APPENDIX 1. EVALUATION OF A PAH'S QUALITY OR INSPECTION SYSTEM

1. PURPOSE. This appendix, in conjunction with the applicable 14 CFR requirements, provides guidance to thoroughly review all data submitted by a PAH that describe the quality control or inspection system required for the applicable production approval. This data may include a quality manual, procedures, policies, standards, instructions, and/or processes. Any inadequacies in the data submitted must be identified to the PAH for corrective action. After the data has been reviewed, and any applicable corrective actions taken, the MIDO/CMO will approve or accept the data, as applicable.

2. DATA REVIEW. All quality control or inspection system data submitted to the cognizant MIDO/CMO must be reviewed to ensure that:

a. The described quality control or inspection system will adequately provide for the consistent acceptance of only those products or parts thereof which are in conformity with the approved design data and in a condition for safe operation.

b. The quality control or inspection system is adequately described, meets the intent of the pertinent rules, and can be realistically implemented. Be wary of data that is overly descriptive, since such data may often be difficult to implement.

c. The data are identified by title, revision, and date, and contain the signature of the appropriately authorized person in the PAH's organization.

d. The data is well organized, unambiguous, and not subject to misinterpretation.

e. Inspection procedures are well organized and easy to understand and implement.

f. The quality control or inspection system adequately defines when a product or part(s) thereof has officially left the control of the quality or inspection system.

g. The quality control or inspection system adequately describes the process of re-introducing, back into the quality control or inspection system, new products or parts thereof that have left a PAH's quality system. The process must ensure the following criteria are met:

(1) The products or parts thereof are traceable to the PAH that manufactured them.

(2) The products or parts thereof meet the type design and are in a condition for safe operation.

NOTE: Depending on their complexity, a visual inspection may be adequate for determining that the products or parts thereof meet their type design. When a determination cannot be made by a visual inspection, the products or parts thereof must be re-introduced to the quality control or inspection system at a point where functional testing is possible.

APPENDIX 1. EVALUATION OF A PAH'S QUALITY OR INSPECTION SYSTEM (CONT'D)

h. New products and parts thereof that leave the control of a PAH and fail on initial installation and/or testing are considered to be nonconforming. Those nonconforming products and parts thereof that are returned to the PAH must be processed utilizing the PAH's quality control or inspection system.

i. Statistical sampling plans are clearly documented. The ASI must ensure that sampling plans based on valid consensus standards do in fact comply with those standards (e.g., MIL-HDBK-683, Statistical Process Control (SPC) Implementation and Evaluation Aid; MIL-HDBK-1916, Companion Document to MIL-STD-1916; "Zero Acceptance Number Sampling Plans," by Nicholas Squeglia, ASQ Quality Press). Sampling plans that are not based on valid consensus standards should be closely examined to determine their statistical validity (Juran & Gryna, *Quality Control Handbook*, may be used as an aid in determining this validity). Regardless of the basis of the sampling plans utilized, the PAH is responsible to ensure that all products or parts thereof conform to the approved design data. Therefore, the ASI should ensure that the acceptance/rejection criteria will not allow for acceptance of nonconforming product or parts thereof. If specific experience or expertise is required to review sampling plans, the PI should advise the MIDO/CMO manager. Additional information is available on the FAA Web site via the Statistical Quality Control (SQC) Best Practice. The following should be considered when reviewing sampling plans:

(1) Controlled process. Prior to implementing a sampling plan, objective evidence must exist that demonstrates and ensures that the process(es) used to manufacture sampled characteristics are documented, controlled, repeatable, and consistent.

(2) Characteristics classified. Each characteristic that will be part of the sample plan must be identified, evaluated, and properly classified. Characteristics are classified based upon the effect they may have on safety or usability of the product.

(3) Proper and reasonable sample sizes. Specific sample sizes should be chosen based upon the lot/batch size, the characteristic classification and criticality, the design tolerances being measured, and the probability of accepting nonconforming products or parts thereof.

(4) Unbiased sample selection. The plan should fully describe how samples are selected. The sample method must be unbiased; that is, the sample selection method does not unfairly weight a particular time frame, production sequence, tooling configuration, operator(s), batch, etc. In order to ensure an unbiased representative sample, the lot, batch, or group should be homogeneous (i.e., consisting of the same characteristics, type, grade, class, composition, and manufactured under the same data and conditions, and manufactured at approximately the same time).

(5) Samples are controlled. When sampling is used, the results of the selected sample apply to the entire lot, batch, or grouping. The lot, batch, or group should be clearly identified and segregated throughout the entire sampling, inspection , and possible disposition process. In the event that any characteristics are found to be nonconforming in the sample, the entire lot, batch, or grouping must be withheld pending additional analysis, ensuring that there are no other nonconforming parts. Should this analysis indicate the possible existence of additional nonconforming parts, the entire lot, batch or grouping must be dispositioned in accordance with the PAH's approved material review procedures. In all cases, the PAH is responsible to ensure that all products and parts thereof conform to the approved design data.

APPENDIX 1. EVALUATION OF A PAH'S QUALITY OR INSPECTION SYSTEM (CONT'D)

3. DATA APPROVAL/ACCEPTANCE STANDARDS.

a. PC or TSO Authorization Holder. The cognizant MIDO/CMO will determine the adequacy of the data reviewed in accordance with paragraph 2 of this appendix. Any inadequacies in the data submitted must be identified to the PAH for corrective action. After the data has been reviewed, and any applicable corrective actions taken, the MIDO/CMO will prepare a letter approving the PAH's quality control data and forward it to the PAH. The cognizant MIDO/CMO also should send a copy of the approval letter to the cognizant ACO. This data, 14 CFR, and the FAA-approved design data comprise the standards with which the PAH must show continued compliance.

b. APIS or PMA Holder. The cognizant MIDO will determine the adequacy of the data reviewed in accordance with paragraph 2 of this appendix. Any inadequacies in the data submitted must be identified to the PAH for corrective action. After the data has been reviewed, and any applicable corrective actions taken, the MIDO will accept the inspection system data submitted by the APIS or PMA holder. The FAA does not approve this data since there is no part 21 requirement for submittal of this data for approval. This data, 14 CFR, and the FAA-approved design data comprise the standards that will be used when performing CM activities at the APIS or PMA holder.

APPENDIX 2. FABRICATION INSPECTION SYSTEM

1. ESTABLISHMENT OF THE FABRICATION INSPECTION SYSTEM (FIS). In accordance with § 21.303(h), the applicant must establish and maintain an FIS. The description of the FIS may be in any form acceptable to the FAA. However, for durability and easy reference, it is suggested that this description be in the form of a manual, indexed as necessary, describing the methods, procedures, inspections, and tests that the applicant and its suppliers intend to use to meet the requirements of § 21.303(h)(1) through (9). This also should apply to meeting the requirements for reporting under § 21.3 and for identifying the product in accordance with § 45.15. The description may or may not comprise a lengthy document, depending upon the size of the manufacturing facilities, and the number and complexity of parts being manufactured. In describing the FIS, references to other documents or data maintained by the applicant may be utilized in lieu of a detailed description of a particular procedure, provided a brief description is included in the manual and the referenced documents provide a complete description of the system. All referenced documents must be submitted for acceptance as part of the FIS description. If procedures or data are kept at or controlled by the original design/PAH under a contractual arrangement with the applicant, the applicant must demonstrate contractual provisions or provide other appropriate written assurance of the procedure for communicating design and manufacturing changes to the applicant. The applicant should demonstrate that termination of the contractual relationship would not affect the applicant's ability to maintain compliance with the established FIS. For record purposes, the description also should include a facsimile of the applicant's symbol, trademark, or prefix/suffix. The following paragraphs, headed by the applicable 14 CFR section to which they apply, provide an example of the material usually found in an acceptable description.

2. SECTION 21.303(h)(1). The portion of the FIS established to comply with this section would usually include the procedures that ensure conformity to approved design data of all supplier-furnished materials and services. Generally, this part of the FIS description would describe how the applicant ensures that:

a. All incoming materials conform to approved design data prior to their acceptance and release to production.

b. Provisions are made for the evaluation and surveillance of suppliers by the applicant when it relies to any degree upon a supplier's inspection system. The surveillance of suppliers of proprietary parts must enable the applicant to determine that incoming materials conform and that supplier services are performed correctly.

c. Suppliers, including suppliers of proprietary parts upon whom an applicant relies for controlling conformity and quality, are formally advised that their inspection system and materials being supplied are subject to inspection by the FAA. When a supplier from a foreign country is involved, the FAA will determine whether the performance of any FAA duties at the supplier's facilities would result in an undue burden on the FAA. If such FAA duties would be required, a means acceptable to the FAA of relieving any undue burden must be found, or it will be necessary for the applicant to perform all required functions in the United States.

d. Positive control is exercised over the design configuration and condition of all parts obtained from suppliers. The fact that the supplier does not hold a production approval for the part reemphasizes the PMA holder's responsibilities for the design configuration of the part.

APPENDIX 2. FABRICATION INSPECTION SYSTEM (CONT'D)

e. All material review actions and design changes made by suppliers, including suppliers of proprietary parts over which the applicant does not exercise direct design control, are evaluated by the applicant and approved, if applicable, in accordance with § 21.303(d) and part 21, subpart D.

f. Records are maintained of all inspections and tests performed by or for the applicant in controlling the conformity of all supplier-furnished materials.

g. All incoming materials and services, including related inspection and test records, are identified with appropriate acceptance, rejection, or rework stamps, as applicable.

3. SECTION 21.303(h)(2). The FIS description will include the system the applicant will utilize, with respect to compliance with this section, to ensure that the physical and chemical properties of incoming material are as specified in the approved design data.

4. SECTION 21.303(h)(3). An acceptable description of the storage and issuance system established by the applicant would include the procedures that ensure:

a. Identification, segregation, and protection of materials in storage.

b. Periodic re-inspection and disposition of materials subject to deterioration from prolonged storage.

c. Protection of materials and components from handling damage while en route and stored in fabrication and shipping areas.

d. Incorporation of all applicable design changes prior to release of stored components for installation in the part.

e. Receipt into and issuance from storage of only those materials and components that are identified as having passed receipt inspection criteria.

5. SECTION 21.303(h)(4). The integrity of processes and services utilized in the manufacture of parts is dependent upon the skill with which the work is performed, the capabilities of the equipment used, and close control of critical factors such as temperatures, solutions, curing time, special tools, etc. A system to control processes and services, such as welding, brazing, heat treatment, plating, and radiographic, ultrasonic, or magnetic particle inspection, etc., requires that each process be performed by trained and qualified personnel, in accordance with approved specifications. The specifications should contain definitive standards of quality, and ensure that the periodic inspection of gauges, solutions, or any critical equipment is controlled and documented. The description with respect to this section in the FIS manual should explain the procedure by which the applicant will qualify personnel and control processes performed at the approved facilities, as well as suppliers. The description should generally include a listing of manufacturing processes that are relied upon to ensure the quality, conformity, and safety of the completed parts.

APPENDIX 2. FABRICATION INSPECTION SYSTEM (CONT'D)

6. SECTION 21.303(b)(5). Compliance with this section requires that procedures be established by the applicant to control all phases of inspection of the part. Therefore, the FIS description should provide descriptions of all procedures established by the applicant to ensure that all inspections and tests will be conducted in the proper sequence, when components and processes are in an inspectable condition (e.g., prior to painting or closures). This is achieved through use of inspection instructions, shop travelers, checklists, or similar media. The following are examples of inspection functions that would be described to the extent applicable to the complexity of the parts or size of the manufacturer's facilities:

a. Planning Procedures. These procedures ensure that each component used in the part is adequately inspected for conformity with the approved design. This function of the planning system would be facilitated if it provided for:

(1) Classifying design characteristics and related manufacturing defects to determine their critical nature so that the most effective fabrication inspection methods and process controls will be used with respect to critical and major characteristics, and defect detection. Acceptable statistical processes may be found in SAE Aerospace Recommended Practice 9013, Statistical Product Acceptance Requirements.

(2) Selecting appropriate inspection methods and plans for each classification. This will ensure that all characteristics affecting safety will be inspected and re-inspected, as appropriate, to conform to approved design data and to eliminate discrepancies from in-process and completed parts.

b. Inspection Status. This system would ensure that appropriate stamps or marks are placed on components or other means are used to indicate their inspection status. It would be helpful if this portion of the description also contains copies of all inspection forms, checklists, and imprints of the various inspection and process stamps, along with their meanings. Procedures should call for the applicant to use suitable acceptance, rework, or rejection stamps, particularly on life-limited, critical, or nonconforming (MRB) parts, materials, and components that:

(1) Have been subjected to a process such as heat treatment, welding, bonding, etc., or testing and inspection that may include hardness tests, laboratory analysis, magnetic particle inspection, or similar functions.

(2) Have been inspected at the specified point in production and are found in conformity with the approved design.

(3) Are rejected as being unusable or scrap, so as to preclude their installation.

APPENDIX 2. FABRICATION INSPECTION SYSTEM (CONT'D)

c. Tool and Gauge Control. This system should provide control over periodic inspection and calibration of inspection tools, gauges, testing equipment, production jigs, fixtures, templates, etc., which are depended upon as media for inspection product acceptance. The description of the means utilized for tool and gauge control should include a schedule of periodic or usage inspection and calibration intervals. This will ensure that tools, gauges, etc., are inspected, adjusted, repaired, and/or replaced before they become inaccurate. The inspection system description also should include the procedures for implementing the tool and gauge control schedules. Such procedures would basically ensure that each piece of equipment is:

(1) Checked prior to first usage and at the proper periodic interval.

(2) Marked to indicate it is under calibration control and indicates the next inspection due date.

(3) Removed from inspection and shop areas or conspicuously identified to prohibit usage after expiration of the inspection due date.

d. Final Inspection. This function of the inspection system would ensure that each completed part is subjected to a final inspection to determine conformity with approved design data. The inspection system also would ensure compliance with applicable FAA airworthiness directives and safety of the part for installation on type-certificated products. Such a system would usually incorporate procedures to ensure that:

(1) Each part is inspected for completeness, adjustments, safety, calibration, markings, placards, etc., as applicable to the complexity of the part.

(2) If applicable, each completed part or appropriate sample is subjected to a functional test to ensure that the operating characteristics meet the approved design provisions.

7. SECTION 21.303(h)(6). The description of the system established for compliance with this rule includes the procedures utilized to ensure that:

a. Current design drawings are readily available to manufacturing and inspection personnel, and used when necessary, and

b. Obsolete drawings and data, or those affected by superseding data or FAA airworthiness directives, are promptly removed from production and inspection areas, or otherwise controlled, to prevent their improper use.

APPENDIX 2. FABRICATION INSPECTION SYSTEM (CONT'D)

8. SECTION 21.303(h)(7). The description of the drawing change controls required by this regulation should include procedures to ensure that, prior to final acceptance of articles and completed parts, all changes required to be FAA-approved have been approved and are incorporated in the applicable drawings or covered by change notices attached to such drawings. The FIS manual would, therefore, include a section describing or referring to the drawing change control system. If the drawing change control system refers to or relies upon the original design approval holder's system through a contractual relationship, the applicant should demonstrate contractual provisions or provide other appropriate written assurance sufficient to ensure that all changes will be incorporated into the finished part(s) manufactured by the applicant. In such a case, the applicant also should indicate how it would establish a new system to maintain the FIS, should the contractual relationship with the original design approval holder or PAH be changed or terminated.

9. SECTION 21.303(h)(8). The description of the procedures established for compliance with this regulation include provisions for the evaluation of rejected materials and articles to determine whether they can be reworked, repaired, or accepted "as is" without affecting the airworthiness of the part. The MRB procedure should describe engineering, quality, and production involvement in MRB activities. Approval for the PMA applicant to use this provision will depend upon the ability of the applicant to substantiate the effects of nonconformance or repair on the safe performance of the part and its parent system(s). If the procedures proposed by the applicant to demonstrate compliance with 14 CFR rely upon a contractual relationship with the original design approval holder, the applicant must demonstrate contractual provisions or provide other appropriate written assurance indicating how the applicant's compliance with applicable requirements will be ensured. In such a case, the applicant also should indicate whether it would need to establish a new system to maintain the FIS should this aspect of the contractual relationship with the original design approval holder or PAH be changed or terminated.

10. SECTION 21.303(h)(9). Compliance with this section requires that procedures be established for maintaining inspection records. This includes all inspections accomplished on the parts from raw materials to finished parts. A procedure should be established for identifying inspection records where practicable with parts, such as serial numbers, dates, codes, etc. The applicant must file and retain the inspection records for at least 2 years after the part has been completed.

APPENDIX 3. RISK MANAGEMENT INDICATOR ASSESSMENT CRITERIA

1. PURPOSE. This appendix provides additional guidance to assist the PI in completing the assessment section of the Risk Management Facility Assessment Sheet.

2. SPECIFIC GUIDANCE. There are 21 risk management indicators in the automated Risk Management Facility Assessment Sheet. These indicators are listed in figure 1 of this appendix. The PI must assess each of these indicators. 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 Risk Management Facility Assessment Sheet.

FIGURE 1. RISK MANAGEMENT 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 Noncompliances
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:

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

APPENDIX 3. RISK MANAGEMENT INDICATOR ASSESSMENT CRITERIA (CONT'D)

(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 14 CFR 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 14 CFR 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 or parts thereof. 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 nondestructive testing [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 14 CFR/FAA familiarity. Technical expertise, however, is paramount for individuals in these key positions.

(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.

APPENDIX 3. RISK MANAGEMENT INDICATOR ASSESSMENT CRITERIA (CONT'D)

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 crosstrained 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 a new facility or facilities, or results in new or additional geographical 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.

APPENDIX 3. RISK MANAGEMENT INDICATOR ASSESSMENT CRITERIA (CONT'D)

(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 14 CFR 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 Noncompliances (6). Noncompliances 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:

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

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

(3) Any repeat noncompliances, either in ACSEP evaluations, PI evaluations, product audits, or supplier control 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 noncompliance to multiple noncompliances, and/or the occurrence of safety issues) should be viewed with apprehension.

APPENDIX 3. RISK MANAGEMENT INDICATOR ASSESSMENT CRITERIA (CONT'D)

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 that resulted from a SUP 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:

(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 that 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.

APPENDIX 3. RISK MANAGEMENT INDICATOR ASSESSMENT CRITERIA (CONT'D)

(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 upfront, 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.

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 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 unscheduled PI or ACSEP evaluations, 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 that must be critically controlled is a complexity driver.

APPENDIX 3. RISK MANAGEMENT INDICATOR ASSESSMENT CRITERIA (CONT'D)

(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, in-depth, 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 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 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 nontraditional, exotic, or revolutionary materials, and/or material(s) that 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 14 CFR was difficult, or if multiple exemptions or special conditions were required, that may also reflect the item's complexity.

APPENDIX 3. RISK MANAGEMENT INDICATOR ASSESSMENT CRITERIA (CONT'D)

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.

(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 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 14 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.

APPENDIX 3. RISK MANAGEMENT INDICATOR ASSESSMENT CRITERIA (CONT'D)

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.

(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 is 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.

APPENDIX 3. RISK MANAGEMENT INDICATOR ASSESSMENT CRITERIA (CONT'D)

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.

(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 14 CFR compliance is maintained. Changes based on FAA recommendations or reported noncompliances are likewise to be encouraged. Changes initiated in pursuit of ISO-9000/9001 certification may warrant concern in light of 14 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 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.

APPENDIX 3. RISK MANAGEMENT INDICATOR ASSESSMENT CRITERIA (CONT'D)

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:

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

(2) Look at methods/systems used by the PAH. If a dock-to-stock or just-in-time delivery program has been implemented, 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.

t. Increased Use of Foreign Suppliers (20). Substantial growth in the number of foreign suppliers has raised a variety of 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 PAH should also raise a red flag.

(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 no agreement is in place, lack of 100 percent incoming inspection by the PAH should be cause for concern.

APPENDIX 3. RISK MANAGEMENT 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 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. CATEGORY PARTS LIST

1. PURPOSE. This appendix describes the Category Parts List (CPL) used to determine the unit criticality for risk management.

2. CATEGORY PARTS LIST. The CPL contains a list of assemblies and part(s) thereof that have been assigned a category rating of 1 or 2. To receive a category rating of 1, an assembly or part thereof must be one whose failure could prevent continued safe flight and landing, and resulting consequences could reduce safety margins, degrade performance, or cause loss of capability to conduct certain flight operations. To receive a category rating of 2, an assembly or part thereof must be one whose failure would not prevent continued safe flight and landing, but whose resulting consequences may reduce the capability of the aircraft or the ability of the crew to cope with adverse operating conditions or subsequent failures.

a. If an assembly or part thereof is listed on the CPL, the PI will use its designated category rating to determine the unit criticality on AIR Form 8120-9.

b. If an assembly or part thereof is not listed on the CPL, it will be considered as Category 3. The PI will use this category rating to determine the unit criticality on AIR Form 8120-9.

3. STRUCTURE OF THE CPL. Refer to figure 1 of this appendix. The CPL is divided into five major areas: structural assemblies, structural elements, hydraulic pneumatic components, propulsion system components, and systems and equipment. Each of these areas is further identified by the applicable 14 CFR part. Each part listed is followed by a number, or numbers, in parentheses. This number identifies the applicable 14 CFR part and the designated category. For example, under "Structural Assemblies," "Fuselage" is followed by "23-1" and "25-1." This indicates that 14 CFR parts 23 and 25 are applicable, and that the fuselage is a Category 1 in both instances.

4. CPL REVISION PROCESS. A request to add a Category 1 or 2 assembly or part thereof to the CPL, to change the category of an existing assembly or part thereof on the CPL, or to remove an existing assembly or part thereof from the CPL, may be generated from any source (e.g., PI, ACO, etc.). Use the following procedure to revise the CPL (see also figure 2):

NOTE: A request to change the category of an existing CPL assembly or part thereof may be justified based on a specific application. For example, a windshield may appear on the CPL as Category 1 for a part 23 aircraft. Based on the application (e.g., unpressurized vs. pressurized), a request to change the category for a specific part 23 aircraft may be warranted if the category rating of 1 is not appropriate.

a. Prepare a Part Categorization memo and include the following as a minimum (see sample memos in figures 3, 4, and 5):

(1) Identify and fully describe the applicable assembly or part thereof.

(2) Identify the applicable 14 CFR part (i.e., part 23, 25, 27, 29, 31, 33, or 35).

APPENDIX 4. CATEGORY PARTS LIST (CONT'D)

FIGURE 1. SAMPLE CATEGORY PARTS LIST

Revision New dated 12/3/00

AIRCRAFT CERTIFICATION SERVICE CATEGORY PARTS LIST

Structural Assemblies	CFR part	Structural Elements	CFR part	Hydraulic Pneumatic Components	CFR part	Propulsion System Components	CFR part	Systems and Equipment	CFR part
Fuselage (23-1), (25-1)	23, 25	Fuselage Structural Elements Pressure Bulkheads (23-1), (25-1) Keel Beam (25-1) Longeron/Stringer (25-2) Floor Beam (25-2) Plates/Skins (25-2) Fuselage to Wing Attach Fittings (25-1) Stabilizer to Fuselage Attach Fittings (25-1) Gear to Fuselage attach Fittings (25-1) Door Hings (on Fuselage) (25-1) Fuselage Panels (23-1), (25-1)	23, 25	Hydraulic Main Pump (23-1), (25-2), (27-1), (29-1) Main Accumulator (25-2) Main Reservoir (25-2) Auxiliary Pump (25-2)	23, 25, 27, 29	Software Thrust (EEC) (23-1), (25-1)	23, 25	Electrical Power System Alternator/Generator Drive System (25-2) AC Generator-Alternator (25-2) AC Inverter (25-2) Phase Adapter (25-2) AC Regulator (25-2) Fire Protection Smoke Detection (25-2), (27-2), (29-2) Fire Detection (25-2), (27-2), (29-2) Overheat Detection (25-2), (27-2), (29-2) Extinguishing System (25-2), (27-2), (29-2) Fire Bottle-Fixed (25-2), (27-2), (29-2)	23, 27, 29
Flight Control Surfaces Ailerons (23-1), (25-1) Rudder (23-1), (25-1) TE Flaps (23-1), (25-2) LE Devices (25-2) Elevator (23-1), (25-1) Spoilers (25-2)	23, 25	Flight Control Structural Elements Aileron Tabs (25-2) Jackscrew (23-1), (25-1) Bellcranks (23-1), (25-1) Flight Control Cables (23-1), (25-1)	23, 25	Flight Control Servo Actuators (25-2), (27-1), (29-1) Flap Actuator (25-2) Rudder Actuator (25-2) Stabilizer Actuator (25-2)	25, 27, 29	Thrust Reversers (23-1), (25-2) Auxiliary Power Units (23-1) FADEC (23-1)	23, 25	Fuel System Boost Pumps (23-1), (25-2), Transfer Valves (23-1), (25-2) Fuel S.O.V. (23-1), (25-1) Digital Fuel Flow System (25-2) Fuel Dump (25-2) Fuel Quantity Indicator (25-2), (27-2), (29-2) Fuel Flow Indicating (27-2), (29-2) Fuel Pressure Indicating (27-2), (29-2) Fuel Pump (25-2), (27-1), (29-1) Crew Oxygen System (27-2), (29-2) Indicating System Warning, Caution, and Advisory Lights (27-2), (29-2), Main Rotor Indicating System (27-2), (29-2) Engine Power (27-2), (29-2) Engine Temperature (27-2), (29-2)	23, 25, 27, 29

(3) Describe the reason for adding the assembly or part thereof, for changing the category of an existing assembly or part thereof, or for removing an existing assembly or part thereof.

(4) Provide all applicable supporting data. This may include service difficulty information, airworthiness directives, or any other data to support the request.

(5) Identify where on the CPL a new assembly or part thereof should be added. Omit this data for a change or removal request.

(6) When requesting a change to the category of an existing assembly or part thereof, or requesting removal of an existing assembly or part thereof, include its current category. Omit this data for an add request.

b. The MIDO/CMO manager reviews the memo to verify that it contains the minimum required information and coordinates with the requester, if necessary. The MIDO/CMO will then send the Part Categorization memo to its respective MIO manager.

APPENDIX 4. CATEGORY PARTS LIST (CONT'D)

c. The MIO manager logs the request and, if the part is assigned to another 14 CFR part directorate, forwards the memo to the 14 CFR part MIO manager. The 14 CFR part MIO managers are as follows:

(1) Parts 23 and 31: ACE-180.

(2) Part 25: ANM-108.

(3) Parts 27 and 29: ASW-180

(4) Parts 33 and 35: ANE-180

d. The 14 CFR part MIO manager forwards the memo to a directorate specialist. The directorate specialist will investigate and coordinate the data described in the memo with the appropriate ACO. The directorate specialist will then complete the "Coordination" section of the Part Categorization memo as follows:

(1) Indicates whether the action taken is to "Accept" or "Deny" the request.

(2) If the action is to accept either a request to add an assembly or part thereof or to change an existing category, assigns the appropriate category to the assembly or part thereof.

(3) If the action is to accept a request to remove an assembly or part thereof from the CPL, goes to paragraph e.

(4) If the action is to deny the request, indicates the reason it was denied.

e. On completion of the actions in paragraph 4d of this appendix, the directorate specialist forwards the memo to the 14 CFR part MIO manager. The 14 CFR part MIO manager will sign the completed memo and forward it to the originating MIO manager. The 14 CFR part MIO manager will retain a copy of the memo as a reference for future request reviews.

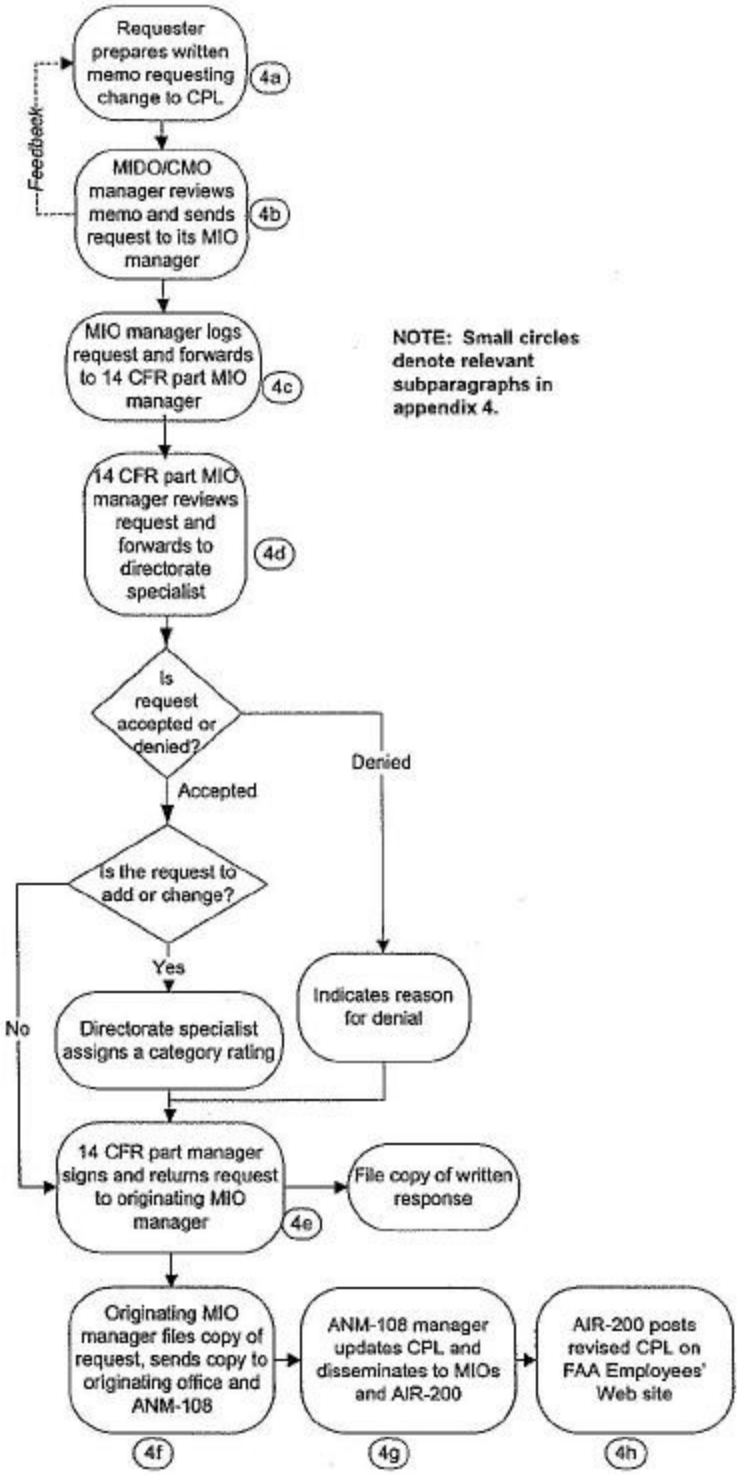
f. The originating MIO manager will file a copy of the memo, notify the originating MIDO/CMO, and send a copy to the manager, ANM-108.

g. The ANM-108 MIO manager updates the CPL and disseminates the revised CPL to the other MIO managers and AIR-200 at the end of each quarter.

h. AIR-200 will post the updated CPL on the FAA Employees' Web site.

APPENDIX 4. CATEGORY PARTS LIST (CONT'D)

FIGURE 2. CPL REVISION PROCESS FLOWCHART



APPENDIX 4. CATEGORY PARTS LIST (CONT'D)

FIGURE 3. SAMPLE PART CATEGORIZATION MEMO FOR REQUESTING AN ADDITION TO THE CPL

Federal Aviation Administration

Memorandum

Date: March 6, 2002

To: Manager, ANM-108

From: Duke E. Season, Manager, ANE MIDO-42
Donald Miller, VIA Manager, ANE-180

Prepared by: James Staney

Subject: **ACTION:** Part Categorization

We request to add the following part to the Category Parts List (CPL).

1. Part name: Fuel cell door.

2. 14 CFR part affected: 25.

3. Reason for adding part to CPL: Paint contamination on fuel cell door for Boeing 737-300 led to issuance of an Airworthiness Directive (AD).

4. The following applicable supporting data are attached: A copy of AD #2001-15-01.

5. Placement of part on CPL: Systems and Equipment, Fuel System.

Attachment
AD #2001-15-01

COORDINATION

Action on request: Accept

Category assigned: 2

C.P. Ells

Date: April 3, 2002

C.P. Ells

APPENDIX 4. CATEGORY PARTS LIST (CONT'D)

FIGURE 4. SAMPLE PART CATEGORIZATION MEMO FOR REQUESTING A CHANGE TO THE CPL

Federal Aviation Administration

Memorandum

Date: March 26, 2002

To: Manager, ACE-180

From: Dewey Revu, Manager, Seattle MIDO
Kathleen Beall, VIA Manager, ANM-108

Prepared by: Ronald Reynolds

Subject: **ACTION:** Part Categorization

We request to change the existing category on the Category Parts List (CPL) for the following part.

1. Part name: Flight compartment window.

2. 14 CFR part affected: 23.

3. Reason for changing existing category: Category 1 is not appropriate for a Cessna 150 aircraft.

4. The following applicable supporting data are attached: Cessna 150 performance data.

5. Placement of part on CPL: Systems and Equipment, Window-Windshield System.

6. Current category: 1.

Attachment
Cessna 150 performance data

COORDINATION

Action on request: Accept

Category assigned: 2

V. Small

Date: April 23, 2002

V. Small

APPENDIX 4. CATEGORY PARTS LIST (CONT'D)

FIGURE 5. SAMPLE PART CATEGORIZATION MEMO FOR REQUESTING REMOVAL OF AN ASSEMBLY/PART FROM THE CPL

Federal Aviation Administration

Memorandum

Date: April 26, 2002

To: Manager, ANM-108

From: I.C. Rotors, Manager, ASW MIDO-42
Michael Bauer, VIA Manager, ASW-180

Prepared by: Molly Gale

Subject: **ACTION:** Part Categorization

We request to remove the following part from the Category Parts List (CPL).

1. Part name: Brake deboost valve.

2. 14 CFR part affected: 25.

3. Reason for removing part: The only PAH manufacturing brake deboost valves is no longer in business.

4. The following applicable supporting data are attached: Letter from ASW MIDO-42 canceling project. Cover letter from PAH containing the returned PMA letter.

5. Placement of part on CPL: Systems and Equipment, Brake System and Assembly Components.

6. Current category: 2.

Attachment
Letter from ASW MIDO-42
Letter from Poland Valve Co.

COORDINATION

Action on request: Deny

The request to remove the part from the CPL has been denied because there are still operators of Model 707 aircraft that would need replacement deboost valves. As a result, other PAHs may apply for PMA to manufacture brake deboost valves.

C.P. Ells Date: May 23, 2002

C.P. Ells

APPENDIX 5. RISK MANAGEMENT REPORTS

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

2. TYPES OF REPORTS. Risk management reports may be accessed through CMIS. The Directorate Report will list all facilities assessed within the selected directorate. The Office Report will list all facilities assessed within the selected MIDO/CMO. Each type of report is formatted as follows:

a. Office identifier.

b. Risk Management Group assigned.

c. Quality System name.

d. Unit Criticality Category assigned.

e. Facility name.

f. Principal Inspector assigned.

g. Date scored.

h. Meta Factors.

(1) 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 that 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.

(2) Inherent Risk: A rating of "Substantial," "Moderate," or "Minimal" will be indicated. Inherent risk encompasses factors that 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 is high. 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 is moderate. 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 is low.

APPENDIX 6. RISK MANAGEMENT MODEL VALIDATION PLAN

1. PURPOSE. This appendix explains the structure and application of the risk management model validation plan. The objective of the plan is to ensure that the model consistently and accurately identifies those PAH's and associate facilities having the greatest potential to produce nonconforming products or parts thereof. 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. RISK MANAGEMENT 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. Validation of Ratings for the Risk Management Indicators and Unit Criticality. This validation is conducted as an integral part of the annual assessment of facilities described in chapter 3, section 2 of this order. It includes elements built directly into the core structure of the model and its basic application processes. As such, this validation provides a real-time validity check on the ratings for the risk management indicators and unit criticality, and on the initial risk management group assignments generated by the model. This validation not only provides managerial oversight for the process but also allows for a different perspective in determining the final ratings for risk management indicators and unit criticality.

(1) Data Source(s): AIR Form(s) 8120-9.

(2) Parties Responsible for Validation: Facility PI and MIDO/CMO manager.

(3) Description: Chapter 3, section 2 of this order requires the MIDO/CMO manager to review each completed AIR Form 8120-9 for agreement with the PI's assessment ratings of the risk management indicators and unit criticality. In so doing, the MIDO/CMO manager is provided an opportunity to help ensure consistency between and among PIs in the application of the model, and to provide a second opinion for complex or ambiguous cases.

(4) Expected Outcome: This validation provides a first level, normative validity check of the assessments entered on AIR Form 8120-9.

b. Validation of the Continued Relevance of the Risk Management Model's Impact Indicators. This validation is conducted annually following the completion of all scheduled ongoing CM responsibilities for the fiscal year. Since this validation is data-driven, and aimed at the adequacy of the risk management model elements, detailed planning for analysis and reporting will be required.

(1) Data Source(s): The risk management module within CMIS is the data source for this validation.

(2) Parties Responsible for Validation: Directorates.

APPENDIX 6. RISK MANAGEMENT MODEL VALIDATION PLAN (CONT'D)

(3) Description: Each directorate will collect the relevant data and design, and perform the required analyses.

(4) Expected Outcome: This validation seeks to identify the model's risk management indicators that do not significantly contribute to the identification of the risk management group assignment. The data will be analyzed to identify risk management 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.

c. Validation of the Risk Management Model's Ability to Reflect PI Experience and Judgment. This validation is conducted every three years. The individual impact indicators and the relative weights assigned to each were based on interviews conducted with PIs and engineers and reflect their combined knowledge, experience, and judgment. It is necessary to periodically revalidate this basis in order to ensure that the model continues to reflect this experience and judgment. Since this validation is data-driven, and aimed at the adequacy of the risk management model elements, detailed planning for analysis and reporting will be required.

(1) Data Source(s): The risk management Office Reports are the primary data sources for this validation. In addition, each directorate will use a risk management questionnaire to assess the validity of the risk management groups assigned.

(2) Parties Responsible for Validation: Directorates.

(3) Description: Each directorate will collect the relevant data and design, and perform the required analyses.

(4) Expected Outcome: This validation seeks to determine the degree to which the rating plan for the model's impact indicators reflects the experience and judgment of the PIs. Once every three years, following assignment of the risk management groups, each directorate will provide a questionnaire to its PIs to assess the validity of the assignments. The questionnaire will request PIs and their managers to mutually review the risk management Office Reports, identify any risk management group assignment they disagree with, and provide written justification for their opinion. The differences identified with the risk management groups assigned and the written justifications will be analyzed to detect any patterns or trends in the data attributable to inadequacies in the model. A small number of justifiable changes to the risk management groups is a strong nominal indicator of model validity; i.e., if a large majority of the model's risk management group assignments are accepted, then the knowledge and experience of the directorate staff is adequately reflected in the model.

APPENDIX 7. PREPARATION INSTRUCTIONS FOR FAA FORM 8100-6, NONCOMPLIANCE RECORD

1. PURPOSE. This appendix provides instructions for completing Form 8100-6 for all audit and evaluation activities.

2. SPECIFIC GUIDANCE. Figure 1 shows Form 8100-6 with numbered blocks. The form will be prepared as a stand-alone document. WRITE THE NONCOMPLIANCE AGAINST THE RESPONSIBLE PAH or ASSOCIATE FACILITY. Prepare the form by inserting in:

a. Block 1. When the activity is an ACSEP evaluation, enter the ACSEP Number/Report Number. For all other activity, enter "N/A."

b. Block 2. The project number(s) applicable to the production approval(s) activity.

c. Block 3. A check mark in the appropriate box to indicate the type of activity that was conducted.

d. Block 4. Under "System Element Evaluated," enter the name of the system element in Order 8100.7 to which the noncompliance is relevant. Under "Evaluation Criteria Number," enter the evaluation criteria number from Order 8100.7, appendix 5. For new criteria, insert the system element number assigned by Order 8100.7, appendix 5. Do NOT insert more than one number.

> **NOTE: More than one noncompliance may be recorded for an evaluation criteria number. When an evaluation criteria contains several statements of condition, it is possible to find noncompliances to some or all of those conditions. When multiple statements of conditions under one criteria are affected, a Form 8100-6 should be completed for each condition. When noncompliances are recorded for a common condition, only one Form 8100-6 should be completed.**

e. Block 5. The reference controlling document. The controlling document is defined as the FAA-approved or accepted data, purchase order/quality requirements from a PAH or associate facility, or internal procedures used in producing the product or part(s) thereof. Enter the complete reference number, or, as a minimum, the document title and effective date. (Examples: ABC Company Quality Manual dated March 5, 1976; XYZ QOI 32-6 dated June 23, 1990; BCD Drawing No. 9825333-2 dated May 20, 1989.) Insert a check in the "Yes" or "No" block, as appropriate, to indicate whether the controlling document is FAA-approved.

> **NOTE: If an APIS or PMA holder's quality manual is submitted to the FAA as evidence of compliance to part 21, it is not considered to be FAA-approved data. The "NO" block should always be checked for these documents. Purchase orders and/or quality requirements flowed down to a supplier by a PAH or associate facility are generally not considered to be FAA-approved data. In some cases, quality requirements for use at a supplier facility are specifically approved by the FAA prior to use. Determine the approval status of any referenced PAH supplier quality requirement before checking the "YES" or "NO" block.**

APPENDIX 7. PREPARATION INSTRUCTIONS FOR FAA FORM 8100-6, NONCOMPLIANCE RECORD (CONT'D)

f. Block 6. The applicable 14 CFR part or section that establishes the responsibility of the PAH (i.e., § 21.165 or § 21.607). For an APIS or PMA facility, insert the specific paragraph reference from § 21.125 or § 21.303(a), (h), (h)(1) through (h)(9), (j), or (k), or other applicable 14 CFR sections (e.g., § 45.15) to which the observed condition is directly traceable. If the observed condition is not directly traceable to one of these requirements, leave the block blank. For ACSEP evaluations only, insert the applicable 14 CFR part or section that establishes the responsibility of any delegated facility evaluated (i.e., § 21.245, § 21.445, or SFAR NO. 36, § 6(a)(2)). Insert the applicable 14 CFR reference for each approval type affected.

> **NOTE: When a facility holds multiple production approvals, and a noncompliance is found that applies to more than one of those approvals, use the highest level quality requirement; for purposes of this order, the quality levels, from highest to lowest, are PC, TSO authorization, APIS, and PMA.**

g. Block 7. A check mark in the appropriate box to indicate the type of noncompliance found. A noncompliance is indicated when it is discovered that a PAH's or associate facility's operating practices are inconsistent with 14 CFR, FAA-approved data, or internal procedures. Internal procedures refer to a PAH's or associate facility's procedures that are not included as part of the FAA-approved data. A supplier's operating practices found to be inconsistent with a PAH's or associate facility's purchase order requirements are considered to be noncompliances by the PAH or associate facility. A noncompliance is classified into one of the following four categories:

(1) Safety-Related Noncompliance: a noncompliance to 14 CFR, FAA-approved data, the facility's internal procedures, or purchase order requirements that compromises immediate continued operational safety and requires immediate corrective action. This includes any noncompliance to § 21.3, including an isolated noncompliance. For an ACSEP evaluation, record a safety-related noncompliance only when the responsible PI determines that immediate action is required.

> **NOTE: The PI should formally submit any safety-related noncompliance to the responsible PAH or associate facility in writing within 72 hours of discovery. If the noncompliance affects delivered products or services, the PI will secure from the responsible PAH or associate facility a list of the end users affected and immediately notify the cognizant ACO, MIO, MIDO, or CMO.**

(2) Systemic Noncompliance: a noncompliance to 14 CFR, FAA-approved data, the facility's internal procedures, or purchase order requirements that is not safety-related and is systemic in nature, i.e., is pervasive, repeatable, and represents a breakdown in the quality control or inspection system.

(3) Isolated Noncompliance: a noncompliance to 14 CFR, FAA-approved data, the facility's internal procedures, or purchase order requirements that is not safety-related and is of an isolated or nonsystemic nature, i.e., is not pervasive or repeatable, and does not represent a breakdown in the quality control or inspection system. However, an isolated noncompliance with § 21.3 is considered a safety-related noncompliance when it meets the definition in paragraph 2g(1) of this appendix.

APPENDIX 7. PREPARATION INSTRUCTIONS FOR FAA FORM 8100-6, NONCOMPLIANCE RECORD (CONT'D)

(4) Certification-Related Noncompliance: a noncompliance to 14 CFR that is discovered in FAA-approved data and that is not safety-related.

NOTE: Number noncompliances sequentially beginning with the number "1."

h. Block 8. The condition required by the controlling document, applicable supporting documents, or the applicable 14 CFR part or section. Use the same wording as the controlling document, the applicable supporting document, or the applicable 14 CFR part or section, whenever possible. List all documents that demonstrate the link back to the controlling document or 14 CFR.

i. Block 9. A detailed explanation of the encountered condition.

(1) Explain why the encountered condition differs from the required condition.

(2) Identify where the encountered condition was found.

(3) Identify the total number of items checked and the total number of items found to be in noncompliance.

(4) List the items found to be in noncompliance, using identification numbers or other specific identifiers whenever possible.

(5) Record any evidence the facility provided during the evaluation to show that corrective action was taken or initiated.

(6) When the encountered condition finds FAA-approved data to be in noncompliance with an applicable 14 CFR part or section, include a note that further investigation by the ACO, MIO, MIDO, or CMO may be required.

(7) List all objective evidence obtained that describes the encountered condition.

j. Block 10. A check in the box to indicate that the encountered condition has been discussed with the facility escort, as a minimum.

k. Block 11. The typed or printed name and signature of the person recording the noncompliance.

NOTE: Evaluators-in-training and support service personnel participating in ACSEP evaluations may sign this block. However, the block must be countersigned by an appointed ACSEP evaluator.

l. Block 12. The routing office symbol of the recorder.

m. Block 13. The date the form is completed.

APPENDIX 7. PREPARATION INSTRUCTIONS FOR FAA FORM 8100-6, NONCOMPLIANCE RECORD (CONT'D)

FIGURE 1. SAMPLE FAA FORM 8100-6

This form is a representation of the original form and not to be construed as the original form.

Noncompliance Record

U.S. Department of Transportation
Federal Aviation Administration

ACSEP No./Report No. *(1)*: N/A

Project No. *(2)*: PT900NE

Type of Activity: ☐ DO Audit ☐ PI Evaluation ☐ ACSEP ☐ Supplier Control Audit ☒ Product Audit ☐ Other *(3)*

System Element Evaluated: *(4)*	Controlling Document: *(5)*	Applicable CFR Section: *(6)*
Manufacturing Processes	RC Purchase Order #94 of 11/23/1997	21.607
Evaluation Criteria Number:		
413	FAA-approved data? ☐ Yes ☒ No	

Type Of Noncompliance: Safety-Related ☐ Systemic ☒ Isolated ☐ Certification-Related ☐ No. 1 *(7)*

Required Condition: *(8)*

RC Purchase Order (PO) #94 for rotor support couplings states: "J&J Machining Co. shall comply with RC Quality Manual, Section 4, and purchase raw materials exclusively from YOYO International Material Broker. Terms of purchase will include a request for a metallurgical lab report with each shipment. These reports will be retained by J&J Machining Co. for a minimum of 5 years."

J&J Machining Co. Quality Manual, paragraph 12.4(c), states: "All raw material purchase orders shall include a statement requiring suppliers to furnish a metallurgical lab report with each shipment. The reports will be retained by J&J Machining Co. metallurgical lab in accordance with paragraph 23.6."

Encountered Condition: *(9)* ☒ *Discussed with Facility (10)*

Ten J&J Machining Co. purchase orders for raw materials to be used for the manufacture of rotor support couplings under RC PO #94 were reviewed (J3-122; J3-114; J3-221; J3-98; J3-301; J3-110; J3-245; J3-15; J3-278; J3-184). All ten POs were issued to YOYO International Material Broker as required by RC PO #94, and all included the statement for furnishing a metallurgical lab report with each shipment. All raw material shipments were completed between January 1997 and March 1998. The J&J Machining Co. metallurgical lab files were reviewed to determine whether metallurgical lab reports had been furnished with each shipment required by the ten POs. Only one metallurgical lab report was found to be on file (shipment under PO #J3-122).

Attachments:

RC Purchase Order #94

RC Quality Manual, Section 4

J&J Machining Co. Quality Manual, paragraphs 12.4(c) and 23.6

J&J Machining Co. PO # J3-122; J3-114; J3-221; J3-98; J3-301; J3-110; J3-245; J3-15; J3-278; J3-184

Typed Name and Signature of Recorder: *(11)*	Office Symbol *(12)*	Date *(13)*
Julia R. Gotta *Julia Gotta*	ANE MIDO 42	5/1/01

FAA Form 8100-6 (2-02)

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

APPENDIX 8. PREPARATION INSTRUCTIONS FOR FAA FORM 8120-14, PRODUCTION APPROVAL/CERTIFICATE MANAGEMENT ACTIVITY REPORT

1. PURPOSE. This appendix provides instructions for completing Form 8120-14. This form is used to document all activity, except ACSEP evaluations, at PAHs, associate facilities, and their suppliers. When combined with the respective Form(s) 8100-6 and, if applicable, Form 8100-1, a complete report of the activity conducted is available for subsequent planning.

2. SPECIFIC GUIDANCE. Figure 1 shows Form 8120-14 with numbered blocks. Prepare the form by inserting in:

a. Block 1. The name and address of the PAH or associate facility as recorded on the production approval.

b. Block 2. The project number(s) applicable to the production approval(s).

c. Block 3. The name and address of the supplier as recorded on the PAH's documentation.

d. Block 4. A check mark in the appropriate box(es) to indicate the type of production approval.

e. Block 5. A check mark in the appropriate box(es) to indicate the type of activity that was conducted.

f. Block 6. The starting date and the ending date of the activity that was conducted.

g. Block 7. The title, revision number, and date of any quality manual submitted to the FAA by the PAH or associate facility. The applicable 14 CFR part or section may also be entered. If no quality data is submitted, enter the applicable 14 CFR part or section. For a supplier, enter the applicable purchase order or quality requirements from the PAH or associate facility.

h. Block 8. The date that applicable quality data submitted by a PAH or associate facility is approved by the FAA. If quality data is not subject to FAA approval, enter "N/A."

i. Block 9. An "X" in the column next to the system element/subelement evaluated when the result of the activity is satisfactory. If the system element/subelement is not applicable at a facility, enter "N/A." If the system element/subelement was not evaluated, enter "N/E."

j. Block 10. The respective Form 8100-6 noncompliance numbers for the system element evaluated, when the result of the activity is unsatisfactory.

k. Block 11. The nomenclature and part number(s) of the product or part(s) thereof audited.

l. Block 12. An "X" in the column next to the product or part(s) thereof audited when the result of the activity is satisfactory.

m. Block 13. The respective Form 8100-6 noncompliance numbers for the product or part(s) thereof audited, when the result of the activity is unsatisfactory.

APPENDIX 8. PREPARATION INSTRUCTIONS FOR FAA FORM 8120-14, PRODUCTION APPROVAL/CERTIFICATE MANAGEMENT ACTIVITY REPORT (CONT'D)

n. Block 14. The specific purchase order or quality requirement audited.

o. Block 15. An "X" in the column next to the specific purchase order or quality requirement audited when the result of the activity is satisfactory.

p. Block 16. The respective Form 8100-6 noncompliance numbers for the specific purchase order or quality requirements audited, when the result of the activity is unsatisfactory.

q. Block 17. Enter the names, titles, and office symbols of all FAA personnel who participated in the activity.

r. Block 18. The typed or printed name and signature of the person conducting the audit or PI evaluation. In most cases, this will be the PI responsible for the PAH or associate facility.

> **NOTE: When Form 8120-14 is used to document a PI evaluation or DO audit with multiple team members, the signature in block 18 is that of the team leader. This form, with the above signature, can then be used to support the continued appointment as an ACSEP team leader in accordance with Order 8100.7, chapter 2, paragraph 21b(1).**

s. Block 19. The office symbol of the person completing this form.

t. Block 20. The date that this form is completed.

APPENDIX 8. PREPARATION INSTRUCTIONS FOR FAA FORM 8120-14, PRODUCTION APPROVAL/CERTIFICATE MANAGEMENT ACTIVITY REPORT (CONT'D)

FIGURE 1. SAMPLE FAA FORM 8120-14 (FRONT)

This form is a representation of the original form and not to be construed as the original form.

U.S. Department of Transportation
Federal Aviation Administration

Production Approval/ Certificate Management Activity Report

Manufacturer/Address: RC Couplings, 10001 Admiral Square, Haverhill MA 01830 *(1)*

Project No.: PQ 1234NE *(2)*

Supplier/Address: N/A *(3)*

Production Basis: *(4)*

PC ☐ APS ☐ TSO authorization ☐ PMA ☒

Production Approval/Certificate Management Activity: *(5)*

DO Audit ☐ PI Evaluation ☒ Product Audit ☒ Supplier Control Audit ☐ Other ☐

Activity Dates: From 4/1/2003 To 4/2/2003 *(6)*

Quality Data - Title, Revision, Date, and/or CFR Section Involved: *(7)*

RC Quality Manual, Rev. C, 1/27/1997

Date of FAA Approval of Quality Data: N/A *(8)*

PI EVALUATION OR DO AUDIT RESULTS

SYSTEM ELEMENT	SATISFACTORY *"X" if applicable*	UNSATISFACTORY *List FAA Form 8100-6 Noncompliance No. (s)*
1. Organizational Management	*(9)*	*(10)*
2. Design Control		
3. Software Quality Assurance		
4. Manufacturing Processes		
4a. Manufacturing and Special Manufacturing Processes		#1 and #2
4b. Material Receiving, Handling & Storage		
4c. Airworthiness Determination		
5. Manufacturing Controls		
5a. Statistical Quality Control (SQC)		
5b. Tool and Gauge		#3
5c. Testing		
5d. Nondestructive Inspection		
5e. Nonconforming Material		
6. Supplier Control		

PRODUCT AUDIT RESULTS

PRODUCT AUDITED (Nomenclature/Part Number)	SATISFACTORY *"X" if applicable*	UNSATISFACTORY *List FAA Form 8100-6 Noncompliance No.(s)*
Rotor support coupling. *(11)* P/N RC25 - 1000	*(12)*	#4 thru #6 *(13)*

FAA Form 8120-14 (8-04) FOR OFFICIAL USE ONLY (when filled in)
Public availability to be determined under 5 U.S.C. 552

APPENDIX 8. PREPARATION INSTRUCTIONS FOR FAA FORM 8120-14, PRODUCTION APPROVAL/CERTIFICATE MANAGEMENT ACTIVITY REPORT (CONT'D)

FIGURE 1. SAMPLE FAA FORM 8120-14 (BACK)

This form is a representation of the original form and not to be construed as the original form.

SUPPLIER CONTROL AUDIT RESULTS

PURCHASE ORDER/QUALITY REQUIREMENTS (14)	SATISFACTORY "X" if applicable (15)	UNSATISFACTORY List FAA Form 8100-6 Noncompliance No.(s) (16)

PARTICIPATING EVALUATORS (17)

NAME	TITLE	OFFICE SYMBOL

Typed/Printed Name and Signature of FI: (18)		Office Symbol (19)	Date (20)
Julia R. Gotta	Julia Gotta	ANE MIDO 42	4/3/2003

FAA Form 8120-14 (8-04) FOR OFFICIAL USE ONLY (when filled in)
Public availability to be determined under 5 U.S.C. 552

APPENDIX 9. FORMS LISTING

1. **PURPOSE.** This appendix lists the forms referenced in this order and their sources. The forms listed in figure 1 are available from the FAA Logistics Center, AML-1000, through normal supply channels. The forms listed in figure 2 are available in an electronic format within CMIS.

FIGURE 1. FORMS AVAILABLE FROM FAA LOGISTICS CENTER

Form Number	Title	NSN	Unit of Issue
FAA Form 8100-1	Conformity Inspection Record	0052-00-039-3001	Package
FAA Form 8110-12	Application for Type Certificate, Production Certificate, or Supplemental Type Certificate	0052-00-025-0001	Sheet
FAA Form 8120-3	Production Limitation Record	0052-00-025-7001	Sheet
FAA Form 8120-4	Production Certificate	0052-00-025-6001	Package
FAA Form 8130-3	Airworthiness Approval Tag	0052-00-012-9005	Pad
FAA Form 8130-9	Statement of Conformity	0052-00-847-2000	Sheet

FIGURE 2. FORMS AVAILABLE WITHIN CMIS

Form Number	Title
FAA Form 8100-1	Conformity Inspection Record
FAA Form 8100-6	Noncompliance Record
FAA Form 8120-3	Production Limitation Record
FAA Form 8120-4	Production Certificate
AIR Form 8120-9	Risk Management Facility Assessment Sheet
FAA Form 8120-14	Production Approval/Certificate Management Activity Report

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: FAA Order 8120.2E

To: Directive Management Officer, AIR-530

(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)