available and used by inspection personnel?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for controlled and detailed methods of inspection in each area of application.

b. There is objective evidence of observance to established procedures.

9Q4. Are tanks and solutions checked for compliance with specified operating conditions?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

9Q4 (continued)

Statement of Condition

a. Procedures provide for:

(1) Periodic samples of tank solutions to ensure compliance with operating specifications.

(2) Processing of lab reports in a timely manner to ensure that out-of-control conditions are responded to immediately.

b. There is objective evidence of observance to established procedures.

9Q5. Are adequate test pieces and NDI known-defect samples available?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Test pieces and samples that adequately reflect the part configuration.

(2) Test pieces and samples containing minimum size anomalies, as required, that would cause rejection of the part.

(3) Availability of American Society for Testing and Materials (ASTM) Standards, or other reference material, for radiographic film interpretation, when required.

b. There is objective evidence of observance to established procedures.

9Q6. Are NDI known-defect samples identified to preclude introduction into the production system?

9Q6 (continued)

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide the method to identify samples with known defects used to establish NDI so as to distinguish them from production items and prevent their introduction into the production system.

b. There is objective evidence of observance to established procedures.

9Q7. Are products/parts thereof properly handled to prevent damage, contamination, corrosion, foreign object ingestion, etc?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Solution selection that precludes rust or corrosion.

(2) Retention of protective covers on parts (e.g., caps, plugs, or plates), if possible, while undergoing the inspection process. Any protective covers which have been removed are reinstalled after the inspection process is completed.

(3) Special holding fixtures if necessary to facilitate inspection methodology.

b. There is objective evidence of observance to established procedures.

9Q8. Is there acceptance and rejection criteria current with FAA-approved design data?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Acceptance/rejection criteria which have been coordinated with the FAA, or the PAH if applicable.

(2) Additional review of marginal inspection results by authorized personnel prior to acceptance.

(3) Use of acceptance/rejection criteria during inspection.

(4) Control of the revision level and for removal of obsolete acceptance/rejection criteria.

(5) Identification of personnel authorized to review and update acceptance/rejection criteria.

b. There is objective evidence of observance to established procedures.

9Q9. Are records generated and maintained to accurately reflect compliance with specification requirements?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Contents of each record used.

9Q9 (continued)

(2) Record legibility, completeness, and accuracy.

(3) Requirements that tape files, microfilm, etc., used for record retention exhibit legible data, acceptance stamps and/or signatures, as required.

(4) Generation of:

(a) Inspection records that include:

1 Acceptance of material.

2 Inspector responsible for each area of test.

3 Date of acceptance.

4 Lot or serial number.

(b) Qualification records for NDI operators that include:

1 Level of certification.

2 Educational background and experience.

3 Statement of satisfactory completion of training.

4 Results of most recent visual acuity examination.

5 Actual grades obtained in each examination.

6 Percentile weight assigned to each examination.

7 Composite grade of all examinations.

8 Date of certification or recertification, or both.

9 Signature of NDI examiner.

b. There is objective evidence of observance to established procedures.

9Q10. Is corrective action taken when an NDI process is found to be out-of-control?

9Q10 (continued)

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for an investigation to ensure continued acceptability of products accepted while the NDI process was out-of-control.

b. There is objective evidence of observance to established procedures.

9Q11. Are the critical parameters of the radiographic process identified and controlled?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Radiographic film processing per written procedures or manufacturer's instructions.

(2) Mixing of solutions in accordance with manufacturer's instructions.

(3) Control of solution temperatures, replenishing rates, and film travel as required to produce film of the required density, free of spots, streaks, fog, or scum.

(4) Periodic development of process control check strips and recording of densities.

(5) Periodic evaluation of uniformity of exposure.

(6) Film identification so as to have sufficient information to provide traceability and date of inspection.

9Q11 (continued)

(7) Inclusion of image quality indicator on each film.

(8) Film storage in accordance with recommendations from the manufacturer and monitoring of date limitations.

b. There is objective evidence of observance to established procedures.

9Q12. Are the critical parameters of ultrasonic inspection identified and controlled?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Immersion/squirter/bubbler tanks.

(a) Tanks are free of foreign materials that may inhibit adequate inspection.

(b) Wetting agent and/or corrosion inhibitor are used where needed.

(2) Couplant materials that are not detrimental to part being inspected or subsequent manufacturing operations.

b. There is objective evidence of observance to established procedures.

9Q13. Are the critical parameters of the magnetic particle process identified and controlled?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

9Q13 (continued)

Statement of Condition

a. Procedures provide for:

(1) Evaluation of the viscosity of the system oil on a systematic and periodic basis.

(2) Evaluation of the suspension of magnetic particles on a systematic and periodic basis.

(3) Evaluation of system sensitivity using a serialized test item on a systematic and periodic basis.

b. There is objective evidence of observance to established procedures.

9Q14. Are the critical parameters of the fluorescent penetrant process identified and controlled?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Checking developers periodically in accordance with applicable specifications.

(2) Checking and recording rinse water temperature and pressure daily (where applicable).

(3) Checking emulsifiers periodically in accordance with manufacturer's recommendations, or applicable specifications.

(4) Contamination testing, with results within the prescribed maximum allowable limits. This test is checked on a systematic and periodic basis.

b. There is objective evidence of observance to established procedures.

9Q15. Are the critical parameters of the eddy current process identified and controlled?

9Q15 (continued)

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Appropriate test pieces, eddy current probes, and handling equipment.

(2) Test pieces used to adjust the sensitivity of the electronic apparatus that are free of interfering discontinuities and that contain discontinuities similar in size and composition to those expected in the products to be examined.

(3) Test pieces that provide good signal resolution and have one or more natural or artificial discontinuities, such as notches or holes.

(4) Test areas visually free of grease, oil, rust, scale, or other substances that could interfere with the inspection.

b. There is objective evidence of observance to established procedures.

SECTION 10. SUPPLIER CONTROL

1. **SYSTEM ELEMENT DESCRIPTION**. The system by which the evaluated facility ensures supplier materials, parts, and services conform to FAA-approved design. For the purpose of this section, the term "supplier" includes distributors.

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

10E1. Does the evaluated facility control supplier design, including changes?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for control over supplier design and changes thereto.

b. There is objective evidence of observance to established procedures.

10Q1. Are initial and periodic evaluations of suppliers made, as necessary, and corrective actions taken to correct deficiencies found in the system?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Initial evaluation of suppliers, and periodically as necessary, to determine their capability to meet requirements.

10Q1 (continued)

(2) The methods for determining the extent of the evaluations, dependent, as a minimum, on the type, complexity, method of control, and importance of products or services procured, and provide for on-site evaluation, process reviews, document reviews, or independent product evaluations.

(3) Implementing and documenting effective corrective action when deficiencies are found.

b. There is objective evidence of observance to established procedures.

10Q2. Is use of approved suppliers required?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Criteria for supplier acceptability, based as a minimum on evaluation results and quality performance history for the commodities or services provided.

(2) Collection, evaluation, and reporting of quality performance data.

(3) A list of suppliers who have been reviewed and evaluated and found to be acceptable.

(4) A list of new suppliers located in other countries.

(5) Use of acceptable suppliers only.

(6) Methods for procurement from suppliers that require special control.

(7) Furnishing a current list to suppliers of the subtier sources evaluated by the evaluated facility.

b. There is objective evidence of observance to established procedures.

10Q3. Is the quality manual (or top level document) of a supplier approved by the evaluated facility?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide the method for reviewing and approving a supplier's quality system data.

b. There is objective evidence of observance to established procedures.

10Q4. Is buyer-furnished material controlled?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.125	§ 21. 165		§ 21.605
P				
N			X	

Statement of Condition

a. There is objective evidence that material furnished by the buyer is accepted under controlled conditions and meets FAA-approved design.

10Q5. Does the evaluated facility flow down applicable technical and quality requirements to both U.S. and other country suppliers?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

10Q5 (continued)

Statement of Condition

a. Procedures provide for:

(1) Inclusion of applicable technical data and quality requirements in the purchase documents. Technical data and requirements include, as applicable:

(a) Special processing specifications/engineering requirements for suppliers performing special processing.

(b) Calibration traceable to a national standard and submittal of certificates for suppliers performing calibration services.

(c) Software specification requirements for suppliers providing software.

(d) Submittal of certification test reports for all shipments of raw material.

(e) Identification of raw and process material in accordance with industry and/or customer specifications.

(f) Appropriate identification and marking of products/parts thereof.

(g) Identification of the actual manufacturers of the supplies provided by warehouses and distributors.

(h) Delegation of authority for major inspections or material review. Material review requirements include, as a minimum:

1 Identification of relevant MRB procedures that define the scope and authority of the supplier MRB.

2 Maintenance of an MRB system that meets all FAA requirements placed on the evaluated facility's MRB system (e.g., documentation of nonconformances, maintenance of records, members of the MRB, mutilation of “scrap” material).

3 Process for submittal to the evaluated facility of supplier nonconformances that are considered major changes to the FAA-approved type design.

(i) Authorization and requirements for direct shipment, when applicable.

(j) Supplier shipping document requirements for direct shipment:

10Q5 (continued)

1 Declaration that parts were produced under the terms of the production approval.

2 Identification of the product on which the part is eligible for installation.

(k) Special packaging and preservation requirements, when warranted for material protection.

(l) Identification of appropriate technical requirement revision levels.

(m) Notice of FAA review of supplier's facilities and products as necessary.

(n) Incorporation of design changes as specified.

(o) Notification to the evaluated facility of any latent defects, or defects listed in § 21.3, in products or parts previously supplied.

(p) Formalized SQC policy, when required.

(q) Requests for copies of control charts and other pertinent statistical data applicable to the time period during which the supplied products/parts thereof were produced.

(r) Submittal of supplier designs and changes to the evaluated facility for approval prior to incorporation, when required.

(s) Submittal of changes to a supplier's quality system that may affect inspection, conformity, or the airworthiness of the product.

(t) Record retention requirements.

(u) Use of English language for quality data (e.g., supplier quality procedures, certificates, reports, or other similar data required by the evaluated facility).

(2) A method to control the issuance and distribution of technical data and quality requirements to suppliers. Control methods include, as a minimum:

(a) Control and documentation of revisions to technical data and quality requirements (including sub-tier and referenced documents).

(b) Control of obsolete technical data and quality requirements.

(c) Determination of receipt status by the supplier.

b. There is objective evidence of observance to established procedures.

10Q6. Does the quality organization review purchase documents prior to issuance?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition:

a. Procedures provide for review of purchase documents by the quality organization prior to issue to ensure that all pertinent requirements have been incorporated.

b. There is objective evidence of observance to established procedures.

10Q7. Does the evaluated facility act on supplier notifications of suspected problems with previously delivered products?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for methods used to act upon notifications of nonconforming products, ensuring proper investigation and corrective action is taken.

b. There is objective evidence of observance to established procedures.

10Q8. Is raw material, including process material (such as weld rod, etc.), verified and identified?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.125	§ 21.143	§ 21.303	§ 21.607
P				
N				

10Q8 (continued)

Statement of Condition

a. There is objective evidence that all raw material has been verified and identified. {§§ 21.125, 21.143, 21.303, 21.607}

(1) Examples of methods of verification include:

(2) Review of certification test reports to ensure all requirements are met.

(3) Types and frequencies of analysis required to verify certifications, consisting as a minimum of initial and periodic verifications, dependent on supplier evaluations, past quality performance, and material importance.

(4) Nondestructive inspection techniques employed to verify the quality of castings and forgings.

b. Examples of methods of identification include:

(1) When specified, Material Laboratory Analysis Records identifiable to batch number, serial number, or heat number for a given part number.

(2) If Material Certificate/Laboratory Analysis is for a quantity of material, then serial numbers, if appropriate, are identifiable to the respective Material Certificate or Laboratory Analysis.

10Q9. Are purchased shelf-life materials and products verified to ensure that specification requirements are met?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Verification upon receipt of purchased material or products that have shelf-life requirements to ensure they are within specified dates.

10Q9 (continued)

(2) Withholding from production purchased material or products not within the specified shelf life requirements unless special testing is accomplished to verify conformity.

b. There is objective evidence of observance to established procedures.

10Q10. Is receiving inspection required to verify that supplier-furnished parts/service conform to the FAA-approved design data?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Conformity of supplier furnished raw material, items, software, parts, and assemblies.

(2) Extent of actual inspection upon receipt, depending as a minimum upon inspectability for conformity and quality, supplier evaluation results, past quality performance, inspections and reviews conducted at the supplier's facility, and relative importance of the supplies.

(3) First article inspection and test of products produced by new suppliers.

(4) Inspection and documentation requirements.

(5) Evaluation of incoming statistical data.

b. There is objective evidence of observance to established procedures.

10Q11. Are material and parts awaiting certification segregated?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for control, identification, and segregation (where practical) of material and parts awaiting testing or inspection from those already approved.

b. There is objective evidence of observance to established procedures.

10Q12. Are records of receiving inspection generated and maintained?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Contents of each record used, including, as a minimum, for the material or product inspected, name, part number, sample size, type and number of inspections made, conformance or nonconformance, number and description of nonconformances found, and action taken.

(2) Record legibility, completeness, and accuracy.

(3) Requirements that tape files, microfilm, etc., used for record retention exhibit legible data, acceptance stamps and/or signatures, as required.

b. There is objective evidence of observance to established procedures.

10C1. Does the evaluated facility make information available to the FAA regarding all delegation of authority to suppliers to make major inspection of any products/parts thereof?

Applicability:

	APIS	PC	PMA	TSO
R		§ 21.143		§ 21.605
P				
N	X		X	

Statement of Condition

a. There is objective evidence that all delegations of authority to suppliers for major inspections of any products/parts are available for review by the FAA. {§ 21.143; § 21.605}

10C2. Does the evaluated facility notify the FAA of all new suppliers located in other countries, and of the receipt of first articles produced by those suppliers?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for notification to the FAA of all new suppliers located in other countries, and of the receipt of first articles produced by those suppliers.

b. There is objective evidence of observance to established procedures.

10C3. Does the evaluated facility notify the FAA of suppliers in other countries authorized to direct ship?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

10C3 (continued)

Statement of Condition

a. Procedures provide for notification to the cognizant FAA office of each supplier located in another country authorized to direct ship.

b. There is objective evidence of observance to established procedures.

SECTION 11. NONCONFORMING MATERIAL

1. **SYSTEM ELEMENT DESCRIPTION**. A method of controlling, evaluating, and dispositioning of any product/part thereof which does not conform to FAA-approved design.

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

11M1. Does upper management review and analyze nonconforming material data to detect adverse trends and determine appropriate levels of corrective and preventive actions required?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Types of nonconforming material data referred for upper management review, personnel involved in reviewing and analyzing the data, and frequency of reviews.

(2) Appropriate investigation by all relevant facility organizations to reduce, prevent, and correct adverse trends.

b. There is objective evidence of observance to established procedures.

11E1. Are engineering personnel reviewing nonconforming material to identify major or minor changes to the FAA-approved type design?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

11E1 (continued)

a. Procedures provide for engineering review of nonconforming material to determine if the documented nonconformance constitutes a major or minor change to the FAA-approved type design.

b. There is objective evidence of observance to established procedures.

11Q1. Are nonconforming products/parts identified, controlled, and dispositioned?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.125	§ 21.143	§ 21.303	§ 21.605
P				
N				

Statement of Condition

a. There is objective evidence that nonconforming products/parts have been identified, controlled, and dispositioned . {§§ 21.125, 21.143; 21.303; 21.605} Control includes segregation of nonconforming material, usually through storage in enclosed and secure holding areas, with access limited to authorized personnel. Standard repair procedures should also be controlled.

11Q2. Is material that has been dispositioned as scrap required to be permanently identified as such, and disposed of?

Applicability:

	APIS	PC	PMA	TSO
R	§21.125	§21.165	§21.303(k)	§21.605
P				
N				

Statement of Condition

a. There is objective evidence that:

(1) Nonconforming material that has been dispositioned as “scrap” has been identified and disposed of. Parts/products dispositioned as “scrap” are mutilated or otherwise identified prior to release from material review control to preclude inadvertent use.

11Q2 (continued)

(2) Parts/products dispositioned as "scrap" that are retained in lieu of mutilation and disposal are properly identified and/or physically segregated to preclude inadvertent use; e.g., parts placed in a "scrap retention" crib awaiting a possible repair to be developed, or used in mock-ups or experimental testing.

(3) Parts from assemblies dispositioned as "scrap" are recovered and used only if the material review disposition shows that those parts did not contain the nonconformances that led to the "scrap" disposition.

11Q3. Is a Material Review Board (MRB) established and operational?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.125	§ 21.143		§ 21.605
P			X	
N				

Statement of Condition

a. There is objective evidence that:

(1) MRB members have been identified. This includes, as a minimum:

(a) Identification of the required members of the MRB, which should include, as a minimum, representatives of both the quality and engineering departments. {§ 21.125}

(b) Required qualifications of the quality and engineering members of the MRB, and the means by which personnel are added to the MRB.

(c) A list or electronic equivalent of approved quality and engineering representative members of the MRB, the frequency that MRB member lists are updated, the areas where these lists are available, and a facsimile of MRB member signatures or identification stamps.

(d) Approval by MRB representatives of both the quality and engineering departments of MRB documents which disposition nonconforming parts "accept-as-is" and "repair."

(2) The MRB has not exceeded its scope and limits of authority. This includes, as a minimum:

(a) Disposition of nonconformances which are minor changes to FAA-approved type design as "accept-as-is," "rework," "repair," "scrap," or "return-to-supplier."

11Q3 (continued)

(b) Disposition of nonconformances which are major changes to the FAA-approved type design as "rework" (to eliminate the nonconformance), "repair," "scrap," or "return-to-supplier." The MRB may disposition these nonconformances "accept-as-is" only after the major change has been approved by the FAA as a change to the FAA-approved type design. {§ 21.93}

(3) Nonconforming material is controlled from presentation to the MRB through final MRB disposition. MRB control may be accomplished through segregation (physical or electronic), marking, or tagging, etc., in a manner to preclude inadvertent release, or release by non-MRB personnel {§ 21.125}. This includes, as a minimum:

(a) Completion of all necessary MRB documents, including all required signatures of MRB personnel, prior to physical release of products/parts from MRB control.

(b) Identification of MRB material sent to manufacturing areas for rework or repair to preclude subsequent release without MRB approval. {§ 21.125}

(c) Identification of MRB material sent to manufacturing areas for continued processing and reinspection of the nonconformance after subsequent operations to ensure reinspection of the specified characteristic. {§ 21.125}

(4) MRB decisions have been recorded. {§ 21.143; § 21.605}.

(5) Nonconforming material disposition authority has been delegated to preliminary review personnel for "scrap," "return-to-supplier," "rework," or "repair" to Standard Repair Procedures.

11Q4. Are material review records generated and maintained?

Applicability:

	APIS	PC	PMA	TSO
R	§21.125	§21.165		§21.607
P			X	
N				

Statement of Condition

a. There is objective evidence that:

(1) Material review records, include, as a minimum, part number, quantity, date, adequate description of nonconformances (including identification as major or minor change), disposition, and authorized approval.

11Q4 (continued)

b. Application of “electronic” signatures are controlled, as well as authorized access to electronic data for making changes (e.g., password protection).

c. Records are legible, complete, and accurate.

11Q5. Is adequate reinspection/retest required following rework/repair?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.125			
P		X	X	X
N				

Statement of Condition

a. There is objective evidence that:

(1) Materials and parts dispositioned as "rework" by the MRB, or by persons assigned preliminary review authority, are reinspected, or retested as necessary, to ensure the rework was completed and that the former nonconformance now meets the FAA-approved type design. {§ 21.125}

(2) Materials and parts dispositioned as "repair" by the MRB are reinspected, or retested as necessary, to ensure the repair was completed and that the nonconformance meets the acceptance criteria of the MRB. {§ 21.125}

11Q6. Is corrective action (in-plant, at suppliers, and in-service) required where processes or procedures result in a nonconforming product/part thereof?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

11Q6 (continued)

(1) Analyses to determine the root cause of nonconformances.

(2) Periodic reviews of material review records to identify repetitive nonconformances. There are guidelines for initiating investigation and corrective action for repeated nonconformances that have exceeded an established limit of occurrences.

(3) Corrective action on repetitive nonconformances dispositioned "accept-as-is" to preclude de facto changes to the type design being made through MRB acceptance of those nonconformances, rather than through the FAA-approved change system.

(4) Evaluation of the design if a product/part thereof continually fails to meet the requirements of the engineering drawing.

(5) Control of any deviation system established to allow the production of products/parts thereof to increased tolerances and/or relaxed standards until the completion of corrective action. Some deviations are FAA-approved minor drawing changes to the type design.

b. There is objective evidence of observance to established procedures.

11Q7. Are corrective actions monitored for response, implementation, and effectiveness?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Review of material review records (including corrective action statements) for repetitive nonconformances to monitor response, implementation, and effectiveness of corrective action.

(2) Responsibilities of any Corrective Action Board (CAB) or equivalent function established, including tracking of significant corrective action.

b. There is objective evidence of observance to established procedures.

11S1. Are nonconformances which affect products in service reported to users?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide the method to notify users and recall products, when necessary, when nonconformances are suspected or known to exist in products in service.

b. There is objective evidence of observance to established procedures.

11C1. Are nonconformance dispositions that are identified as major changes approved only by the FAA through the type design process?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.97	§ 21.97	§ 21.97	
P				
N				X

Statement of Condition

a. There is objective evidence that all nonconformance dispositions that are considered major changes to the type design are submitted to the FAA for approval. {§ 21.97}

SECTION 12. MATERIAL HANDLING/STORAGE

1. **SYSTEM ELEMENT DESCRIPTION**. The methods used to protect raw materials, parts, subassemblies, assemblies, and completed products during manufacture, inspection, test, storage, and preparation for shipment to prevent damage, deterioration, or contamination.

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

12E1. Are changes to drawings, specifications, etc., made to incorporate appropriate methods of protecting products when recurrent damage is reported?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for design engineering review of recurrent product damage linked to approved protection methods to ensure appropriate methods are put in place.

b. There is objective evidence of observance to established procedures.

12P1. Does the manufacturing organization participate in the review of material handling specifications, procedures, etc.?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

12P1 (continued)

Statement of Condition

a. Procedures provide for the manufacturing organization to review specifications, procedures, etc., prior to release to ensure that the product can be effectively protected and retain conformity to FAA-approved design during production.

b. There is objective evidence of observance to established procedures.

12Q1. Are appropriate methods used to prevent part damage or contamination?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21. 125		§ 21.303	
P		X		X
N				

Statement of Condition

a. There is objective evidence of:

(1) Instructional guidance on the use of material handling equipment.

(2) Methods for stacking parts.

(3) Methods for tieing, wrapping, or properly supporting parts to preclude shifting and falling.

(4) Methods to protect critical machined surfaces, highly polished surfaces, or plated parts. Methods include use of lift fixtures, covering on fork lift contact surfaces, protective containers, wrapping, interlayering with protective material, special racks.

(5) Methods to protect electronic parts from corrosion, pin damage, or contamination from dust or dirt. Sealed type parts (e.g., switches, circuit breakers, or relays) are protected from rough handling and contact damage from like parts or other products.

(6) Methods to protect product from contamination. Methods include:

(a) Capping all tubing prone to entrapment of foreign objects at both ends.

12Q1 (continued)

NOTE: Tubes that will receive further processing (e.g., fittings, welding, or chemical treatment), and that will be cleaned in a subsequent process, need not be protected until all operations are completed.

(b) Bagging, plugging, or capping completed hose and hose assemblies.

(c) Individually packaging or properly protecting oxygen equipment, plumbing, and fittings. Methods also include cleaning instructions and subsequent protection for contaminated items.

(d) Bagging or capping of sensing devices (e.g., instruments, pressure and vacuum transducers, cabin pressurization equipment, gyros, switches, or air data computers), and pressure venting when required.

(7) Special handling provisions (e.g., white gloves or electrostatic discharge (ESD) control), where warranted. These provisions include:

(a) Protective measures to prevent fingerprints (particularly the by-products of oil, moisture, and salt) from deteriorating the product or causing inadequate adhesion.

(b) Protecting grease-coated products (e.g., control cables, bearings, gears, and rod ends) from dust, dirt, and corrosion.

(c) Training in special handling and storage techniques.

(d) Proper handling of ESD sensitive supplies and parts, including the methods for clearly identifying supplies and parts that require special ESD handling.

(e) Controlled work station conditions for removing ESD parts from special tote trays, boxes, and packaging.

(8) Methods to protect products during transit. Methods include:

(a) Bagging, boxing, or tieing parts and material to prevent intermixing.

(b) Retaining product in original containers as long as possible or practical.

(c) Foam, pads, or special packaging for delicate parts that are susceptible to vibration and shock damage.

(d) Covering, tieing, or banding parts and material that may be blown out of carts, trucks, or dollies.

12Q1 (continued)

(e) Protecting parts and materials from adverse weather conditions that would affect the product.

12Q2. Are special environmental controls (temperature, cleanness, etc.) utilized when warranted?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.125		§ 21.303	
P		X		X
N				

Statement of Condition

a. There is objective evidence that:

(1) Environmentally sensitive material is stored in original containers or, if removed for inspection, is appropriately resealed.

(2) Stock areas are surveyed to ensure compliance to written procedures for environmentally sensitive materials.

(3) Upper and lower temperature and humidity control limits, when applicable, recording requirements, and corrective action procedures have been established, and that corrective action is taken as required when limits are exceeded.

(4) General housekeeping is controlled to ensure the product is not adversely affected by storage and handling (e.g., dirt, dust, water damage, corrosion, compression, dropping, ultraviolet light, heat, or cold).

(5) Stock room personnel have been trained in maintaining established environmental controls.

12Q3. Are only conforming and properly identified products/parts placed in storage?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

12Q3 (continued)

Statement of Condition

a. Procedures provide for:

(1) Placement in stock of products/parts thereof that have met established acceptance criteria. This includes parts that have been previously installed and removed, but not nonconforming material.

(2) Control of uncompleted parts to prevent stocking under an identifying part number until complete as defined by print or specification.

(3) Placement in stocking areas of parts and material under investigation for suspected nonconformances only if the issuance has been suspended, and parts or material are properly identified to preclude distribution and usage.

b. There is objective evidence of observance to established procedures.

12Q4. Is there proper segregation and protection of product/parts thereof in storage areas?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.125		§ 21.303	
P		X		X
N				

Statement of Condition

a. There is objective evidence that:

(1) Parts and materials in storage areas are segregated from like or similar parts and material types.

(2) Bins, shelves, and storage areas are identified as to contents.

(3) Parts and materials in storage areas are protected from water, dust, and dirt damage.

12Q5. Are products/parts/material subject to age control, deterioration, or corrosion from prolonged storage identified and controlled?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.125		§ 21.303	
P		X		X
N				

Statement of Condition

a. There is objective evidence that:

(1) Age-sensitive materials, and materials susceptible to corrosion, are identified and controlled. This includes, as a minimum:

(a) Determination of shelf life limits by type of material.

(b) Detailed mixing instructions if different from manufacturer's.

(c) Instructions for retest and extension of shelf life.

(d) Permissible amount of time shelf life may be extended.

(e) Identification requirements for shelf life extension dates.

(2) Bins containing limited shelf life items are identified.

(3) Out-of-date items in bonded areas are removed and segregated until reinspection, retesting, and dispositioning can be accomplished.

(4) Raw materials used in composites (e.g., pre-preg rolls and epoxy/adhesive materials) are in compliance with manufacturer's specifications. There is an evaluation trail concerning receipt of material, initial testing usage, retesting, etc.

12Q6. When appropriate, are design changes incorporated on products/parts in storage prior to their release for installation/shipment?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.125	§ 21.165	§ 21.303(k)	§ 21.607
P				
N				

Statement of Condition

a. There is objective evidence that design changes are incorporated into a product/part in storage before installation or shipment. This evidence may include one or more of the following:

(1) Establishment of effectivity of a design change.

(2) Use of shop order or traveler.

(3) Stock purge requirements.

(4) Rework to Engineering instructions.

(5) Inspection requirements.

(6) Reidentification and restocking requirements.

12Q7. Is removal or issuance of products from storage areas controlled?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Authorized methods for removal or replacement of parts.

12Q7 (continued)

(2) Limited and controlled access to storage areas.

(3) Records to be generated and maintained for parts removed from the stock system.

(4) Issue of raw and process material accountable to a released production order.

(5) Control of parts that have been quarantined as a result of a suspected nonconformance.

b. There is objective evidence of observance to established procedures.

12Q8. Are only conforming and properly identified products/parts under the production approval or direct ship authority prepared for packaging and shipping?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Packaging and shipping products/parts that have been manufactured under the production approval, or authorized for direct shipment, and that meet established acceptance criteria.

(2) Compliance with shipping instructions.

(3) Methods for preservation, packaging, and shipping of completed products.

b. There is objective evidence of observance to established procedures.

SECTION 13. AIRWORTHINESS DETERMINATION

1. **SYSTEM ELEMENT DESCRIPTION**. The function which provides for evaluation of completed products/parts thereof, and related documentation, to determine conformity to FAA-approved design and condition for safe operation.

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

13E1. Are Airworthiness Directives (AD) incorporated?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.123	§ 21.165	§ 21.303(k)	§ 21.607
P				
N				

Statement of Condition

a. There is objective evidence that applicable AD's have been incorporated. This evidence may include one or more of the following:

(1) Identification of applicable AD's.

(2) Tracking the status of AD incorporation.

(3) Furnishing the customer with the AD incorporation status at the time the product is delivered.

13P1. Are completed aircraft properly registered?

Applicability:

	APIS	PC	PMA	TSO
R	Part 47	Part 47		
P				
N			X	X

13P1 (continued)

Statement of Condition

a. There is objective evidence that completed aircraft are properly registered. {Part 47}

13P2. Are flight manuals, supplements, and current weight and balance data furnished with each aircraft?

Applicability:

	APIS	PC	PMA	TSO
R	§ 23.1581 § 25.1581 § 27.1581 § 29.1581	§ 23.1581 § 25.1581 § 27.1581 § 29.1581		
P				
N			X	X

Statement of Condition

a. There is objective evidence that aircraft flight manuals, supplements, and current weight and balance data are furnished with each aircraft.

13Q1. Are aircraft, engine, and/or propeller log books and/or records, which have inspections and operating time requirements, properly annotated, signed, and dated?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X		
N			X	X

Statement of Condition

a. Procedures provide for:

(1) Aircraft log book entry and recording requirements.

(2) Record legibility, completeness, and accuracy.

13Q1 (continued)

(3) Methods for updating log books.

(4) Monitoring and verification of log book entries.

b. There is objective evidence of observance to established procedures.

13Q2. Have applicable airworthiness certificates or special flight permits been obtained for the purposes for which the aircraft is flown?

Applicability:

	APIS	PC	PMA	TSO
R	Part 21 Subparts H, I	Part 21 Subparts H, I		
P				
N			X	X

Statement of Condition

a. There is objective evidence that proper airworthiness certificates or special flight permits have been obtained prior to using aircraft for their intended purposes. {Part 21 Subparts H and I}

13C1. Have Statements of Conformity been submitted to the FAA?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.130			
P				
N		X	X	X

Statement of Condition

a. There is objective evidence that a statement of conformity for the product manufactured by an APIS holder has been submitted to the FAA, and that this statement has been signed by an authorized person who holds a responsible position in the manufacturing organization. {§ 21.130}

13C2. Have applications for airworthiness certification been submitted to the FAA?

Applicability:

	APIS	PC	PMA	TSO
R	Part 21 Subparts H, I			
P				
N		X	X	X

Statement of Condition

a. There is objective evidence that applications for airworthiness certificates have been submitted to the FAA.

13C3. Have registration and airworthiness certificates been cancelled for aircraft whose title has passed to an importing country purchaser?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.335	§ 21.335		
P				
N			X	X

Statement of Condition

a. There is objective evidence that U.S. registration and airworthiness certificates have been cancelled by the FAA when title passes or has passed to an importing country purchaser. This evidence includes the return of Registration and Airworthiness Certificates, AC Form 8050.3 and FAA Form 8100-2, to the FAA. {§ 21.335}

SECTION 14. FAA REPORTING REQUIREMENTS

1. **SYSTEM ELEMENT DESCRIPTION**. The procedures and methods used to notify the FAA of specific conditions as required by the applicable CFR. This includes procedures for positive feedback, recording, reporting, and investigation of significant or reported failures, malfunctions, or defects. This function would also provide for determining cause and effecting appropriate corrective actions on such failures, malfunctions, or defects.

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

14S1. Are there provisions for receiving feedback on service problems from users/installers of the product/part thereof?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Identification of a specific function to receive reports of service difficulties.

(2) Determination of appropriate manufacturing or design responsibilities for the reported problem.

(3) A system of tracking for accountability.

b. There is objective evidence of observance to established procedures.

14S2. Is a record of reported service difficulties generated and maintained?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

14S2 (continued)

Statement of Condition

a. Procedures provide for:

(1) Contents of each record used, including when the report was received, what was reported, and actions taken.

(2) Record legibility, completeness, and accuracy.

(3) Requirements that tape files, microfilm, etc., used for record retention exhibit legible data, acceptance stamps and/or signatures, as required.

b. There is objective evidence of observance to established procedures.

14S3. Are service problems (both design and manufacturing) investigated and prompt corrective actions taken by the evaluated facility?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) A method of investigating, identifying, locating and reporting suspected unsafe products.

(2) Prompt corrective action, which includes, as a minimum:

(a) Root cause determination and correction of deficient design or manufacturing.

(b) A means of reporting, purging, tracking, and accountability of known unsafe products.

b. There is objective evidence of observance to established procedures.

14S4. Is there a means for keeping users of the product/part thereof informed of service information, including field purges?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for informing product users of service difficulties, and of required field purges for suspected or known unsafe conditions.

b. There is objective evidence of observance to established procedures.

14S5. Are service bulletins and maintenance manuals approved by authorized personnel?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures define specific organizational and individual responsibilities for issuing service bulletins, maintenance manuals, service difficulty reports, and other related communication.

b. There is objective evidence of observance to established procedures.

14C1. Are failures, malfunctions, and defects reported to the FAA?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.3	§ 21.3	§ 21.3	§ 21.3
P				
N				

14C1 (continued)

Statement of Condition

a. There is objective evidence that failures, malfunctions, and defects identified as reportable conditions in § 21.3 are reported to the FAA by the most expeditious method available within 24 hours of occurrence, with provisions for weekends and holidays.

14C2. Are there requirements for the investigation of unairworthy conditions or unsafe features or characteristics reported by the FAA?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Investigating reports of unairworthy conditions or unsafe features or characteristics reported by the FAA.

(2) Reporting investigation results and actions taken or proposed to the FAA.

14C3. Is quality system data, and changes thereto, submitted to the FAA for approval?

Applicability:

	APIS	PC	PMA	TSO
R		§ 21.147		
P				
N	X		X	X

Statement of Condition

a. There is objective evidence that quality system data changes at a PC holder that may affect inspection, conformity, or airworthiness of the product are promptly submitted in writing to the FAA for approval. {§ 21.147} Implementation of the changes should be withheld until verbal or written FAA approval, as appropriate, is received.

14C4. Are relocations of the manufacturing facility at which products are manufactured, or expansions to include additional facilities at other locations, reported to the FAA in writing within 10 days of the action?

Applicability:

	APIS	PC	PMA	TSO
R			§ 21.303(j)	
P				
N	X	X		X

Statement of Condition

a. There is objective evidence that any changes in the location(s) where PMA products are manufactured have been promptly reported to the FAA. {§ 21.303(j)}

14C5. Are service bulletins, maintenance manuals, and changes thereto, coordinated with FAA engineering?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for coordination of service bulletin and maintenance manual issuances, and changes thereto, with FAA engineering.

b. There is objective evidence of observance to established procedures.

SECTION 15. INTERNAL AUDIT

1. **SYSTEM ELEMENT DESCRIPTION**. A scheduled and systematic evaluation by the evaluated facility to ascertain its own abilities and procedural compliance to established policy and guidance.

> **NOTE: The establishment and operation of an internal audit program (or sometimes referred to as a self-audit program) is not a mandatory requirement placed upon a PAH, but is commonly observed as an established industry practice. If a facility has a documented and operational internal audit program, it should be reviewed during the ACSEP evaluation for adequacy and observance with the facility's established procedures.**

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

15M1. Does the evaluated facility have an internal auditing program to verify compliance with established policies or approved data?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Planned and documented internal audits of personnel, procedures, operations, equipment, material, processes performed, and records in all major functional areas.

(2) Conducting, accomplishing, and reporting the audits.

(3) Compliance, systems, and product audits.

(4) An audit schedule which is available and followed.

(5) Special audits when critical safety problems are detected, or when there are significant organizational changes.

15M1 (continued)

(6) Methods for identifying nonconformances, obtaining required corrective action.

(7) Identification of responsible personnel.

b. There is objective evidence of observance to established procedures.

15M2. Is there feedback to higher-level management concerning the results of internal audits?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Review of internal audit results and corrective actions by management.

(2) Review of internal audit results by personnel having responsibility for the area that was audited.

(3) Quality systems or overall quality program improvement, in addition to correcting reported noncompliances.

b. There is objective evidence of observance to established procedures.

SECTION 16. GLOBAL PRODUCTION

1. **SYSTEM ELEMENT DESCRIPTION**. With the onset of profit and risk-sharing ventures by many FAA approval holders, global marketing and procurement strategies, multinational and multicorporate activities, etc., there has been a significant increase in the global expansion of the world's aircraft manufacturing community. Global production includes the use of associate facilities, the issuance and acceptance of import/export airworthiness approvals, and adherence to all applicable Bilateral Airworthiness Agreement (BAA) requirements

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

16Q1. Has an interface quality document been prepared for international manufacturing activities?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for a quality document that establishes the interface between the quality requirements of the international manufacturing activity and the evaluated facility's quality manual or procedures.

b. There is objective evidence of observance to established procedures.

16Q2. Is product/parts thereof from associate facilities controlled?

Applicability:

	APIS	PC	PMA	TSO
R				
P		X	X	X
N	X			

16Q2 (continued)

Statement of Condition

a. Procedures provide for:

(1) Control of product/parts thereof from associate facilities.

(2) Collection of quality performance data.

b. There is objective evidence of observance to established procedures.

16Q3. Have export airworthiness approvals been obtained for all products exported?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for:

(1) Methods for applying for export airworthiness approvals, and the responsibilities of personnel authorized to submit applications.

(2) A list of the products for which export airworthiness approvals are obtained.

(3) All exported products to meet special requirements of the importing country listed in Appendix 2 of AC 21-2 (current revision). Procedures provide for properly annotating any deviation on the exporting documentation, and including a letter of acceptance from the importing country for such deviations.

(4) Retention of copies of FAA Form 8130-4, Export Certificate of Airworthiness, and/or FAA Form 8130-3, Airworthiness Approval Tags, as applicable.

b. There is objective evidence of observance to established procedures.

16Q4. Have airworthiness approval tags (FAA Form 8130-3) been issued by authorized personnel?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. Procedures provide for identification of personnel authorized to issue airworthiness approval tags. {Part 21 Subpart L}

b. There is objective evidence of observance to established procedures.

16Q5. If an export airworthiness approval has been issued, have the necessary documents and instructions been forwarded to the aviation authority of the importing country, or to other locations as specified in the special requirements of importing countries in AC 21-2?

Applicability:

	APIS	PC	PMA	TSO
R	§ 21.335	§ 21.335	§ 21.335	§ 21.335
P				
N				

Statement of Condition

a. There is objective evidence that:

(1) All documents and information necessary for proper operation of the products being exported have been forwarded to the cognizant aviation authority. {§ 21.335}

(2) Manufacturing assembly instructions and an FAA-approved flight test checkoff form have been forwarded to the cognizant aviation authority for unassembled aircraft that is being exported. {§ 21.335}

SECTION 17. MANUFACTURER'S MAINTENANCE FACILITY

1. **SYSTEM ELEMENT DESCRIPTION**. The system by which a manufacturer of aircraft, aircraft engines, propellers, appliances, or parts thereof, maintains and approves for return to service any article for which it is rated, and performs preventive maintenance on that article.

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

17Q1. Has an inspection program and a program covering maintenance and preventive maintenance been established?

Applicability:

	APIS	PC	PMA	TSO
R	§ 145.2	§ 145.2	§ 145.2	§ 145.2
P				
N				

Statement of Condition

a. There is objective evidence of:

(1) Maintenance, return to service, and preventive maintenance on those products and appliances for which the MMF has been issued. {§ 145.2}

(2) Competent personnel, and adequate facilities and equipment. {§ 145.2}

(3) Aircraft released to service that is airworthy and that has been properly maintained. {§ 145.2}

17Q2. Is the evaluated facility operating within the privileges of its repair station certificate?

Applicability:

	APIS	PC	PMA	TSO
R	§ 145.103	§ 145.103	§ 145.103	§ 145.103
P				
N				

17Q2 (continued)

Statement of Condition

a. There is objective evidence that the work performed under the MMF is limited to the maintenance and return to service of products manufactured under the facility's production approval, and to preventive maintenance on those products. {§ 145.103}

17Q3. Is the work performed in accordance with Part 43 requirements, and approved data?

Applicability:

	APIS	PC	PMA	TSO
R	§ 145.105	§ 145.105	§ 145.105	§ 145.105
P				
N				

Statement of Condition

a. There is objective evidence that work is performed according to the manufacturer's maintenance procedures or Instructions for Continued Airworthiness. {§ 145.105; § 43.13}

17Q4. Are certificated mechanics or repairmen directly in charge of maintenance and preventive maintenance?

Applicability:

	APIS	PC	PMA	TSO
R	§ 145.103	§ 145.103	§ 145.103	§ 145.103
P				
N				

Statement of Condition

a. There is objective evidence that certificated mechanics and repairmen are directly in charge in all areas of the facility where maintenance or preventive maintenance is being performed. {§ 145.103}

17Q5. Is the work accomplished entered in the appropriate maintenance record?

Applicability:

	APIS	PC	PMA	TSO
R	§ 145.105 § 43.9 § 43.11	§ 145.105 § 43.9 § 43.11	§ 145.105 § 43.9 § 43.11	§ 145.105 § 43.9 § 43.11
P				
N				

Statement of Condition:

a. There is objective evidence that all maintenance and preventive maintenance is entered in the appropriate maintenance record, including the information listed in CFR part 43, § 43.9 and/or § 43.11.

17Q6. Have all requirements been completed prior to approving return to service?

Applicability:

	APIS	PC	PMA	TSO
R	§ 145.105 § 43.5	§ 145.105 § 43.5	§ 145.105 § 43.5	§ 145.105 § 43.5
P				
N				

Statement of Condition

a. There is objective evidence that all requirements have been satisfactorily completed, including AD incorporation, before approving for return to service any product or part thereof that has undergone maintenance or preventive maintenance. {§ 145.105; § 43.5}

17Q7. Is product/parts thereof from satellite MMFs controlled?

Applicability:

	APIS	PC	PMA	TSO
R				
P	X	X	X	X
N				

Statement of Condition

a. There is objective evidence that:

(1) Product/parts thereof from satellite MMFs are controlled.

(2) Quality performance data has been collected.

APPENDIX 15. STANDARDIZED EVALUATION CRITERIA FOR DELEGATED FACILITIES

1. **PURPOSE**. This appendix provides standardized evaluation criteria used in documenting the evaluation of the systems elements listed in figure 1 for delegated facilities.

FIGURE 1. SYSTEM ELEMENTS

Section	System Elements	Appendix 15 Page No.
1	Organization and Responsibility	3
2	Project Management	17
3	Design Data Approval	33
4	Design Change Approval	41
5	Testing	47
6	Conformity Inspection	53
7	Airworthiness Certification	61
8	FAA Notification	67
9	Continued Airworthiness	71
10	Audit	79

2. **DESCRIPTION OF SYSTEM ELEMENTS SECTION FORMAT**. Each section of this appendix addresses one of the 10 system elements listed in figure 1. Each section is formatted as follows:

a. **System Element Description**. This is a brief description of what the system element is intended to accomplish or control.

b. **System Element Standardized Evaluation Criteria**. Each criteria is formatted as follows:

(1) **Standardized Evaluation Criteria**. Each criteria is identified by a numbered question within a box. The format of each question number is based on the specific system element section number identified in figure 1, the letter "D" to identify the criteria as specific to delegated facilities, and the sequence within the system element. For example, question 1D8 would be the eighth question [8] under the organization and responsibility system element [1] for a delegated engineering function [D]. Numbers in parentheses refer to the ACSEP criteria in appendix 14 of this order that are similar in nature and that may be grouped together by AIR-200 for data analysis.

(2) **Applicability**. This identifies the specific type of delegated facility function (DAS, DOA, or SFAR 36) to which the standardized evaluation criteria applies. A table format is used that identifies the type of facility across the top, and a code for the type of applicability in the first column. The codes for the types of applicability are defined as follows:

(a) **R**. This applicability code is used to identify criteria that have a CFR based origin. The applicability to a specific facility is indicated by the specific CFR part or section reference; e.g., § 21.463.

(b) **P**. This applicability code is used to identify criteria that reflect FAA Aircraft Certification practices to assist in evaluating design data for compliance to applicable CFR. These practices may be contained in the FAA-approved DAS or SFAR 36 Procedures Manual, DOA Handbook, or other non-FAA approved facility procedures. The evaluator must determine the actual level of application at each delegated facility. The applicability to a specific facility is indicated with an "X."

(c) **N**. This applicability code is used to indicate that the criteria is not generally applicable at a specific facility. The evaluator must determine the actual level of application at each facility. The applicability to a specific facility is indicated with an "X."

(3) **Statement of Condition**. The statement of condition provides specific indicators of criteria that have been satisfactorily implemented. These indicators generally include documented procedures and adherence to those procedures. The procedures indicated in the statement of condition include some of the specific practices and principles that are often associated with the criteria. However, these practices and principles are not the only acceptable indicators of satisfactory implementation. Evaluators may identify additional practices and principles in FAA-approved data or other facility procedures. A practice or principle that reflects CFR requirements is followed by the specific CFR part or section reference in brackets, e.g., {§ 21.463}. The statement of condition assists the evaluator to determine the following:

(a) The depth of the investigation that may be required to satisfactorily evaluate the criteria.

(b) The appropriate criteria on which to document evaluation results.

SECTION 1. ORGANIZATION AND RESPONSIBILITY

1. **SYSTEM ELEMENT DESCRIPTION**. The evaluation of the facility's organization and responsibilities relative to the facility's delegation.

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document the evaluation of this system element.

1D1 (*1Q4*). Does the evaluated facility have and use a Procedures Manual appropriate to the delegation/authorization that it holds, including description of responsibilities and authorities?

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.441		§ 6
P		X	
N			

Statement of Condition

a. There is objective evidence that the evaluated facility has and uses a procedures manual.

1D2. Are procedures for the delegated functions set forth in a current DOA Handbook, or DAS or SFAR 36 Procedures Manual?

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.441		§ 6(b)
P		X	
N			

Statement of Condition

a. There is objective evidence that a procedures manual has been prepared for DAS and SFAR 36 facilities. Examples of applicable procedures that should be included are as follows:

DAS: Procedures for processing the technical data required for supplemental type certification and for issuing STC's.

1D2 (continued)

(1) Determination of certification basis.

(2) Classification of project significance and complexity.

(3) Method for developing certification plan.

(4) The identification (names, signatures, and responsibilities) of officials and of each staff member.

(5) A "Log of Revisions" page that identifies each revised item, page, and date of revision, and contains the signature of the person approving the change for the Administrator.

(6) Approval of design data (drawings and reports) within the DAS organization.

(7) Requests for conformity inspection, including test articles and test setups.

(8) Approval of certification documents, e.g., TIA, TIR, AFMS, STC.

(9) Conduct of inspections, including conformity and compliance inspections.

(10) Issuance of special airworthiness (experimental) certificates and reissuance of standard airworthiness certificates.

DOA:

(1) Type Certification (covering at least §§21.253, 21.257 and 21.261).

(2) Revision to the Production Certificate (covering at least § 21.267).

(3) Issuance of Airworthiness Certificates (covering at least §§ 21.269, 21.271 and 21.273).

(4) Repairs and Alterations (covering at least § 21.289).

(5) Service Difficulties (covering at least § 21.277).

(6) Other functions within the scope of the delegation.

SFAR 36:

(1) Procedures for developing and determining the adequacy of technical data for major repairs.

1D2 (continued)

(2) The identification (names, signatures, and responsibilities) of officials and of each staff member.

(3) A "Log of Revisions" page that identifies each revised item, page, and date of revision, and contains the signature of the person approving the change for the Administrator.

(4) Procedures in establishing the applicability and limitations of approved repairs.

b. There is objective evidence of ACO-approved procedures, when required.

1D3. Is the procedures manual or handbook reviewed periodically by the evaluated facility for adequacy and currency, and updated as necessary?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. The procedures manual provides for periodic review update and approval.

b. There is objective evidence of observance to established procedures.

1D4 (*4M1*). Is the DOA, DAS, or SFAR 36 facility operating within its approved delegated authority?

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.451	§ 21.251	§ 10
P			
N			

Statement of Condition

a. There is objective evidence that:

1D4 (continued)

(1) The holder of a DOA is applying the delegation to only products that it produces, or has authority to produce.

(2) Approvals granted by the DOA, DAS, or SFAR 36 are within its delegated authority.

(3) An STC containing acoustic and exhaust emissions changes to the type design is issued only after the FAA has determined that the respective CFR part 36 and CFR part 34 requirements have been met.

1D5. Does the evaluated facility limit repair, rebuilding, or altering only to those products for which a production approval has been obtained?

Applicability:

	DAS	DOA	SFAR 36
R		§§ 21.289 & 43.3	
P			
N	X		X

Statement of Condition

a. There is objective evidence that the evaluated facility approves repairs, rebuilding, and alterations only for those products covered by production approval.

1D6. Does the evaluated facility assure that it continues to meet the criteria for holding its authorization?

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.439	§ 21.239	§ 5
P			
N			

Statement of Condition

a. There is objective evidence that the evaluated facility is operating within the regulatory criteria.

1D6 (continued)

DAS:

(1) Holds a current domestic repair station certificate under CFR Part 145, or air carrier or commercial operator operating certificate under CFR Part 121.

(2) Is a manufacturer of a product for which it has alteration authority under CFR part 43.3(j).

(3) Has adequate maintenance facilities and personnel, and

(4) Employs, or has available, an appropriate staff.

DOA:

(1) Holds a current type certificate, issued under the standard procedures, for each product type for which a DOA is held.

(2) Holds a current production certificate issued under standard procedures, and

(3) Employs an appropriate staff.

SFAR 36:

(1) Holds an air carrier, commercial, or air taxi operating certificate, and has operation specifications for operations required to be conducted in accordance with part 121 or 127, or § 135.2, or has a domestic repair station certificate under part 145, and

(2) Has an adequate number of appropriate personnel.

1D7. Does the evaluated facility have a Coordinator as a focal point for communication with the FAA as it relates to the interpretation of regulations, policies, procedures, and maintenance of certification data and certification checklist?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

1D7 (continued)

Statement of Condition

a. There is objective evidence that a Coordinator has been established as a communication focal point with the FAA.

1D8. Does the Coordinator have sufficient authority to administer the pertinent CFR effectively?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. The Coordinator is in an organizational position with sufficient authority to administer the pertinent CFR effectively.

b. The Coordinator is actively involved in engineering processes and airworthiness activities defined by the evaluated facility in order to administer the pertinent CFR effectively.

c. There is objective evidence that the procedure is used.

1D9. Are the organizations responsible for performing delegated engineering and flight test functions described and their levels of authority defined?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. The procedure manual includes as a minimum:

1D9 (continued)

(1) A table of organization that describes the functional relationship of upper management to the various organizational components.

(2) The purpose and objectives of the engineering and flight test organization.

(3) The identification of the functions of staff members within the facility.

(4) The role of staff members in the facility and their responsibilities as representatives of the Administrator, ensuring that no conflicting restraints are placed on the performance of their duties.

b. There is objective evidence of observance to established procedure.

1D10. Are the organizations responsible for performing conformity inspection and airworthiness functions described and their levels of authority defined?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. The procedure manual includes as a minimum:

(1) A table of organization that describes the functional relationship of upper management to the various organizational components.

(2) The purpose and objectives of the conformity inspection and airworthiness organization.

(3) The identification of the functions of staff members within the facility.

(4) The role of staff members in the facility and their responsibilities as representatives of the Administrator, ensuring that no conflicting restraints are placed on the performance of their duties.

b. There is objective evidence of observance to established procedure.

1D11 (*1M6*). Are approved procedures, regulations, and policies made available to responsible delegated facility staff members?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. The procedures manual provides for distribution of regulations, policy, and procedures.

b. The procedures manual provides that each appropriate employee has easy access to pertinent regulations, policy, and procedures.

c. There is objective evidence of observance to established procedure.

1D12 (*1M3*). Is there a staff of engineering, flight test, and inspection personnel, as appropriate, that can determine compliance to airworthiness requirements?

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.439(a)(4)	§ 21.239(c)	§ 5(a)(3)
P			
N			

Statement of Condition

a. There is objective evidence of a staff of engineering, flight test, and inspection personnel, as appropriate, to determine compliance with airworthiness requirements.

1D13. Does the evaluated facility maintain a current list of products or articles that have been repaired or modified under the delegated authorization?

1D13 (continued)

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.493		§ 13(b)
P		X	
N			

Statement of Condition

a. There is objective evidence that a list of products by make, model, manufacturer's serial number, and, if applicable, TSO or PMA identification, is being maintained.

1D14 (*1M7*). Does the evaluated facility keep current a list of all the certificates for which it holds approval?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide:

(1) For DOA, assurance that the appropriate FAA office keeps current each Type Certificate (TC), Production Certificate (PC), and Production Limitation Record (PLR), as appropriate, of the evaluated facility.

(2) For DAS, assurance that Supplemental Type Certificates are kept current.

(3) Assurance that limits of authorization are current, i.e., letter of delegation for DOA, Air Agency Certificate for DAS.

b. There is objective evidence of observance to established procedures.

1D15. Is there a requirement for the evaluated facility's personnel to have knowledge, skills, and abilities appropriate to their assignments and responsibilities?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures define the method for establishing and maintaining personnel qualifications appropriate to the delegated functions being performed.

b. There is objective evidence of observance to established procedures.

1D16. Do the organizations and personnel identified in the evaluated facility periodically receive training and updates for the functions and procedures that they have been delegated?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. There is objective evidence (on going training requirements) that staff members are knowledgeable of the approved functions and procedures, including periodic changes, that have been delegated to them and to the facility.

1D17. Have appropriate personnel attended periodic FAA Standardization Workshops?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

1D17 (continued)

Statement of Condition

a. There is objective evidence that the individuals identified on the organization's delegated function list have attended applicable FAA Standardization Workshops.

1D18 (*1Q5*). Are tags, forms, and other certification documents described in the procedures manual and are the items properly controlled?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures include, as a minimum:

(1) A sample of each tag, form, and other document with instructions for use as applicable.

(2) A formal change control procedure.

b. There is objective evidence of observance to established procedures.

1D19 (*1Q6*). Does the evaluated facility retain records in accordance with the appropriate regulations?

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.493	§ 21.293	§ 13
P			
N			

Statement of Condition

a. There is objective evidence that:

(1) A record retention schedule that complies with applicable regulations has been established.

1D19 (*1Q6*) (continued)

(2) Technical data files, repair, rebuild, and alteration records, original application data, inspection records, and service difficulty records, as applicable, are maintained in accordance with record retention requirements.

1D20 (*8E5*). In the case of aircraft, does the evaluated facility have a flight safety program?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for a flight safety program that includes, as a minimum:

(1) Monitoring of crew duty hours.

(2) Periodic review of accidents and incidents.

(3) Mandatory safety meetings.

b. There is objective evidence of observance to established procedures.

SECTION 2. PROJECT MANAGEMENT

1. **SYSTEM ELEMENT DESCRIPTION**. Project management includes those functions related to the overall management and approval of a project within the delegated facility's approved procedures manual or handbook.

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document the evaluation of this system element.

2D1. Has a certification basis or airworthiness requirement been established and used for the modified or repaired type certificated product?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures include, as a minimum:

(1) Method used to determine certification basis (regulatory requirements).

(2) Method for evaluating the regulatory requirement against the modification or repair.

(3) Method of documenting certification basis (regulatory) applicability.

b. There is objective evidence of observance to established procedures.

2D2. When determining the certification basis, has the evaluated facility made a determination on the use of the latest airworthiness standards?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

2D2 (continued)

Statement of Condition

a. Procedures include, as a minimum:

(1) Method of documenting certification basis (regulatory) applicability, including the position relative to complying with the later standards.

(2) Method used in evaluating the basic regulatory requirements together with the applicable service experience.

b. There is objective evidence of observance to established procedures.

2D3. Does the evaluated facility make a determination as to whether a project is significant or non-significant prior to submitting the letter of intent to the FAA?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures include, as a minimum:

(1) Method used to determine and document the project criticality assessment.

(2) Method to incorporate the assessment findings into the letter of intent or other project notification form.

b. There is objective evidence of observance to established procedures.

2D4. Has a certification basis been established and coordinated with the FAA for new type certification projects?

Applicability:

2D4 (continued)

	DAS	DOA	SFAR 36
R			
P		X	
N	X		X

Statement of Condition

a. Procedures include, as a minimum:

(1) Method used to determine certification basis (regulatory requirements).

(2) Method for evaluating the regulatory requirement against the proposed type certificated product.

(3) Method of documenting certification basis (regulatory) applicability.

(4) Method to notify the FAA of the proposed certification basis.

b. There is objective evidence of observance to established procedures.

2D5. Are letters of intent or similar documents reviewed by the staff prior to submittal to the FAA?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures include a method to coordinate the letter of intent internally with engineering, flight test, and inspection staff members prior to submitting the letter to the FAA.

b. There is objective evidence of observance to established procedures.

2D6. Does the evaluated facility submit a Letter of Intent or similar document for project initiation to the respective ACO?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures include, as a minimum:

(1) Method to identify the information required in the Letter of Intent.

(2) A listing of staff member(s) authorized to approve and submit the Letter of Intent to the FAA within a prescribed time.

b. There is objective evidence of observance to established procedures.

2D7. Is the FAA response to the letter of intent obtained prior to the issuance of the certificate?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures include a method to disposition the FAA response or requirements to the Letter of Intent.

b. There is objective evidence of observance to established procedures.

2D8. Does the evaluated facility obtain FAA's concurrence for the application of all equivalent safety provisions applied for under § 21.21?

2D8 (continued)

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.461	§ 21.261	
P			
N			X

Statement of Condition

a. There is objective evidence that FAA concurrence has been obtained for the application of equivalent safety provisions.

2D9. Are AD's identified for the product being modified/repaired and evaluated for their effect on the change in the type design?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures include, as a minimum:

(1) Identification of applicable AD's.

(2) Evaluation of the effect the AD has on the modified/repaired product.

NOTE: If an AD is identified as applicable, and as a result of the proposed modification or repair the requirements of the AD can no longer be accomplished, the delegated facility MUST obtain an alternate means of compliance to the AD from the ACO which ISSUED the AD, PRIOR to the delegated facility's issuance of a design approval.

b. There is objective evidence of observance to established procedures.

2D10. Does the evaluated facility coordinate milestones and unique project requirements with the appropriate disciplines within the facility, and with the ACO and MIDO?

2D10 (continued)

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for communicating milestones and unique project requirements with the appropriate DAS/DOA personnel and with the FAA.

b. There is objective evidence of observance to established procedures.

2D11. Are there means for the identification and resolution of significant technical, regulatory, and administrative issues that occur during the certification process within the facility, and with the ACO and MIDO?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures include, as a minimum, a method to:

(1) Identify issue(s).

(2) Identify staff member participation.

(3) Request the FAA for an issue paper(s), if required.

(4) Incorporate the findings of the issue paper into the type design.

b. There is objective evidence of observance to established procedures.

2D12. Do staff members communicate with each other for project coordination and, when applicable, with the FAA (ACO and/or MIDO)?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures promote, as a minimum, communication between:

(1) Staff members and management.

(2) Staff members for project coordination.

(3) Delegated facility staff members and the FAA.

b. There is objective evidence of observance to established procedures.

2D13. Is there coordination between staff members on projects that require approvals in more than one technical area?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures include, as a minimum, a method to:

(1) Coordinate multi-discipline review and approval, e.g. airframe, systems, propulsion, flight test, and inspection.

(2) Authorize staff member(s) to review each data package for possible overlaps.

b. There is objective evidence of observance to established procedures.

2D14. Are required certification tests identified, documented, and approved?

Applicability:

	DAS	DOA	SFAR 36
R			§ 6(b)(2)(ii)
P	X	X	
N			

Statement of Condition

a. There is objective evidence that staff members authorized to witness and approve test results have been identified{SFAR 36, § 6(b)(2(ii)}. Procedures may provide for:

(1) Method to identify all tests to assure compliance with the applicable airworthiness requirements.

(2) Method to define and conduct tests, e.g., ground tests, TIA.

(3) Method to document and approve results, e.g., test report, TIR.

2D15. Does the evaluated facility process and approve an authorization, such as a TIA, which authorizes the official conformity, airworthiness inspections, and flight tests necessary to fulfill certain requirements for TC, STC, and amended TC/STC certification?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures include, as a minimum, a method to:

(1) Document the required official certification inspections and tests.

(2) Approve the required document, including, as applicable, the coordination with other staff members.

(3) Make and approve changes to this document.

2D15 (continued)

(4) Control and file this document.

(5) Include FAA participation, as required.

b. There is objective evidence of observance to established procedures.

2D16. Are compliance inspections being conducted by authorized staff members?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for:

(1) Method to identify compliance inspection requirements.

(2) Method to document and disposition the findings of the compliance inspection.

(3) Identification of staff members authorized to conduct compliance inspections.

b. There is objective evidence of observance to established procedures.

2D17. Are conformity inspections accomplished and documented prior to conducting certification tests?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

2D17 (continued)

Statement of Condition

a. Procedures provide for a method to:

(1) Assure that conformity inspections are accomplished prior to certification tests.

(2) Define and conduct conformity inspections, e.g., ground tests, TIA.

(3) Document and approve results.

b. There is objective evidence of observance to established procedures.

2D18. Are nonconforming products/parts dispositioned by engineering prior to tests or final approval?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for engineering review and disposition of nonconforming products/parts.

b. There is objective evidence of observance to established procedures.

2D19. Does the evaluated facility assure that FAA-requested participation and/or the determination of specific findings are completed?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

2D19 (continued)

Statement of Condition

a. Procedures include, as a minimum, a method to assure that:

(1) FAA-requested participation and/or specific findings are included in the testing and inspection schedule.

(2) FAA-requested participation and/or specific findings are completed and documented.

b. There is objective evidence of observance to established procedures.

2D20. When applicable, is the AFM/AFMS (Aircraft Flight Manual or Aircraft Flight Manual Supplement) properly formatted, documented, coordinated, approved, and controlled?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures include, as a minimum, a method to:

(1) Determine whether an AFM or AFMS is necessary.

(2) Assure that the AFM or AFMS is properly formatted.

(3) Assure that the document has been coordinated with all engineering disciplines.

(4) Assure that the AFM or AFMS is approved and referenced properly on the approval certificate prior to the issuance of the type certificate or supplemental type certificate.

(5) Process revisions to the AFM or AFMS.

b. There is objective evidence of observance to the established procedures.

2D21. Does the evaluated facility process and approve a document, such as a TIR/STIR, which documents those official conformity, airworthiness inspections, and flight tests necessary to fulfill the requirements for TC, STC, and amended TC certification?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures include, as a minimum, a method to:

(1) Document the results of the official certification inspections and tests.

(2) Approve the required document, including, as applicable, coordination with other staff members.

(3) Make and approve changes to this document.

(4) Control and file this document.

(5) Identify timely completion of the document.

(6) Include FAA participation, as required.

b. There is objective evidence of observance to established procedures.

2D22. Are projects that require TC or STC amendment identified, documented, and approved?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

2D22 (continued)

Statement of Condition

a. Procedures include a method that identifies the procedure to be used when amending a TC or STC.

b. There is objective evidence of observance to established procedures.

2D23. Does the DAS/DOA coordinator obtain concurrence from the applicable staff members that all items are completed prior to the issuance of the TC/STC?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures should include the process by which the evaluated facility will obtain concurrence from engineering, flight test, and inspection prior to the issuance of the TC/ STC to verify that all project items are completed; for example:

(1) TC/STC product eligibility is correct.

(2) Certification basis is documented.

(3) Installation or Drawing list is the later approved revision.

(4) All limitations and conditions are listed in the document.

b. There is objective evidence of observance to established procedures.

2D24. Prior to issuing an STC, does the evaluated facility ensure that a type certificate has been issued for the aircraft being modified and/or repaired?

2D24 (continued)

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.117		
P			
N		X	X

Statement of Condition

a. There is objective evidence that a type certificate has been previously issued for the product being modified and/or repaired at the DAS.

2D25. Are STC certificates properly completed?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X		
N		X	X

Statement of Condition

a. Procedures include a method on how to properly complete the STC certificate (FAA Form 8110-2), to include the STC Continuation Sheet (FAA Form 8110-2-1), when required.

b. There is objective evidence of observance to established procedures.

2D26. Upon the completion of a project, does the evaluated facility document the project certification activities in a report such as a certification summary report?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

2D26 (continued)

Statement of Condition

a. Procedures include, as a minimum, a method to:

(1) Identify the documentation to be used for summarizing project activities.

(2) Complete the required documentation and forms.

(3) Approve these documents, and identify those staff members authorized to do so.

(4) Make and approve changes to this document.

(5) Control and file these documents.

b. There is objective evidence of observance to established procedures.

2D27. Does the coordinator assure that the type design data, technical data, and/or repair data are approved, documented, and controlled?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures include, as a minimum:

(1) Methods for documenting data approvals.

(2) A description of the data approval process, including personnel authorized to approve the data.

(3) A means of controlling the issuance and distribution of data approvals.

b. There is objective evidence of observance to established procedures.

SECTION 3. DESIGN DATA APPROVAL

1. **SYSTEM ELEMENT DESCRIPTION**. The planning and integration of the evaluated facility's procedures for the approval of the design/repair data (including software) as delegated to the DOA, DAS, and SFAR 36 authorizations.

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

3D1. Is the type design data, technical data, and/or repair data documented and controlled?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures include, as a minimum:

(1) Methods for documenting and retaining data approvals.

(2) A means of controlling the issuance and distribution of approval documents.

(3) A means of documenting and controlling test plans, reports, and data.

(4) A means of documenting and controlling required documents, e.g., instructions for continued airworthiness, flight manuals, installation/operation instructions.

b. There is objective evidence that the procedure is being used.

3D2. Are documents and forms, identified and listed in the procedures manual or handbook, used to document the approval of data and to make findings of compliance?

3D2 (continued)

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures provide for documenting approved data and findings of compliance on specified forms.

b. There is objective evidence of observance to established procedures.

3D3. During the approval process, is there a determination on and classification of the type of data being approved?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures include, as a minimum:

(1) Determination and classification of data by engineering disciplines, such as requiring FAA/designee approval.

(2) For SFAR 36, determination and classification of repair as major or minor.

b. There is objective evidence of observance to established procedures.

3D4 (*2E2*). Is there a drawing control system?

3D4 (*2E2*) (continued)

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures provide for:

(1) Drawings that are adequate, complete, and legible.

(2) Identification of drawings.

(3) Indication of drawing approval, including FAA approval.

(4) Maintenance and security of drawings.

(5) Use of current drawings and removal of obsolete drawings.

(6) A list of drawings and specifications necessary to define configuration of the FAA-approved design.

(7) Control of preliminary/experimental drawings.

(8) Existence of adequate backup methods for software used for drawing control.

b. There is objective evidence of observance to established procedures.

3D5. Is the type design data, technical data, and/or repair data approved?

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.441		§ 6(b)(1)
P		X	
N			

3D5 (continued)

Statement of Condition

a. The procedures include, as a minimum:

(1) Description of the data approval process, including personnel authorized to approve the data.

(2) Methods to obtain complete design data and approval documents in accordance with certification plan.

(3) Methods to approve master document (data) and/or certification compliance checklist.

(4) Methods to approve test plans, data, and reports.

(5) Methods to approve required documents, e.g., instructions for continued airworthiness, flight manuals, installation instructions.

b. There is objective evidence that the procedure is being used.

3D6 (*3AE1*). Is there a Software Configuration Management Plan (SCMP) or procedure to control airborne software configuration?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for:

(1) Installation of the correct version of the software in the certification test article or in the delivered product in accordance with the FAA-approved design in the certification program.

(2) Method by which controlled software containing the FAA-approved design data is transitioned into production. The media containing the software installed in the product is directly traceable to the Software Configuration Management (SCM) library.

b. There is objective evidence of observance to established procedures.

3D7. Has a criticality assessment and the software verification been accomplished in accordance with RTCA/DO-178 or other accepted/approved documents (e.g., RTCA/DO-236, etc.)?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for a properly documented software criticality assessment and verification process.

b. There is objective evidence of observance to established procedures.

3D8 (*3AE2*). Is there a Configuration Index Document (CID) listing all software documents under configuration control and defining the hardware and software part numbers?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for traceability of hardware and software part numbers to the drawing control system.

b. There is objective evidence of observance to established procedures.

3D9 (*3AE3*). Are there practices and procedures for reporting, tracking, and resolving software problems?

3D9 (*3AE3*) (continued)

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for:

(1) Methods for corrective action, for problems found, include provisions for airborne software and hardware/software combinations. Procedures may parallel or be part of hardware corrective action procedures.

(2) Method to dispose and delete obsolete or non-current software.

b. There is objective evidence of observance to established procedures.

3D10 (*3AE5*). Are there methods and facilities to protect computer programs from unauthorized access, inadvertent damage, or degradation?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for:

(1) Configuration control of the airborne software within the product design files.

(2) Limited access to software files.

(3) Separate archives for masters and duplicates.

(4) That masters and duplicates are not revived by the same machine simultaneously.

3D10 (*3AE5*) (continued)

b. There is objective evidence of observance to established procedures.

3D11 (*3AE6*). Are there procedures to ensure that the software development environment (i.e., compilers, loaders, linkers, editors, emulators, etc.) is identified, documented and archived for each version of the delivered airborne software version?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for methods to identify, document, and archive the software development environment for each version of delivered airborne software.

b. There is objective evidence of observance to established procedures.

3D12 (*3AQ1*). Is airborne software programmed media handled and stored properly (e.g., environmental controls and magnetic interference precautions)?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for special handling of programmed media.

b. There is objective evidence of observance to established procedures.

SECTION 4. DESIGN CHANGE APPROVAL

1. **SYSTEM ELEMENT DESCRIPTION**. The planning and integration of the evaluated facility's procedures for the approval of changes to the DAS and DOA design data. This includes software used in type-certificated aircraft or related products (airborne software).

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

4D1 (*2E1*). Are the changes to the type design data, technical data, and/or repair data documented and controlled?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures include, as a minimum:

(1) Methods for documenting and retaining data approvals.

(2) A means of controlling the issuance and distribution of approval documents.

(3) A means of documenting and controlling test plans, reports, and data.

(4) A means of documenting and controlling required documents, e.g., instructions for continued airworthiness, flight manuals, installation/operation instructions.

b. There is objective evidence of observance to established procedures.

4D2 (*2E8*). Does the evaluated facility determine if a design change or an SFAR 36 repair is major or minor?

4D2 (*2E8*) (continued)

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.93(a)	§ 21.93	
P			X
N			

Statement of Condition

a. There is objective evidence that changes to the DAS or DOA design data, or a repair for SFAR 36, have been properly classified as major or minor.

4D3 (*2C1*). Are minor design changes approved under a method acceptable to the FAA?

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.95	§ 21.95	
P			
N			X

Statement of Condition

a. There is objective evidence that the FAA has approved a method to approve minor design changes and that the evaluated facility is using the approved method.

4D4. Are major changes to type design, technical data, and/or repair data approved?

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.97	§ 21.97	
P			
N			X

Statement of Condition

a. There is objective evidence that major changes to the type design are approved.

4D5. Are documents and forms, identified and listed in the procedures manual or handbook, used to document the approval of design changes and findings of compliance?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. The procedures include all relevant information required to complete the forms relative to the design changes to the DAS/DOA data.

b. There is objective evidence of observance to established procedures.

4D6 (*2E4*). Are corrective actions identified in Airworthiness Directives incorporated into the FAA-approved design, when applicable?

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.99	§ 21.99	
P			
N			X

Statement of Condition

a. There is objective evidence that design changes necessary to correct unsafe conditions identified in AD's have been incorporated into the FAA-approved design.

4D7. Does the evaluated facility specify the repairable damage limits when applicable?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

4D7 (continued)

Statement of Condition

a. Procedures provide for repairable damage limits, e.g., crack lengths, dent depth, wear limits.

b. There is objective evidence of observance to established procedures.

SECTION 5. TESTING

1. **SYSTEM ELEMENT DESCRIPTION**. The function which provides for the testing, including both component and final product tests, required to establish that the approved design or changes thereof are in compliance with the applicable CFR.

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this systems element.

5D1. Are all certification tests identified, documented, and approved?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures provide for a method to:

(1) Identify all certification tests, and the disposition of the conformity inspections associated with the test plans.

(2) Define and approve tests, e.g., TIA, test plans, including pass/fail criteria.

b. There is objective evidence of observance to established procedures.

5D2. Are staff members responsible for the development of test plans, witnessing of tests, and the documentation of test results identified?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

5D2 (continued)

Statement of Condition

a. Procedures provide for an organizational chart or table that identifies the staff, and their responsibility and authority for developing and approving test plans; witnessing tests; and documenting and approving test results.

b. There is objective evidence of observance to established procedures.

5D3. Does equipment used for test have the degree of accuracy necessary to determine conformity of the characteristic being measured/tested?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures provide for:

(1) The degree of accuracy and current calibration of all measurement devices and test equipment.

(2) Measurement devices and test equipment capable of the accuracy necessary and adequate for the intended purpose, including measurement devices and test equipment substituted for those specified.

(3) A list of measurement devices and test equipment used to determine conformity of the characteristics being tested.

b. There is objective evidence of observance to established procedures.

5D4. Is there appropriate safety equipment available during certification testing?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

5D4 (continued)

Statement of Condition

a. Procedures include the method for the training of personnel, and the control and availability of appropriate safety equipment.

b. There is objective evidence of observance to established procedures.

5D5. Does the evaluated facility's authorized staff members assure that conformity inspections are completed prior to conducting certification tests?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures provide for a method to:

(1) Verify that certification conformity inspections have been accomplished; for example, parts, installation, and/or test setup.

(2) Review conformity inspection records.

(3) Disposition nonconformity inspection records.

b. There is objective evidence of observance to established procedures.

5D6 (*8Q1*). Does the evaluated facility's staff members, including inspection personnel, participate in the review of test instructions or procedures?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

5D6 (*8Q1*) (continued)

Statement of Condition

a. Procedures provide for a method:

(1) For the delegated facility staff members, including inspection personnel, to review test instructions or procedures prior to release.

(2) To evaluate and verify conformity to approved design. This includes the identification of inspection points that ensure conformity to approved design.

(3) For inspection equipment to be available or procured that will adequately verify conformity to approved design, and that can be controlled for accuracy, when required.

b. There is objective evidence of observance to established procedures.

5D7 (*8Q3*). Are test results documented and approved?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures provide for documentation to include as a minimum:

(1) Test results.

(2) Approval of test results.

b. There is objective evidence of observance to established procedures.

5D8 (*8Q3*). Are certification test discrepancies documented and dispositioned?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures provide for a method to:

(1) Document discrepancies.

(2) Disposition discrepancies, e.g., re-evaluate test procedures, rework and re-conform test setup, redesign.

b. There is objective evidence of observance to established procedures.

5D9. Does the evaluated facility allow for the use of personnel other than those identified in the procedures manual or handbook to assist in witnessing the required certification tests?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures include:

(1) The method of approving personnel to conduct and witness required certification tests.

(2) The requirements and controls, including training, for authorized persons to document and approve applicable data.

b. There is objective evidence of observance to established procedures.

SECTION 6. CONFORMITY INSPECTION

1. **SYSTEM ELEMENT DESCRIPTION**. The function which establishes control of the prototype/test article conformity to approved drawings.

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

6D1. Are Statements of Conformity properly submitted?

Applicability:

	DAS	DOA	SFAR 36
R	§§ 21.53 & 21.463	§§ 21.53 & 21.253	
P			
N			X

Statement of Condition

a. There is objective evidence that:

(1) The method for verifying the statement of conformity, for the product manufactured, altered, or repaired, has been submitted to the appropriate delegated facility staff member.

(2) The statement of conformity has been signed by an authorized person who holds a responsible position in the manufacturing organization or repair station.

6D2. Are conformity inspections documented?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

6D2 (continued)

Statement of Condition

a. Procedures include, as a minimum, a method to:

(1) Obtain the statement of conformity from the applicant.

(2) Conduct conformity inspections (ref. FAA Order 8110.4, Chapter 5).

(3) Complete the conformity inspection records (using FAA Form 8100-1 or equivalent).

(4) Document the detail parts, assemblies, and installation conformities recorded on the conformity inspection record, including design data revision level and release date of design data.

(5) Document and coordinate disposition of nonconformities or deviations with the engineering organization.

(6) Verify and/or conform that special processes called out in design data have been accomplished in accordance with the process requirements.

b. There is objective evidence of observance to established procedures.

6D3. Does equipment used for inspection have the degree of accuracy necessary to determine conformity of the characteristic being inspected?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures provide for:

(1) The degree of accuracy and a current calibration of all measurement devices and test equipment.

(2) Measurement devices and test equipment capable of the accuracy necessary and adequate for the intended purpose, including measurement devices and test equipment substituted for those specified.

6D3 (continued)

(3) A list of measurement devices and test equipment used to determine conformity of characteristics being inspected**.**

b. There is objective evidence of observance to established procedures.

6D4. Are "at-risk" conformity inspection records generated and tracked for in-process conformity inspections and do these records reflect the final approved design? (Inspections conducted prior to issuing TIA or Conformity Request)

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for a method to assure that in-process conformity records:

(1) Are generated and maintained.

(2) Reflect the final approved design.

b. There is objective evidence of observance to established procedures.

6D5. Do the evaluated facility inspection staff members conduct conformity inspections at the supplier/vendor when conformity cannot be determined upon receipt?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for:

6D5 (continued)

(1) Only authorized staff members to conduct conformity inspections.

(2) Method to conduct conformity inspections at suppliers/vendors.

b. There is objective evidence of observance to established procedures.

6D6 (*11Q1*). Are methods for identification, control, and disposition of nonconforming products/parts provided?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for:

(1) Methods used for identification, control, and disposition of nonconforming products/parts.

(2) Method to secure nonconforming material, with access limited to authorized personnel.

(3) Disposition of nonconforming items, including standard repairs and MRB actions, only through the delegated facility engineering review and approval process.

b. There is objective evidence of observance to established procedures.

6D7 (*3AP1*). Is software identified/marked externally/internally in accordance with the engineering drawing requirements?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

6D7 (continued)

Statement of Condition

a. Work instructions detail the identification/marking requirements.

b. There is objective evidence of observance to established instructions.

6D8. Are special processes coordinated with engineering and inspection personnel?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures provide for the engineering and inspection organizations to review design and technical data changes prior to release to ensure that:

(1) The product can be properly evaluated and verified to be in conformity to approved design.

(2) Inspection equipment is available or can be procured that will adequately verify conformity to approved design, and that can be controlled for accuracy, when required.

b. There is objective evidence of observance to established procedures.

6D9. Does the evaluated facility inspection personnel verify that the approved data are adequate for a multiple approval and the installation is airworthy?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for a method to:

6D9 (continued)

(1) Verify that the approved data are adequate for a multiple approval and to provide feedback to the Coordinator.

(2) Determine that the installation is airworthy and to provide feedback to the Coordinator.

b. There is objective evidence of observance to established procedures.

SECTION 7. AIRWORTHINESS CERTIFICATION

1. **SYSTEM ELEMENT DESCRIPTION**. The function which provides for the issuance of appropriate airworthiness certificates.

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

7D1. Have applications for airworthiness certification been properly completed as identified in approved procedures, and submitted to the FAA, as applicable?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures define the responsibilities and method for airworthiness certificate application.

b. There is objective evidence of observance to established procedures.

7D2. Have limitations and conditions been obtained from the cognizant MIDO prior to issuing experimental airworthiness certificates?

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.475	§ 21.275	
P			
N			X

Statement of Condition

a. There is objective evidence that the necessary limitations and conditions have been obtained from the cognizant MIDO prior to issuing experimental airworthiness certificates.

7D3 (*13Q2*) Have applicable airworthiness certificates been obtained for the purposes for which the aircraft is flown?

Applicability:

	DAS	DOA	SFAR 36
R	Part 21, Subparts H, I	Part 21, Subparts H, I	
P			
N			X

Statement of Condition

a. There is objective evidence that the proper airworthiness certificates have been obtained for the purposes for which the aircraft is flown.

7D4. Are Airworthiness Directives (AD) incorporated?

Applicability:

	DAS	DOA	SFAR 36
R	§ 39.3	§ 39.3	
P			
N			X

Statement of Condition

a. There is objective evidence that applicable AD's have been complied with prior to operating the product.

7D5 (*16Q5*). If an export airworthiness approval has been issued, have the necessary documents and instructions been forwarded to the aviation authority of the importing country, or to other locations as specified in the special requirements of importing countries in AC 21-2?

Applicability:

	DAS	DOA	SFAR 36
R		§ 21.335	
P			
N	X		X

7D5 (*16Q5*) (continued)

Statement of Condition

a. There is objective evidence that all the documents and information necessary for proper operation of the product being exported have been forwarded to the cognizant aviation authority. For unassembled aircraft, this includes manufacturing assembly instructions and an FAA-approved flight test check off form.

7D6 (*16Q3*). Have export airworthiness approvals been obtained for all products exported?

Applicability:

	DAS	DOA	SFAR 36
R			
P		X	
N	X		X

Statement of Condition

a. Procedures provide for:

(1) Methods for applying for export airworthiness approvals, and the responsibilities of personnel authorized to submit applications.

(2) A list of the products for which export airworthiness approvals are obtained.

(3) All exported products to meet special requirements of the importing country listed in Appendix 6 of AC 21-2 (current revision). Procedures provide for properly annotating any deviation on the exporting documentation, and including a letter of acceptance from the importing country for such deviations.

(4) Retention of copies of FAA Form 8130-4, Export Certificate of Airworthiness, and/or FAA Form 8130-3, Airworthiness Approval Tags, as applicable.

b. There is objective evidence of observance to established procedures.

7D7 (*13P2*). Are flight manuals, supplements, and current weight and balance data furnished with each aircraft before issuance of standard or restricted airworthiness certificate?

7D7 (*13P2*) (continued)

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for the furnishing of aircraft flight manuals, supplements, and current weight and balance data with each aircraft.

b. There is objective evidence of observance to established procedures.

7D8 (*16Q4*). Have airworthiness approval tags (FAA Form 8130-3) been issued by authorized personnel?

Applicability:

	DAS	DOA	SFAR 36
R			
P		X	
N	X		X

Statement of Condition

a. Procedures provide for identification of personnel authorized to issue airworthiness approval tags.

b. There is objective evidence of observance to established procedures.

SECTION 8. FAA NOTIFICATION

1. **SYSTEM ELEMENT DESCRIPTION**. The function which notifies the FAA of specific conditions as required by the approved procedures and by the CFR. This includes procedures for positive feedback, recording, reporting, and investigation of significant or reported failures, malfunctions, or defects. This function would also provide for determining cause and effecting appropriate corrective actions on such failures, malfunctions, or defects.

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

8D1. Does the evaluated facility submit required information to the FAA?

Applicability:

	DAS	DOA	SFAR 36
R	§§ 21.441(b) & 21.463	§§ 21.253 & 21.267	§ 6(c)
P			
N			

Statement of Condition

a. There is objective evidence that:

(1) For a DOA facility, an application for amendment to the production certificate has been submitted to the FAA for new models and type certificates. {§ 21.267}

(2) For a DOA facility, the following type certificate data has been submitted to the FAA for new products or amended type certificates: {§ 21.253}

(a) Type certificate application (FAA Form 312).

(b) Statement of applicable airworthiness requirements.

(c) Statement certifying compliance of type design to applicable requirements.

(d) Statement certifying that required technical data and type inspection report have been placed in the technical data file.

8D1 (continued)

(e) Proposed type certificate data sheet.

(f) Aircraft Flight Manual (if required), operating limitations summary, or other information necessary for safe operation of the product.

(3) For a DAS facility, a statement must be submitted to the FAA, prior to issuance of the STC, describing:

(a) The type design change.

(b) The airworthiness requirements of this chapter that the DAS considers applicable.

(c) The proposed program for meeting the applicable airworthiness requirements.

(4) For a DAS facility, the following STC data has been submitted to the FAA within 30 days of STC issuance: {§ 21.463(b)}

(a) Two copies of the STC.

(b) One copy of the design data approved by the DAS and referred to in the STC.

(c) One copy of each inspection and test report.

(d) Two copies of each revision to the Aircraft Flight Manual or operating limitations, and any other information necessary for safe operation of the product.

(5) For a DAS or SFAR-36 facility, changes to the procedures manual have been submitted to the FAA for approval. {DAS, § 21.441(b); SFAR-36, § 6(c)}

8D2. Does the evaluated facility notify the ACO within 48 hours of any change that could affect its ability to maintain its authorization eligibility?

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.445	§ 21.245	§ 5(c)
P			
N			

8D2 (continued)

Statement of Condition

a. There is objective evidence that the ACO was notified within 48 hours of any change (including a change of personnel) that could affect the ability of the evaluated facility to maintain its authorization eligibility.

8D3 (*14C2*). Does the evaluated facility investigate unairworthy conditions or unsafe features or characteristics reported by the FAA?

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.477	§ 21.277	§ 12
P			
N			

Statement of Condition

a. There is objective evidence that the evaluated facility has:

(1) Investigated reports of unairworthy conditions or unsafe features or characteristics reported by the FAA.

(2) Reported investigation results and the action, if any, taken or proposed to the FAA.

8D4. Does the evaluated facility notify the FAA when a Type Certificate, Supplemental Type Certificate, or Licensing Agreement is transferred?

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.47	§ 21.47	
P			
N			X

Statement of Condition

a. There is objective evidence that notification has been provided.

SECTION 9. CONTINUED AIRWORTHINESS

1. **SYSTEM ELEMENT DESCRIPTION**. The function which assures the continued airworthiness of the product.

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA**. The following criteria are used to document evaluation of this system element.

9D1. Does the evaluated facility develop Instructions for Continued Airworthiness?

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.50	§ 21.50	
P			X
N			

Statement of Condition

a. There is objective evidence that Instructions for Continued Airworthiness have been developed.

9D2 (*2S2*). Does the evaluated facility make available Instructions for Continued Airworthiness, including changes, to appropriate persons?

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.50	§ 21.50	
P			X
N			

Statement of Condition

a. There is objective evidence that Instructions for Continued Airworthiness, including changes, have been furnished or made available, as applicable, to the appropriate persons.

9D3 (*2E5*) Are design changes considered in Instructions for Continued Airworthiness, when appropriate?

9D3 (*2E5*) (continued)

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for a method to:

(1) Consider the effect on the Instructions for Continued Airworthiness as a result of design changes.

(2) Revise Instructions for Continued Airworthiness, as required.

b. There is objective evidence of observance to established procedures.

9D4. Does the evaluated facility, in developing repair data, specify new inspection limits, when applicable?

Applicability:

	DAS	DOA	SFAR 36
R			
P			X
N	X	X	

Statement of Condition

a. Procedures include development of inspection limits when applicable.

b. There is objective evidence of observance to established procedures.

9D5. Are there provisions for receiving feedback on service problems from users/installers of the product/part thereof?

9D5 (continued)

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures provide for:

(1) Identification of a specific function to receive reports of service difficulties.

(2) Determination of appropriate manufacturing or design responsibilities for the reported problem.

(3) A system of tracking for accountability.

b. There is objective evidence of observance to established procedures.

9D6 (*14S3*). Are service problems investigated, and prompt corrective actions taken, by the evaluated facility?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures provide for:

(1) A method of investigating, identifying, locating and reporting suspected unsafe products.

(2) Prompt corrective action, which includes, as a minimum:

(a) Root cause determination and correction of deficient design or manufacturing.

9D6 (*14S3*) (continued)

(b) A means of reporting, purging, tracking, and accountability of known unsafe products.

b. There is objective evidence of observance to established procedures.

9D7 (*14C1*). Are failures, malfunctions, and defects reported to the FAA?

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.3	§ 21.3	§ 21.3
P			
N			

Statement of Condition

a. There is objective evidence that failures, malfunctions, and defects identified as reportable conditions in § 21.3 are reported to the FAA.

b. When procedures for reporting failures, malfunctions, and defects to the FAA have been established, they should provide for, as a minimum:

(1) Definitions of reportable conditions.

(2) Evaluation of conditions to determine their reportability.

(3) Documentation and reporting method(s).

(4) Submittal of each report by the most expeditious method available within 24 hours of occurrence, with provisions for weekends and holidays.

9D8 (*2S3*) When corrective action is required by AD's, is information on the design changes made available to all owners and operators of the product?

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.99	§ 21.99	
P			
N			X

9D8 (*2S3*) (continued)

Statement of Condition

a. There is objective evidence that all applicable descriptive data and information covering approved design changes made as a result of AD incorporation or improvements which contribute to the safety of the product have been made available to product users.

9D9 (*14S2*). Is a record or file of reported service difficulties generated and maintained?

Applicability:

	DAS	DOA	SFAR 36
R	§ 21.493	§ 21.293	§ 13(c)
P			
N			

Statement of Condition

a. There is objective evidence that a record, or file as applicable, has been generated and maintained.

b. When procedures for preparing a record or file of service difficulties have been established, they should provide for, as a minimum:

(1) Dates of receipt, what was reported, and action taken.

(2) Record legibility, completeness, and accuracy.

(3) Requirements that tape files, microfilm, etc., used for record retention exhibit legible data, acceptance stamps and/or signatures, as required.

9D10 (*14S5*). Is there a means for keeping users of the product/part thereof informed of service information?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

9D10 (*14S5*) (continued)

Statement of Condition

a. Procedures provide for informing product users of service-related information for suspected or known unsafe conditions, e.g., service bulletins.

b. There is objective evidence of observance to established procedures.

9D11. Does the evaluated facility evaluate the effect on continued airworthiness or service issues for the product based on results from follow-on life cycle testing?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for the evaluation of test results from follow-on life cycle testing for their effect on the continued airworthiness of the product.

b. There is objective evidence of observance to established procedures.

9D12 (*14S5*). Are service bulletins and maintenance manuals approved by authorized personnel?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures define specific organizational and individual responsibilities for approving service bulletins and maintenance manuals.

b. There is objective evidence of observance to established procedures.

9D13. Are service bulletins, maintenance manuals, and changes thereto, forwarded to the delegation oversight ACO?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for the submittal of service bulletin and maintenance manual issuances, and changes thereto, to the managing ACO.

b. There is objective evidence of observance to established procedures.

9D14. Does the evaluated facility assure that only approved technical data, including changes, are used for repair, rebuilding, and alterations?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures provide, as a minimum:

(1) Method to approve the technical data.

(2) Indication of appropriate revision level of the technical data on inspection documents and work instructions.

b. There is objective evidence of observance to established procedures.

SECTION 10. AUDIT

1. **SYSTEM ELEMENT DESCRIPTION**. The function of a scheduled and systematic evaluation by the delegated facility to ascertain its own compliance to its FAA-approved Procedures Manual (DAS and SFAR-36) or Handbook (DOA), as well as applicable CFR.

> **NOTE: The establishment and operation of an internal audit program (sometimes referred to as a self-audit program) or external audit program (sometimes referred to as a surveillance audit program) is not a mandatory requirement placed upon DOA/DAS/SFAR 36 facilities, but is considered to be a "good" practice. If the evaluated facility HAS a documented and operational internal and/or external audit program, it should be reviewed during the ACSEP evaluation for adequacy and observance with the established procedures.**

2. **SYSTEM ELEMENT STANDARDIZED EVALUATION CRITERIA.** The following criteria are used to document evaluation of this system element.

10D1 (*15M1*). Does the evaluated facility have an internal auditing program to verify compliance with its approved procedures, established policies, and approved data?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures provide for:

(1) Auditor qualifications and training.

(2) Formal audit checklists that systematically evaluate all major activities controlled by the delegated function.

(3) Audit planning to include an audit schedule that is available and followed.

(4) Special audits when major deficiencies within the evaluated facility's system are detected, or when there are significant organizational changes.

10D1 (*15M1*) (continued)

(5) Conducting and reporting of the results of the internal audits.

(6) Methods for identifying nonconformances, and obtaining required corrective action to include the identification of personnel responsible for the corrective action.

(7) Follow-up for corrective action effectiveness.

b. There is objective evidence of observance to established procedures.

10D2. Does the evaluated facility partner with the organization that produces parts and assemblies, and perform installations, to share audit information?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	
N			X

Statement of Condition

a. Procedures provide for:

(1) Description of the interface/relationship between the delegated function and:

(a) For a DOA, the part 21, subpart G, certificated PAH and its approved quality system.

(b) For a DAS, the part 145 certificated repair station and its corresponding Inspection and Procedures Manual; *or*, the part 121 certificated operator and its corresponding General Maintenance Manual; *or*, the part 21 PAH and its corresponding approved quality system.

(2) Recommendation of special audits when major deficiencies in procurement, fabrication, and/or installation are detected during conformity inspections, or when there are significant changes to the repair station's, operator's, or PAH's organization.

(3) Methods for identifying nonconformances, and obtaining required corrective action to include the identification of personnel responsible for the corrective action.

(4) Follow-up for corrective action effectiveness.

b. There is objective evidence of observance to established procedures.

10D3. Does the evaluated facility periodically review implemented modifications or repairs for compliance to the developed data?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures provide for a periodic review of implemented modifications or repairs for compliance to the developed data.

b. There is objective evidence of observance to established procedures.

10D4 (*15M2*). Is there feedback to higher-level management concerning the results of the internal audits?

Applicability:

	DAS	DOA	SFAR 36
R			
P	X	X	X
N			

Statement of Condition

a. Procedures provide for:

(1) Periodic management review of the audit program to include internal audit results, nonconformances, corrective actions, and corrective action effectiveness.

(2) Review of internal audit results by personnel having responsibility for the area that was audited.

(3) Revision to procedures manual or handbook to prevent reoccurrence of actual or potential nonconformances.

b. There is objective evidence of observance to established procedures

APPENDIX 16. PREPARATION INSTRUCTIONS FOR FAA FORM 8100-4, ACSEP SURVEY SHEET FOR PAH AND ASSOCIATED FACILITIES

1. **PURPOSE**. This appendix provides instructions for completing FAA Form 8100-4.

2. **SPECIFIC GUIDANCE**. Figure 1 shows FAA Form 8100-4. Prepare the form by inserting in:

a. **ACSEP NO./REPORT NO. Block**. The ACSEP number and the Report number.

b. **PROJECT NO. Block**. The Project Number(s).

c. **Blocks 1 through 17**. A check in the appropriate box for each system element evaluation criteria. Determine the appropriate box to check for each criteria as follows:

(1) **Unable to evaluate**: Check this box if you were unable to fully evaluate the criteria due to lack of time, inadequate resources, lack of expertise, or other reasons. You may also check either the "No procedures" block or the "Procedures in place" box if that information is known; see paragraphs 2c(3) and 2c(4) below. If you were unable to evaluate an entire system element, record the appropriate reasons as part of the lessons learned (see appendix 20).

(2) **Not applicable**: Check this box if the criteria or system element was not applicable at the facility being evaluated. Do not check any other box for this criteria.

(3) **No procedures**: Check the box if the criteria was applicable at the facility being evaluated and there were no procedures in place to address actions relative to the criteria. You may check this block in addition to the "Unable to evaluate" block if it is known that no procedures were in place relative to the criteria.

(4) **Procedures in place**: Check this box if the criteria was applicable at the facility being evaluated and there were procedures in place relative to the criteria. You may check this block in addition to the "Unable to evaluate" block if it is known that procedures were in place relative to the criteria.

d. **New Criteria Block**. The system element number and a brief description of the new criteria.

(1) **List** all new criteria developed.

NOTE: Include the complete text of new criteria in the "ACSEP Evaluation Lessons Learned" section of the ACSEP evaluation report (see appendix 20).

(2) **Assign** a system element number to each new criteria. For example, a new criteria developed for evaluation of the tool and gauge system element would be assigned system element number 7.

FIGURE 1. SAMPLE FAA FORM 8100-4

U.S. Department of Transportation
Federal Aviation Administration

ACSEP Survey Sheet
for
Production Approval Holders

ACSEP No/ Report No:

Project No:

Unable to evaluate | Not applicable | No procedures | Procedures in-place

1. Organization & Responsibility

- 1M1. Overall policy document
- 1M2. Organizations described
- 1M3. Appropriate staff
- 1M4. FAA designee authority
- 1M5. Policy document review
- 1M6. Policies/procedures availability
- 1M7. TC/PC/PLR does accurately list products
- 1E1. Engineering/Flight Test organizations described
- 1E2. Engineering Manager identified
- 1P1. Manufacturing organization described
- 1P2. Manufacturing Manager identified
- 1P3. Manufacturing staff qualifications
- 1Q1. Quality organizations described
- 1Q2. Quality Assurance Manager identified
- 1Q3. Quality Assurance staff qualifications
- 1Q4. Quality Manual
- 1Q5. Tags, forms, etc. described
- 1Q6. Record retention schedule
- 1Q7. Record analysis
- 1S1. Service/Product Support organization described
- 1S2. Service/Product Support Manager identified
- 1S3. Service/Product Support staff qualifications
- 1C1. Notification organization described
- 1C2. Notification organization Manager identified
- 1C3. Notification organization staff qualifications

2. Design Data Control

- 2E1. Design change approval
- 2E2. Drawing control system
- 2E3. Technical data change approval
- 2E4. AD incorporation into design
- 2E5. Changes to Inst. for Continued Airworthiness
- 2E6. Storage of design documents
- 2E7. Design/Technical data document control
- 2E8. Major/minor design changes
- 2E9. Technical data file
- 2E10. Supplemental type design submittal
- 2P1. Manufacturing review of design/tech. data changes
- 2Q1. QA review of design/technical data changes
- 2S1. Service/Product Support review of design changes
- 2S2. Distribution of Inst. for Cont'd Airworthiness changes
- 2S3. AD/safety-related design changes to users
- 2C1. Minor design change approval
- 2C2. Major design change approval
- 2C3. Distribution of Inst. for Cont'd Airworthiness appr.
- 2C4. Data submittal for TSO minor changes
- 2C5. New TSO authorization for major design changes

3. Software Quality Assurance

A. Airborne Software

- 3AE1. Software Configuration Management Plan
- 3AE2. Configuration Index Document
- 3AE3. Software problem reporting
- 3AE4. Recall/purge of obsolete software
- 3AE5. Software security
- 3AE6. Software development environment
- 3AP1. Software identification
- 3AQ1. Programmed media handling/storage
- 3AQ2. Build and load instructions

B. Product Acceptance Software

- 3BE1. Software Configuration Management Plan
- 3BE2. Change documentation and approval
- 3BE3. Software problem reporting
- 3BE4. Software security
- 3BQ1. Verification prior to use
- 3BQ2. Build and load instructions

4. Manufacturing Processes

- 4M1. Operation within production limitations
- 4M2. Production certificate displayed
- 4E1. Accord with FAA-approved design data
- 4E2. New/changed process test substantiation
- 4P1. Change approval
- 4P2. Work instructions prepared
- 4P3. Work instructions reflect tech data
- 4P4. Work instructions control manufacturing processes
- 4P5. Work instruction revision approval
- 4P6. Familiarity with specifications.
- 4P7. Identification/control of partially accepted parts
- 4P8. Traceability for split lots
- 4P9. Completed product/part identification
- 4P10. Aircraft marking
- 4Q1. Inspection methods and plans
- 4Q2. Location of inspection stations
- 4Q3. Issuance of inspection stamps
- 4Q4. Inspection stamps & damage to material
- 4Q5. Inspection records
- 4Q6. Cleaners, solvents, etc. identified
- 4Q7. Control of environmental conditions
- 4Q8. Traceable components identified
- 4Q9. Traceability to raw material
- 4Q10. Inspection marking
- 4Q11. Inspection before closure
- 4Q12. Completion of all inspections & tests

FAA Form 8100-4 (4-99)

FOR OFFICIAL USE ONLY (when filled in)
Public availability to be determined under 5 U.S.C. 552

Page 1 of 3

FIGURE 1. SAMPLE FAA FORM 8100-4 (CONT'D)

U.S. Department of Transportation
Federal Aviation Administration

ACSEP Survey Sheet
for
Production Approval Holders

ACSEP No/ Report No:

Project No:

Unable to evaluate | Not applicable | No procedures | Procedures in-place

5. Special Manufacturing Processes

- 5E1. All special processes in use identified
- 5E2. New/changed process test substantiation
- 5Q1. Equipment available & calibrated
- 5Q2. Required qualifications/approvals
- 5Q3. Accord with process specifications
- 5Q4. Records maintained
- 5Q5. Action on process out of control

6. Statistical Quality Control (SQC)

- 6E1. Engineering review of SQC techniques
- 6P1. Manufacturing review of SQC techniques
- 6Q1. Statistical sampling inspection plans
- 6Q2. Training in sampling techniques
- 6Q3. PRE-control method established
- 6Q4. Training in PRE-control techniques
- 6Q5. SPC method established
- 6Q6. Training in SPC techniques
- 6Q7. SPC control limits/subgroup selection
- 6Q8. Criteria for SPC out of control
- 6Q9. Regular review of SPC charts
- 6Q10. Corrective action
- 6Q11. Additional inspection during corrective action

7. Tool & Gauge

- 7E1. Engineering participation in selection
- 7P1. Appropriate measuring devices used
- 7Q1. Approval/inspection of tools & gauges
- 7Q2. Instructions for acceptance tooling
- 7Q3. Tool & gauge recall system
- 7Q4. Traceability to national/international standards
- 7Q5. Accuracy of standards
- 7Q6. Calibration & use in acceptable environment
- 7Q7. Accuracy of inspection & test equipment
- 7Q8. Use of personal gauges
- 7Q9. Control of special processing equipment
- 7Q10. Control of NDI Equipment
- 7Q11. Control of production tooling
- 7Q12. Calibration records
- 7Q13. Adjustment of calibration intervals
- 7Q14. Identification of gauges
- 7Q15. Care of tools & gauges
- 7Q16. Inaccurate tools & gauges identified
- 7Q17. Percent of uncertainty for SOT
- 7Q18. Action on product measured by SOT gauge
- 7Q19. Tool & gauge rework/reinspection
- 7S1. Service/Product Support in SOT investigations

Unable to evaluate | Not applicable | No procedures | Procedures in-place

8. Testing

- 8E1. Test procedures/instructions established
- 8E2. Control of test procedure/instruction changes
- 8E3. Approved flight checkoff form
- 8E4. Use of qualified test pilots
- 8E5. Flight safety program
- 8P1. Manufacturing review of test instructions
- 8Q1. QA review of test instructions
- 8Q2. Engine inlet/test cell foreign object inspection
- 8Q3. Records of completed tests
- 8Q4. Retest after adjustment/rework
- 8Q5. Post-test teardown inspection & retest
- 8C1. Approval of flight test procedures
- 8C2. Submittal of changes to flight test procedures
- 8C3. Approval of test cell correlation/calibration standard

9. Nondestructive Inspection (NDI)

- 9E1. Engineering review of NDI processes
- 9E2. Control of NDI processes & changes
- 9Q1. Operator qualification
- 9Q2. Operators performing within authorized limits
- 9Q3. NDI procedures/specifications available & used
- 9Q4. Tanks & solutions checked
- 9Q5. Test pieces/samples available
- 9Q6. Identification of known-defect samples
- 9Q7. Product handling
- 9Q8. Acceptance/rejection criteria provided
- 9Q9. Records of compliance
- 9Q10. Corrective action
- 9Q11. Critical radiographic parameters identified
- 9Q12. Critical ultrasonic parameters identified
- 9Q13. Critical magnetic particle parameters identified
- 9Q14. Critical penetrant parameters identified
- 9Q15. Critical eddy current parameters identified

FAA Form 8100-4 (4-99)

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FIGURE 1. SAMPLE FAA FORM 8100-4 (CONT'D)

U.S. Department of Transportation
Federal Aviation Administration

ACSEP Survey Sheet
for
Production Approval Holders

ACSEP No/ Report No:

Project No:

Unable to evaluate | Not applicable | No procedures | Procedures in-place

10. Supplier Control

- 10E1. Control of supplier design and changes
- 10Q1. Initial & periodic evaluations of suppliers
- 10Q2. Use of approved suppliers
- 10Q3. Approval of supplier quality manual
- 10Q4. Control of buyer-furnished material
- 10Q5. Flowdown of technical & quality requirements
- 10Q6. Quality Assurance review of purchase documents
- 10Q7. Action on problem notification
- 10Q8. Verification of raw material
- 10Q9. Verification of shelf-life materials
- 10Q10. Receiving inspection
- 10Q11. Segregation of non-certificated parts
- 10Q12. Records of receiving inspection
- 10C1. Delegation of major inspection authority
- 10C2. New suppliers/first articles
- 10C3. Direct shipment

11. Nonconforming Material

- 11M1. Management review of data
- 11E1. Engineering review for major/minor changes
- 11Q1. Control of nonconforming products
- 11Q2. Permanent identification of scrap material
- 11Q3. MRB established and operational
- 11Q4. Material review record generated
- 11Q5. Reinspection/retest after rework/repair
- 11Q6. Corrective action required
- 11Q7. Corrective action monitored
- 11S1. Nonconformances reported to users
- 11C1. Major changes approved

12. Material Handling/Storage

- 12E1. Design change for recurrent damage
- 12P1. Manufacturing review of handling specifications, etc.
- 12Q1. Prevention of part damage/contamination
- 12Q2. Special environmental controls
- 12Q3. Storage of conforming parts
- 12Q4. Segregation of product in storage
- 12Q5. Identification of age control products
- 12Q6. Incorporation of design changes
- 12Q7. Control of product removal/issuance
- 12Q8. Conforming products packaged & shipped

13. Airworthiness Determination

- 13E1. AD incorporation
- 13P1. Aircraft registration
- 13P2. Flight manuals, supplements, weight & balance data
- 13Q1. Log books
- 13Q2. Airworthiness certificates/special flight permits
- 13C1. Statements of Conformity
- 13C2. Applications for airworthiness certificates
- 13C3. Cancellation of certifications for passed title

14. FAA Reporting Requirements

- 14S1. Feedback on service problems
- 14S2. Record of service difficulties
- 14S3. Investigation/corrective action
- 14S4. Informing the user
- 14S5. Approval of service bulletins
- 14C1. Failure reporting
- 14C2. Investigation of unairworthy conditions
- 14C3. Submittal of quality system data changes
- 14C4. Relocation of manufacturing facility
- 14C5. Coordination of service bulletins, etc.

15. Internal Audit

- 15M1. Internal auditing program
- 15M2. Feedback to higher-level management

16. Global Production

- 16Q1. Interface quality documents
- 16Q2. Control of parts from associated facilities
- 16Q3. Export airworthiness approvals obtained
- 16Q4. Airworthiness approval tags obtained
- 16Q5. Documents to importing country

17. Manufacturer's Maintenance Facility (MMF)

- 17Q1. Inspection/maintenance program
- 17Q2. Operation within certificate privileges
- 17Q3. Work in accordance with Part 43 requirements
- 17Q4. Mechanics/repairmen directly in charge
- 17Q5. Record of completed work
- 17Q6. Completion of all requirements
- 17Q7. Control of parts from satellite MMF's

New Criteria

Criteria	Description

FAA Form 8100-4 (4-99)

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APPENDIX 17. PREPARATION INSTRUCTIONS FOR FAA FORM 8100-8, ACSEP SURVEY SHEET FOR DAS/DOA/SFAR 36 DELEGATED FACILITIES

1. **PURPOSE**. This appendix provides instructions for completing FAA Form 8100-8.

2. **SPECIFIC GUIDANCE**. Figure 1 shows FAA Form 8100-8. Prepare the form by inserting in:

a. **ACSEP NO./REPORT NO. Block**. The ACSEP number and the Report number.

b. **Facility Type Block**. The type of delegated facility (DAS, DOA, or SFAR-36).

c. **Blocks 1 through 10**. A check in the appropriate box for each system element evaluation criteria. Determine the appropriate box to check for each criteria as follows:

(1) **Unable to evaluate**: Check this box if you were unable to fully evaluate the criteria due to lack of time, inadequate resources, lack of expertise, or other reasons. You may also check either the "No procedures" block or the "Procedures in place" box if that information is known; see paragraphs 2c(3) and 2c(4) below. If you were unable to evaluate an entire system element, record the appropriate reasons as part of the lessons learned (see appendix 20).

(2) **Not applicable**: Check this box if the criteria or system element was not applicable at the facility being evaluated. Do not check any other box for this criteria.

(3) **No procedures**: Check the box if the criteria was applicable at the facility being evaluated and there were no procedures in place relative to the criteria. You may check this block in addition to the "Unable to evaluate" block if it is known that no procedures were in place relative to the criteria.

(4) **Procedures in place**: Check this box if the criteria was applicable at the facility being evaluated and there were procedures in place to address actions relative to the criteria. You may check this block in addition to the "Unable to evaluate" block if it is known that procedures were in place relative to the criteria.

d. **New Criteria Block**. The system element number and a brief description of the new criteria.

(1) **List** all new criteria developed.

NOTE: Include the complete text of new criteria in the "ACSEP Evaluation Lessons Learned" section of the ACSEP evaluation report (see appendix 20).

(2) **Assign** a system element number to each new criteria. For example, a new criteria developed for evaluation of the testing system element would be assigned system element number 5.

FIGURE 1. SAMPLE FAA FORM 8100-8

U.S. Department of Transportation
Federal Aviation Administration

ACSEP Survey Sheet
for
DAS/DOA/SFAR 36 Delegated Facilities

ACSEP No/ Report No:

Project No:

Unable to evaluate | Not applicable | No procedures | Procedures in-place

☐ ☐ 1. Organization & Responsibility

- ☐ ☐ ☐ ☐ 1D1. Use of FAA-approved Procedure Manual/Handbook
- ☐ ☐ ☐ ☐ 1D2. Current Procedure Manual/Handbook
- ☐ ☐ ☐ ☐ 1D3. Periodic review of Procedure Manual/Handbook
- ☐ ☐ ☐ ☐ 1D4. Operation within approved delegation authority
- ☐ ☐ ☐ ☐ 1D5. Limits on the repair, rebuilding, or altering of products
- ☐ ☐ ☐ ☐ 1D6. Continues to meet criteria for holding authorization
- ☐ ☐ ☐ ☐ 1D7. Use of coordinator as focal point
- ☐ ☐ ☐ ☐ 1D8. Coordinator has sufficient authority
- ☐ ☐ ☐ ☐ 1D9. Delegation engineering and flight test org. described
- ☐ ☐ ☐ ☐ 1D10. Delegation inspection and airworthiness org. described
- ☐ ☐ ☐ ☐ 1D11. Procedures, regulations, and policies are made available
- ☐ ☐ ☐ ☐ 1D12. List of engineer, flight test, and inspection staff
- ☐ ☐ ☐ ☐ 1D13. List of products repaired or modified
- ☐ ☐ ☐ ☐ 1D14. Current list of certificates held
- ☐ ☐ ☐ ☐ 1D15. Qualifications of delegated facility staff
- ☐ ☐ ☐ ☐ 1D16. Training of delegated facility staff
- ☐ ☐ ☐ ☐ 1D17. Attendance at FAA Standardization Workshops
- ☐ ☐ ☐ ☐ 1D18. Tags, forms, etc., described/controlled
- ☐ ☐ ☐ ☐ 1D19. Records retention
- ☐ ☐ ☐ ☐ 1D20. Flight safety program

Unable to evaluate | Not applicable | No procedures | Procedures in-place

☐ ☐ 2. Project Management

- ☐ ☐ ☐ ☐ 2D1. Certification basis established
- ☐ ☐ ☐ ☐ 2D2. Use of latest airworthiness standards
- ☐ ☐ ☐ ☐ 2D3. Determination of project significance
- ☐ ☐ ☐ ☐ 2D4. Coordination of certification basis with FAA
- ☐ ☐ ☐ ☐ 2D5. Review of Letter of Intent by delegation staff
- ☐ ☐ ☐ ☐ 2D6. Submittal of Letter of Intent to FAA
- ☐ ☐ ☐ ☐ 2D7. FAA response to Letter of Intent
- ☐ ☐ ☐ ☐ 2D8. FAA concurrence on equivalent safety provisions
- ☐ ☐ ☐ ☐ 2D9. AD's effect on change in type design
- ☐ ☐ ☐ ☐ 2D10. Coordination of project milestones/requirements
- ☐ ☐ ☐ ☐ 2D11. Ident. of technical, regulatory, and administrative issues
- ☐ ☐ ☐ ☐ 2D12. Management promotion of staff communication
- ☐ ☐ ☐ ☐ 2D13. Coordination between technical disciplines
- ☐ ☐ ☐ ☐ 2D14. Identification/approval of certification tests
- ☐ ☐ ☐ ☐ 2D15. Conformity, inspection, and test authorization
- ☐ ☐ ☐ ☐ 2D16. Inspections conducted by authorized staff members
- ☐ ☐ ☐ ☐ 2D17. Conformity inspections conducted prior to testing
- ☐ ☐ ☐ ☐ 2D18. Engineering disposition of nonconforming products/parts
- ☐ ☐ ☐ ☐ 2D19. FAA-requested participation
- ☐ ☐ ☐ ☐ 2D20. Approval/control of AFM/AFMS
- ☐ ☐ ☐ ☐ 2D21. TIR/STIR to document conformity, inspection, and tests
- ☐ ☐ ☐ ☐ 2D22. TC/STC amendment projects identified
- ☐ ☐ ☐ ☐ 2D23. DAS/DOA Coordinator concurrence with staff
- ☐ ☐ ☐ ☐ 2D24. Verification of type certificate issuance
- ☐ ☐ ☐ ☐ 2D25. Proper completion of STC certificates
- ☐ ☐ ☐ ☐ 2D26. Certification summary report
- ☐ ☐ ☐ ☐ 2D27. Documentation/approval of type design data

☐ ☐ 3. Design Data Approval

- ☐ ☐ ☐ ☐ 3D1. Control of type design data
- ☐ ☐ ☐ ☐ 3D2. Use of approved documents and forms
- ☐ ☐ ☐ ☐ 3D3. Classification of data being approved
- ☐ ☐ ☐ ☐ 3D4. Drawing control system
- ☐ ☐ ☐ ☐ 3D5. Technical/repair data is approved
- ☐ ☐ ☐ ☐ 3D6. Software Configuration Mgmt. Plan
- ☐ ☐ ☐ ☐ 3D7. Software criticality assessment
- ☐ ☐ ☐ ☐ 3D8. Configuration Index Document
- ☐ ☐ ☐ ☐ 3D9. Software problem reporting
- ☐ ☐ ☐ ☐ 3D10. Software security
- ☐ ☐ ☐ ☐ 3D11. Software development environment
- ☐ ☐ ☐ ☐ 3D12. Software media handling/storage

FAA Form 8100-8 (4-99)

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FIGURE 1. SAMPLE FAA FORM 8100-8 (CONT'D)

U.S. Department of Transportation
Federal Aviation Administration

ACSEP Survey Sheet
for
DAS/DOA/SFAR 36 Delegated Facilities

ACSEP No/ Report No:

Project No:

Unable to evaluate | Not applicable | No procedures | Procedures in-place

4. Design Change Approval

- 4D1. Control of changes to type design data
- 4D2. Major/minor determination
- 4D3. Minor design change approval method
- 4D4. Approval of major changes to type design
- 4D5. Use of approved documents and forms
- 4D6. AD incorporation into design
- 4D7. Repairable damage limits specified

5. Testing

- 5D1. Approval of certification tests
- 5D2. Authorized staff members identified
- 5D3. Accuracy and calibration of test equipment
- 5D4. Safety equipment availability
- 5D5. Conformity inspections prior to certification testing
- 5D6. Staff review of test instructions/procedures
- 5D7. Results documented and approved
- 5D8. Test discrepancies documented and dispositioned
- 5D9. Identification of personnel used to assist in test witnessing

6. Conformity Inspection

- 6D1. Statements of conformity submitted
- 6D2. Conformity inspections documented
- 6D3. Accuracy and calibration of inspection equipment
- 6D4. "At-risk" conformity inspection records reviewed
- 6D5. Conformity inspections at supplier/vendor
- 6D6. Control of nonconforming products/parts
- 6D7. Software identification
- 6D8. Engineering/inspection review of special process
- 6D9. Adequacy of data for multiple approval

7. Airworthiness Certification

- 7D1. Application for airworthiness certification submitted
- 7D2. Limitations and conditions for experimental airworthiness
- 7D3. Appropriate airworthiness certificate for purpose flown
- 7D4. AD incorporation
- 7D5. Export airworthiness approval documentation/coordination
- 7D6. Export airworthiness approval records
- 7D7. Required manuals/documents furnished with aircraft
- 7D8. Authorized issue of airworthiness approval tags

8. FAA Notification

- 8D1. Submittal of required information to FAA
- 8D2. Notification of changes to authorization eligibility
- 8D3. Investigation of FAA-reported unsafe conditions
- 8D4. Transfer of TC/STC certificate

Unable to evaluate | Not applicable | No procedures | Procedures in-place

9. Continued Airworthiness

- 9D1. Instructions for Continued Airworthiness developed
- 9D2. Availability of Instructions for Continued Airworthiness
- 9D3. Design change impact on Inst. for Continued Airworthiness
- 9D4. Repair data impact on current inspection limits
- 9D5. Feedback on service problems
- 9D6. Service problem investigation and corrective action
- 9D7. Failure reporting
- 9D8. AD required corrective action information made available
- 9D9. Record of reported service difficulties maintained
- 9D10. Users kept informed of service information
- 9D11. Impact of follow-on life cycle testing on airworthiness
- 9D12. Approval of service bulletins and maint. manuals
- 9D13. Submittal of service bulletins and maint. manuals to FAA
- 9D14. Use of approved technical data for repair/rebuild/alterations

10. Audit

- 10D1. Internal auditing program
- 10D2. Sharing of audit information
- 10D3. Periodic review of implemented modifications/repairs
- 10D4. Feedback to higher-level management

New Criteria

Criteria	Description

FAA Form 8100-8 (4-99)

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APPENDIX 18. PREPARATION INSTRUCTIONS FOR FEDERAL AVIATION ADMINISTRATION AIRCRAFT CERTIFICATION SYSTEMS EVALUATION PROGRAM (ACSEP) EXECUTIVE SUMMARY

1. **PURPOSE**. This appendix provides instructions for preparing the Federal Aviation Administration Aircraft Certification Systems Evaluation Program (ACSEP) Executive Summary. This summary provides the status of each system element evaluated and a narrative of applicable findings and observations. The completed summary will be the only record of findings and observations provided to the evaluated facility by the team leader at the post-evaluation conference.

2. **SPECIFIC GUIDANCE**. Figures 1 and 2 show sample executive summaries with numbered blocks. Prepare the summary by inserting in:

a. **Block 1**. The ACSEP number/Report number.

b. **Block 2**. The Project Number(s) assigned to the production approval activity being evaluated. For a delegated facility, enter the type of delegated facility, i.e., DAS, DOA, or SFAR 36.

c. **Block 3**. The name of the facility that was evaluated.

d. **Block 4**. The date(s) of the evaluation.

e. **Block 5**. Brief statements outlining the findings and/or observations for each of the applicable system elements. Format the summary as follows:

(1) **State** the total number of findings and observations identified for the entire evaluation. If there were none, so state.

(2) **Discuss** only those system elements that have findings and/or observations recorded. Do not list system elements that have no findings or observations recorded.

(a) **State** the number of findings and observations identified for each system element discussed.

(b) **Summarize** the findings and observations for each system element discussed. Summarize the findings first, and then the observations.

f. **Block 6**. The signature of the team leader. This block may be signed by a team leader-in-training, but must also be countersigned by the team leader. When an electronic version of the executive summary is used, ensure that all required names are typed in.

g. **Block 7**. The date of the post-evaluation conference.

h. **Block 8**. The appropriate marking in accordance with paragraph 9 of Order 1600.15, Control and Protection of "For Official Use Only" Information.

APPENDIX 18. PREPARATION INSTRUCTIONS FOR FEDERAL AVIATION ADMINISTRATION AIRCRAFT CERTIFICATION SYSTEMS EVALUATION PROGRAM (ACSEP) EXECUTIVE SUMMARY (CONT'D)

FIGURE 1. SAMPLE EXECUTIVE SUMMARY FOR PAH AND ASSOCIATE FACILITIES, AND SATELLITE MMF'S

FEDERAL AVIATION ADMINISTRATION
AIRCRAFT CERTIFICATION SYSTEMS EVALUATION PROGRAM (ACSEP)
EXECUTIVE SUMMARY

(1) **(2)**
ACSEP NO./REPORT NO. 98NE278/1-1 **PROJECT NO.** PA9999NE
(3) FACILITY: Cape Cod Aircraft Engine Co.
(4) DATE OF EVALUATION: August 6-15, 1997

(5) SYSTEM ELEMENT FINDINGS/OBSERVATIONS

During this evaluation, the team documented 8 findings and 3 observations.

Design Data Control System Element. Four findings were recorded for this system element. One finding was recorded for a breakdown in the approved procedure for determining major or minor design changes. A second finding was recorded for a breakdown in the approved procedure for processing minor design changes. Two additional findings were also recorded for a breakdown in the approved procedures for submitting major design changes and process specification changes to the FAA.

Software Quality Assurance System Element . One observation was recorded for this system element. It was recorded for an isolated incident of obsolete software media not being properly controlled.

Manufacturing Processes System Element. One finding and one observation were recorded for this system element. A finding was recorded for a breakdown in the job order manufacturing sequence for the main housing, part numbers 123-666 and 123-667. An observation was recorded for an isolated incident of changes to work instructions not being properly controlled.

Special Manufacturing Processes System Element. One observation was recorded for this system element. It was recorded for an isolated incident of a change to a special process not being properly controlled.

Supplier Control System Element. One finding was recorded for this system element. It was recorded for a breakdown in the approved procedure to make information available to the FAA regarding all delegation of authority to suppliers to make major inspection of any products/parts thereof.

Nonconforming Material System Element. One finding was recorded for this system element. It was recorded for a breakdown in the approved procedure to control nonconformances which are considered major changes to the type design.

Material Handling/Storage System Element. One finding was recorded for this system element. It was recorded for a breakdown in the approved procedures for handling parts sensitive to electrostatic discharge.

(6) **(7)**
J.J. Gem August 22, 1997

(8)
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APPENDIX 18. PREPARATION INSTRUCTIONS FOR FEDERAL AVIATION ADMINISTRATION AIRCRAFT CERTIFICATION SYSTEMS EVALUATION PROGRAM (ACSEP) EXECUTIVE SUMMARY (CONT'D)

FIGURE 2. SAMPLE EXECUTIVE SUMMARY FOR DELEGATED FACILITIES

FEDERAL AVIATION ADMINISTRATION
AIRCRAFT CERTIFICATION SYSTEMS EVALUATION PROGRAM (ACSEP)
EXECUTIVE SUMMARY

(1) **(2)**
ACSEP NO./REPORT NO. 98SW333 /1-1 **PROJECT NO.** DAS
(3) **FACILITY**: Metal Components Inc.
(4) DATE OF EVALUATION: April 3-5, 1997

SYSTEM ELEMENT FINDINGS/OBSERVATIONS

(5) During this evaluation, the team documented 4 findings and 4 observations.

PROJECT MANAGEMENT: One finding and one observation were recorded in this system element. The finding was recorded for a system breakdown in the failure to obtain FAA concurrence on an equivalent safety issue prior to issuance of Supplemental Type Certificate number ST0086XX-D. The observation was recorded for an isolated incident of a certification summary report that was improperly filled out.

DESIGN DATA APPROVAL: There were 2 findings recorded in this system element. One finding was recorded for a system breakdown in the failure to provide adequate security (i.e., limited access) for the DAS/FAA approved type data files. The second finding was recorded for a system breakdown in the failure to follow procedures which require special handling of software media.

TESTING: One finding was recorded in this system element. The finding was recorded for a system breakdown in the use of non-DAS personnel to witness and approve required certification tests.

CONTINUED AIRWORTHINESS: There were 2 observations recorded in this system element. One observation was recorded for an isolated incident of a reported service problem that was not properly documented. The second, a CFR-based observation, was documented against the FAA-approved DAS Procedures Manual for a Failure Reporting procedure that is inconsistent with CFR § 21.3 (i.e., 72 hours versus the required 24 hours for FAA notification).

AUDIT: One observation was recorded in this system element. The observation was recorded for an isolated incident of a failure to accomplish required follow-up on an internal audit report that was identified as "corrective action required."

(6) **(7)**
Q. C. Record April 20, 1997

(8)
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APPENDIX 19. PREPARATION INSTRUCTIONS FOR ACSEP EVALUATION SPECIAL EMPHASIS ITEMS

1. **PURPOSE**. This appendix provides instructions for preparing ACSEP evaluation special emphasis items. These items are intended to bring to the attention of the ACO and MIO managers, the PI, the AE, and the Flight Standards Principal Maintenance Inspector (when appropriate) specific problems or concerns which the ACSEP evaluation team believes require further action.

2. **SPECIFIC GUIDANCE**. Figures 1 and 2 show sample special emphasis items with numbered blocks. Prepare the summary by inserting in:

a. **Block 1**. The ACSEP number/Report number.

b. **Block 2**. The Project Number(s) assigned to the production approval activity being evaluated. For a delegated facility, enter the type of delegated facility, i.e., DAS, DOA, or SFAR 36.

c. **Block 3**. A brief statement summarizing the problem or concern, identifying the relevant system element, and referencing the relevant findings/observations. Provide a recommendation for further action required, when appropriate.

d. **Block 4**. The appropriate marking in accordance with paragraph 9 of Order 1600.15, Control and Protection of "For Official Use Only" Information.

APPENDIX 19. PREPARATION INSTRUCTIONS FOR ACSEP EVALUATION SPECIAL EMPHASIS ITEMS (CONT'D)

FIGURE 1. SAMPLE ACSEP EVALUATION SPECIAL EMPHASIS ITEMS FOR PAH AND ASSOCIATE FACILITIES, AND SATELLITE MMF'S

ACSEP EVALUATION
SPECIAL EMPHASIS ITEMS

(1) **(2)**
ACSEP NO. /REPORT NO. 98SW314/1-2 **PROJECT NO.** PT9999SW

(3)

NOTE TO MIO MANAGER AND COGNIZANT PRINCIPAL INSPECTOR

At the request of the principal inspector, the team put special emphasis on the supplier control system element. Although only 2 findings were recorded, a large number of isolated incidents were recorded among the other system element criteria. See the attached FAA Form(s) 8100-6, Findings No. 6 and 7, and Observations No. 8-19. The team can not say with confidence that there is a systemic problem with supplier control; however, when all of the discrepancies are taken as a whole, we believe there is a strong probability that a systemic problem may exist. We recommend that a special evaluation be conducted on the supplier control system element to fully determine whether a systemic problem exists.

NOTE TO ACO MANAGER AND ASSIGNED ENGINEER

An observation was recorded in the design data control system element for a suspected problem with the FAA-approved data. See the attached FAA Form 8100-6, Observation No. 20. There is a systemic problem with FAA-approved drawings which call out incorrect or non-existent process specifications. We recommend that this problem be investigated further.

(4)

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APPENDIX 19. PREPARATION INSTRUCTIONS FOR ACSEP EVALUATION SPECIAL EMPHASIS ITEMS (CONT'D)

FIGURE 2. SAMPLE ACSEP EVALUATION SPECIAL EMPHASIS ITEMS FOR DELEGATED FACILITIES

ACSEP EVALUATION
SPECIAL EMPHASIS ITEMS

(1) **(2)**
ACSEP NO. /REPORT NO. 98SW365/1-1 **PROJECT NO.** DAS

(3)

NOTE TO ACO MANAGER AND ASSIGNED ENGINEER

Design Change Approval

During the evaluation of the Design Change Approval system element it was discovered that many of the drawings reviewed had in excess of 25 design change notices (DCN's) attached. Although the FAA-approved procedures manual does not specify a limit to the number of DCN's allowed prior to a formal drawing revision, the current facility practice appears excessive. Since facility procedures do not specify a limit on the number of DCN's allowed, no finding was documented. However, a finding was documented for approval of parts which were not in conformance to type design data, and excessive DCN's were considered a contributing factor (see FAA Form 8100-6, Finding No. 3). The team recommends that the ACO/AE review the FAA-approved procedures manual and work with the delegated facility to revise the design change procedures to specify a realistic limit on the number of DCN's that can be written against a drawing before a formal drawing revision is required.

NOTE TO FSDO PMI

During the review of DAS conformity inspection records for various galley installation STC's, it was noted that there were a high number of rejects of the galley compartment covers before an article was accepted for installation. The rejects were apparently caused by lack of or improper procedures in storage of prepreg material from which the covers were made. A roll of prepreg material needs to be in cold storage when it is not in use. Each roll needs a record to show how long the roll is out of the cold storage vault when the roll is taken out for use. The records for the cold storage vault appear to be too lax to get the needed controls for the prepreg material. It is recommended that the Flight Standards PMI for the Repair Station investigate this issue and revise the facility's Inspection and Procedures Manual as deemed appropriate.

(4)

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APPENDIX 20. PREPARATION INSTRUCTIONS FOR ACSEP LESSONS LEARNED

1. **PURPOSE**. This appendix provides instructions for recording lessons learned from ACSEP evaluations. These lessons form an important part of the ACSEP quality improvement program.

2. **SPECIFIC GUIDANCE**. Figure 1 shows sample lessons learned statements. Prepare the lessons learned by inserting in:

a. **Block 1**. The ACSEP number/Report number.

b. **Block 2**. The Project Number(s) assigned to the production approval activity being evaluated. For a delegated facility, enter the type of delegated facility, i.e., DAS, DOA, or SFAR 36.

c. **Block 3**. All events noted during the evaluation which may lead to improvement of ACSEP policy or evaluation techniques. Events should include the following:

(1) An assessment of the performance of the evaluation, detailing the successes, failures, unique problems encountered, solutions, and recommendations for future evaluations, policy, and related training.

(2) Difficulties in using this order, including the standardized evaluation criteria, and recommendations for improving this document and the related training.

(3) The rationale for checking the "Unable to Evaluate" block on Form 8100-4 or 8100-8 for an ENTIRE SYSTEM ELEMENT (e.g., lack of time, inadequate resources, or lack of expertise).

(4) All new evaluation criteria and/or statement of condition practices and principles.

(a) **State** the complete text of any new criteria added to Form 8100-4 or 8100-8. Include statement of condition, when appropriate.

(b) **State** the complete text of any new practices or principles proposed for an existing statement of condition. Indicate the criteria number to which the statement of condition applies.

d. **Block 4**. The appropriate marking in accordance with paragraph 9 of Order 1600.15, Control and Protection of "For Official Use Only" Information.

APPENDIX 20. PREPARATION INSTRUCTIONS FOR ACSEP LESSONS LEARNED (CONT'D)

FIGURE 1. SAMPLE ACSEP LESSONS LEARNED

ACSEP EVALUATION
LESSONS LEARNED

(1) **(2)**
ACSEP NO. /REPORT NO. 98NM355/1-1 **PROJECT NO.** PQ9999NM

(3)

EVALUATION ASSESSMENT

The evaluation process went well. The facility response to the ACSEP process was favorable. Two-person teams were utilized for all system element evaluations; all team members agreed that this approach helped them get started quicker and contributed to a more complete evaluation of each system element.

DIFFICULTIES IN USING THE ORDER

Standardized Evaluation Criteria 4P7 and 4Q1 are so similar that it is difficult to determine which of the criteria to write an observation against. As written, the danger exists of writing two observations when only one exists. Recommend combining these two criteria to eliminate duplication.

SYSTEM ELEMENTS NOT EVALUATED

The Statistical Quality Control system element was not evaluated due to lack of time.

PROPOSED NEW EVALUATION CRITERIA

System Element #9 (Nondestructive Inspection). Are the critical parameters of the holography process identified and controlled?

(4)

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APPENDIX 21. PREPARATION INSTRUCTIONS FOR FAA FORM 8100-3, ACSEP EVALUATION REPORT COVER PAGE

1. **PURPOSE**. This appendix provides instructions for preparing FAA Form 8100-3.

2. **PREPARING THE FRONT OF THE FORM**. Figure 1 shows the front of FAA Form 8100-3 with numbered blocks. Prepare the form by typing in:

a. **Block 1**. The ACSEP number.

b. **Block 2**. The Report number. This number will consist of the report order sequence and the total number of separate original reports issued under the ACSEP number in block 1 above. For example, ACSEP Evaluation Report No. 1-2 would indicate that this is the first report in a series of two separate original reports issued for a specific evaluation. This example could indicate, in one instance, that an evaluation was conducted at a PAH who also holds a DAS authorization, thereby requiring issuance of two separate original reports. When only one report is required, it shall be identified as No. 1-1.

c. **Block 3**. The name, address, city, state (or country), and ZIP/postal code of the facility that was evaluated.

d. **Block 4**. A checkmark in the applicable box(es) that indicates the type(s) of design or production approval the facility has.

e. **Block 5**. The date of the pre-evaluation conference.

f. **Block 6**. The date of the post-evaluation conference.

g. **Block 7**. The name of the office responsible for certificate management or delegation oversight of the evaluated facility.

h. **Block 8**. The name of the MIDO responsible for surveillance of the evaluated facility. No entry is required if the surveillance is performed by the certificate management MIDO.

i. **Block 9**. The team leader's signature. This block may be signed by a team leader-in-training, but must also be countersigned by the team leader. When an electronic version of the form is used, ensure that all required names are typed in.

j. **Block 10**. The date of signature.

k. **Block 11**. The location of the objective evidence. Indicate if the objective evidence is attached to the report, or if the objective evidence has been retained by the principal inspector or assigned engineer.

APPENDIX 21. PREPARATION INSTRUCTIONS FOR FAA FORM 8100-3, ACSEP EVALUATION REPORT COVER PAGE (CONT'D)

3. **PREPARING THE BACK OF THE FORM**. Figure 2 shows the back of Form 8100-3 with numbered blocks. Prepare the form by typing in:

a. **Block 12**. The name of each team member, including any national resource specialist, manager, or outside support services utilized, and any evaluators/team leaders-in-training who participated. List the team members first. Do not enter the team leader's name.

b. **Block 13**. The office to which each individual listed in block 13 is officially assigned.

c. **Block 14**. The discipline of each individual listed in block 13. Identify whether the individual is an aviation safety inspector, engineer, or flight test pilot.

d. **Block 15**. The specialty of each individual listed in block 13, as applicable. Identify engineers by systems, equipment, propulsion, airframe, or flight test specialty.

e. **Block 16**. An "(E)" to identify evaluators-in-training; or a "(T)" to identify team leaders-in-training. Leave this block blank for team members.

APPENDIX 21. PREPARATION INSTRUCTIONS FOR FAA FORM 8100-3, ACSEP EVALUATION REPORT COVER PAGE (CONT'D)

FIGURE 1. SAMPLE FAA FORM 8100-3 (FRONT)

U.S. Department of Transportation
Federal Aviation Administration

ACSEP Number
98CE365
(1)

ACSEP Evaluation Report No. 1-1 **(2)**

Facility: **(3)**
XYZ Tire Company
55667 Aviation Parkway
Anytown, OH 45000-5566

Facility Type: ☐ APIS ☐ PC ☐ PC Extension ☐ TSO ☐ PMA
(4) ☐ DOA ☐ SFAR-36 ☐ DAS

(5) Start Date: May 12, 1998

(6) End Date: May 15, 1998

Certificate Management/Delegation Oversight Office: **(7)**
Vandalia MIDO

Surveillance/Geographic MIDO: **(8)**

(9) Prepared By: Jill Doe

(10) May 21, 1998

FAA ACSEP Evaluation Team Leader — Date

(11) Location of Objective Evidence: Retained by the principal inspector.

FAA Form 8100-3 (12-98) FOR OFFICIAL USE ONLY (when filled in)
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APPENDIX 21. PREPARATION INSTRUCTIONS FOR FAA FORM 8100-3, ACSEP EVALUATION REPORT COVER PAGE (CONT'D)

FIGURE 2. SAMPLE FAA FORM 8100-3 (BACK)

TEAM MEMBERS

Name	Office	Discipline	Specialty	Training Status (E or T)*
(12)	**(13)**	**(14)**	**(15)**	**(16)**
John Smith	Atlanta MIDO	ASI		
Fred Exe	ACE-118W	Eng	Airframe	
Mary Lamb	ACE-117A	Eng	Airframe	E

*E = Evaluator-in-training
T = Team Leader-in-training

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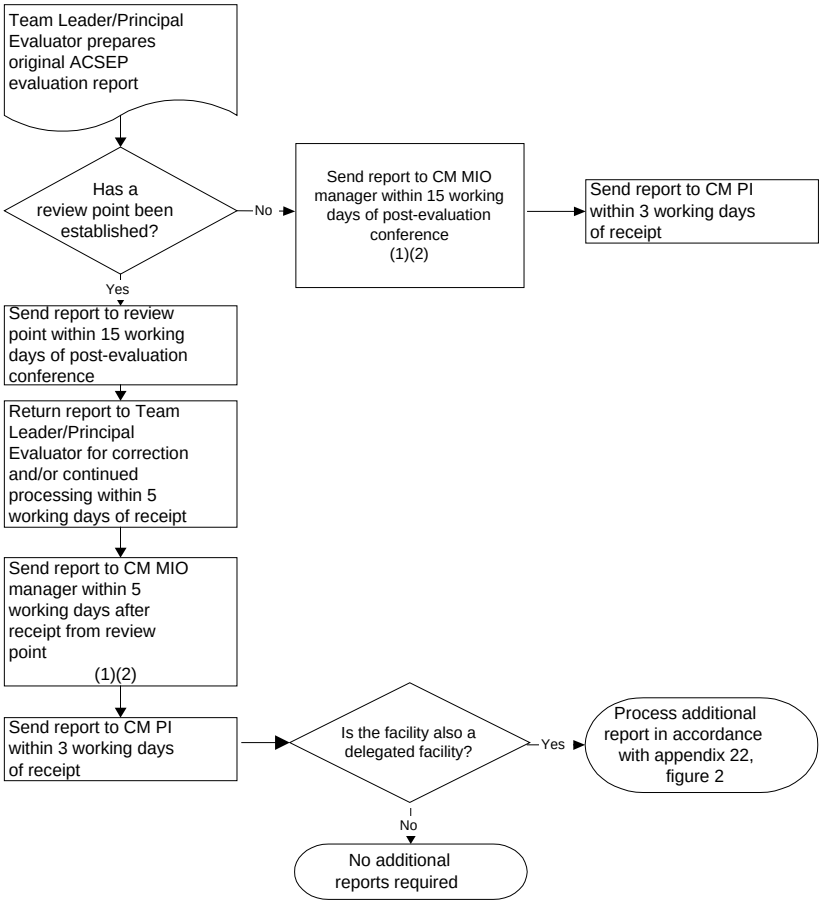
APPENDIX 22. PROCESS FOR SENDING ACSEP EVALUATION REPORTS

1. **PURPOSE**. This appendix provides several flowcharts to assist the team leader, principal evaluator, MIO manager, and ACO manager in identifying where a completed ACSEP evaluation report is required to be sent. It supplements the description provided in chapter 5, section 3, of this order.

2. **DESCRIPTION**. Figures 1 through 3 provide flowcharts to identify where a completed ACSEP evaluation report is required to be sent for the various facility types encountered during the ACSEP evaluation.

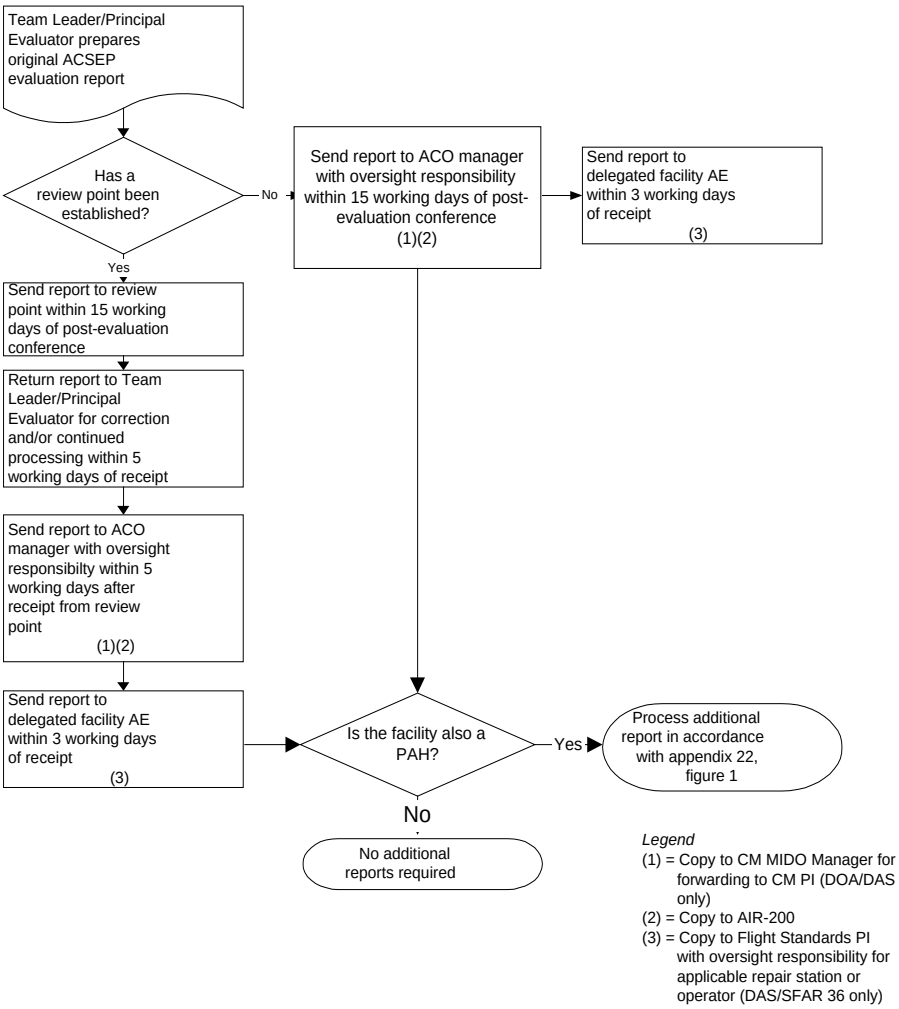
FIGURE 1. PRODUCTION APPROVAL HOLDERS AND ASSOCIATE FACILITIES



Legend
CM = Certificate Management
(1) = Copy to CM ACO Manager for forwarding to CM AE
(2) = Copy to AIR-200

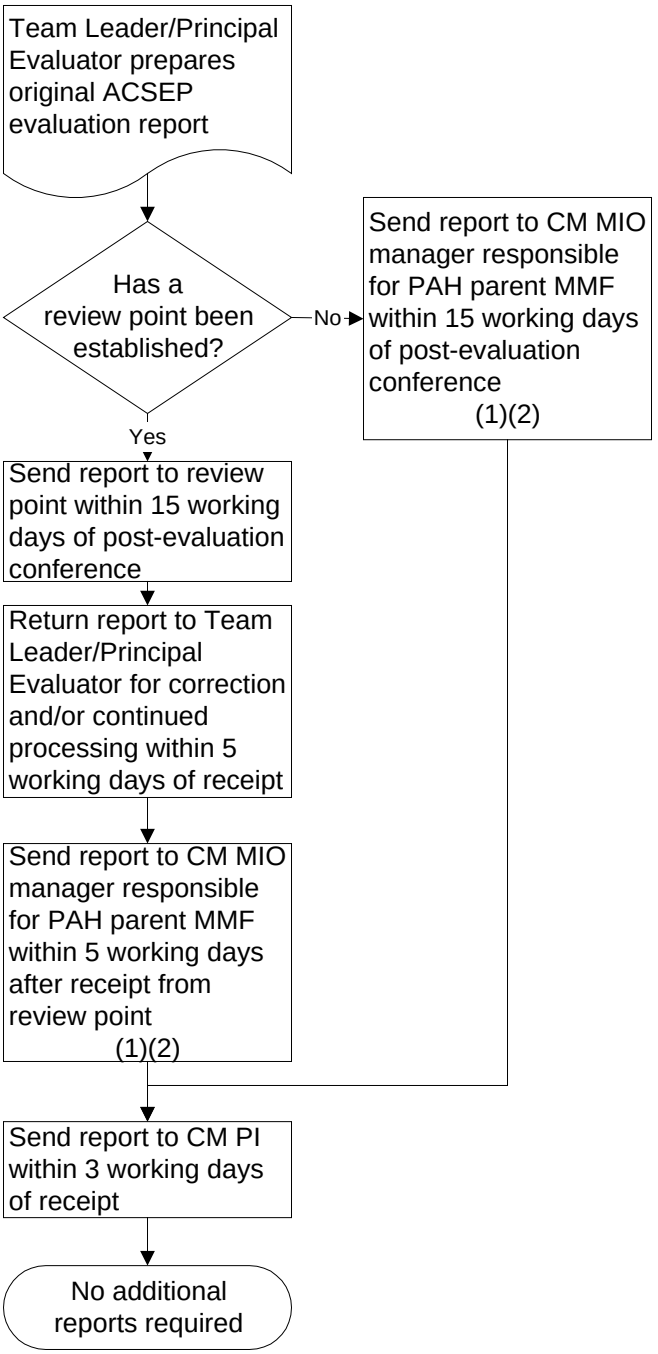
APPENDIX 22. PROCESS FOR SENDING ACSEP EVALUATION REPORTS (CONT'D)

FIGURE 2. DELEGATED FACILITIES



APPENDIX 22. PROCESS FOR SENDING ACSEP EVALUATION REPORTS (CONT'D)

FIGURE 3. SATELLITE MMF'S



Legend
CM = Certificate Management
(1) = Copy to CM ACO Manager for forwarding to CM AE
(2) = Copy to AIR-200

U.S. Department
of Transportation

**Federal Aviation
Administration**

Directive Feedback Information

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

Subject: Order 8100.7A

To: Directive Management Officer, AIR-520

(Please check all appropriate line items)

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

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

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

☐ Other comments:

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

Submitted by: _____ Date: _____

FTS Telephone Number: _____ Routing Symbol: _____

FAA Form 1320-19 (8-89)