VOLUME 20 CONTINUOUS AIRWORTHINESS MAINTENANCE PROGRAM

CHAPTER 8 CONTRACT MAINTENANCE

Section 1 Contract Maintenance Regulations and Maintenance Provider Airworthiness Agreements—Parts 121 and 135 (With OpSpec D072)

Source Basis:

General	
• § 1.1, General Definitions. • § 43.3, Persons Authorized to Perform Maintenance, Preventive Maintenance, Rebuilding, and Alterations. • § 43.7, Persons Authorized to Approve Aircraft, Airframes, Aircraft Engines, Propellers, Appliances, or Component Parts for Return to Service After Maintenance, Preventive Maintenance, Rebuilding, or Alteration. • § 43.9, Content, Form, and Disposition of Maintenance, Preventive Maintenance, Rebuilding, and Alteration Records (Except Inspections Performed in Accordance with Part 91, Part 125, § 135.411(a)(1), and § 135.419 of This Chapter). • § 43.13, Performance Rules (General). • § 119.59, Conducting Tests and Inspections. • Title 49 U.S.C. § 44701, General Requirements.	
Part 121	**Part 135 (With OpSpec D072)**
§ 121.363, Responsibility for Airworthiness	§ 135.413, Responsibility for Airworthiness
§ 121.365, Maintenance, Preventive Maintenance, and Alteration Organization	§ 135.423, Maintenance, Preventive Maintenance, and Alteration Organization
§ 121.367, Maintenance, Preventive Maintenance, and Alterations Programs	§ 135.425, Maintenance, Preventive Maintenance, and Alteration Programs
§ 121.368, Contract Maintenance	§ 135.426, Contract Maintenance
§ 121.369(b)(10), Manual Requirements	§ 135.427(b)(10), Manual Requirements
§ 121.371, Required Inspection Personnel	§ 135.429, Required Inspection Personnel
§ 121.373, Continuing Analysis and Surveillance	§ 135.431, Continuing Analysis and Surveillance
§ 121.375, Maintenance and Preventive Maintenance Training Program	§ 135.433, Maintenance and Preventive Maintenance Training Program
§ 121.377, Maintenance and Preventive Maintenance Personnel Duty Time Limitations	N/A. There is no corresponding part 135 regulation for duty time.
§ 121.378, Certificate Requirements	§ 135.435, Certificate Requirements
§ 121.379, Authority to Perform and Approve Maintenance, Preventive Maintenance, and Alterations	§ 135.437, Authority to Perform and Approve Maintenance, Preventive Maintenance, and Alterations

§ 121.380, Maintenance Recording Requirements	§ 135.439, Maintenance Recording Requirements
§ 121.709, Airworthiness Release or Aircraft Log Entry	§ 135.443, Airworthiness Release or Aircraft Maintenance Log Entry

20-8-1-1 REPORTING SYSTEM(S). Use Safety Assurance System (SAS) automation and the associated Data Collection Tools (DCT).

20-8-1-3 OBJECTIVE. This section provides aviation safety inspectors (ASI) with policy and guidance for safety oversight of contract maintenance. The objective is to ensure that maintenance providers perform maintenance, preventive maintenance, and alterations in accordance with the certificate holder's (CH) manual and work instructions. Refer to Title 14 of the Code of Federal Regulations (14 CFR) part 121, § 121.367(a) and part 135, § 135.425(a).

NOTE: In this section, when we say "maintenance," we mean maintenance, preventive maintenance, and alterations. The terms "other persons," "maintenance provider," and "certificate holder (CH)" appear in this section wherever appropriate when they are consistent with the regulatory language used in part 121 subpart L and part 135 subpart J. As stated in 14 CFR part 1, the intended meaning of the word "person" is "an individual, firm, partnership, corporation, company, association, joint-stock association, or governmental entity."

20-8-1-5 GENERAL.

A. Contract Maintenance. When the CH uses a maintenance provider to accomplish all or part of the maintenance activities on their aircraft or component parts, that maintenance provider becomes a part of the CH's maintenance organization and under the CH's control. However, §§ 121.363 and 135.413 make it clear that the CH remains primarily responsible for all of the maintenance performed by that maintenance provider on their aircraft. The CH must determine that the maintenance provider has the capability to do the CH's work on their behalf, manage their work, and determine that it does the work satisfactorily according to the CH's manual and standards. Because the maintenance provider must perform all work on the CH's aircraft in accordance with the CH's manual and their maintenance program, the CH must provide the maintenance provider with appropriate material from their manual for that work.

B. Air Carrier Policy and Procedures. The CH must ensure that the maintenance provider follows the procedures in the CH's manual. The CH should accomplish this through work-in-progress audits while the maintenance provider is actually accomplishing the work. The CH's manual system should accommodate work performed for them by each maintenance provider. The policy and procedures portion of the CH's manual should assign clear authority and responsibilities and outline procedures for their personnel to administer, control, and direct all contract maintenance. Refer to §§ 121.369(b)(10) and 135.427(b)(10).

C. Evaluating New Contract Maintenance Providers (CMP). Before the CH can use a maintenance provider for the first time, they must determine that the maintenance provider

candidate complies with pertinent requirements of part 121 subpart L or part 135 subpart J. The CH should use a risk assessment process to determine if an onsite audit should be accomplished. The CH must demonstrate, through this audit or by some other means, that the maintenance provider has an adequate organization, adequate facilities and equipment, and competent personnel, and that the maintenance provider is capable of performing the work consistent with the requirements of the CH's program. The CH's risk assessment should take into account what happens when the aircraft part or aircraft system that the maintenance provider works on fails (the failure effect). If the failure effect is safety, the CH procedures should mandate an initial onsite audit along with recurrent onsite audits, and in some cases, the posting of an employee who is assigned audit and oversight duties as resident at the maintenance provider's facility.

D. Regulatory Requirements. The CH should use the same requirements to qualify a maintenance provider who holds a 14 CFR part 145 Repair Station Certificate and a person who does not hold a part 145 Repair Station Certificate. Consistent with 14 CFR part 119, § 119.1(c), § 121.1(b), or § 135.1(a)(2), each person, whether certificated or not, employed or used by the CH for any maintenance, preventive maintenance, or alteration of the CH's aircraft is required to comply with the part 121 and/or part 135 requirements and the CH's maintenance program requirements.

E. Airworthiness Agreement. The CH should have a written agreement with anyone who performs maintenance on their behalf. This will help ensure that the maintenance provider performs work in accordance with the CH's Continuous Airworthiness Maintenance Program (CAMP).

F. Continuing Maintenance Provider Oversight. Ensuring that each one of the CH's maintenance providers is in continuous compliance is a major function of the CH's Continuing Analysis and Surveillance System (CASS). The CH should use their risk-based process for establishing a schedule for auditing and inspecting each of their maintenance providers. Inherent with a risk-based process, the CH may determine that some of their maintenance providers do not require an onsite audit. Consistent with the "performance" wording of § 121.373 or § 135.431, the audits that the CH accomplishes should be primarily work-in-progress audits to determine if the CH's maintenance providers are following the CH's manual. The audits should be accomplished by trained auditors, and the results analyzed by trained analysts. The results of the analysis should permit the CH to determine each maintenance provider's continuing compliance with part 121 subpart L or part 135 subpart J, as appropriate, and the CH's maintenance program. Refer to §§ 121.368(f) and 135.426(f).

G. Unscheduled Maintenance Performed Away from Regular Facilities. Sometimes the CH will need maintenance performed on their aircraft while it is away from their regular maintenance facilities. The CH may also need maintenance services on short notice. The CH's manual should include procedures for obtaining these services under these unanticipated conditions. The CH should not use the term "emergency maintenance" to describe unscheduled, short notice maintenance, as this term may imply to the CH's employees and their maintenance provider that Federal Aviation Administration (FAA) regulations and the CH's procedures do not have to be followed. "Emergency" means that a serious situation has occurred unexpectedly, involves a peril to life or property, and demands immediate action (e.g., an out-of-commission aircraft parked on an airport ramp could hardly constitute a peril to life or property). The CH

should outline the procedural steps that they will take to control and direct the unscheduled maintenance accomplished by their maintenance provider. Unscheduled, short notice requirements for maintenance do not void the CH's responsibility to determine that their maintenance provider has the organization, adequate facilities and equipment, competent personnel, and appropriate portions of the CH's manual for the work the maintenance provider needs to complete. The CH must make these determinations before any maintenance provider starts to work on their aircraft. These procedures and the method of determination must be in the CH's manual.

20-8-1-7 EXPLANATION OF TERMS, DEFINITIONS, AND REGULATIONS.

A. Maintenance Provider. Sections 121.368(a)(1) and 135.426(a)(1) define a maintenance provider as "any person who performs maintenance, preventive maintenance, or an alteration for a certificate holder other than a person who is trained by and employed directly by that certificate holder." Noncertificated repair stations, also referred to as noncertificated entities, may provide contract maintenance workers, services, or maintenance functions to a part 121 or 135 air carrier; however, noncertificated repair stations may not perform maintenance. Refer to 14 CFR part 43, § 43.3.

1) Maintenance providers include certificated repair stations (CRS); individual appropriately rated mechanic (Airframe and Powerplant (A&P)) that the CH directly contracts with; individual A&P mechanics employed by noncertificated entities; Canadian Approved Maintenance Organizations (AMO); individual Canadian Aircraft Maintenance Engineers (AME); other air carriers that perform maintenance on behalf of the CH; and maintenance, repair, and overhaul (MRO) facilities.

2) Maintenance providers may perform maintenance in locations such as a hangar, a line maintenance environment, or in a shop.

3) A CH may arrange with a maintenance provider for the performance of maintenance only if all the requirements of § 121.368 or § 135.426 have been met.

4) A maintenance provider is an extension of the CH's CAMP; therefore, there must be no difference between maintenance performed by the CH and maintenance performed by a maintenance provider. Refer to §§ 121.367(a) and 135.425(a).

B. Covered Work. Covered work includes any of the following (refer to §§ 121.368(a)(2) and 135.426(a)(2)):

1) Essential maintenance that could result in a failure, malfunction, or defect endangering the safe operation of an aircraft if not performed properly or if improper parts or materials are used.

2) Regularly scheduled maintenance; or

3) A Required Inspection Item (RII) on an aircraft.

NOTE: Nonscheduled work: The preamble for §§ 121.368 and 135.426 states that covered work includes both essential maintenance and RIIs, both of which include nonscheduled maintenance. In addition, other requirements that address both covered work and all other contracted maintenance, such as the requirement for air carriers to develop policies, procedures, methods, and instructions for accomplishing all contracted maintenance, necessarily include both scheduled and nonscheduled work.

C. Essential Maintenance. Flight Standards (FS) defines essential maintenance as the performance of maintenance that is associated with an air carrier RII on-wing. Essential maintenance does not encompass any off-wing maintenance. This maintenance, if done improperly or if improper parts or materials were used, could result in a failure effect that would endanger the continued safe flight and landing of the aircraft. The regulatory basis for this definition is §§ 121.368(a)(2) and 135.426(a)(2).

1) Definition of Essential Maintenance Provider (EMP). An EMP is any person with whom a part 121 or 135 CH has arranged with for the accomplishment of essential maintenance.

2) Definition of Non-EMP. A non-EMP is any person with whom a part 121 or 135 CH has arranged with for the performance of maintenance but does not perform essential maintenance.

D. Directly in Charge. "Directly in charge means having responsibility for covered work performed by a maintenance provider. A representative of the certificate holder directly in charge of covered work does not need to physically observe and direct each maintenance provider constantly, but must be available for consultation on matters requiring instruction or decision." Refer to §§ 121.368(a)(3) and 135.426(a)(3). A representative of the CH directly in charge of work should be familiar with all maintenance provider programs when accepted by the CH.

NOTE: The term "available for consultation" has a broad interpretation. This allows the CH flexibility to use numerous information technology methods, such as high-resolution photographs, text messaging, and the internet, to acquire the information necessary to make decisions and provide instructions.

E. Manual. The term "manual" within this section is reference to the document(s) identified and listed within operations specification (OpSpec) D072. These documents in their entirety, which includes guidance and information incorporated by reference, constitute the maintenance part of the manual, required by 14 CFR part 91, § 91.1023 and §§ 121.133 and § 135.21.

20-8-1-9 PROCEDURES.

A. Manual Review. Regulations require the CH to list in their manual each person they arrange with for the performance of any of their required inspections, other maintenance, preventive maintenance, or alterations. This requirement applies to all maintenance providers that the CH has (directly) arranged with for the performance of maintenance, preventive

maintenance, and alterations, such as a repair station. It does not apply to persons who perform contract maintenance for the repair station under part 145, § 145.217. Sections 121.369(b)(10) and 135.427(b)(10) require the CH's manual to contain policies, procedures, methods, and instructions for the accomplishment of all maintenance, preventive maintenance, and alterations carried out by a maintenance provider. These policies, procedures, methods, and instructions must be acceptable to the FAA, and they must address all aspects of contract maintenance.

B. Surveillance.

1) The FAA provides safety oversight of CHs, including all other persons used by the CH to perform, or arrange for the performance of, maintenance. There should be no difference in the FAA oversight of a certificated maintenance provider and a noncertificated repair station or entity (see Volume 20, Chapter 8, Section 2).

2) The ASI should ensure that the CH is able to establish compliance with their own procedures through either direct supervision, surveillance, or auditing. Controls such as airworthiness agreements define the nature of the arrangement between the CH and the maintenance provider.

C. Category of Maintenance. The following should be used by CHs when providing the general description of work required by §§ 121.369(a) and 135.427(a). The CH, not the FAA, is responsible for classifying their work into these categories.

1) Aircraft Maintenance.

a) Heavy Maintenance. An example of heavy maintenance could be the inspection and repair of the aircraft airframe performed at specified time intervals. Guidelines from the aircraft manufacturer, the National Aviation Authority (NAA), the FAA, and the European Union Aviation Safety Agency (EASA), and further refined by the CH, determine the intervals. There are four levels of inspections, usually termed "A," "B," "C," and "D" checks. Line maintenance includes "A" and "B" checks while "C" and "D" checks are heavy maintenance.

b) Line Maintenance. Line maintenance includes light, regular checks to ensure that the aircraft is safe for flight. Line maintenance also includes troubleshooting, defect rectification, and component replacement. Aviation Maintenance Technicians (AMT) (A&P mechanics) diagnose and correct issues on the aircraft and carry out these checks on either an ad hoc basis or at a scheduled interval. Line maintenance consists of three primary activity categories: transit checks, daily and weekly checks, and "A" and "B" checks.

2) Aircraft Engines. This means off-wing maintenance of aircraft engine maintenance.

3) Propeller Work. This means off-wing maintenance of propellers and propeller control components.

4) Component. This means off-wing maintenance carried out in the shop environment in order to return the part to a serviceable condition.

5) Specialized Service. This includes services such as x ray, plating, eddy current, painting, shot peening, plasma spray, composite structures maintenance, weighing, welding, etc.

D. Maintenance Provider List (MPL). CHs that use the services of a maintenance provider must comply with the reporting requirements of §§ 121.368(h) and 135.426(h). This section provides guidance for standardized interpretation and oversight of these regulations.

NOTE: It is the responsibility of the principal inspectors (PI) to ensure all maintenance providers, both EMP and non-EMP, are uploaded and listed under the Contractors tab in SAS Module 1. This is necessary for certificate management uses as well as analysis at the national level.

1) MPL. Sections 121.368(h) and 135.426(h) state, in part, that "each certificate holder who contracts for maintenance, preventive maintenance, or alterations must provide to its responsible Flight Standards office, in a format acceptable to the FAA, a list." FS has established the MPL Excel file, created under the "Contractors" tab in SAS Module 1, as the standard method used for this information collection. Using SAS automation, PIs export this file and provide it to the CH who will then make additions or deletions as required, and then return it to the PI to import into SAS. This format provides for standardized reporting and importing of MPL data into SAS. In lieu of the SAS MPL Excel file, PIs at their discretion may work with CHs to tailor the method used for contract maintenance reporting based on the complexity of the CH's use of contract maintenance. However, the PI remains responsible for ensuring all maintenance provider data, regardless of the reporting method used, is current and accurate in SAS.

2) Location of Maintenance Provider. Sections 121.368(h) and 135.426(h) state, in part, "the name and physical (street) address, or addresses, where the work is carried out for each maintenance provider that performs work for the certificate holder" must be on the list. The FAA needs to know where maintenance is performed for each CH. This means that for each maintenance provider, the CH must list all locations where maintenance is to be performed. Keep in mind that the business address for the maintenance provider may not necessarily be the address where the maintenance is performed. If the maintenance is to be performed at an airport, the airport code meets the address requirement and no further information, such as a street address, is required.

3) Description of Work. Sections 121.368(h) and 135.426(h) state, in part, "a description of the type of maintenance, preventive maintenance, or alteration that is to be performed at each location" must be on the list. The type of maintenance to be performed includes covered work and the categories of work listed in accordance with §§ 121.369(a) and 135.427(a). CHs should use the following eight categories, as applicable, to provide a description of the type of maintenance that is to be performed at each location:

a) Essential maintenance (covered work).

b) Regularly scheduled maintenance (covered work).

c) RII on an aircraft (covered work).

d) Aircraft maintenance (heavy maintenance and/or line maintenance).

e) Aircraft engine work.

f) Propeller work.

g) Component work.

h) Specialized service.

4) When to Update List. Sections 121.368(h) and 135.426(h) state, in part, that "the list must be updated with any changes, including additions or deletions, and the updated list provided to the FAA in a format acceptable to the FAA by the last day of each calendar month." In cases where there are no additions or deletions to the MPL, CHs are not required to provide an unchanged list to the FAA. However, CHs should notify their PI(s) when there are no changes.

5) Applicability. The following is an overview of who or what, as applicable, must be listed on the MPL, and who or what should not be:

a) FAA-CRSs that perform maintenance on behalf of the CH.

b) Other CHs (air carriers) that perform maintenance on behalf of the CH.

c) Individual A&P mechanics that the CH directly contracts with to perform maintenance (other than CH employees). Examples of this include oncall maintenance or flight mechanics.

d) Individual A&P mechanics that are employed by a noncertificated entity and perform maintenance on behalf of the CH.

e) Individual A&P mechanics employed by a CRS and use their A&P Certificate to sign for maintenance performed on behalf of the CH.

f) Canadian AMOs that perform maintenance on behalf of the CH.

g) Individual Canadian AMEs that the CH directly contracts with to perform maintenance (other than CH employees).

h) The MPL should also include noncertificated repair stations/entities that provide, or arrange for, contract maintenance workers, services, or maintenance functions for an air carrier.

i) The MPL should not include subcontractors used by the first-tier maintenance provider. The CH should have procedures in their manual for accepting the maintenance provider's subcontractors at the forefront of the airworthiness agreement, and procedures that ensure the CH is made aware of any changes to subcontractors.

6) Compliance Methods. A CH may elect to maintain an electronic file within their manual system for compliance with §§ 121.368(h), 121.369(a), 135.426(h), and 135.427(a). The

MPL Excel file created using SAS and updated by the end of each calendar month will meet these regulatory requirements.

7) PI Requirement. PIs must ensure that all maintenance providers are entered under the "Contractors" tab in SAS Module 1.

E. FAA EMP Inspections.

1) FAA Part 121 or 135 EMP Inspections. The frequency of FAA EMP inspections is determined through Risk-Based Decision Making (RBDM) by the PIs assigned to each CH. This is in line with FS's risk-based, data-supported, safety oversight model, SAS.

2) Part 121 and 135 CH's Audits. Before adding an EMP to the list required by §§ 121.369(a) and 135.427(a), the CH should have a means to determine that each proposed EMP has an organization adequate to perform the work. Sections 121.368(f) and 135.426(f) require that CHs must ensure that the system for CASS, required by §§ 121.373(a) and 135.431(a), contains procedures for oversight of all contracted covered work. As stated in §§ 121.368(g) and 135.426(g), these procedures must be acceptable to the FAA and must be included in the CH's manual as required by §§ 121.369(b)(10) and 135.427(b)(10).

20-8-1-11 MAINTENANCE PROVIDER AIRWORTHINESS AGREEMENTS.

A. CH Maintenance Responsibility. Throughout the process of evaluating an arrangement for the performance of maintenance, it is important to remember that the CH is responsible for the performance and the quality of the maintenance and cannot delegate this responsibility. Refer to §§ 121.363 and 135.413. The maintenance provider's organization becomes, in effect, an extension of the CH's maintenance organization. The CH's contract maintenance program that documents the nature of the arrangement between the CH and the maintenance provider should demonstrate that the CH retains the responsibility and the authority to decide what to do, when to do it, and how to do it. Additionally, §§ 121.368 and 135.426 require that:

1) Each CH must be directly in charge of all covered work done for them by a maintenance provider.

2) Each maintenance provider must perform all covered work in accordance with the CH's manual.

3) No maintenance provider may perform covered work unless that work is carried out under the supervision and control of the CH.

4) Each CH who contracts for maintenance must develop and implement policies, procedures, methods, and instructions for the accomplishment of all contracted maintenance. These policies, procedures, methods, and instructions must provide for the maintenance to be performed in accordance with the CH's CAMP. These procedures should cover all aspects of contract maintenance, from arranging for the performance of heavy maintenance visits, to component repair, to oncall line maintenance. The CH should specifically explain how the

maintenance provider will receive the appropriate manual sections and work instructions for the accomplishment of the maintenance.

5) Each CH who contracts for maintenance, preventive maintenance, or alterations must ensure that their system for the continuing analysis and surveillance of the maintenance, preventive maintenance, and alterations carried out by the maintenance provider, as required by §§ 121.373(a) and 135.431(a), contains procedures for oversight of all contracted covered work.

6) The policies, procedures, methods, and instructions required by subparagraphs 4) and 5) above must be acceptable to the FAA and included in the CH's manual, as required by §§ 121.369(b)(10) and 135.427(b)(10).

7) The CH must have a maintenance provider qualification process that defines the method used to determine if the maintenance provider has the capability to do the requested work, prior to placing a maintenance provider on the lists required by §§ 121.369(a) and 135.427(a). This qualification process should include the nature of the work to be performed (i.e., essential maintenance or nonessential maintenance), the ability to use a maintenance provider in good standing on the Coordinating Agency for Supplier Evaluation (C.A.S.E.) Registry (refer to part 121, unless that maintenance provider is to perform essential maintenance), the procedures for conducting an audit and the type of audit (i.e., onsite or other means), and the standards for determining acceptance of the maintenance provider.

B. Communication Between the CH and Their Maintenance Providers. A maintenance provider is considered an extension of the CH and, as such, there should be clear, two-way communication between each entity. ASIs should be aware of regulatory requirements that are the responsibility of the part 121 or 135 CH.

1) CHs must keep maintenance providers informed of the provisions of their OpSpecs that are applicable to the duties and responsibilities of each maintenance provider. Refer to § 119.43.

2) CHs must notify each maintenance provider, in writing, of the CH's policies and OpSpecs authorization that permits or prohibits the acceptance, rejection, handling, storage incidental to transport, and transportation of hazardous materials (HAZMAT), including company material. Refer to §§ 121.1005(e) and 135.505(e).

C. Maintenance Scope. The performance of maintenance includes all facets of performing maintenance on the CH's aircraft or components and includes, but is not necessarily limited to, the following areas of the CH's CAMP:

1) Maintenance personnel training (including inspection personnel and RII-authorized personnel).

2) Instructions for the accomplishment of maintenance and inspections (including the use of manuals, work cards, Engineering Orders (EO), etc.).

3) Duty time under § 121.377, the CH must ensure that their maintenance providers follow the duty time requirements. If the CH's CAMP indicates that the maintenance provider

provides specific assurances, the contractor must provide those assurances. The CH should ensure that the maintenance provider has procedures in place to guarantee that those assurances are being met.

NOTE: There is no corresponding part 135 regulation for duty time.

4) Maintenance documentation and that documentation's control (including documenting scheduled and nonroutine maintenance and the use of documents to control work packages).

5) Maintenance records (including record retention and the transfer of maintenance records). Under §§ 43.9, 121.380, and 135.439, aircraft owners and operators must maintain specific records. If the CH's CAMP indicates that the maintenance provider may be responsible for making regulatory records available, then the CH should clearly define the records to be maintained, the length of time the records should be kept, and the form and manner of maintaining those records. Refer to § 119.59(b)(1)(ii). This must also include where the records will be physically located and how the information will be included in the CH's CASS.

6) Procedures for service difficulty reporting.

7) Parts handling, storage, and identification (including receiving, inspection, and usage of parts tags).

8) Calibrated tools and test equipment.

9) Certificate requirements. As required by §§ 121.378 and 135.435, each person who is directly in charge of maintenance, preventive maintenance, or alterations, and each person performing required inspections, must hold an appropriate airman certificate, unless the maintenance provider is located outside the United States.

10) Policies and procedures, as required, for transferring and receiving data and information necessary to support the CASS, reliability program, or other programs from which the CH has interfaces with the maintenance provider.

D. Proprietary Data. Many times, CHs' General Maintenance Manuals (GMM) are designed for in-house maintenance. This is aggravated when the manual contains proprietary or other confidential information that a CH may not want to share with a maintenance provider. In many cases, the maintenance provider also works on competitors' aircraft. This has a tendency to make CHs reluctant to share this information, and therefore they do not. Proprietary data issues should be addressed by agreements, which describe the nature of the arrangements between the CH and the maintenance provider.

E. Unexpected Requirement for Unscheduled Maintenance. Unscheduled maintenance may occur at any time. If a requirement for unscheduled maintenance occurs, the FAA expects each CH to have demonstrated that they have competent personnel and adequate facilities and equipment (including spare parts, supplies, and materials) available for the proper servicing, maintenance, preventive maintenance, and alterations of a CH's aircraft. A diversion airport, or airports, must be identified in each CH's flight plan. Each identified diversion airport

is considered to be along the CH's approved route. Further, if a domestic or flag CH is operating off their approved routes, they must operate under the applicable supplemental rules and demonstrate compliance with § 121.123 in regard to competent personnel and adequate facilities and equipment (including spare parts, supplies, and materials). Refer to §§ 121.105, 121.123, and 135.23(h).

NOTE: A CH that elects to obtain the services of a maintenance provider either on an unscheduled or short notice basis must include specific procedures for doing so in their manual. Refer to §§ 121.369(b)(10) and 135.427(b)(10).

F. Qualifications. Regulations require that each person with whom a CH arranges for the performance of maintenance, preventive maintenance, and alterations must have:

1) An organization adequate to perform the work. Refer to §§ 121.365(a) and 135.423(a).

2) Competent personnel and adequate facilities and equipment for the proper performance of maintenance, preventive maintenance, and alterations. Refer to §§ 121.367(b) and 135.425(b).

3) Relevant and current technical and administrative material from the CH's manual for the work to be performed. Refer to §§ 121.137(a)(1) and 135.21(d).

4) A current listing of individuals trained, qualified, and authorized by the CH to conduct required inspections. The list must identify these individuals by name, occupational title, and the inspection(s) they are authorized to perform. Refer to §§ 121.371(d) and 135.429(e).

G. Subcontracted Maintenance. The CH's manual should address maintenance that is contracted to one maintenance provider and then subcontracted out to other certificated and/or noncertificated maintenance providers. The CH must ensure that the policies, procedures, methods, and instructions for the performance of maintenance that are contracted with the maintenance provider and which the maintenance provider has contracted to any other outside source are specified, and that the CH retains responsibility for the performance of the work performed. If there are deviations from the methods and instructions for the performance of work by an outside source contracted by the maintenance provider, they must be authorized by the CH. CHs that rely solely on the repair stations to oversee the subcontracted work without involvement are doing so contrary to the regulations. Refer to §§ 121.363, 121.367(a), 135.413, and 135.425(a).

H. Maintenance Program Performance Procedures. Due to the wide variety and different levels of contracting out maintenance, the CH may evaluate and accept into their CAMP the procedures used by the maintenance provider for the performance of maintenance. However, the CH's CAMP must contain the manner used to evaluate, accept, and authorize the maintenance provider's procedures. Refer to §§ 121.369(b)(10) and 135.427(b)(10).

1) CH Participation in Parts Leasing or Exchanging Pool. Because the CH is responsible for the airworthiness of their aircraft and the performance of their maintenance, arrangements with persons or organizations that supply parts and components other than new

supply parts and components on a lease or exchange basis should also be considered maintenance providers. While a leased or exchanged part is installed on a CH's aircraft, that part is subject to the controls and requirements of the CH's maintenance program. Leases or exchanges, which do not allow the CH to be in control of the maintenance of the leased or exchanged part or component while under the CH's certificate responsibility, and while in a maintenance status, are contrary to regulations as they do not allow the CH to exercise their responsibility for airworthiness under § 121.363 or for performance of maintenance under the CH's maintenance program. Refer to § 121.367.

NOTE: CHs who participate in parts leasing or exchange pools should have policies and procedures in place to ensure that the regulatory responsibility for the performance of maintenance and CASS are met. Data produced by these parts or components should be analyzed to determine that the CH's programs are working effectively as intended and that any deficiencies are corrected.

2) Part Transactions. There are two types of part transactions that may take place when a CH sends a component to a supplier to have it replaced with a new or repaired part. ASIs should review the agreement between the person providing the part and the CH, the work order that the CH sends along with the part to the person supplying the part, or both.

a) Sales Transaction. In this transaction, the CH may sell their component to a parts broker and the CH then buys a serviceable part from the parts broker. This is basic buying and selling (a sales transaction), and the end product does not involve maintenance since the CH is buying the part and not sending it out for maintenance. The cost to the CH is the cost of the part (i.e., list or retail price for the part). These transactions involve persons who may not be authorized to accomplish maintenance on the part. In this instance, the parts broker would not be listed on the MPL. The surveillance focus for this type of transaction would be on the CH's receiving inspection and the process of bridging the part into the CH's system.

b) Maintenance Transaction. If the CH sends a part out for maintenance to a maintenance provider authorized to accomplish maintenance on the part, and the maintenance provider simply exchanges the received part for a serviceable one it had on the shelf, it is a maintenance transaction and not a sales transaction. The cost to the CH is the cost of the maintenance and not the cost of the part itself. In this instance, the maintenance provider would be listed on the CH's MPL, and the surveillance focus would be on the CH's CAMP and oversight of the maintenance provider.

I. Evaluating and Accepting the Procedures or Methods of a Maintenance Provider as Part of the CH's CAMP.

1) Instead of a CH reiterating the maintenance requirements or publications that are already contained in a maintenance provider's manual, the CH may evaluate and accept the maintenance provider's manual, in part or as a whole, as part of their CAMP.

a) For example, a CH's calibrated tool interval for recalibration is 12 months, but a review of the maintenance provider's manual shows that their requirement is 18 months. In this situation, the CH can evaluate the calibrated tool program of the maintenance provider and

accept the 18-month interval, or the CH can instruct the maintenance provider that the calibrated tools used on their aircraft must be calibrated within the last 12 months.

b) Another example is maintenance documentation. The CH's program may require all maintenance discrepancies to be documented on their specific company forms. A CH can evaluate the maintenance forms used by the maintenance provider and determine that their methods of documenting maintenance are acceptable and allow the maintenance provider to use their forms instead of the CH's.

2) In either case, it is important to note that this evaluation is not necessarily a comparison of the maintenance provider's manuals to the CH's manuals to determine that the programs are the same. Rather, this is an evaluation of the maintenance provider's manual to determine if their program is acceptable to the CH for the accomplishment of the particular maintenance. Once this evaluation has taken place, the CH will detail to the maintenance provider how the maintenance needs to be accomplished. They should also include the method for disseminating the authorization and specific work instructions to the maintenance provider. This evaluation process and subsequent dissemination to the maintenance provider should be described within the CH's contract maintenance program portion of their CAMP. Instead of the CH revising their CAMP each time this process takes place, the CH can place the specific policies, procedures, and work instructions to the maintenance provider in a letter or agreement that describes the specific nature of the arrangement for the performance of work. This process, as a whole, complies with the requirements to perform maintenance in accordance with the CH's manuals per §§ 121.363(b), 121.367(a), 121.368(c), 121.379(a), 135.413(b)(2), 135.425(a), 135.426(c), and 135.437(a).

3) CHs should differentiate these policies and procedures between the different levels of contract maintenance (e.g., EMPs versus non-EMPs, or providers of on-aircraft work versus a repair station that repairs components). Once the CH and the maintenance provider enter into an agreement in which the CH will accept the maintenance provider's procedures, those procedures are now part of the CH's CAMP. Any revisions to the accepted procedures by the maintenance provider, in effect, revise the CH's CAMP. Policies and procedures should be contained in the CH's CAMP to ensure that the CH is in control of their CAMP. They should ensure that the CH is aware of any such revision prior to the contract provider implementing those revisions. These procedures should include a method to reevaluate the revisions (as described above) and determine if they continue to be acceptable to the CH. The manuals should identify who is responsible to ensure that this process is functioning and who has the authority to revise this process.

J. CASS. Per §§ 121.373 and 135.431, the CH shall establish and maintain a system for the continuing analysis and surveillance of the performance and effectiveness of their contract maintenance program and provide for the correction of any deficiencies in the program. As part of their CASS, the CH should establish a schedule for accomplishing continuing audits or inspections, which are designed to determine the maintenance provider's level of compliance with the specific work instruction and the procedures in the CH's manual. A number of variables will dictate the frequency of these audits or inspections, such as the CH's level of confidence in the maintenance provider, the complexity and quantity of the work, the quality of the work produced, and the quality of the records and certifications produced. Because of these variables,

CHs will have audit schedules that differ from one another. Each CH should have a risk-based audit schedule.

> NOTE: The maintenance provider operates as an extension of the CH's maintenance organization, and the resultant relationship in regard to maintenance, preventive maintenance, and alterations should be transparent in all respects with regard to the work performed for the CH. The CH should ensure that agreements defining the nature of the arrangements with the maintenance provider include reciprocal sharing of information from voluntary programs, such as the Aviation Safety Action Program (ASAP) and the Voluntary Disclosure Reporting Program (VDRP). This reciprocity is essential in order to identify deficiencies or inadequacies in the CH's CAMP. Voluntary program data should be included in the CH's CASS and used to monitor the effectiveness of safety risk controls and as a measurement of the organization's safety performance. For more information, refer to Advisory Circular (AC) 00-58, Voluntary Disclosure Reporting Program, and AC 120-66, Aviation Safety Action Program.

K. C.A.S.E. C.A.S.E. functions as a contract auditor for their CH members; however, the C.A.S.E. audit alone does not satisfy regulatory requirements of §§ 121.373 and 135.431. The C.A.S.E. program must be integral to the CH's CASS. See Volume 3, Chapter 49, Section 1 for additional information.

1) Data collected by the C.A.S.E. audit must be analyzed to determine that the CH's programs are working effectively and that any deficiencies are corrected.

2) CHs authorized by OpSpecs to utilize C.A.S.E. audits for the surveillance of repair stations should have procedures in their manual to determine when C.A.S.E. audits are acceptable to use for the work being performed. This determination may include considering elements of risk resulting from CASS analysis, maintenance program requirements for the scope of work to be performed, covered work, or work managed under the CH's reliability program, etc.

L. Return to Service and Airworthiness Release.

1) Return to Service. Sections 121.379(b) and 135.437(b) authorize the CH to approve their aircraft, airframes, aircraft engines, propellers, or appliances for return to service after they accomplish any maintenance, preventive maintenance, and alterations.

2) Airworthiness Release. Sections 121.709(b) and 135.443(b) provide the framework for airworthiness release requirements. For repair stations located within the United States, an individual employed by the repair station and authorized by the air carrier may sign the airworthiness release. An individual employed by the repair station who does not hold an FAA-issued Mechanic or Repairman Certificate may not sign the airworthiness release unless the repair station is located outside the United States. The individual signing the airworthiness release acts as the air carrier's authorized agent and, in accordance with the air carrier's manual, includes the certifications required by §§ 121.709(b)(2) and/or 135.443(b)(2). See Volume 20, Chapter 1, Section 1 for more information regarding airworthiness release.

NOTE: For part 121 only, regulations provide for use of an Airworthiness Release Form. Refer to § 121.709(d).

M. Required Inspection Personnel.

1) As required by §§ 121.371(a) and 135.429(a), no person may use any person to perform required inspections unless the person performing the inspection is appropriately certificated, properly trained, qualified, and authorized to do so.

2) Sections 121.371(d) and 135.429(e) require that each CH shall maintain, or shall determine that each person with whom they arrange to perform their required inspections maintains, a current listing of persons who have been trained, qualified, and authorized by the CH to conduct required inspections. The persons must be identified by name, occupational title, and the inspection that they are authorized to perform. The CH shall give written information to each person so authorized by the CH, describing the extent of the person's responsibilities, authorities, and inspectional limitations. Additionally, the CH must provide this list for inspection upon FAA request.

3) The CH's audit used to survey maintenance providers or EMPs should include a specific review of the RII qualifications and records of the individual RII-designated personnel.

4) Furthermore, if RIIs are to be accomplished by the maintenance provider, the inspection functions within the contracting organization must be separate from the other maintenance, preventive maintenance, and alteration functions. If the CH's maintenance program or procedures require specific compliance aspects, the CH must ensure that the maintenance provider is equally capable of following their manual procedures, written instructions, and any work scope provided.

5) An RII relates directly to flight safety, and §§ 121.371 and 135.429 do not differentiate between a one-time authorization and an authorization for continuing use. As such, the process for a one-time RII authorization must be equivalent to the process used to grant an authorization for continuing use. If a CH makes an authorization due to unscheduled RII requirements, they should have in their manual a process to identify repetitive usage for the same person. ASIs should verify that the CH's process for a one-time RII authorization meets the regulatory requirements of § 121.371 or § 135.429, as applicable.

N. Maintenance Personnel Training. Sections 121.375 and 135.433 require each CH or person performing maintenance or preventive maintenance functions to have a training process program to ensure that each person (including inspection personnel), who determines the adequacy of work done, is fully informed about procedures, techniques, and new equipment in use, and is competent to perform their duties. This applies to each CMP, their subcontractors, and any person employed by any company that performs maintenance for a CH. The CH should detail in their manual and each contract maintenance agreement how they will comply with these regulations for all contract maintenance. To use maintenance provider training, the manual must describe policies, procedures, methods, and instructions for the acceptance of a maintenance provider program. The maintenance provider agreement must be clear in any additional requirements upon which acceptance is dependent and provide a distinct authorization of the

maintenance provider training. A maintenance provider agreement extends the OpSpec D072 CAMP authorization to include the maintenance provider, including CASS oversight of its performance and effectiveness of the work the CAMP operator authorizes it to do. This includes training (see Volume 20, Chapter 9, Section 1). The CH may evaluate and accept the training programs of the maintenance provider if they have determined that the maintenance provider's program is equivalent to their own and meets the requirements of §§ 121.375 and 135.433. This process should be described in detail within the CH's CAMP.

20-8-1-13 REFERENCES, FORMS, AND JOB AIDS.

A. References (current editions):

- Volume 1, Chapter 3, Section 1, Responsibilities of Aviation Safety Inspectors.
- Volume 10, Safety Assurance System Policies and Procedures.
- Volume 14, Chapter 1, Section 2, Flight Standards Service Compliance Action Decision Procedure.

B. Forms. None.

C. Job Aids. None.

20-8-1-15 TASK OUTCOMES.

A. Conduct Debriefing. Brief the CH on the results. Discuss all deficiencies, CH corrective actions, and FAA actions. The ASI can find instructions for conducting briefings in Volume 1, Chapter 3, Section 1.

B. Compliance and Enforcement Action. If safety issues and/or regulatory noncompliance are identified, follow the process contained in Volume 14, Chapter 1, Section 2 to determine the appropriate FAA compliance or enforcement action.

C. Complete the Task. Follow Volume 10 guidance for completion of the SAS DCT.

20-8-1-17 FUTURE ACTIVITIES. Follow Volume 10 to plan future risk-based surveillance in SAS.

20-8-1-19 through 20-8-1-31 RESERVED.