

## U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N 8900.616

**National Policy** 

Effective Date: 5/18/22

Cancellation Date: 5/18/23

**SUBJ:** Part 147 Aviation Maintenance Technician Schools (AMTS) New Regulations and OpSpecs

- 1. Purpose of This Notice. This notice announces revisions to operations specifications (OpSpecs), guidance, and training related to Title 14 of the Code of Federal Regulations (14 CFR) part 147 certificated Aviation Maintenance Technician Schools (AMTS).
- **2.** Audience. The primary audience for this notice is Flight Standards Service (FS) Safety Assurance offices, International Field Offices (IFO), and aviation safety inspectors (ASI) and principal inspectors (PI) with oversight responsibilities of part 147 certificated AMTSs. The secondary audience includes all other Safety Assurance and Safety Standards personnel.
- **3.** Where You Can Find This Notice. You can find this notice on the MyFAA employee website at https://employees.faa.gov/tools\_resources/orders\_notices and the Dynamic Regulatory System (DRS) at https://drs.faa.gov. Operators and the public can find this notice on the Federal Aviation Administration's (FAA) website at https://www.faa.gov/regulations\_policies/orders\_no tices and the DRS.

### 4. Background.

- **a.** Aircraft Certification, Safety, and Accountability Act. On December 27, 2020, Congress passed the Consolidated Appropriations Act, 2021 (Public Law (P.L.) 116-260), which includes the Aircraft Certification, Safety, and Accountability Act ("the Act"). In Section 135 of the Act, titled "Promoting Aviation Regulations for Technical Training," Congress directed the FAA to issue interim final regulations to establish requirements for issuing AMTS certificates and associated ratings, and the general operating rules for the holders of those certificates and ratings.
- **b.** Interim Final Rule (IFR). Pursuant to Section 135(a)(1) of the Act, the FAA published an IFR consistent with the requirements set forth in Section 135. In accordance with Section 135, the FAA updated part 147 to include requirements pertaining to:
  - When an AMTS certificate is required;
  - Applications for AMTS certificates and associated ratings, additional ratings, and changes to certificates;
  - OpSpecs and the contents thereof;

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- The duration of a certificate or rating issued under part 147;
- The ratings that an AMTS may obtain under part 147;
- AMTS facilities, equipment, and material;
- Training provided at another location;
- AMTS training and curricula;
- Instructors;
- Certificates of completion;
- Quality control (QC) systems;
- The minimum passage rate each school must maintain;
- FAA inspections;
- The display of part 147 certificates; and
- A student's ability to take the FAA's general written test prior to satisfying the experience requirements of 14 CFR part 65, § 65.77, provided certain conditions are met.
- **5. Regulations.** The new part 147 regulations and preamble information can be found on the following websites:
  - Part 65: https://www.ecfr.gov/current/title-14/chapter-I/subchapter-D/part-65.
  - Part 147: https://www.ecfr.gov/current/title-14/chapter-I/subchapter-H/part-147.
  - Rulemaking Docket: https://www.regulations.gov/docket/FAA-2021-0237.
  - FAA-S-ACS-1, Aviation Mechanic General, Airframe, and Powerplant Airman Certification Standards (ACS), and mechanic practical test standards (PTS): https://www.faa.gov/training\_testing/testing.

### 6. Guidance.

- **a. Job Task Analysis (JTA).** The following General Aviation (GA) JTAs have been revised/added:
  - GA JTA M2.4.14 (AW), Inspect a 14 CFR Part 147 Aviation Maintenance Technician School.
  - GA JTA M3.4.32 (AW), Evaluate a 14 CFR Part 147 Aviation Maintenance Technician School/Applicant Curriculum/Revision.
  - GA JTA M3.4.34 (AW), Evaluate a 14 CFR Part 147 Aviation Maintenance Technician School/Applicant Facility, Equipment, and Materials.
  - GA JTA M3.4.36 (AW), Certificate a 14 CFR Part 147 Aviation Maintenance Technician School.
  - GA JTA M3.4.44 (AW), Evaluate a 14 CFR Part 147 Aviation Maintenance Technician School/Applicant Initial Quality Control (QC) System or QC System Revision.
  - GA JTA M3.4.45 (AW), Evaluate a 14 CFR Part 147 Aviation Maintenance Technician School/Applicant Instructor Qualifications.
- **b.** Sample Part 147 OpSpecs. This notice contains the following OpSpec templates that apply to part 147:

- Sample OpSpec A001 template in Appendix A.
- Sample OpSpec A002 template in Appendix B.
- Sample OpSpec A007 template in Appendix C.
- Sample OpSpec A008 template in Appendix D.
- Sample OpSpec A013 template in Appendix E.
- Sample OpSpec A015 template in Appendix F.
- Sample OpSpec A025 template in Appendix G.
- Sample OpSpec A027 template in Appendix H.
- Sample OpSpec B001 template in Appendix I.

### c. FAA Order 8900.1. The following Order 8900.1 guidance sections have been updated:

- Volume 2, Chapter 12, Section 1, Phase 1—Preapplication (see Appendix J).
- Volume 2, Chapter 12, Section 2, Phase 2—Formal Application (see Appendix K).
- Volume 2, Chapter 12, Section 3, Phase 3—Design Assessment (see Appendix L).
- Volume 2, Chapter 12, Section 4, Phase 4—Performance Assessment (see Appendix M).
- Volume 2, Chapter 12, Section 5, Phase 5—Certification Administrative Functions (see Appendix N).
- Volume 3, Chapter 18, Section 11, Parts A and B Operations Specifications for Part 147 Aviation Maintenance Technician Schools (see Appendix O).
- Volume 6, Chapter 10, Section 1, Introduction to Aviation Maintenance Technician School (AMTS) Surveillance (see Appendix P).
- Volume 6, Chapter 10, Section 2, Inspect AMTS Organizational Management (see Appendix Q).
- Volume 6, Chapter 10, Section 3, Inspect AMTS Training Operations (see Appendix R).
- Volume 6, Chapter 10, Section 4, Inspect AMTS Facilities (see Appendix S).
- Volume 6, Chapter 10, Section 5, Evaluate an AMTS Initial Curriculum or Curriculum Revision (see Appendix T).
- Volume 6, Chapter 10, Section 6, Evaluate/Approve an AMTS Quality Control System/Procedures (see Appendix U).
- Volume 6, Chapter 10, Section 7, Inspect an AMTS Quality Control System (see Appendix V).

### 7. Discussion/Explanation of Policy Changes.

**a. Policy/Guidance.** The new regulations result in significant changes to requirements under part 147. Accordingly, all part 147 certification and surveillance sections in Order 8900.1 have been revised. Prior to the effective date of the IFR, these sections are made available through this notice. These sections will be published in Order 8900.1 upon the effective date of the IFR. Additionally, Advisory Circular (AC) 147-3, Certification and Operation of Aviation Maintenance Technician Schools, has been revised to inform part 147 stakeholders of new and changed requirements for obtaining and maintaining part 147 AMTS certification. Prior to the effective date of the IFR, the AC can be found at https://www.faa.gov/aircraft/draft\_docs/afs\_ac/.

After the effective date of the IFR, the AC will be available on the FAA website at https://www.faa.gov/regulations\_policies/advisory\_circulars and the DRS at https://drs.faa.gov.

- **b. Training.** The following training must be completed by each ASI/PI with responsibility for part 147 oversight, prior to taking any action directed by this notice.
- (1) Electronic Learning Management System (eLMS) Course 27100350, Part 147 Interim Final Rule Overview/Implementation Briefing.
- (2) Prerequisite: eLMS Course FAA27100162, Intro to Part 147 Aviation Maintenance Technician Schools for GA Airworthiness ASIs.
- **c.** Safety Assurance System (SAS). SAS is being updated to reflect the new requirements in part 147, to include:
  - Addition of SAS Element 1.3.6 (AW) AMTS Quality Control System, to the Part 147 Peer Group K Master List of Functions (MLF);
  - Updated Data Collection Tools (DCT);
  - Automation for managing additional training locations; and
  - Updated Vitals information data fields.
- **d.** Exemptions. Upon the effective date of the part 147 IFR, certain exemptions issued under previous part 147 regulations will no longer be effective. Some exemptions will continue to be effective if they relate to regulatory requirements that were retained under the new part 147 IFR. Table 1, Currently Issued Exemptions to Part 147 ATMSs, lists exemptions that are applicable to AMTSs, and the status of the exemption upon the effective date of the IFR.
- **e. OpSpec Template Changes.** Table 2, Summary of Part 147 OpSpec Template Changes, is a summary of changes made to part 147 OpSpec templates as a result of the IFR.
  - Two part 147 OpSpec templates (A003 and A005) have not been revised.
  - Six part 147 OpSpec templates (A001, A002, A004, A007, A013, and A025) have been revised.
  - Four new part 147 OpSpec templates (A008, A015, A027, and B001) are introduced.
  - Five part 147 OpSpec templates (A006, A026, B002, B003, and B004) are decommissioned.

**Table 1. Currently Issued Exemptions to Part 147 AMTSs** 

Exemption to 14 CFR Part:	Purpose	Discussion	Status
Former § 65.75(a)	To allow AMTSs to issue a certificate of completion for the general portion of the school's curriculum, and allow the AMTS student to take the general knowledge test prior to graduating from the AMTS curriculum.	The IFR explicitly permits early testing provisions in new § 147.31 and revised § 65.75.	These exemptions are no longer needed as the new regulations provide this relief. These exemptions are void upon the effective date of the IFR.
Former § 147.21	To allow relief to the curriculum hour requirements for various circumstances (e.g., exemptions 18892 and 18766).	The IFR does not prescribe curriculum hour requirements, pursuant to new § 147.17.	These exemptions are no longer needed as the new regulations provide this relief. These exemptions are void upon the effective date of the IFR.
Former § 147.31 (c)(2)(iii)	Permits United States Air Force Aviation Maintenance Technicians (AMT) who have completed military aviation maintenance training courses to be evaluated using the same criteria used for the civilian sector (e.g., exemption 10411D).	The IFR removes requirements for AMTSs related to crediting prior instruction or experience.	These exemptions are no longer needed as the new regulations provide this relief. These exemptions are void upon the effective date of the IFR.
Former § 147.36	Provides relief to the 25:1 student-to-instructor ratio in shop classes on a temporary basis (e.g., exemption 18854).	The IFR retains the 25:1 requirement for a student-to-instructor ratio in shop classes in new § 147.19(c).	This exemption may continue to be used until its expiration date; if the holder requests an extension to the exemption, the revised regulatory reference will be updated at that time.

 Table 2. Summary of Part 147 OpSpec Template Changes

Part/ Paragraph	Title	Required/ Optional	Template Revision Type	Description of Change	Regulatory Reference
A001	Issuance and Applicability	Required	Mandatory	This OpSpec template is revised to update the regulatory reference to § 147.3 (previously § 147.5).	§§ 147.1 and 147.3
A002	Definitions and Abbreviations	Required	Mandatory	This OpSpec template is revised to remove definitions no longer applicable under the new IFR, and to add new applicable definitions.	NA
A003	Ratings	Required	No Change	No change to OpSpec template.	§ 147.11
A004	Summary of Special Authorizations and Limitations	Required	Authorization statements revised	Authorization statements associated with new optional OpSpecs have been added, and those associated with decommissioned OpSpecs no longer relevant under the IFR have been removed.	§ 147.3
A005	Exemptions	Optional	No Change	No change to OpSpec template; however, A005 must be reissued as directed in Table 1.	14 CFR part 11
A006	Management Personnel	NA	Decommissioned	This OpSpec template will be decommissioned on the effective date of the IFR. Since the new part 147 does not specify management personnel, this OpSpec is unnecessary. Inspectors must archive issued A006.	NA
A007	Designated Persons	Required	Mandatory	This OpSpec template is revised to add an email address for each designated person.	§ 147.27
A008	Additional Training Locations	Optional	New	This is a new OpSpec template to provide for the authorization of certificate holder (CH) additional training locations.	§§ 147.5(b)(1) and 147.15
A013	Instructors	Required	Mandatory	This OpSpec template is revised to allow for the description of how the CH provides the necessary qualified instructors.	§§ 147.5 and 147.19
A015	Facilities, Equipment, and Materials	Required	New	This is a new OpSpec template to provide for the description of facilities, equipment, and materials for the primary location, and each additional authorized training location(s) of the CH.	

Part/ Paragraph	Title	Required/ Optional	Template Revision Type	Description of Change	Regulatory Reference
A025	Electronic Signatures, Electronic Recordkeeping, and Electronic Manuals/Documents	Optional	Mandatory	This OpSpec template has been revised to remove reference to recordkeeping system and records location authorizations, and adds tables for a CH to describe its use of electronic signatures, electronic recordkeeping, and/or electronic manuals/documents. Additionally, the title has been revised and the paragraph is now optional, instead of required.	FAA
A026	Authorizations/ Limitations	NA	Decommissioned	This OpSpec template will be decommissioned on the effective date of the IFR. The new part 147 does not require FAA approval of a CH's distance learning program; therefore this OpSpec is unnecessary.  Inspectors must archive issued A026.	NA
A027	Quality Control System	Required	New	This is a new OpSpec template to authorize how the CH meets the QC system requirements of § 147.23.	§ 147.23
B001	Curriculum	Required	New	This is a new OpSpec template that provides for the description of the manner in which the school's curriculum will ensure the student has the knowledge and skills necessary for attaining a mechanic certificate and associated ratings under part 65 subpart D.	§§ 147.5 and 147.17
B002	Required Minimum Curriculum for General	NA	Decommissioned	This OpSpec template will be decommissioned on the effective date of the IFR. As of that date, the information in this OpSpec will be unnecessary.  Inspectors must archive issued B002.	
B003	Required Minimum Curriculum for Airframe	NA	Decommissioned	This OpSpec template will be decommissioned on the effective date of the IFR. As of that date, the information in this OpSpec will be unnecessary.  Inspectors must archive issued B003.	
B004	Required Minimum Curriculum for Powerplant	NA	Decommissioned	This OpSpec template will be decommissioned on the effective date of the IFR. As of that date, the information in this OpSpec will be unnecessary.  Inspectors must archive issued B004.	NA

**8.** Action for Existing AMTS CHs. Due to the changes resulting from the IFR, ASIs/PIs with responsibility for part 147 oversight must complete the training listed in subparagraph 7b, verify the CH is in compliance with the IFR, and then issue the appropriate OpSpecs.

- **a. IFR Conditions.** After the effective date of the IFR, a certificated AMTS must have the appropriate (IFR-based) OpSpecs issued prior to conducting part 147 training operations. An AMTS may not conduct training operations using the provisions of the IFR until both of the following conditions are met:
  - (1) The IFR is effective; and
  - (2) Appropriate OpSpecs reflecting the new part 147 requirements have been issued.
- **b. Demonstration of Compliance.** If the AMTS was certificated prior to the effective date of the IFR, the AMTS must demonstrate compliance with any new regulatory requirements, and the FAA must verify and document that compliance, prior to the FAA issuance of appropriate OpSpecs. It is not necessary for existing part 147 CHs to undergo the entire certification process again. However, the IFR contains certain requirements that are different from former part 147 requirements and that must be verified by the FAA. To demonstrate compliance with the IFR, the AMTS must provide the following information required by the new part 147, as applicable, to its responsible Flight Standards office:
  - (1) The descriptions required by § 147.5:
    - A description of the AMTS facilities at the primary location, and each additional training location.
    - A description of the AMTS equipment used at the primary location, and each additional training location.
    - A description of the AMTS materials used at the primary location, and each additional training location.
    - A description of the manner in which the school's curriculum will ensure the student has the knowledge and skills necessary for attaining a mechanic certificate and associated ratings under part 65 subpart D.
    - A description of the manner in which the school will ensure it provides the necessary qualified instructors to meet the requirements of § 147.19 (refer to § 147.5(b)(3)).
  - (2) The school's curriculum, that aligns with the Mechanic ACS as required by § 147.17.
- (3) Evidence of accreditation, if the AMTS intends to meet the QC system requirements using accreditation as provided in § 147.23(a)(1).
- (4) An FAA-approved QC system, if the AMTS intends to meet the QC system requirements as provided in § 147.23(a)(2).
- (5) If the AMTS will use the provision of § 147.31 to facilitate student early testing of the mechanic general written test, ensure the AMTS has a method/procedures to issue an authenticated document that demonstrates the student's preparedness to take the mechanic general written test early.

(6) Any other information applicable to the school's training operations, such as additional training locations or exemptions to 14 CFR.

**Note:** The FAA should allow the CH to submit the above information in the format of their choosing (e.g., paper or electronic).

### c. Verify and Document Compliance.

- (1) Prior to the effective date of the IFR, the ASI/PI must verify and then document compliance with the new part 147 IFR requirements, using the following National/Divisional Custom DCTs (C DCT), as appropriate:
  - "Part 147 Interim Final Rule (IFR) Transition," to record the AMTS compliance with the new part 147 requirements.
  - "AMTS FAA-Approved QC System," to record design compliance if the certificated AMTS requests approval of a QC system.
  - "Additional Locations Facilities, Equipment, and Materials," to record performance compliance if the certificated AMTS requests additional training locations.
- (2) After the effective date of the IFR, if the National/Divisional C DCTs have not been started, use the applicable updated standard DCTs to record Design Assessment (DA) and Performance Assessment (PA) on the AMTS. Refer to Order 8900.1, Volume 6, Chapter 10, Part 147 Inspections.

**Note:** National/Divisional C DCTs can be added directly to the Comprehensive Assessment Plan (CAP) by the PI. Refer to SAS Q-Card Q3-10, Custom DCT Using a National/Divisional Template, for step-by-step instructions. Select "YES" for "Requires Own Assessment?".

**d. Issue OpSpecs.** Once compliance with the IFR is verified, the ASI/PI may issue the appropriate OpSpecs. The information provided by the CH (listed in subparagraph 8b) will assist the ASI/PI with entering appropriate information into the OpSpecs.

**Note:** Issuing OpSpecs using the timeframes recommended in the notes below Table 3, Part 147 OpSpec Actions Required, is intended to assist the ASI/PI in preparing OpSpecs to be issued and available for the AMTS upon the effective date of the IFR, while ensuring the AMTS retains appropriate OpSpecs for operations conducted prior to the effective date of the IFR.

- (1) Table 3 is a summary of part 147 OpSpecs that will require issuance/reissuance upon the effective date of the IFR, and provides instructions on actions related to each available part 147 OpSpec.
- (2) Notes 1 through 3 below the table provide additional information to the Table 3 instructions for each referenced OpSpec. The ASI/PI must work with the CH to issue the new required OpSpecs and reissue revised OpSpecs, prior to or upon the effective date of the IFR.

**Table 3. Part 147 OpSpec Actions Required** 

Part/ Paragraph	Title	Required/ Optional	Action	Instructions	Notes
A001	Issuance and Applicability	Required	Reissue	Reissue upon the effective date of the IFR.	Note 1
A002	Definitions and Abbreviations	Required	Reissue	Reissue upon the effective date of the IFR.	Note 1
A003	Ratings	Required	No Action	No action is required unless the ratings of the AMTS have changed.	
A004	Summary of Special Authorizations and Limitations	Required	Reissue	Reissue upon the effective date of the IFR. If an optional OpSpec is no longer applicable to a CH, ensure that the OpSpec is de-authorized in the A004 before the A004 is reissued.	Note 1
A005	Exemptions	Optional	Reissue or Archive, as applicable	If previously issued, reissue upon the effective date of the IFR to remove exemptions no longer applicable under the IFR (see Table 1).  Archive the OpSpec if the CH no longer has valid exemptions.	Note 1
A006	Management Personnel	NA	Archive	Archive this OpSpec at any time before, or upon, the effective date of the IFR.	Note 3
A007	Designated Persons	Required	Reissue	Reissue at any time before, or upon, the effective date of the IFR.	Note 3
A008	Additional Training Locations	Optional	Issue, as applicable	Issue if authorizing additional training locations of the CH. Issue at any time before, or upon, the effective date of the IFR.	Note 2
A013	Instructors	Required	Reissue	Reissue at any time before, or upon, the effective date of the IFR.	Note 2
A015	Facilities, Equipment, and Materials	Required	Issue	Issue at any time before, or upon, the effective date of the IFR.	Note 2
A025	Electronic Signatures, Electronic Recordkeeping, and Electronic Manuals/Documents	Optional	Reissue or Archive, as applicable	Reissue upon the effective date of the IFR if the CH uses electronic signatures, electronic recordkeeping, or electronic manuals/documents.  Archive if the CH does not use electronic signatures, electronic recordkeeping, or electronic manuals/documents.	Note 3
A026	Authorizations/Limitations	NA	Archive	Archive this OpSpec upon the effective date of the IFR. This OpSpec will no longer be issued.	Note 1

Part/ Paragraph	Title	Required/ Optional	Action	Instructions	Notes
A027	Quality Control System	Required	Issue	Issue upon the effective date of the IFR.	Note 1
B001	Curriculum	Required	Issue	Issue at any time before, or upon, the effective date of the IFR.	Note 2
B002	Required Minimum Curriculum for General	NA	Archive	Archive this OpSpec at any time before, or upon, the effective date of the IFR. This OpSpec will no longer be issued.	Note 3
B003	Required Minimum Curriculum for Airframe	NA	Archive	Archive this OpSpec at any time before, or upon, the effective date of the IFR. This OpSpec will no longer be issued.	Note 3
B004	Required Minimum Curriculum for Powerplant	NA	Archive		

**Note 1:** Certain OpSpecs should not be reissued or archived until the effective date of the IFR so current authorizations issued to a CH are not prematurely affected. <u>It is recommended that these OpSpecs are prepared in draft in the Web-based Operations Safety System (WebOPSS) "Maintain Authorizing Documents" workspace, and then issued upon the effective date of the IFR.</u>

**Note 2:** Some OpSpecs may be issued prior to the effective date of the IFR, when the OpSpec issuance will not affect currently issued authorizations. These are OpSpecs that are related to new or changed requirements within part 147, and therefore <u>must be issued with an effective date that matches the effective date of the IFR</u>.

**Note 3:** Some OpSpecs require reissuance or archiving, but are not affected by the effective date of the IFR, or by pre-IFR part 147 regulations. Therefore, the required action may be taken at any time prior to the effective date of the IFR.

### e. Noncompliance.

(1) CHs must conduct all training operations under the applicable part 147 regulations effective the date of operation.

- (a) Prior to the effective date of the IFR, CHs must conduct training operations in accordance with existing part 147 requirements.
- (b) After the effective date of the IFR, CHs must conduct training operations in accordance with new part 147, promulgated by the IFR. CHs may not conduct part 147 training operations until all of the new part 147 requirements have been met and the applicable OpSpecs have been issued.
- (2) Upon the effective date of the IFR, if the CH has not met the new/revised regulatory requirements of the new part 147, the CH's OpSpecs should be archived by the responsible Flight Standards office, with the exception of OpSpec A004 (this paragraph cannot be archived). The responsible Flight Standards office should notify the AMTS that its part 147 OpSpecs have been revoked until the AMTS demonstrates compliance with the new regulations that are in effect.

**Note:** When the CH is issued appropriate new/revised OpSpecs, ensure OpSpec A004 is reissued to remove/revise any optional authorizations.

- (3) If a CH is unable to comply with the new part 147 regulations for an extended period of time and the CH does not cease operations and surrender its Air Agency Certificate, the responsible Flight Standards office should determine if it is appropriate to begin the certificate revocation process. Refer to Order 8900.1, Volume 14, Compliance and Enforcement.
- 9. Action for Part 147 Applicants (New Applications). If the AMTS applicant is undergoing the part 147 certification process prior to the effective date of the IFR, the following guidelines should be used.

**Note:** The Certificate Management Team (CMT) should discuss with the applicant the below options for moving forward with the certification, and determine what option suits the applicant's needs.

- **a.** If the Air Agency Certificate will be issued prior to the effective date of the IFR, then the applicant and the FAA must ensure compliance with the existing part 147 regulations currently in effect. Once the IFR is effective, the recently certificated AMTS must meet the part 147 IFR requirements (see paragraph 8).
- **b.** If the Air Agency Certificate will be issued on or after the effective date of the IFR, then the FAA must verify compliance with the part 147 IFR requirements prior to issuance of an Air Agency Certificate or OpSpecs. The CMT must ensure the AMTS applicant understands that a certificate and OpSpecs cannot be issued until the effective date of the IFR, since the applicant is only being evaluated against the new part 147 IFR requirements.

(1) The CMT must follow the certification guidance (Order 8900.1, Volume 2, Chapter 10) developed for the IFR, and included in the appendices of this notice.

- (2) If prior to the effective date of the IFR, the CMT must verify and then document compliance with the new part 147 requirements, using the following National/Divisional C DCTs, as appropriate:
  - "Part 147 IFR Initial Certification Design Assessment."
  - "AMTS FAA-Approved QC System," to record design compliance if the certificated AMTS requests approval of a QC system.
  - "Part 147 IFR Initial Certification Performance Assessment."

**Note:** National/Divisional C DCTs can be added directly to the CAP (via the certification project) by the CMT.

(3) After the effective date of the IFR, if the National/Divisional C DCTs have not been started, use the applicable updated standard DCTs to record DA and PA during certification. Refer to Order 8900.1, Volume 6, Chapter 10.

**Note:** National/Divisional C DCTs can be added directly to the CAP by the PI. Refer to SAS Q-Card Q3-10 for step-by-step instructions. Select "YES" for "Requires Own Assessment?".

- (4) The Air Agency Certificate and OpSpecs must not be issued until both of the following conditions are met:
  - (a) The IFR is effective; and
- (b) The applicant has demonstrated compliance with all applicable requirements of the part 147 IFR, and the certification process has been completed.
- **10. Disposition.** We will incorporate the information in this notice into Order 8900.1 before this notice expires. Direct questions or comments concerning the information in this notice to the Aircraft Maintenance Division (AFS-300) at 202-267-1675, or 9-AWA-AFS-300-Correspondence@faa.gov.

Robert C. Carty

Deputy Executive Director, Flight Standards Service

### Appendix A. Sample OpSpec A001, Issuance and Applicability: 14 CFR Part 147

a. These operations specifications are issued to [CERTIFICATE HOLDER NAME] whose principal air agency is located at:

Primary Business Address:

[MAILING ADDRESS]

[ADDRESS]

**Table 1 – Primary Point(s) of Contact** 

Name	<b>Email Address</b>	Telephone Number

- b. The holder of these operations specifications holds Air Agency Certificate Number [CERTIFICATE NUMBER] and is hereafter referred to as the certificate holder.
- c. These operations specifications are issued in accordance with 14 CFR Part 147, § 147.3. The certificate holder must operate in accordance with Part 147 and associated authorizations, limitations, and procedures.
- d. These operations specifications are effective as of the "Effective Date" listed in each paragraph and will remain in effect as long as the certificate holder continues to meet the requirements of Part 147 as specified for certification or unless otherwise suspended, surrendered, amended, or revoked.

# Appendix B. Sample OpSpec A002, Definitions and Abbreviations: 14 CFR Part 147

The definitions below apply to operations conducted in accordance with these operations specifications.

Term or Terms	Definition
Accreditation	Refers to accreditation by a Department of Education nationally recognized accrediting agency or association, in accordance with Title 20 of the United States Code (20 U.S.C.) § 1001(a)(5) and listed pursuant to § 1001(c). Note: Pre-accreditation status as discussed in 20 U.S.C. § 1001(a)(5) is not accreditation.
Aviation Maintenance Technician (AMT)	A person holding an FAA certificate issued under 14 CFR Part 65 Subpart D, Mechanics.
Aviation Maintenance Technician School (AMTS)	An air agency certificated in accordance with 14 CFR Part 147 that trains individuals in the knowledge and skills required to obtain a mechanic certificate issued under Part 65 Subpart D.

## Appendix C. Sample OpSpec A007, Designated Persons: 14 CFR Part 147

a. The personnel listed in the following table are designated to officially apply for and receive operations specifications for the certificate holder.

Table 1- Designated Persons to Apply for and Receive Authorizations

Title	Name	Parts Authorized	Email Address
[LOAD Operator Data]	[LOAD Operator Data]	[LOAD Operator Data]	

# Appendix D. Sample OpSpec A008, Additional Training Locations: 14 CFR Part 147

a. The certificate holder is authorized to conduct training operations at the following additional fixed training location(s), in addition to the primary location listed in operations specification A001, as provided by 14 CFR Part 147, § 147.15.

Table 1 – Authorized Additional Training Locations

Physical Address	<b>Contact Person</b>	Phone Number	Email Address

### Appendix E. Sample OpSpec A013, Instructors: 14 CFR Part 147

a. Pursuant to 14 CFR Part 147, § 147.5(b)(3), the manner in which the certificate holder will ensure it provides the necessary qualified instructors to meet the requirements of § 147.19 is described (or referenced) below:

[Insert description or reference to the Aviation Maintenance Technician School (AMTS) document containing the description, including document name, document revision level, and document revision date.]

## Appendix F. Sample OpSpec A015, Facilities, Equipment, and Materials: 14 CFR Part 147

a. Pursuant to 14 CFR Part 147, § 147.5(b)(1), the description of the facilities, equipment, and materials to be used at the certificate holder's primary location, as listed in operations specification A001, and at each additional authorized fixed location where training will be provided, are described (or referenced) in Tables 1, 2, and 3 below.

Table 1 – Description of Facilities Used at Each Location

Address	Description of Facilities
Primary Location (identified on A001)	[Insert description or reference to the Aviation Maintenance Technician School (AMTS) document containing the description, including document name, document revision level, and document revision date.]
[Insert address of each location identified on A008.]	[Insert description or reference to AMTS document containing the description, including document name, document revision level, and document revision date.]

Table 2 – Description of Equipment Used at Each Location

Address	Description of Equipment
Primary Location (identified on A001)	[Insert description or reference to AMTS document containing the description, including document name, document revision level, and document revision date.]
[Insert address of each location identified on A008.]	[Insert description or reference to AMTS document containing the description, including document name, document revision level, and document revision date.]

Table 3 – Description of Materials Used at Each Location

Address	Description of Materials
Primary Location (identified on A001)	[Insert description or reference to AMTS document containing the description, including document name, document revision level, and document revision date.]
[Insert address of each location identified on A008.]	[Insert description or reference to AMTS document containing the description, including document name, document revision level, and document revision date.]

## Appendix G. Sample OpSpec A025, Electronic Signatures, Electronic Recordkeeping, and Electronic Manuals/Documents: 14 CFR Part 147

a. The certificate holder uses electronic signatures to attest to, certify, endorse, or otherwise authenticate the items listed in Table 1, as described within the certificate holder's quality control (QC) system procedures.

**Table 1 – Electronic Signatures** 

Kind of Electronic Signature	Reference to QC System Procedures
<ul> <li>[Select from dropdown list of options:]</li> <li>Graduation document issued under § 147.21.</li> <li>Completion document issued under § 147.31.</li> </ul>	[Enter a description of the electronic signature procedures, or a reference to a document containing the school's electronic signature procedures.]

b. The certificate holder uses an electronic/digital recordkeeping system for maintaining the following records listed in Table 2, as described within the certificate holder's QC system procedures.

Table 2 – Electronic Recordkeeping

Kind of Record	Name of Electronic Recordkeeping System	Reference to QC System Procedures
[Enter the electronic recordkeeping information from the QC procedures or select the dropdown options:]  • The certificate holder meets the requirements of § 147.23 by being accredited.  • The certificate holder does not use an electronic/digital recordkeeping system.		

c. The certificate holder uses electronic manuals/documents listed in Table 3 to maintain, distribute, and otherwise make available the certificate holder's QC system procedures.

**Table 3 – Electronic Manuals/Documents** 

Manual/Document Name	Manual/Document Number
<ul> <li>[Enter the electronic manual/document information or select the dropdown options:]</li> <li>The certificate holder meets the requirements of § 147.23 by being accredited.</li> <li>The certificate holder does not use electronic documents or manuals to maintain its QC system procedures.</li> </ul>	

### Appendix H. Sample OpSpec A027, Quality Control System: 14 CFR Part 147

a. The certificate holder is accredited in accordance with 14 CFR Part 147, § 147.23(a)(1), by the accrediting agency specified in Table 1 below. The certificate holder will notify the FAA of changes to its accreditation.

### **Table 1 – Accreditation**

### Name of Accrediting Agency

[Select from dropdown list or enter accrediting agency. If the certificate holder is not accredited, select the following statement from the dropdown list:

The certificate holder uses the quality control system described in Table 2.]

b. The certificate holder has established and maintains a quality control system in accordance with § 147.23(b), and is approved by the FAA as specified in the manual(s), document(s), or section(s) described in Table 2 below.

**Table 2 – FAA-Approved Quality Control System** 

Manual/Document/Section Name and Number	Manual/Document/Section Revision Information	Manual/Document/Section FAA Approval Date
[Enter the name and/or number of the manual/document/section containing the procedures required by § 147.23(b).]	[Enter the revision number and/or date (e.g., Revision B, 10/12/2021).]	[Enter the FAA approval date of the manual/document/section.]
[Can add rows to table.]		

### Appendix I. Sample OpSpec B001, Curriculum: 14 CFR Part 147

a. Pursuant to 14 CFR Part 147, § 147.5(b)(2), the manner in which the certificate holder's curriculum will ensure the student has the knowledge and skills necessary for attaining a mechanic certificate and associated ratings under subpart D of 14 CFR Part 65 is described (or referenced) below:

[Insert the description or the reference to the Aviation Maintenance Technician School (AMTS) document containing the description, including document name, document revision level, and document revision date.]

## Appendix J. Order 8900.1, Volume 2, Chapter 12, Section 1, Phase 1—Preapplication

## VOLUME 2 AIR OPERATOR AND AIR AGENCY CERTIFICATION AND APPLICATION PROCESS

## CHAPTER 12 CERTIFICATION OF A PART 147 AVIATION MAINTENANCE TECHNICIAN SCHOOL

### **Section 1 Phase 1—Preapplication**

#### **Source Basis:**

- Part 65, Certification: Airmen Other Than Flight Crewmembers.
- Part 147, Aviation Maintenance Technician Schools.
- Title 49 U.S.C. § 44701, General Requirements.
- Title 49 U.S.C. § 44702, Issuance of Certificates.
- Title 49 U.S.C. § 44707, Examining and Rating Air Agencies.
- Title 49 U.S.C. § 44709, Amendments, Modifications, Suspensions, and Revocations of Certificates.
- Public Law 116-260, Consolidated Appropriations Act, 2021; Division V, Title I, Aircraft Certification, Safety, and Accountability; Section 135, Promoting Aviation Regulations for Technical Training.
- **2-1411 GENERAL.** This section, along with the other sections in this chapter, prescribes procedures for evaluating applications for Title 14 of the Code of Federal Regulations (14 CFR) part 147 Aviation Maintenance Technician School (AMTS) certification.

NOTE: The Volume 2, Chapter 12 sections on part 147 certification must be used in conjunction with the Volume 6, Chapter 10 sections on part 147 surveillance. While Volume 2, Chapter 12 provides information on the certification process, Volume 6, Chapter 10 contains the information on the inspection requirements, including aviation safety inspector (ASI) prerequisites, for both certification and surveillance.

#### A. Part 147.

- 1) Certification and Operation of an AMTS. Part 147 specifies requirements for the certification and operation of an AMTS. An AMTS is an educational facility certificated by the Federal Aviation Administration (FAA) to train prospective aircraft mechanics with the knowledge and skills needed to obtain an FAA Airframe and Powerplant (A&P) certificate and to be successful in an aviation maintenance career.
- **2) Graduation/Completion of AMTS Curriculum.** A graduation/completion document issued in accordance with part 147, § 147.21 by a certificated AMTS can be used by a mechanic applicant to show eligibility to test for a mechanic certificate airframe and/or powerplant rating, as applicable to the curriculum completed. Although the AMTS graduation/completion certificate can be used towards 14 CFR part 65, § 65.77 eligibility, all

other part 65 eligibility requirements must also be met in order for a mechanic certificate to be issued.

### B. Background.

1) History of Part 147, Part 147 originated as Civil Air Regulations (CAR) part 53 in 1940. As a result of the recodification of the CARs in 1962, CAR part 53 became 14 CFR part 147.<sup>2</sup> In 1970, the FAA issued a final rule that changed the name of "mechanic schools" to "aviation maintenance technician schools," provided more specific guidelines for the certification and operation of schools, increased the required core curriculum hours from 1,500 to 1,900, and further defined teaching guidelines and subject content to reflect technological advancements in the aviation industry. In 1992, the FAA revised part 147 by adding a definition in appendix A for "teaching materials and equipment" to include the use of computers in the training environment. The FAA also revised the headings of several subjects in appendices B, C, and D to better reflect course content, added course content items within several subject areas, and added two new subject headings with related course content items for "Unducted Fans" and "Auxiliary Power Units". 4 Subsequently, in 1992, the FAA made a minor amendment to § 147.21 as part of another rulemaking. 5 Specifically, the FAA added a provision to § 147.21 that allowed an AMTS to apply for and receive approval of special courses in the performance of inspection and maintenance on primary category aircraft, and authorized the school to issue certificates of competency to persons successfully completing such courses. There have been no further revisions to part 147.

2) Notice of Proposed Rulemaking (NPRM) and Supplemental Notice of Proposed Rulemaking (SNPRM). On October 2, 2015, the FAA published an NPRM titled, "Aviation Maintenance Technician Schools." In the NPRM, the FAA proposed to amend the regulations governing the curriculum and operation of FAA-certificated AMTSs. The FAA proposed to modernize and reorganize the required curriculum subjects found in the appendices of the current regulation, remove the course content items from the appendices and relocate them to each school's operations specifications (OpSpecs), and revise the curriculum requirements to include an option for schools to use a credit hour curriculum. The final comment period for the NPRM closed on February 1, 2016. After considering the comments to the NPRM, and the potential benefits to industry, the FAA decided to expand the scope of the rulemaking by issuing an SNPRM, published on April 16, 2019. The SNPRM proposed (1) to allow curriculum based training (CBT) programs as a curriculum delivery method, (2) to allow the establishment of satellite training locations, and (3) to remove the national passing norm requirements in § 147.37 and replace them with a standard pass rate. The comment period closed on June 17, 2019.

<sup>1</sup> Final Rule, "Providing for the Rating and Certification of Civilian Schools giving Instruction in Aircraft and Aircraft Engine Mechanics," 5 FR 673 (Feb. 15, 1940) (amending the CARs by adding new part 53, effective May 1, 1940).

<sup>2</sup> Final Rule, "Schools and other Certificated Agencies," 27 FR 6655 (Jul. 13, 1962).

<sup>3</sup> Final Rule, "Name, Operations, and Curriculum," 35 FR 5531 (Apr. 3, 1970).

<sup>4</sup> Final Rule, "Revision of Aviation Maintenance Technician Schools Regulations," 57 FR 28952 (Jun. 29, 1992).

<sup>5</sup> Final Rule, "Primary Category," 57 FR 41360 (Sept. 9, 1992).

<sup>6</sup> NPRM, 80 FR 59674.

<sup>7</sup> Supplemental NPRM, 83 FR 15533.

3) Interim Final Rule (IFR). While the FAA was in the process of completing the final rule, which would have responded to all significant comments received on the NPRM and SNPRM, Congress passed legislation requiring the FAA to replace part 147 with new regulations. Specifically, on December 27, 2020, Congress passed the Consolidated Appropriations Act (Public Law 116-260), which includes the Aircraft Certification, Safety, and Accountability Act ("the Act"). In Section 135 of the Act, titled "Promoting Aviation Regulations for Technical Training," Congress directed the FAA to issue interim final regulations, not later than 90 days after the date of enactment of the Act, to establish requirements for issuing AMTS certificates and associated ratings and the general operating rules for the holders of those certificates and ratings. Upon review of Section 135, the FAA determined that the proposed requirements in the NPRM and SNPRM would have significantly exceeded the scope of the statutory mandate. Therefore, to comply with Section 135, the FAA published a Federal Register Notice withdrawing the NPRM (80 FR 59674, October 2, 2015) and SNPRM (83 FR 15533, April 10, 2019). Subsequently, the FAA issued the IFR to establish requirements for certificated AMTSs in accordance with Section 135 of the Act. In accordance with the statute, the part 147 regulations in effect at the time and any regulations issued under Section 624 of the FAA Reauthorization Act of 2018 shall have no force or effect on or after the effective date of the IFR. As a result, the IFR repealed and replaced the existing part 147 regulations upon its effective date.

- **C. Statutory Mandate.** Pursuant to Section 135(a)(1) of the Act, the FAA issued the IFR in accordance with the requirements set forth in Section 135. The provisions of Section 135 include requirements pertaining to:
  - When an AMTS certificate is required;
  - Applications for AMTS certificates and associated ratings, additional ratings, and changes to certificates;
  - OpSpecs and the contents thereof;
  - The duration of a certificate or rating issued under part 147;
  - The ratings that an AMTS may obtain under part 147;
  - AMTS facilities, equipment, and material;
  - Training provided at another location;
  - AMTS training and curricula;
  - Instructors;
  - Certificates of completion;
  - Quality control (QC) systems;
  - The minimum passage rate each school must maintain;
  - FAA inspections;
  - The display of part 147 certificates; and
  - A student's ability to take the FAA's general written test prior to satisfying the experience requirements of § 65.77, provided certain conditions are met.
- **D.** Certification Process. The certification process is an interaction between the AMTS applicant and the FAA from initial inquiry to issuance or denial of an AMTS certificate. The process ensures the school's method of compliance with part 147 requirements for curriculum, policies and procedures, facilities, equipment, materials, and personnel are thoroughly reviewed,

evaluated, and validated (see Figure 2-110, Certification Process Flowchart). The certification process consists of the following five phases:

- Preapplication phase;
- Formal application phase;
- Design Assessment (DA) (document compliance) phase;
- Performance Assessment (PA) (demonstration and inspection) phase; and
- Administrative functions (i.e., certification) phase.
- **E. Authority.** The regulatory and statutory authority for certificating an AMTS can be found here:
  - Title 49 of the United States Code (49 U.S.C.) §§ 44701, 44702, 44707, and 44709;
  - Public Law 116-260, Division V, Title I, Section 135; and
  - Part 147.
- **F. ASI Responsibility.** ASIs must remain objective in evaluating the applicant's facilities, equipment, materials, personnel, curriculum, or other areas of the AMTS. ASIs should not become involved in determining the market need for the AMTS, the selection of resource personnel (e.g., consultants), or materials.
- **2-1412 PHASES OF CERTIFICATION.** See Figure 2-110 for an overview of the phases of certification. Flight Standards (FS) personnel will use Safety Assurance System (SAS) automation to record the results of the certification process.

NOTE: The SAS Resource Guide (SRG) contains a Part 147 Initial Certification Checklist (ICC) to assist navigation through SAS during the certification process. Access the SRG and ICC here: https://avssp.faa.gov/avs/afs900/CIPO/PRF/SAS% 20Resource%20Guide/Published%20SRG/story.html.

A. Phase 1: Preapplication. This phase begins with an initial inquiry made by the applicant and includes the submission of FAA Form 8400-6, Preapplication Statement of Intent,
(PASI) for initiation of the Certification Services Oversight Process (CSOP) and the assignment of a Certification Project Team (CPT). The phase ends with a preapplication meeting with the applicant to verify that the applicant understands the certification process and intends to continue with the certification.

NOTE: The certification project manager (CPM) should not proceed to the next phase until all requirements of this phase are met.

- **B.** Phase 2: Formal Application. During this phase, the applicant submits its formal application and any required application attachments. Phase 2 ends when the CPT accepts the formal application package.
- 1) The CPT reviews the applicant's preapplication information and schedules a formal application meeting with the applicant.

2) The applicant may submit the formal application documents before, during, or after the formal application meeting. See subparagraph 2-1416B for a list of the documents required to be submitted to the FAA during the formal application phase.

**3)** The CPM should provide the applicant the option to complete Element Design Data Collection Tools (ED DCT) to allow for applicant self-assessment. Inform the applicant the self-assessment ED DCTs should be provided to the FAA along with the formal application and attachments.

NOTE: The CPM should not proceed to the next phase until all requirements of this phase are met.

- C. Phase 3: Design Assessment (DA). In this phase, the CPT evaluates the design of the applicant's curriculum and operating systems to ensure their compliance with regulations and safety standards, and records the evaluation in ED DCTs. This document evaluation phase will be used to determine if the air agency system design meets all criteria.
- **D. Phase 4: Performance Assessment (PA).** Inspectors use Element Performance DCTs (EP DCT) during this phase to record data collected while determining if the applicant's systems are performing as intended and producing the desired results. This phase requires the demonstration of methods and procedures to aid in the assessment of the applicant's system design.

NOTE: The CPT may elect to use Custom DCTs (C DCT) to record follow-up actions, as necessary.

NOTE: Phases 3 and 4 end when all DCTs have been successfully completed and are satisfactory to the CPM. The CPM should not proceed to the next phase until all requirements of phases 3 and 4 are met.

**E. Phase 5: Administrative Functions.** This phase provides for completion of all administrative functions (e.g., issuance of the Air Agency Certificate, OpSpecs, and certification reports).

### 2-1413 PREAPPLICATION PROCEDURES.

### A. Initial Inquiry.

1) Applicant Interest. Initial inquiries about certification or requests for application may come in various formats from individuals or organizations. These inquiries may be in writing, in the form of meetings with FS office personnel, or may come through the SAS External Portal (sas.faa.gov). The office receiving an initial inquiry for part 147 certification should direct the applicant to the faa.gov website to familiarize themselves with the certification process requirements. The initial inquiry activity is informational only and does not initiate CSOP or the certification process.

2) Applicant Orientation and Preliminary Discussion. Upon initial contact, FS personnel should direct the applicant to the FS website at https://www.faa.gov/licenses\_certificates/airline certification/amts/. The website is intended to inform the applicant of:

- The regulations applicable to the certification;
- An initial overview of the certification process;
- The availability of the FAA website at https://www.faa.gov/regulations\_polici es/ for applicable regulations, advisory circulars (AC), FAA orders, notices, bulletins, and other pertinent information;
- The purpose of FAA Form 8400-6, instructions on how to complete the form, and how to initiate the certification process; and
- Links to forms and other types of information the applicant may find useful to complete the certification process.

### **B.** SAS External Portal.

- 1) The SAS External Portal is a secure, web-based system that allows the principal inspector (PI) and the certificate holder (CH) or applicant to communicate, exchange information, and initiate configuration changes in the SAS automation. The PI is notified of CH configuration change requests when the requests are submitted through the External Portal. If the CH or applicant cannot access the External Portal, or chooses not to, then requests will be coordinated with the PI. CHs and applicants can refer to the SAS External Portal User's Guide for information on how to register for access to the External Portal.
- 2) Use of the SAS External Portal by part 147 applicants is optional. The External Portal can be used to collect the following information from the applicant:
  - FAA Form 8400-6 (PASI);
  - FAA Form 8310-6, Aviation Maintenance Technician School Certificate and Ratings Application;
  - Scoped ED DCTs (SAS Module 4);
  - Change requests to the certificate; and
  - Document submission.

NOTE: The FAA forms submitted by the applicant must be retained in the responsible Flight Standards office official file for the CH/applicant following completion or termination of the certification.

- C. FAA Form 8400-6. Submission of a PASI expresses the potential applicant's intent to begin the certification process and allows the FAA to plan activities and commit resources.
- 1) Upon initial contact, the responsible Flight Standards office personnel should instruct potential applicants to submit a completed PASI (FAA Form 8400-6), available at https://www.faa.gov/forms. The potential applicant should be advised to submit a completed PASI only after reviewing the appropriate regulations and advisory material to include applicable ACs, notices, and FAA Order 8900.1 guidance.

**2)** Preapplication for certification may be received by the FAA through the SAS External Portal, by email, by mail, or by in-person submission.

### D. Certification Service Oversight Process (CSOP).

1) The responsible Flight Standards office manager will initiate CSOP upon receipt of the PASI from an applicant.

NOTE: See Volume 10, Chapter 12, Section 1 for detailed information/guidance on CSOP.

2) If the PASI is not acceptable, the FS office must notify the applicant describing the reasons in section 2 of the PASI. Retain a copy of all submissions of the PASI and any correspondence in the office certification files.

### 2-1414 ASSIGNMENT OF THE CPT.

**A.** Selection of Team Members. The certification office assigns team members for the certification. A part 147 CPT should consist of at least one Maintenance ASI and one Avionics ASI. Additional ASIs may be utilized as needed.

NOTE: Requests for precertification/certification numbers are made through SAS automation, not via email requests to the Regulatory Support Division (AFS-600). Refer to the SRG Part 147 ICC.

- **B.** Designation of the CPM. One team member will be designated as the CPM. The designated CPM should have previous experience in the certification of an AMTS under part 147 and must have completed appropriate training, to include:
  - Just-In-Time Training, Part 147 Interim Final Rule (IFR).
  - Course 27100312, Initial Certification in SAS.

NOTE: Additional recommended training can be found in the SRG.

- C. Responsibilities of the CPM and Certification Project Team (CPT). See Volume 1, Chapter 3 for overall inspector responsibilities, administration, ethics, and conduct. See Volume 2, Chapter 1, Section 1 for CPM duties and responsibilities. Team members must respond to CPM requests for assistance and keep the CPM informed of the status of the certification. Team members should immediately bring any discrepancy that may delay the certification effort to the attention of the CPM.
- 1) The CPM should initiate the request for precertification/certification numbers through SAS automation at the appropriate point in the certification. Refer to the SRG Part 147 ICC.
- 2) The CPM should use a Schedule of Events (SOE) to track and document certification progress (see Figure 2-111, Sample Schedule of Events for Part 147 AMTS). It is

not the applicant's responsibility to submit an SOE; however, planning of the certification events/timeline should be determined through coordination with the applicant.

- 3) The CPM should be familiar with the documents that will be needed for the certification file upon completion of the certification, or in the event of termination of the certification, to ensure the required information/documentation is retained (see Volume 2, Chapter 12, Section 5, Subparagraph 2-1537A, Certification File.)
- D. Responsibilities of the Certification Frontline Manager (CFLM) and Certification Team Leader (CTL). These are optional SAS roles that may be included as part of the CPT. If these roles are used, the responsible Flight Standards office should define the responsibilities of these team members.
- **E.** Responsibilities of the Applicant. The applicant must develop and complete all required documents for submission with the formal application. Additionally, the applicant must ensure that facilities, equipment, materials, and personnel meet part 147 requirements prior to issuance of the FAA Air Agency Certificate.
- **F.** Office of Safety Standards, Aircraft Maintenance Division (AFS-300). The AFS-300, Airmen and Special Projects Group (AFS-320), Airmen Section is the responsible Flight Standards office for part 147, and will support certification questions and concerns.

### 2-1415 PREAPPLICATION MEETING.

- **A. General.** The CPM should include all certification team members in the preapplication meeting if possible. Additionally, the CPM should request of the applicant that key management and/or operations personnel attend the meeting and be prepared to discuss, in general terms, the various aspects of their proposed operation. The applicant should be encouraged to ask questions during the discussion. Applicants should be thoroughly familiar with the certification requirements before continuing with the certification process.
- **B.** Discussion Topics. The CPM should discuss the certification process in depth, placing emphasis on the expectations the FAA has of the applicant, what the applicant should expect from the FAA, and the sequence of events. Additionally, the CPM should thoroughly prepare to conduct the meeting and discuss the following:
  - 1) The availability of forms on https://www.faa.gov/forms.
    - a) FAA Form 8400-6.
    - b) FAA Form 8310-6.
  - 2) The certification process.
- 3) The certification schedule, including potential impacts to the schedule that consider both FAA and applicant expectations.
  - 4) Guidance available on www.faa.gov.

a) AC 147-3, Certification and Operation of Aviation Maintenance Technician Schools.

- b) AC 00-58, Voluntary Disclosure Reporting Program, and Volume 11, Chapter 1, Section 1.
- c) AC 120-78, Electronic Signatures, Electronic Recordkeeping, and Electronic Manuals.
  - 5) FAA Order 8900.1, available at https://drs.faa.gov/.
  - 6) Web-based Operations Safety System (WebOPSS) and AMTS OpSpecs.
- 7) The SAS External Portal (https://sas.faa.gov/) and the option to complete self-assessment DCTs.
- **8)** Additional publications or documents that the CPM considers appropriate to the certification.
- **C. Briefing of the Applicant.** At the preapplication meeting, brief the applicant and any key personnel attending the meeting in as much detail as necessary to ensure that they understand the certification process.
  - Use Figure 2-111 as a guide to facilitate the discussion and to ensure that you cover all elements of the certification process.
  - Advise the applicant that the SAS External Portal may be used as an option for submission of the application and application attachments.
  - Encourage the applicant to ask questions about any area of the process not clearly understood.
  - Advise the applicant that it is to their benefit to submit required items as soon as they become available, and to notify the FS office immediately of any problems or changes in the proposed operation.
- **D.** Verifying Information on the PASI. The first item for discussion should be verification of the information on the PASI, such as the proposed ratings and location of facilities. When changes to this information occur, the applicant should annotate the changes on the PASI. If changes indicate the need for reassignment of certification responsibilities to another FS office, the current office must notify the affected FS office and coordinate the reassignment of the certification project. In this situation, it may be appropriate to terminate the preapplication meeting to provide for discussions with the appropriate FAA office.

### E. Applicable Regulations.

1) It is essential that the applicant understands the regulations that apply to the proposed operation. Advise the applicant to acquire and become familiar with the 14 CFR parts and ACs pertaining to the proposed operation. Encourage the applicant to complete a Letter of Compliance (refer to AC 147-3, Appendix D, Sample Letter of Compliance (i.e., Statement of Compliance, Compliance Statement).

2) Applicant completion of a Letter of Compliance assists in the certification process by describing how the applicant intends to meet each section of part 147, thus demonstrating the applicant is knowledgeable on the regulatory requirements. The compliance statement should list each applicable part 147 section and provide a brief narrative or a specific reference to a written procedure or other document describing the planned method of compliance with the regulation.

NOTE: Part 147 does not require that a Letter of Compliance be completed as an application requirement; however, an applicant must be knowledgeable on the regulatory requirements applicable to the certificate requested.

- **F. Self-Assessment DCTs.** Discuss with the applicant the option to conduct a self-assessment, using applicable DCTs. If the applicant elects to perform the self-assessment DCTs, advise the applicant that the DCTs should be submitted at the time of formal application to assist the FAA during evaluation in the DA phase.
- **G. SOE.** Discuss with the applicant the certification process and the SOE associated with that process. Figure 2-111 provides an outline of the typical part 147 certification SOE. The sample SOE is a list of items, activities, programs, and/or facility acquisitions that the applicant must accomplish or make ready for FAA inspection before part 147 certification.
- 1) The CPT and the applicant should coordinate development of the SOE to provide clear expectations and timelines for the certification project for both the FAA and the applicant. The SOE should indicate the results of the efforts to consider:
  - The applicant's best estimate of the date that the item, activity, program, equipment, or facility acquisitions will be accomplished or be ready for FAA inspection; and
  - The FAA's schedule and resource considerations for providing a reasonable timeframe for FAA review and acceptance.
- 2) When the SAS External Portal is used, an automated SOE is available in the SAS automation.

### 2-1416 INSTRUCTIONS TO THE APPLICANT ON THE FORMAL APPLICATION.

- **A. Formal Application Submission Process.** During the preapplication meeting, it is essential that the applicant has a clear understanding of the form, content, and documents required for the formal application. Advise the applicant of the following:
  - The formal application package must include the required application and all application attachments. The application should not be submitted piecemeal, unless specifically discussed with and acceptable to the CPM.
  - The formal application package must be submitted to the FS office assigned to the certification project. Encourage the applicant to submit the package as far in advance as possible of the desired starting date of training under part 147.
  - The FAA will review the package to determine if the application and attachments are sufficient to proceed with the certification process. The FAA will provide

- written notification of the application package acceptance or rejection within 15 business-days of application receipt. Rejection of an application will include details of why the application was rejected.
- While the CPT may furnish informal guidance and advice during the preparation of required documents and/or manuals, the production of acceptable documents and manuals is solely the responsibility of the applicant.
- **B. Formal Application and Attachments.** Advise the applicant that the formal application package must include at least the documents described below:
- 1) FAA Form 8310-6. This form ensures the applicant provides the information required by § 147.5 to the FAA for certification.
- 2) Description of the AMTS Facilities. The descriptions will be included in the AMTS OpSpecs, once issued. The description must be detailed enough to demonstrate that the AMTS can provide and maintain facilities that are appropriate to the rating or ratings requested, and the number of students taught. The applicant may provide facility diagrams in addition to the written description, which could be referenced to in the OpSpec. The applicant must provide the facility description for the primary location and each additional training location.

NOTE: Additional training locations requested during initial certification must be listed on the application, i.e., FAA Form 8310-6.

- 3) Description of the Equipment To Be Used by the AMTS. The description will be included in the AMTS OpSpecs, once issued. The description must be detailed enough to demonstrate how the AMTS can provide and maintain equipment appropriate to the rating or ratings requested, and the number of students taught. The applicant must provide an equipment description for the primary location and each additional training location.
- 4) Description of the Materials To Be Used by the AMTS. The description will be included in the AMTS OpSpecs, once issued. The description must be detailed enough to demonstrate how the AMTS can provide and maintain materials appropriate to the rating or ratings requested, and the number of students taught. The applicant must provide a material description for the primary location and each additional training location.
- 5) Description of Curriculum Basis. The school must submit a description of the manner in which the school's curriculum will ensure the student has the knowledge and skills necessary for attaining a mechanic certificate and associated ratings under part 65 subpart D. This description should describe the basis of the curriculum, such as hours, credit hours, competency based training, or some other curriculum basis. The description may also describe course delivery methods to be used by the school, such as in-person or distance learning.

NOTE: Distance learning is considered a curriculum delivery method which enables participatory access to learning when the source of information and the learners are separated physically by time or distance, or both.

6) **Description of Instructor Requirements.** The school must submit a description of the manner in which the school will ensure it provides the necessary qualified instructors to

meet the requirements of § 147.19 (refer to § 147.5(b)(3)). The description should include how the school provides the appropriate number of instructors, how it ensures instructors are appropriately qualified, and how the school ensures the student-to-instructor ratios are maintained in shop classes.

- 7) Curriculum. The applicant must submit the curriculum document(s), showing the curriculum content the AMTS will deliver, to the FAA. The FAA will review the curriculum to ensure it meets the requirements of § 147.17(a)(1) prior to certification of the AMTS. Emphasize that the curriculum must be submitted for review before the PA can be accomplished. This is required because determining appropriate AMTS facilities, equipment, materials, and instructors could vary based on the specific curriculum requirements developed by the AMTS.
- 8) Evidence of Accreditation (if applicable). If the AMTS meets the requirements of § 147.23(a) through accreditation within the meaning of 20 U.S.C. § 1001(a)(5), then it must be able to demonstrate to the FAA how it meets the accreditation requirement, to include evidence of the school's accrediting organization and the school's accreditation status.
- 9) AMTS QC System (if applicable). If the AMTS intends to meet the requirements of § 147.23(a) through a QC system that meets the requirements specified in § 147.23(b), then the school must submit its QC system to the FAA for review and approval.
- 10) Exemption Approvals (if applicable). Exemptions held by an AMTS are listed in the AMTS OpSpecs. If an AMTS holds an exemption to a 14 CFR requirement, it should include a copy of the exemption grant in the formal application package. If the AMTS is in the process of requesting an exemption, it should include a copy of the exemption request that was sent to the FAA.
- 11) Other Attachments (if applicable). Any other application attachments the AMTS would like to submit to demonstrate compliance with part 147.
- 12) Letter of Intent. A letter stating the applicant's intent to continue with the certification process and indicating when the facilities and proposed training operations will be ready for a formal inspection by the FAA.
- 13) ED DCTs (if applicable). If the applicant elects to perform the applicable ED DCTs, then these completed DCTs should be submitted to the FAA as a part of the formal application to allow for evaluation during the DA phase.
- **2-1417 CONCLUSION OF THE PREAPPLICATION MEETING.** The CPT must ensure that the applicant understands the requirements of the formal application.
- **2-1418 TERMINATION OF THE PREAPPLICATION PROCESS.** Termination may be initiated by either the applicant or the FAA.
- **A. Documenting the Termination on the PASI.** If, at any time during the preapplication phase, the certification process is formally terminated, by either the FAA or the applicant, this action should be noted on the PASI, and the PASI retained in the certification file.

**B.** Notify Applicant. The certificating FS office must notify the applicant in writing that the certification is terminated and that the applicant should submit a new PASI in order to initiate the certification process again.

**C. SAS Automation.** To terminate a certification project in the SAS automation, follow the procedures in Volume 10, Chapter 12, Section 1.

NOTE: If a certification (precertification) number has been requested, SAS automation will notify the Aviation Data Systems Branch (AFS-620) that the project is terminated. This allows the precertification number to be put back into the centralized certificate number data file.

**D.** Inactivity. The applicant must maintain an active project. The responsible Flight Standards office must evaluate an inactive period that exceeds 90 calendar-days. Inactivity of greater than 90 calendar-days may be cause to terminate the certification process when it is clear that continuing the process will not result in approval or acceptance (i.e., multiple failures of the applicant's submissions).

### 2-1419 FAA DATABASE INTERFACES.

- **A. Precertification Number.** If the applicant will proceed with certification, the CPM must request a precertification number. This process is completed inside the SAS automation through the "Certification Projects" section. The following information will be needed to request the precertification number:
  - Full official name of company.
  - Address of primary training location of the school.
  - Name of proposed management personnel.
  - Type of certificate and 14 CFR part.
  - Proposed start-up date.
  - Applicant's requested designators.
  - Any current or previous designators of certificates held by the applicant.
  - Designator of FAA office where the certification project is located (e.g., WP01).

NOTE: The SRG contains a Part 147 ICC to assist navigation through SAS during the certification process. Access the SRG and ICC here: https://avssp.faa.gov/avs/afs900/CIPO/PRF/SAS%20Resource%20Guide/Publish ed%20SRG/story.html.

**B.** SAS Vitals. If the applicant will proceed with certification, the CPM should populate and/or review the applicant configuration data in SAS. The CPM will use the Configuration Data link (within the Certification Project) to view, edit, and update the applicant's proposed OpSpecs and Vitals. Accurate configuration data is needed during the certification process to generate DCTs applicable to the applicant's scope of operations.

Figure 2-110. Certification Process Flowchart

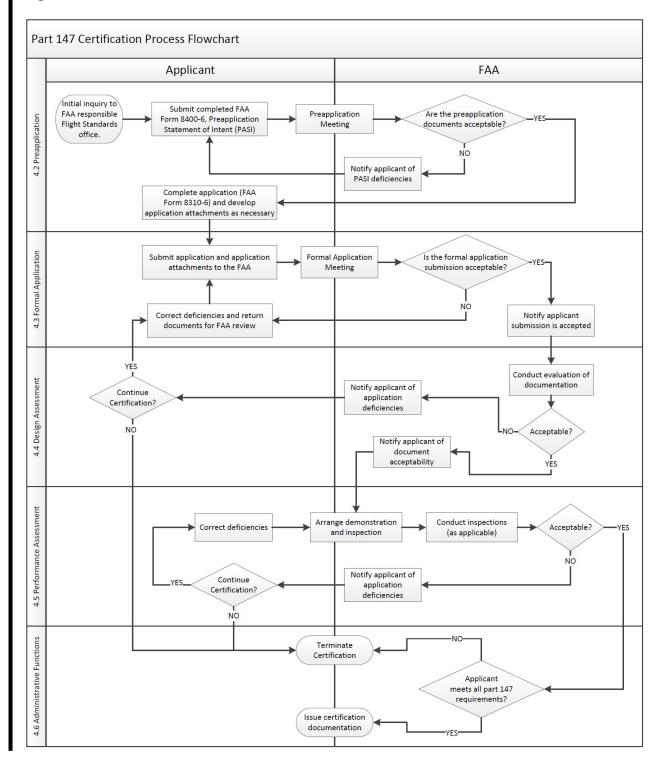


Figure 2-111. Sample Schedule of Events for Part 147 AMTS

Phase	Event	Proposed Date MM/DD/YYYY
1. Preapplication	Initial Contact	
1. Preapplication	Submit PASI, FAA Form 8400-6	
1. Preapplication	Preapplication Meeting	
2. Formal Application	Conduct Formal Application Meeting	
2. Formal Application	Submit Formal Application and Attachments	
2a. Documents	Application, FAA Form 8310-6	
2a. Documents	Descriptions Required by § 147.5	
2a. Documents	Curriculum	
2a. Documents	Evidence of Accreditation, if applicable	
2a. Documents	Quality Control (QC) System, if applicable	
2a. Documents	Evidence of Exemption Grant/Request, if any	
2a. Documents	Applicant-Completed DCTs, if applicable	
2. Formal Application	Review Formal Application Documents	
2. Formal Application	Accept or Deny Formal Application	
3. Design Assessment (DA)	Review Documents	
3. Design Assessment (DA)	Document Deficiencies, if any. Notify Applicant.	
3. Design Assessment (DA)	Approve QC System, if applicable	
4. Performance Assessment (PA)	Evaluate Facilities and Proposed Training Operations	
4a. Inspection Items	Facilities	
4a. Inspection Items	Equipment	
4a. Inspection Items	Materials	
4a. Inspection Items	Instructor Qualifications	
4a. Inspection Items	Evidence of Accreditation, if applicable	
4. Performance Assessment (PA)	Observe use of FAA-Approved QC System, if applicable	
4. Performance Assessment (PA)	Observe Exemption Conditions and Limitations, if applicable	
4. Performance Assessment (PA)	Document Deficiencies, if any. Notify Applicant.	
5. Certification	Issue Part 147 Air Agency Certificate	
5. Certification	Issue Part 147 OpSpecs, as appropriate	
5. Certification	Prepare FAA Certification File	

**RESERVED.** Paragraphs 2-1420 through 2-1445.

# Appendix K. Order 8900.1, Volume 2, Chapter 12, Section 2, Phase 2—Formal Application

# VOLUME 6 AIR OPERATOR AND AIR AGENCY CERTIFICATION AND APPLICATION PROCESS

# CHAPTER 12 CERTIFICATION OF A PART 147 AVIATION MAINTENANCE TECHNICIAN SCHOOL

### **Section 2 Phase 2—Formal Application**

#### **Source Basis:**

- Part 65, Certification: Airmen Other Than Flight Crewmembers.
- Part 147, Aviation Maintenance Technician Schools.
- Title 49 U.S.C. § 44701, General Requirements.
- Title 49 U.S.C. § 44702, Issuance of Certificates.
- Title 49 U.S.C. § 44707, Examining and Rating Air Agencies.
- Title 49 U.S.C. § 44709, Amendments, Modifications, Suspensions, and Revocations of Certificates.
- Public Law 116-260, Consolidated Appropriations Act, 2021; Division V, Title I, Aircraft Certification, Safety, and Accountability; Section 135, Promoting Aviation Regulations for Technical Training.

**6-1446 RECEIPT OF FORMAL APPLICATION.** After receiving the formal application package from the applicant, the Federal Aviation Administration (FAA) will review the submission and notify the applicant of its acceptability within 15 business-days.

**6-1447 PURPOSE OF INITIAL REVIEW OF THE APPLICATION PACKAGE.** Upon receipt of a formal application, the Certification Project Team (CPT) must initially review it and make a determination of its acceptability within 15 business-days. The certification project manager (CPM) will provide written notification of acceptance or rejection of the formal application. The CPM should upload the written notification to the "Initial Certification Documents" folder created by the CPM in the Safety Assurance System (SAS) database.

#### A. Complete Submission.

- 1) Ensure all the items required for formal application have been submitted, to include:
  - FAA Form 8310-6, Aviation Maintenance Technician School Certificate and Ratings Application; and
  - The attachments described in Volume 2, Chapter 12, Section 1, Subparagraph 2-1416B, Formal Application and Attachments.
- 2) If any of the items required for the formal application are missing or are incomplete, the entire formal application must be rejected. It should be returned to the applicant with a letter stating the reasons for its rejection following completion of the initial review. See

Figure 2-112, Sample Rejection of Formal Application—Missing or Incomplete Documents, for an example of a rejection letter.

- **B.** Quality Submission. The initial review also permits a determination of whether the submitted material represents a feasible proposal and is of sufficient quality to allow for a productive formal application meeting and to proceed with the certification process. The following paragraphs are provided as direction and guidance for this initial review.
- **6-1448 CONDUCTING THE INITIAL REVIEW.** The CPT will review the following formal application submission items, as applicable:
- **A. Application Forms.** Review the submitted FAA Form 8310-6. Ensure the document is not missing required information. Verify the scope of certification being requested.
- **B.** Aviation Maintenance Technician School (AMTS) Application Attachments. Conduct a cursory review of the curriculum and written procedures. Verify that all required attachments have been submitted and that the overall content and scope of the material indicates that the applicant understands the certification process and the applicable regulations. An indepth review and evaluation, and the acceptance, approval, or rejection of the documents, will be accomplished in the Design Assessment (DA) phase.
- C. Applicant Completed (Self-Assessment) Data Collection Tools (DCT). If the applicant has opted to submit self-assessment DCTs, ensure that all applicable DCTs have been completed, and review each DCT for obvious omissions or significant discrepancies related to the applicant's proposed operations.
- **D. Exemption Approvals (if applicable).** Review any exemption grants or requests made by the applicant under Title 14 of the Code of Federal Regulations (14 CFR) part 11 to determine the impact on the certification requirements.

#### 6-1449 DETERMINATION OF INITIAL FORMAL APPLICATION ACCEPTABILITY.

- A. Acceptance of Formal Application Prior to Formal Application Meeting. If appropriate, the CPM may accept the formal application prior to conducting a formal application meeting. The decision must be tempered with good judgment and a reasonably flexible attitude. Results of informal meetings, reviews, and observations of the applicant's capabilities during the preapplication phase should supplement the decision-making process. Other factors, such as working relationships and understanding established during the preapplication phase, should also be considered. However, the decision must be based primarily on the results of the initial review of the formal application and attachments. The decision to proceed is predicated on receipt of all required documents in the formal application and an initial acceptance of the contents.
- **B.** Scheduling the Formal Application Meeting. The CPM must contact the applicant and schedule the formal application meeting. The applicant must be informed that attendance of key management and/or operations personnel is required.
- C. During the Formal Application Meeting. Normally, if an applicant has been thoroughly briefed and has acquired a good understanding of the requirements during the

preapplication phase, the formal application should be of sufficient quality that any discrepancies, omissions, and/or open questions can be resolved during the formal application meeting. For example, if the chronology of the Schedule of Events (SOE) needs to be adjusted for logic of sequence, timeliness, or to accommodate inspector resource requirements, such adjustments can normally be accomplished during this meeting. Often minor, and occasionally some significant, discrepancies or omissions in the curriculum or written procedures can be resolved during the formal application meeting.

#### 6-1450 THE FORMAL APPLICATION MEETING.

- **A. Purpose.** The purpose of this meeting is to resolve any questions on the part of either party and to establish a common resolve for future proceedings of the application process. The CPM is responsible for conducting the formal application meeting. Ideally, the CPM should open the meeting with all members of the CPT, the applicant, and the applicant's key management and/or operations personnel being present.
- **B.** Topics. The CPM should encourage the applicant to present any questions they may have concerning the certification process. The CPM and CPT should provide candid answers and discuss freely all aspects of the certification process. The detailed SOE should be discussed, and any needed revisions should be negotiated prior to proceeding. Before concluding the formal application meeting, the CPM must make certain that the applicant clearly understands the following:
- 1) Notification of acceptance of the formal application package does not in any way constitute acceptance or approval of the separate attachments. The attachments will be reviewed further, and additional corrective actions may be required, following which the applicant will be expected to take appropriate corrective action.
- 2) If the applicant is unable to meet the dates and timelines specified in the SOE, the FAA may still need equivalent amounts of time, as agreed upon during the meeting, to make the necessary reviews and inspections. Consequently, the proposed start-up date could be delayed.

### 6-1451 DETERMINATION OF FORMAL APPLICATION ACCEPTABILITY.

- **A. Notification of Acceptance or Rejection.** The CPM will provide either a letter of acceptance or a letter of rejection to the applicant within 15 business-days of receiving the formal application package. The CPM will inform the applicant in writing or via the SAS External Portal. See Figure 2-113, Sample Acceptance of Formal Application, for an example of an acceptance letter.
- **B.** Inactivity. The applicant must maintain an active project. The responsible Flight Standards office must evaluate an inactive period that exceeds 90 calendar-days. Inactivity of greater than 90 calendar-days may be cause to terminate the certification process when it is clear that continuing the process will not result in approval or acceptance (i.e., multiple failures of the applicant's submissions).
- **6-1452 SAS CONFIGURATION DATA.** If not already accomplished, the CPM should populate configuration data, using the configuration data link within the applicant's certification

project in SAS. The CPM will use this link to view, edit, and update the applicant's proposed operations specifications (OpSpecs) and Vitals. Accurate configuration data is needed to generate DCTs that are applicable to the applicant's scope of operations.

Figure 2-112. Sample Rejection of Formal Application—Missing or Incomplete Documents

[FAA Letterhead]

[Date]

Mr. John J. Jones Director, ABC School 601 Sky Harbor Blvd. Little Rock, AR 72202

Dear Mr. Jones:

This office has reviewed your formal application for an Air Agency Certificate, dated \_\_\_\_\_. We find it necessary to return your application because of deficiencies in the following area:

The curriculum required by Title 14 of the Code of Federal Regulations (14 CFR) part 147, § 147.17 was not included in your formal application.

We are returning your application package with all attachments. It will be necessary to submit a new formal application when you have corrected all discrepancies noted above and any other omissions that exist. Please contact us if we can be of any further assistance in clarifying the minimum requirements for your formal application.

Sincerely,

William Board Certification Project Manager

### Figure 2-113. Sample Acceptance of Formal Application

[FAA Letterhead]

[Date]

Mr. John J. Jones Director, ABC School 601 Sky Harbor Blvd. Little Rock, AR 72202

Dear Mr. Jones:

Your formal application has been reviewed and found acceptable. Acceptance of the application does not convey specific approval of the attachments. Specific approvals or acceptance of the attachments will be appropriately conveyed after a detailed evaluation by the Federal Aviation Administration (FAA) Certification Project Team (CPT).

We look forward to working with you and your personnel in the continuation of the certification process.

Sincerely,

William Board Certification Project Manager

**RESERVED.** Paragraphs 2-1453 through 2-1475.

# Appendix L. Order 8900.1, Volume 2, Chapter 12, Section 3, Phase 3—Design Assessment

# VOLUME 2 AIR OPERATOR AND AIR AGENCY CERTIFICATION AND APPLICATION PROCESS

# CHAPTER 12 CERTIFICATION OF A PART 147 AVIATION MAINTENANCE TECHNICIAN SCHOOL

### Section 3 Phase 3—Design Assessment

#### **Source Basis:**

- Part 65, Certification: Airmen Other Than Flight Crewmembers.
- Part 147, Aviation Maintenance Technician Schools.
- Title 49 U.S.C. § 44701, General Requirements.
- Title 49 U.S.C. § 44702, Issuance of Certificates.
- Title 49 U.S.C. § 44707, Examining and Rating Air Agencies.
- Title 49 U.S.C. § 44709, Amendments, Modifications, Suspensions, and Revocations of Certificates.
- Public Law 116-260, Consolidated Appropriations Act, 2021; Division V, Title I, Aircraft Certification, Safety, and Accountability; Section 135, Promoting Aviation Regulations for Technical Training.
- **2-1476 GENERAL.** The Design Assessment (DA), or document compliance, phase is the part of the certification process when the applicant's curriculum and other documents are reviewed in depth to ensure compliance with applicable regulations and conformity to safe operating practices. These documents may be in paper or electronic formats.
- **A. Related Sections.** Reference the following sections for conducting DA of the applicant's curriculum and procedures:
  - Volume 6, Chapter 10, Section 4, Inspect AMTS Facilities. This section discusses the required "descriptions" of the AMTS facilities, equipment, and materials.
  - Volume 6, Chapter 10, Section 5, Evaluate an AMTS Initial Curriculum or Curriculum Revision.
  - Volume 6, Chapter 10, Section 6, Evaluate/Approve an AMTS Quality Control System/Procedures.
- **B.** Organization and Resource Management. An important responsibility of the certification project manager (CPM) is to organize the Certification Project Team's (CPT) efforts to promptly review the applicant's curriculum and other documents. The DA phase is an intensive process and will require appropriate resources to accomplish the necessary task. The responsible Flight Standards office CPT may be augmented by other Federal Aviation Administration (FAA) resources.

1) The previously agreed-upon Schedule of Events (SOE) can assist in determining the priority of items to be reviewed and any additional inspector support or other FAA resources that will be needed beyond the composition of the basic CPT.

- 2) The CPM will provide input to the Frontline Managers (FLM) or Certification Frontline Managers (CFLM) to help them identify team resources to complete each Element Design Data Collection Tool (ED DCT).
- 3) The FLMs will determine resource availability and assign team coordinators (TC) and team members to support the plan. The FLM will concur with the Comprehensive Assessment Plan (CAP).
- **C. Plan for Review.** The plan for review should ensure that each of the documents submitted by the applicant will be reviewed in accordance with procedures and criteria outlined in the other applicable volumes of this order.
- 1) Ensure that the Safety Assurance System (SAS) CAP has been developed to complete all elements and record results as appropriate.

NOTE: Generate the CAP as instructed in the Initial Certification Checklist (ICC). If the applicant is using the SAS External Portal, ensure the applicant-submitted DCTs have been approved by the CPM before the CAP is generated.

2) Principal inspector (PI) instructions for each DA will include "Initial Cert." in the "Local/Divisional/National" field, the name of the aviation safety inspector (ASI) assigned, and the proposed completion date.

#### 2-1477 DATA COLLECTION.

- **A. Review of the Applicant's Submission.** During this phase, members of the CPT evaluate the applicant's curriculum and any other required documents. Review of the applicant's submissions should be accomplished by simultaneous reference to Title 14 of the Code of Federal Regulations (14 CFR) and the appropriate manual or document. The following are examples of typical submissions from applicants during the DA phase:
  - FAA Form 8310-6, Aviation Maintenance Technician School Certificate and Ratings Application.
  - Descriptions required by 14 CFR part 147, § 147.5.
  - Curriculum required by § 147.17.
  - Accreditation status, if applicable (§ 147.23(a)(1)).
  - Quality control (QC) system, if applicable (§ 147.23(a)(2)).
- **B.** Self-Assessment DCTs. The CPT will verify the accuracy of the applicant's optional, self-audited DCTs, if submitted. The information from these DCTs should be used to assist the FAA in its review and in recording of the submission review results.

**C. FAA Data Collection.** The FAA must conduct its own review of the applicant's submission and should not rely solely on the applicant's self-assessment to determine compliance with the regulatory requirements.

- **2-1478 DATA REPORTING.** Each team member must enter review responses into the SAS. For a Custom DCT (C DCT), enter "Initial Cert." in the "Local/Divisional/National" field on the "Common Data" screen for each DCT.
- **2-1479 DATA REVIEW.** The data reviewer will ensure that data meets the data quality guidelines (DQG).
- **2-1480 ANALYSIS AND ASSESSMENT.** Along with the identified members of the CPT, the CPM conducts an Element Design Assessment (EDA) meeting to analyze all DCTs. The CPM will make a bottom-line assessment and document it in the Analysis, Assessment, and Action (AAA) module.

### 2-1481 ACTION.

- **A.** Unacceptable Submission. If the current submission is not of sufficient quality and/or when additional data is necessary, the CPM must notify the applicant with a written explanation of the identified concerns.
- 1) Written Notification. The written notification must advise the applicant that he or she must return the next revision as an entire submission. Instruct the applicant to label all documents in the revised submission in sequential order (e.g., Revision B, Revision C). Applicants should use their manual/document revision process when revising their curriculum or other documents (e.g., change bars).
- 2) Applicant Meeting. If a subsequent submission contains minimal concerns or remaining discrepancies, schedule and conduct a meeting with the applicant to discuss and correct the remaining discrepancies.
- **B. FAA Approval.** When documents, procedures, or programs require specific FAA approval, the CPM may approve the item during this phase when found acceptable. Approval should be made in accordance with the approval procedures in the applicable guidance for review of the document, procedure, or program. The CPM may also choose to delay approval of the document, procedure, or program until Performance Assessment (PA) verifies the intended results can be met.
- **C. SAS Automation.** Follow the Module 5 business process to determine the appropriate course of action for each element.
- **2-1482 CERTIFICATION ACTIVITY.** The applicant must maintain an active project. The responsible Flight Standards office must evaluate an inactive period that exceeds 90 calendar-days. Inactivity of greater than 90 calendar-days may be cause to terminate the certification process when it is clear that continuing the process will not result in approval or acceptance (i.e., multiple failures of the applicant's submissions).

RESERVED. Paragraphs 2-1483 through 2-1505.

# Appendix M. Order 8900.1, Volume 2, Chapter 12, Section 4, Phase 4—Performance Assessment

# VOLUME 2 AIR OPERATOR AND AIR AGENCY CERTIFICATION AND APPLICATION PROCESS

# CHAPTER 12 CERTIFICATION OF A PART 147 AVIATION MAINTENANCE TECHNICIAN SCHOOL

#### **Section 4 Phase 4—Performance Assessment**

#### **Source Basis:**

- Part 65, Certification: Airmen Other Than Flight Crewmembers.
- Part 147, Aviation Maintenance Technician Schools.
- Title 49 U.S.C. § 44701, General Requirements.
- Title 49 U.S.C. § 44702, Issuance of Certificates.
- Title 49 U.S.C. § 44707, Examining and Rating Air Agencies.
- Title 49 U.S.C. § 44709, Amendments, Modifications, Suspensions, and Revocations of Certificates.
- Public Law 116-260, Consolidated Appropriations Act, 2021; Division V, Title I, Aircraft Certification, Safety, and Accountability; Section 135, Promoting Aviation Regulations for Technical Training.
- **2-1506 GENERAL.** In the Performance Assessment (PA) phase, the Certification Project Team (CPT) determines whether the applicant's proposed procedures are effective, if the descriptions provided by the applicants of their facilities, equipment, and materials are accurate and support the applicant's curriculum. In this phase, the emphasis is on compliance with regulations, the applicant's procedures, and safe performance practices.
- **A. Related Sections.** Refer to the following sections for conducting PA of the applicant's organizational management, facility, and training operations:
  - Volume 6, Chapter 10, Section 2, Inspect AMTS Organizational Management.
  - Volume 6, Chapter 10, Section 3, Inspect AMTS Training Operations.
  - Volume 6, Chapter 10, Section 4, Inspect AMTS Facilities.
  - Volume 6, Chapter 10, Section 7, Inspect an AMTS Quality Control System.
- **B.** Organization and Resource Management. The certification project manager (CPM) will arrange the performance evaluations with the applicant.
- 1) The previously agreed-upon Schedule of Events (SOE) can assist in determining the priority of items to be reviewed and any additional inspector support or other Federal Aviation Administration (FAA) resources that will be needed beyond the composition of the basic CPT.

2) The CPM will provide input to the Frontline Managers (FLM) or Certification Frontline Managers (CFLM) to help them identify team resources to complete each applicable Data Collection Tool (DCT).

- 3) The FLM or CFLM will determine resource availability and assign team members to support the plan.
- **C. Plan for Review.** The plan for review should ensure that each of the required events listed below, to be performed by the applicant, will be evaluated utilizing Element Performance DCTs (EP DCT) or Custom DCTs (C DCT).
- 1) Ensure that the Comprehensive Assessment Plan (CAP) has been developed to complete all elements. This should have been previously completed during the Design Assessment (DA) phase.
- **2)** Principal inspector (PI) instructions for each DCT will include "Initial Cert." in the "Local/Divisional/National" field.

#### 2-1507 DATA COLLECTION.

- **A. Performance Observations.** Throughout the PA phase, members of the certificating team observe and monitor many types of applicant activities. The manner in which the applicant is to be evaluated while conducting different segments of this phase is outlined in the applicable sections of this order (see paragraph 2-1506A).
- **B.** Activities or Events. The following list of activities or events is representative of events that occur in the PA phase. Although the below list is not all inclusive, the CPT or CPM, as appropriate, should include the following areas during PA:
- 1) Verify the descriptions of facilities, equipment, and materials provided pursuant to Title 14 of the Code of Federal Regulations (14 CFR) part 147, § 147.5 represent those actually used by the Aviation Maintenance Technician School (AMTS). Each additional training location requested during certification must be evaluated.
- 2) Verify the AMTS as a whole is providing the facilities, equipment, and materials that are appropriate to the rating or ratings held by the school and the number of students taught.
- 3) Verify at each training location of the AMTS that the facilities, equipment, and materials used at each location are appropriate to the curriculum or portion of the curriculum, and the number of students being taught, at that location.
- 4) Verify instructor qualifications. The school must be able to demonstrate to the FAA how its instructors meet the requirements of § 147.19. This would include compliance with instructor qualifications and the student-to-instructor ratio for shop classes.
- 5) Verify the school's accreditation status, if applicable. If the AMTS is meeting the requirements of § 147.23(a)(1), then it must be able to demonstrate to the FAA how it meets the

accreditation requirement, to include evidence of the school's accrediting organization and the school's accreditation status.

- 6) For schools meeting the quality control (QC) system requirements of § 147.23(a)(2) by using an FAA-approved QC system, verify that the school is using its QC system procedures and that the procedures are producing the desired outcomes. For example, verify the school's procedures for:
  - Recordkeeping.
  - Assessment.
  - Issuing credit.
  - Issuing of final course grades.
  - Attendance.
  - Ensuring sufficient number of instructors.
  - Granting of graduation documentation.
  - Corrective action for addressing deficiencies.
- 7) Ensure compliance with conditions and limitations associated with any FAA exemption issued to be used by the school.
- **2-1508 DATA REPORTING.** Each team member will then enter their responses into the applicable Safety Assurance System (SAS) DCTs. Enter "Initial Cert." in the "Local/Divisional/National" field on the "Common Data" screen for each DCT.
- **2-1509 DATA REVIEW.** The data reviewer will ensure that data meets the data quality guidelines (DQG). For EP DCTs, the data reviewer is the CPM.
- **2-1510 ANALYSIS AND ASSESSMENT.** Along with the identified members of the CPT, the CPM conducts an Element Performance Assessment (EPA) meeting to analyze the data collected while completing the assigned DCTs. The CPM will make a bottom-line assessment and document it in the Analysis, Assessment, and Action (AAA) module.

#### 2-1511 ACTION.

- **A.** Unacceptable Performance. If the performance of the applicant does not meet the regulatory requirements, follow the applicant's own written procedures, or is otherwise unsafe, the CPM must notify the applicant with a written explanation of the identified concerns.
- 1) Written Notification. The written notification must advise the applicant that additional performance observation will be required prior to issuance of a certificate.
- 2) Applicant Meeting. The CPM may elect to have a meeting with the applicant to discuss performance concerns. Continued failures to perform as appropriate may require that the certification be terminated.
- **B. SAS Automation.** Follow the Module 5 business process to determine the appropriate course of action for each element.

**2-1512 CERTIFICATION ACTIVITY.** The applicant must maintain an active project. The responsible Flight Standards office must evaluate an inactive period that exceeds 90 calendar-days. Inactivity of greater than 90 calendar-days may be cause to terminate the certification process when it is clear that continuing the process will not result in approval or acceptance (i.e., multiple failures of the applicant's submissions).

RESERVED. Paragraphs 2-1513 through 2-1530.

# Appendix N. Order 8900.1, Volume 2, Chapter 12, Section 5, Phase 5—Certification Administrative Functions

# VOLUME 2 AIR OPERATOR AND AIR AGENCY CERTIFICATION AND APPLICATION PROCESS

# CHAPTER 12 CERTIFICATION OF A PART 147 AVIATION MAINTENANCE TECHNICIAN SCHOOL

#### **Section 5 Phase 5—Certification Administrative Functions**

#### **Source Basis:**

- Part 65, Certification: Airmen Other Than Flight Crewmembers.
- Part 147, Aviation Maintenance Technician Schools.
- Title 49 U.S.C. § 44701, General Requirements.
- Title 49 U.S.C. § 44702, Issuance of Certificates.
- Title 49 U.S.C. § 44707, Examining and Rating Air Agencies.
- Title 49 U.S.C. § 44709, Amendments, Modifications, Suspensions, and Revocations of Certificates.
- Public Law 116-260, Consolidated Appropriations Act, 2021; Division V, Title I, Aircraft Certification, Safety, and Accountability; Section 135, Promoting Aviation Regulations for Technical Training.
- **2-1531 GENERAL.** In this phase, the Federal Aviation Administration (FAA) will issue the certificate and the applicable operations specifications (OpSpecs) to the applicant once it has been determined all regulatory requirements have been met and unsatisfactory items have been corrected. This action completes the certification process. The FAA will not, under any circumstances, certificate an applicant until the certification project manager (CPM) determines that the applicant is fully capable of fulfilling his or her responsibilities as charged by Title 49 of the United States Code (49 U.S.C.) and that the applicant will comply with Title 14 of the Code of Federal Regulations (14 CFR) in an appropriate manner.
- **2-1532 COMPLETE FAA FORM 8310-6.** When the applicant has met all regulatory requirements, the principal inspector (PI) will complete Section F, FAA Certification Action, of FAA Form 8310-6, Aviation Maintenance Technician School Certificate and Ratings Application, to show:
  - Whether certification is "Approved" or "Disapproved."
  - The certificate number assigned to the Aviation Maintenance Technician School (AMTS).
  - The date the FAA Air Agency Certificate is issued.
  - The ratings issued to the AMTS.
  - The designator of the Flight Standards (FS) office issuing the certificate.
  - The signature of the FAA inspector approving the FAA certification action, and the date signed.

#### 2-1533 PREPARE THE AMTS OPSPECS.

**A. Preparation.** Prepare the OpSpecs in accordance with the procedures described in Volume 3, Chapter 18, Section 11. Any additional training locations requested during initial certification, and listed on FAA Form 8310-6, become authorized when listed on OpSpec A008 and the paragraph is signed and issued.

- **B.** Review and Signatures. The applicant and the CPM will review and sign the appropriate paragraphs in the Web-based Operations Safety System (WebOPSS). The CPM should coordinate the OpSpec review and issuance with the PIs who will have oversight of the certificate.
- 1) If the applicant cannot digitally sign the OpSpecs within the WebOPSS database, the OpSpecs can be printed and signed.
- **2)** Print or copy the signed OpSpecs to retain in the certification file. See paragraph 2-1537.

NOTE: See Volume 3, Chapter 18, Section 2 for more information on digital signatures and delegation procedures.

**2-1534 PREPARE AIR AGENCY CERTIFICATE.** FAA Form 8000-4, Air Agency Certificate, will include the following information when issued to an AMTS. FAA employees may sign in to the eForms service to download a fillable copy of the form at https://eforms.faa.gov/#/landing. See Figure 2-114, Sample FAA Form 8000-4, Air Agency Certificate, for an AMTS, for an example of a completed FAA Form 8000-4 for an AMTS.

NOTE: See Volume 2, Chapter 1, Section 4 for additional information regarding preparation of FAA Operating Certificates.

**A.** Certification Number. After "Number," insert the certificate number assigned to the AMTS. Ensure the final certification number is entered, not a precertification number. All letters in the certificate number should be capitalized.

NOTE: For additional information on FAA certificate number construction, see Volume 2, Chapter 1, Section 3.

- **B.** Applicant's Name. Under "This certificate is issued to," insert the official name of the school. This must be the same as shown on the application form. Place any additional business names on the certificate below the legal name.
  - 1) The acronym "DBA" (doing business as) precedes the additional business name.
- 2) The certificate holder (CH) must provide evidence, as applicable, of the appropriate state or local government's authorization of all business names prior to placing them on the certificate.

3) The responsible Flight Standards office should not restrict the number of DBAs used by a CH. Should there be insufficient space on the certificate to accommodate all DBAs, the legal name and address should appear on the certificate with a notation to see an enclosed letter for a list of DBAs.

- **C. Applicant's Address.** Under "whose business address is," insert the address of the applicant's primary training location. This must be the same as shown on the application form. A post office box address is not acceptable unless it also reflects the physical location of the school's primary training location.
- **D.** Approved AMTS. After "... and is empowered to operate an approved," insert the words "Aviation Maintenance Technician School."
- **E. Ratings.** Under "with the following ratings," insert the ratings issued. List the ratings authorized by the FAA and as shown on the completed application. One or more ratings may be listed as appropriate. Possible ratings include:
  - Airframe.
  - Powerplant.
  - Airframe and Powerplant.

NOTE: When ratings are added to the certificate at a later date, show the date of each issuance in parentheses following the added rating.

- **F.** Certificate Duration. After "This certificate, unless cancelled, suspended, or revoked, shall continue in effect," insert the word "indefinitely."
- **G. Issuance Date.** Under "Date issued," insert the issuance date of the certificate, in "Month DD, YYYY" format. This will be the date of original certification (i.e., the date this specific certificate number was issued). Future changes or amendments to the certificate will not affect this date unless a new certificate number is issued.
- **H. Signatures.** Under "By direction of the Administrator," the Safety Assurance office manager signs the certificate. Below the signature, type the name and title of the person signing the certificate, and the office identifier/routing code (e.g., AFS-DPA-FSDO-03 for DuPage Flight Standards Office).
- **2-1535 SAFETY ASSURANCE SYSTEM (SAS) AUTOMATION.** Follow Volume 10 for the completion of the certification project in the SAS automation.
- **A. Review Configuration Data.** Review the SAS Vitals information to ensure information is current and complete. Review the "OPSS Authorizing Documents" tab to verify all appropriate OpSpecs have been issued in WebOPSS.
- **B.** Assign PIs. Prior to making the certificate active, the CPM must ensure that the PIs, as determined by management, have been assigned to the certificate.
- C. Request Activation of Certificate Number. The CPM must request activation of the certificate number via SAS automation. The CPM requests activation of the certification from

the "Certification Disposition" tab in the certification project by selecting the "Request Activation" button.

NOTE: The SAS Resource Guide (SRG) contains a Part 147 Initial Certification Checklist (ICC) to assist navigation through SAS during the certification process. Access the SRG and ICC here: https://avssp.faa.gov/avs/afs900/CIPO/PRF/SAS% 20Resource%20Guide/Published%20SRG/story.html.

**2-1536 ISSUANCE OF OPSPECS AND AIR AGENCY CERTIFICATE.** After determining that the applicant has met all regulatory requirements, provide the applicant with its Air Agency Certificate and OpSpecs.

#### 2-1537 TASK OUTCOMES.

- **A.** Certification File. Once the applicant has been certificated, the CPM is responsible for assembling a certification file, which is the initial contents of the FAA office file for the CH. The certification file should consist of the following documents:
  - Preapplication Statement of Intent (PASI);
  - Schedule of Events (SOE) job aid for 14 CFR part 147 AMTS, when the SAS SOE is not used via the SAS External Portal;
  - Completed FAA Form 8310-6;
  - A copy of the issued OpSpecs;
  - A copy of the issued Air Agency Certificate; and
  - Applicant/FAA correspondence during the certification process.
- **B.** Certification Terminated. If a certification project is terminated for any reason, the certification file should include any of the documents listed in subparagraph A above that have been submitted to the FAA at the time of termination. Any time a certification project is terminated, the responsible Flight Standards office that terminated the project should provide the applicant with a letter outlining the specific reasons for the termination (if FAA-initiated), or acknowledging the applicants request to terminate the project (if applicant-initiated).

NOTE: The responsible Flight Standards office's Office File Plan (OFP) must be followed for determining file retention requirements for CHs and applicants.

#### 2-1538 FUTURE ACTIVITIES.

- **A. Risk-Based Surveillance.** Follow Volume 10 SAS guidance to plan future risk-based surveillance in SAS.
- **B.** Certificate Holder Assessment Tool (CHAT). Review and update the CHAT when changes to the CH's operations occur, or when information becomes available that could change the CH's ability to manage risk.

NOTE: The CHAT includes a "new entrant" factor that may be checked to indicate possible risk related to the potential inexperience of the CH and a lack of assessment history.

Figure 2-114. Sample FAA Form 8000-4, Air Agency Certificate, for an AMTS

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

# Air Agency Certificate

Number 1ABT123C

This certificate is issued to

ABC School

whose business address is 601 Sky Harbor Blvd. Little Rock, AR 72202

upon finding that its organization complies in all respects with the requirements of the Federal Aviation Regulations relating to the establishment of an Air Agency, and is empowered to operate an approved Aviation Maintenance Technician

School

with the following ratings:

Airframe
Powerplant
Airframe and Powerplant (April 22, 2021)

This certificate, unless canceled, suspended, or revoked, shall continue in effect indefinitely.

By direction of the Administrator

Date issued:

May 19, 2020

Charles E. Taylor, Office Manager AFS-LIT-FSDO-11

This Certificate is not Transferable, and any major change in the basic facilities, or in the location thereof, shall be immediately reported to the appropriate regional office of the federal aviation administration

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both

FAA Form 8000-4 (1-87)

SUPERSEDES FAA FORM 380.

Electronic Forms (PDF)

**RESERVED.** Paragraphs 2-1539 through 2-1554.

Appendix O. Order 8900.1, Volume 3, Chapter 18, Section 11, Parts A and B Operations Specifications for Part 147 Aviation Maintenance Technician Schools

#### **VOLUME 3 GENERAL TECHNICAL ADMINISTRATION**

#### **CHAPTER 18 OPERATIONS SPECIFICATIONS**

### Section 11 Parts A and B Operations Specifications for Part 147 Aviation Maintenance Technician Schools

**3-1061 DISCUSSION.** This section discusses each standard operations specification (OpSpec) available for issuance from the Web-based Operations Safety System (WebOPSS) for Title 14 of the Code of Federal Regulations (14 CFR) part 147 certificated Aviation Maintenance Technician Schools (AMTS). These OpSpecs are also referred to as paragraphs.

NOTE: See Volume 3, Chapter 18, Section 2 for additional discussion on WebOPSS and the WebOPSS Dynamic Information System (DIS).

**A.** Lawful Basis for Part 147 OpSpecs. Section 135, Promoting Aviation Regulations for Technical Training, of the Aircraft Certification, Safety, and Accountability Act in Public Law (P.L.) 116-260, Consolidated Appropriations Act, 2021, contains requirements for what information must be contained in part 147 OpSpecs. Specifically, Section 135(c)(5) states certificated AMTSs shall operate in accordance with OpSpecs that include the following:

- The certificate holder's (CH) name.
- The CH's Air Agency Certificate number.
- The name and contact information of the CH's primary point of contact (POC).
- The physical address of the CH's primary location.
- The physical address of any additional location of the CH.
- The ratings held.
- Any regulatory exemption granted to the school by the Administrator.

NOTE: The requirement for OpSpecs from Section 135(c)(5) of P.L. 116-260 are not specifically called out in part 147 but are lawful requirements for part 147 OpSpecs content.

**B.** General OpSpec Guidance. See Volume 3, Chapter 18, Section 2 for general information for issuing OpSpecs through WebOPSS.

### 3-1062 PART 147 OPSPEC PARAGRAPHS.

**OPSPEC A001—ISSUANCE AND APPLICABILITY (REQUIRED).** A001 is a required OpSpec issued to all part 147 AMTS CHs. A001 lists:

- Name of the CH;
- Primary business address of the principal location of the air agency;
- Mailing address (if different from the primary address);

- Primary POCs (name, telephone number, and email address); and
- Air Agency Certificate number.

**OPSPEC A002—DEFINITIONS AND ABBREVIATIONS (REQUIRED).** A002 is a required OpSpec issued to all part 147 CHs. It includes definitions of words or phrases used in the OpSpecs and not otherwise defined in regulation or policy. The Office of Safety Standards will add definitions as they are needed. Office of Safety Standards-developed definitions must not be changed by Safety Assurance offices.

**OPSPEC A003—RATINGS (REQUIRED).** A003 is a required OpSpec issued to all part 147 CHs and lists the authorized rating(s) held by the CH:

- Airframe;
- Powerplant; and/or
- Airframe and Powerplant.

# OPSPEC A004—SUMMARY OF SPECIAL AUTHORIZATIONS AND LIMITATIONS (REQUIRED). A004 is a required OpSpec issued to all part 147 CHs. A004 lists all optional/not required OpSpecs and identifies whether or not they are authorized to the CH.

optional/not-required OpSpecs and identifies whether or not they are authorized to the CH. Optional OpSpecs must be authorized in the CH's A004 before they can be issued to the CH. If an optional OpSpec is removed from a CH's issued authorizations, the CH's A004 must be updated and reissued to reflect that the OpSpec is no longer authorized.

**OPSPEC A005—EXEMPTIONS (OPTIONAL).** This is an optional OpSpec issued to part 147 CHs granted an exemption. In order for a CH to conduct operations under the provisions of an exemption, OpSpec A005 must be issued to the CH, listing the exemption, to include the current exemption number and expiration date. A brief description of the exemption or, if appropriate, the exempted regulation(s) should be included in the "Remarks and/or References" column.

#### **OPSPEC A006. DECOMMISSIONED.**

**OPSPEC A007—DESIGNATED PERSONS (REQUIRED).** A007 is a required OpSpec issued to all part 147 CHs. It lists the person(s) designated to officially apply for and receive OpSpecs for the CH, by name, title, and the OpSpec part(s) they are authorized to apply for and receive.

**OPSPEC A008—ADDITIONAL TRAINING LOCATIONS (OPTIONAL).** A008 is an optional OpSpec issued to authorize part 147 CHs to conduct training at additional fixed training locations, as provided by § 147.15. OpSpec A008 lists the physical address and contact information for the authorized additional location(s).

### OPSPEC A013—INSTRUCTORS (REQUIRED).

**C. Purpose.** A013 is a required OpSpec issued to part 147 CHs. The OpSpec contains the description of the manner in which the school will ensure it provides the necessary qualified instructors to meet the requirements of § 147.19.

**D.** Description. The description may be included in the OpSpec by reference to a document provided by the CH, rather than by including the description directly into the body of the OpSpec. In these instances, the document's title, revision level, and revision date will be listed in the OpSpec, and the FAA will retain a copy of the document.

### OPSPEC A015—FACILITIES, EQUIPMENT, AND MATERIALS (REQUIRED).

- **E. Purpose.** A015 is a required OpSpec issued to all part 147 CHs. The OpSpec contains a description of the facilities, equipment, and materials used at the primary location, and at each additional fixed training location of the AMTS.
- **F. Description.** The description may be included in the OpSpec by reference to a document provided by the CH, rather than by including the description directly into the body of the OpSpec. In these instances, the document's title, revision level, and revision date will be listed in the OpSpec, and the FAA will retain a copy of the document.

# OPSPEC A025—ELECTRONIC SIGNATURES, ELECTRONIC RECORDKEEPING, AND ELECTRONIC MANUALS/DOCUMENTS (OPTIONAL).

- **G. Purpose.** A025 is an optional OpSpec issued to part 147 CHs to identify if:
  - The CH uses electronic signatures to attest to, certify, endorse, or otherwise authenticate the documents produced under § 147.21 or § 147.31, which are used by the FAA to determine an applicant's eligibility to attempt the required tests for issuance of a mechanic certificate under 14 CFR part 65 subpart D;
  - The CH uses an electronic/digital recordkeeping system, for maintaining records; and/or
  - The CH uses electronic manuals/documents to maintain, distribute, and otherwise make available the CH's quality control (QC) system procedures.
- **H. Meeting QC System Requirements.** Part 147 CHs who use accreditation to meet the QC system requirements of § 147.23 are not subject to FAA oversight of the CH's procedures for electronic recordkeeping or electronic manual/procedures. In this instance, select "The certificate holder meets the requirements of § 147.23 by being accredited." in the "Kind of Record" or "Manual Name" column of the applicable table.

#### **OPSPEC A026. DECOMMISSIONED.**

**OPSPEC A027—QUALITY CONTROL SYSTEM (REQUIRED).** A027 is a required OpSpec issued to all part 147 CHs. OpSpec A027 authorizes how the CH meets the QC system requirements of § 147.23(a).

**I.** Accreditation. If the CH uses accreditation to meet the QC system requirements of § 147.23(a), then Table 1 will list the accrediting agency of the school. If the CH has an FAA-approved QC system, then insert/select the text "The certificate holder uses the Quality Control System described in Table 2" under the "Name of Accrediting Agency" column.

NOTE: The CH should notify the FAA of any changes to its accreditation (i.e., changes to the accrediting agency or a lapse in accreditation) so that the OpSpec can be updated, as necessary.

**J. FAA-Approved QC System.** If the CH has an FAA-approved QC system, then Table 2 will list the CH's FAA-approved manuals, documents, or sections that contain the procedures that make up the FAA-approved QC system. List all FAA-approved manuals, documents, or sections that comprise the FAA-approved QC system.

### OPSPEC B001—CURRICULUM (REQUIRED).

- **K. Purpose.** B001 is a required OpSpec issued to all part 147 CHs. OpSpec B001 contains a description of the manner in which the school's curriculum will ensure the student has the knowledge and skills necessary for attaining a mechanic certificate and associated ratings under part 65 subpart D.
- **L. Description.** The description may be included in the OpSpec by reference to a document provided by the CH, rather than by including the description directly into the body of the OpSpec. In these instances, the document's title, revision level, and revision date will be listed in the OpSpec, and the FAA will retain a copy of the document.

**OPSPEC B002. DECOMMISSIONED.** 

**OPSPEC B003. DECOMMISSIONED.** 

**OPSPEC B004. DECOMMISSIONED.** 

**RESERVED.** Paragraphs 3-1063 through 3-1070.

# Appendix P. Order 8900.1, Volume 6, Chapter 10, Section 1, Introduction to Aviation Maintenance Technician School (AMTS) Surveillance

#### **VOLUME 6 SURVEILLANCE**

### **CHAPTER 10 PART 147 INSPECTIONS**

Section 1 Introduction to Aviation Maintenance Technician School (AMTS) Surveillance

#### **Source Basis:**

- Part 65, Certification: Airmen Other Than Flight Crewmembers.
- Part 147, Aviation Maintenance Technician Schools.
- Title 49 U.S.C. § 44701, General Requirements.
- Title 49 U.S.C. § 44702, Issuance of Certificates.
- Title 49 U.S.C. § 44707, Examining and Rating Air Agencies.
- Title 49 U.S.C. § 44709, Amendments, Modifications, Suspensions, and Revocations of Certificates.
- Public Law 116-260, Consolidated Appropriations Act, 2021; Division V, Title I, Aircraft Certification, Safety, and Accountability; Section 135, Promoting Aviation Regulations for Technical Training.

**6-2140 REPORTING SYSTEM(S).** Use Safety Assurance System (SAS) automation and the associated Data Collection Tools (DCT).

NOTE: Title 14 of the Code of Federal Regulations (14 CFR) part 147 functions are listed in Peer Group K of the SAS Master List of Functions (MLF). To view the MLF, see Volume 10, Chapter 1, Section 2.

**6-2141 OBJECTIVE.** This section provides introductory guidance for conducting surveillance inspections of Aviation Maintenance Technician Schools (AMTS) and is applicable to all part 147 surveillance tasks. This section also provides information on changes to an AMTS certificate, ratings, or operations specifications (OpSpecs), and the authorization of additional fixed training locations.

#### 6-2142 **GENERAL**.

- **A.** Part 147. Part 147 establishes requirements for issuing AMTS certificates and associated ratings and the general operating rules for the holders of those certificates and ratings.
- **B.** Purpose of an AMTS. An AMTS is an educational facility certificated by the Federal Aviation Administration (FAA) to train prospective aircraft mechanics with the knowledge and skills needed to obtain an FAA Airframe and Powerplant (A&P) certificate and to be successful in an aviation maintenance career.
- 1) Graduation/Completion of an AMTS Curriculum. A graduation/completion document issued in accordance with part 147, § 147.21 by a certificated AMTS can be used by a

mechanic applicant to show eligibility to test for a mechanic certificate airframe and/or powerplant rating, as applicable to the curriculum completed.

2) Eligibility for Mechanic Applicants Under 14 CFR Part 65. Although the AMTS graduation/completion certificate can be used toward part 65, § 65.77 eligibility, all other part 65 eligibility requirements must also be met in order for a mechanic certificate to be issued.

NOTE: See Volume 2, Chapter 12, Section 1, Paragraph 2-1411, General, for detailed background information regarding part 147.

- C. Inspection Frequency. Section 147.27 requires a certificated AMTS to allow the FAA such access as the FAA determines necessary to inspect the school for purposes of determining the school's compliance with part 147. Thus, the FAA may conduct an inspection at a certificated AMTS at any time after issuance of the part 147 certificate and rating. SAS automation schedules the inspection areas for part 147 based on the MLF system criticality applicable to part 147. If the Certificate Management Team (CMT) determines that additional inspections are needed based on identified risk, SAS automation has various tools to allow inspectors to record the identified risk, plan additional inspections and record results, and plan and track corrective action of identified deficiencies. See Volume 10 for information on planning additional risk-based surveillance.
- **D. AMTS Curriculum.** See Volume 6, Chapter 10, Section 5 for discussion on curriculum requirements and procedures for curriculum review. During AMTS inspections, the FAA inspector should be familiar with the specific curriculum used by the AMTS. This will assist the inspector in determining if the AMTS has the appropriate facilities, equipment, materials, and instructors. Additionally, AMTS curriculum must be reviewed to ensure alignment with the Mechanic Airman Certification Standards (ACS) (refer to § 147.17). However, the FAA does not approve or accept an AMTS curriculum. Further, there is no requirement for the AMTS to notify the FAA that its curriculum has been revised. Therefore, during inspections the FAA should determine if the AMTS has revised its curriculum since the last time the FAA verified the curriculum aligned with the Mechanic ACS. If so revised, the FAA should review the revised curriculum to verify compliance with § 147.17(a)(1) (see Volume 6, Chapter 10, Section 5).

NOTE: AMTS curricula that were FAA-approved prior to the part 147 interim final rule (IFR) may not meet the requirements of § 147.17, specifically, the requirement to align with the Mechanic ACS.

**E.** Additional Training Locations of the AMTS. Section 147.15 allows a certificated AMTS to provide training at additional training locations. Additional training locations are any fixed location other than the school's primary location. The additional location must meet all part 147 requirements and be listed in the AMTS's OpSpecs. Under part 147, OpSpec A001 lists the AMTS primary location while OpSpec A008 lists any additional training locations of the AMTS.

NOTE: Prior to the part 147 IFR, some AMTSs may have been conducting specific training operations at a location different from the address listed on the AMTS Air Agency Certificate and OpSpec A001. Upon the effective date of the part 147 IFR, any training location of the school that is in addition to the primary

location (as listed on the AMTS Air Agency Certificate and OpSpec A001) is an additional training location of the school. Each additional training location of the school must be listed in OpSpec A008 prior to the school conducting training operations at the additional location. Buildings co-located on a campus do not need to be considered separate/additional training locations.

NOTE: A distance learning system is considered an instructional delivery method intended to allow for flexible scheduling and varied location settings and therefore is not considered a fixed location other than the primary location of the school.

- 1) During certification, the AMTS applicant must include on its application (FAA Form 8310-6, Aviation Maintenance Technician School Certificate and Ratings Application) each training location being requested in addition to its primary location. See Volume 2, Chapter 12.
- 2) For certificated AMTSs, additional training locations may be added by the AMTS by requesting the additional training location be listed in the AMTS OpSpecs prior to conducting any training. See the procedures in paragraph 6-2147.
  - 3) The additional location must meet the requirements of part 147, such as:
    - The facilities, equipment, and materials for each location must be described in the AMTS OpSpec A015. Refer to § 147.15.
    - The facilities, equipment, and materials used at each location must be appropriate to the curriculum or portion of the curriculum taught, and the number of students being taught at that location. Refer to § 147.13.
    - Each location must use the curriculum of the AMTS; however, all or a portion of the AMTS curriculum may be taught at each additional training location.
    - Where applicable, established quality control (QC) system procedures may need to be revised to describe differing procedures at different locations.
       AMTS with FAA-approved QC systems would need to submit revisions to the QC system to the FAA for approval.

NOTE: Section 147.17 requires each certificated AMTS to establish, maintain, and utilize a curriculum; both "AMTS" and "curriculum" are stated in the singular. While an AMTS may have only one curriculum, it may have separate curriculum components (i.e., general, Airframe, Powerplant) for the ratings that the AMTS holds.

- 4) The AMTS must allow access for inspection of each training location for the purpose of determining compliance with this part, in accordance with § 147.27. This includes inspections prior to and following addition of the location to the school's OpSpecs.
- **F. AMTS Located Outside of the United States.** Part 147 does not prohibit AMTSs having a primary AMTS location, or additional training locations, from being located outside of the United States. FAA certification and surveillance activities may be a coordinated effort

between FAA offices, depending on the location of the primary facility and the additional training location(s).

- 1) Coordination between the responsible Flight Standards District Offices (FSDO) and International Field Offices (IFO) will be required when an AMTS has both domestic and international training locations.
- 2) FAA certification, and subsequent inspection, of AMTS primary or additional training locations outside of the United States are subject to fees in accordance with 14 CFR part 187. Refer to Advisory Circular (AC) 187-1, Flight Standards Service Schedule of Charges Outside of the United States, for information on fees.

NOTE: In certain instances, there may be circumstances outside of the control of the FAA that could interfere with certification or inspection of a foreign AMTS location.

- **3)** The Department of Education recognition of accrediting agencies is limited by statute to accreditation activities within the United States. For additional discussion on accreditation, see Volume 6, Chapter 10, Section 7, Paragraph 6-10-7-5, AMTS QC System General Discussion.
- **G. Minimum Passage Rate.** AMTS must maintain the minimum passage rate prescribed in § 147.25. The FAA will publish a quarterly pass rate report that displays the school's pass rate based on the FAA test results for AMTS students testing within the pass rate metric timeframe.

NOTE: The FAA published pass rate report may not be available immediately following the effective date of the IFR. When the report is available, notification on where to access the report will be provided to the General Aviation Safety Assurance (GASA) offices.

1) Section 147.25(a) requires each certificated AMTS to maintain the pass rate specified in § 147.25(b) for the most recent 3-year period. Therefore, pass rate calculations will be based on 3 years of the school's data. In some instances, 3 years of data may not be available, such as when a school is newly certificated. Regulatory compliance with § 147.25(a) can only be determined when 3 years of data is available. However, the FAA should address any failure to meet the 70-percent pass rate by discussing the issues with the school. The CMT should assist the school in determining the cause and long-term corrective action for the quality-of-instruction issue evidenced by the pass rate data.

NOTE: Regardless of whether or not there is 3 years of data available for the pass rate, failure to meet the pass rate at any time could indicate that the AMTS is not training students to meet § 147.17(a)(3), by ensuring students have the knowledge and skills to be prepared to test for a mechanic certificate.

2) For students who take an FAA mechanic test under part 65 within 60 days after graduation, at least 70 percent of students must pass the test (or any combination thereof). These tests are outlined in § 147.25(b)(1) through (3) and include:

- Written test;
- Oral test; or
- Practical test.

NOTE: The FAA interprets "within 60 days of graduation" to mean "60 days after graduation". As a result, tests taken prior to graduation, such as the tests taken under §§ 65.75(c) and 65.80, are not included in the pass rate calculation. Additionally, tests taken more than 60 days after a student's graduation are not included in the pass rate calculation.

- 3) Section 147.25(c) states that for students who take a combination of tests within the 60-day window, an AMTS must count a failure on any one test as a student failure for purposes of determining the pass rate, unless that failed test is subsequently passed within the 60-day window. For example:
- a) If a student takes only a single test in the 60-day window following graduation, the student must pass that test to be counted as a passing student toward the school's pass rate.
- b) If a student takes a combination of tests (e.g., written, oral, and practical) within the 60 days following graduation, the student must pass all tests taken to be counted as a passing student toward the school's pass rate.

NOTE: There is no requirement to pass a test on the first attempt. Therefore, if the student passes a previously failed test on a subsequent attempt within the 60-day window following graduation, only the passing test will count toward the school's pass rate.

Figure 6-96. Hypothetical to Determine School's Pass Rate in Accordance with § 147.25

In this example, 3 years of data for the school shows that 7 out of 10 students who graduated from the school and took the test within 60 days of graduation are passing the FAA tests. Therefore, the school has a 70-percent pass rate.

	Written Test*	Oral Test	Practical Test	Student Pass Rate
Student	Failed first attempt.	Passed first	Passed first attempt.	PASS
1	Passed second attempt.	attempt.		
Student	Passed first attempt.	Failed first and	Failed first attempt.	FAIL
2		only attempt.	Passed second attempt.	
Student	Passed first attempt.	Passed first	Passed first attempt.	PASS
3		attempt.		
Student	Failed first attempt.	Failed first and	Failed first and only	FAIL
4	Passed second attempt.	only attempt.	attempt.	
Student	Passed first attempt.	Passed first	Passed first attempt.	PASS
5		attempt.		

	Written Test*	Oral Test	Practical Test	Student Pass Rate
Student 6	Passed first attempt.	Passed first attempt.	Passed first attempt.	PASS
Student 7	Passed first attempt.	Passed first attempt.	Passed first attempt.	PASS
Student 8	Passed first attempt.	Passed first attempt.	N/A**	PASS
Student 9	Passed first attempt.	N/A**	N/A**	PASS
Student 10	Failed first attempt. Failed second attempt.	N/A**	N/A**	FAIL

<sup>\*</sup> For simplicity, the table refers to a single written test. However, the number of written tests that a mechanic applicant must take depends on the rating sought and whether it is an initial mechanic applicant or an application for an additional rating.

### 6-2143 PREREQUISITES AND COORDINATION REQUIREMENTS.

### A. Prerequisites.

- 1) Certification. At least one member of the Certification Project Team (CPT) must meet the prerequisites listed in the surveillance paragraph below when conducting part 147 certification activities.
- **2)** Surveillance. The aviation safety inspector (ASI) performing any part 147 inspection must have:
  - Knowledge of the regulatory requirements of parts 43, 65, and 147; and
  - Completion of the Just-In-Time Training, Part 147 Interim Final Rule Overview and Implementation.

NOTE: It is recommended that the ASI also has completed the instructor-led FAA Course 21000113, Aviation Maintenance Technician Schools, or previous equivalent. Although this course is based on the previous part 147 regulations, it provides knowledge and skills that will assist the ASI in conducting an AMTS inspection.

NOTE: The policy office is working to develop a new instructor-led course based on the part 147 IFR and will notify the GASA offices when it is available. Once available, this will replace Course 21000113 as the required training prerequisite.

<sup>\*\*</sup>For purposes of this figure, N/A means the student did not take the test within the 60 days following graduation.

#### B. Coordination.

1) Certification. Part 147 inspections as a part of a certification project require coordination with the certification project manager (CPM) and all certification team members (CTM), as appropriate.

2) Continued Operational Safety (COS). Part 147 inspections require coordination with other principal inspectors (PI) assigned to the AMTS, and with ASIs' assigned work functions associated with the AMTS.

#### 6-2144 REFERENCES, FORMS, AND JOB AIDS.

#### A. References (current editions):

- Title 14 CFR Parts 43, 65, and 147.
- Volume 1, Chapter 3, Section 1, Safety Assurance System: Responsibilities of Aviation Safety Inspectors.
- Volume 2, Chapter 12, Certification of a Part 147 Aviation Maintenance Technician School.
- Volume 6, Chapter 10, Part 147 Inspections.
- Volume 10, Safety Assurance System Policy and Procedures.
- Volume 14, Chapter 1, Section 2, Flight Standards Service Compliance Action Decision Procedure.
- AC 147-3, Certification and Operation of Aviation Maintenance Technician Schools.
- **B. Forms.** FAA Form 8310-6, Aviation Maintenance Technician School Certificate and Ratings Application.

#### C. Job Aids:

- General Aviation (GA) Job Task Analysis (JTA) 2.4.14 (AW) Inspect a 14 CFR Part 147 Aviation Maintenance Technician School.
- GA JTA 3.4.32 (AW) Evaluate a 14 CFR Part 147 Aviation Maintenance Technician School's Curriculum/Revision.
- GA JTA 3.4.34 (AW) Evaluate a 14 CFR Part 147 Aviation Maintenance Technician School/Applicant's Facility, Equipment, and Materials.
- GA JTA 3.4.36 (AW) Certificate a 14 CFR Part 147 Aviation Maintenance Technician School.
- GA JTA 3.4.44 (AW) Evaluate a 14 CFR Part 147 Aviation Maintenance Technician School's Quality Control System.
- GA JTA 3.4.45 (AW) Evaluate a 14 CFR Part 147 Aviation Maintenance Technician School's Instructor Qualifications.

### 6-2145 PROCEDURES.

**A. Prepare for the AMTS Inspection.** Prior to conducting an onsite inspection activity of an AMTS, the PI/ASI must become knowledgeable with the certificate holder's (CH) operation and history.

1) Review the AMTS File. Before inspecting the facility, review the CH's most recent application (FAA Form 8310-6) and the responsible Flight Standards office file. Review correspondence with the AMTS and check for any previous violation history.

### 2) Review the AMTS Surveillance History and Operating Profile.

- a) CH historical surveillance data can be found in Module 5, Analysis, Assessment, and Action (AAA), or various SAS and Safety Performance Analysis System (SPAS) reports. Surveillance history recorded prior to SAS implementation is accessible via various SPAS links and includes the National Program Tracking and Reporting Subsystem (NPTRS) database.
- b) The CH's operating profile tab can be found in the SAS Configuration Module. The Vitals Information under the Configuration Data, Vitals tab should be updated whenever the FAA becomes aware of changes to applicable information and reviewed for accuracy during any surveillance activity and/or at least once per year. Information within the OPSS Authorizing Documents tab is read-only data provided by the Web-based Operations Safety System (WebOPSS) database and should be reviewed for accuracy.
- 3) Review the AMTS Certificate Holder Assessment Tool (CHAT) and Risk Profile Assessment Tool (RPAT). Review the AMTS CHAT and the RPAT to become familiar with previously identified hazards and risk related to the CH's operations.

#### 4) Review the AMTS Curriculum and QC System Procedures.

a) If needed, request a current copy of the AMTS curriculum. If the curriculum has been revised since last reviewed by the FAA, review the curriculum and verify the curriculum aligns with the Mechanic ACS (refer to § 147.17). See Volume 6, Chapter 10, Section 5.

NOTE: The FAA does not approve the AMTS curriculum. The review of the curriculum is for the purpose of determining compliance with the requirements of § 147.17(a)(1) and to assist in evaluation of appropriate facilities, equipment, materials, and instructors specific to the school's training program.

b) If the AMTS has an FAA-approved QC system, review the QC system. The ASI must be familiar with the AMTS QC system policies and procedures prior to conducting an onsite inspection. Ensure the responsible Flight Standards office has a copy of the currently approved AMTS QC system. See the following for additional information on the AMTS QC system:

- Volume 6, Chapter 10, Section 6, Evaluate/Approve an AMTS Quality Control System/Procedures.
- Volume 6, Chapter 10, Section 7, Inspect an AMTS Quality Control System.

NOTE: AMTS who meet § 147.23 by means of accreditation are not subject to FAA oversight of the school's QC policies and procedures. See Volume 6, Chapter 10, Section 7 on how to inspect a schools accreditation status.

- 5) Review the AMTS OpSpecs. Review the issued OpSpecs to ensure the following:
  - All mandatory OpSpecs have been issued to the AMTS.
  - The applicable optional OpSpecs have been issued to the AMTS.
  - The information in the issued OpSpecs is current and complete.

NOTE: OpSpec A005 is subject to periodic update due to exemption renewal requirements, and is sometimes overlooked by the CMT. Exemptions typically expire after 2 years and are identified by changing the letter sequence after the exemption number, if renewed. However, if the petitioner does not request an extension in time and the exemption expires, a new exemption number is issued. In accordance with Public Law (P.L.) 116-260, Consolidated Appropriations Act, 2021, exemptions used by an AMTS must be listed in the school's OpSpecs.

- **B.** Review the AMTS's Minimum Passage Rate. Section 147.25 requires that AMTSs maintain a minimum passage rate.
- 1) Accessing Pass Rate Data. Pass rate data for each AMTS is available in the AMTS Pass Rate Report (Location TBD).
- **2)** Pass Rate Corrective Action. When an individual school's pass rate does not meet § 147.25, corrective action must be initiated. Failure to meet the regulatory minimum pass rate may indicate the AMTS is providing inadequate or ineffective instruction in one or more of the following areas:
  - Inadequate curriculum and/or course content.
  - Inadequate practical application during instruction.
  - Inadequate instruction or instructor knowledge of the topic.
  - Inadequate or unsuitable facilities, equipment, or materials.
- 3) Determining the Reasons for Poor Test Performance. Additional surveillance may be necessary to determine accurate reasons for poor test performance so that appropriate and effective corrective action can be put in place. The following observations may assist in determining cause of the poor quality of instruction:
  - Identify the subject areas of poor test performance.
  - Review the curriculum related to the area(s) of poor test performance.

- Inspect the AMTS facilities, equipment, and materials related to the poor performance areas.
- Observe instructors performing classroom instruction.
- Observe instructional effectiveness of alternate curriculum delivery methods (e.g., distance learning delivery).
- Observe instructors performing lab/shop instruction and practical application projects, to include alternate curriculum delivery methods (e.g., distance learning or virtual environments/equipment used when conducting practical application).

NOTE: Pass rate data is not able to identify an individual training location of a school since pass rate is based on the aggregate of all the school's graduates who test within the 60-day timeframe. It is important that the FAA and the AMTS work collaboratively to identify the cause of poor quality of instruction in order to effectively implement corrective actions.

4) Failure to Correct Issues Relevant to Poor Test Performance. Failure of a school to correct the issues which resulted in not meeting the required pass rate could result in the FAA pursuing certificate action. See Volume 14, Chapter 1, Section 2 to determine the appropriate level of enforcement action.

#### 6-2146 CHANGES TO THE AMTS CERTIFICATE.

NOTE: See Volume 10, Chapter 10, Section 1 for procedures for transfer of a part 147 certificate from one responsible Flight Standards office to another.

- **A. Amendment of an AMTS Certificate.** When an AMTS makes changes that result in amendment of the AMTS certificate, the AMTS must submit a new application and receive FAA approval for the change. The AMTS must submit an FAA Form 8310-6 pursuant to regulation when the AMTS:
  - Requests a change to the AMTS ratings.
  - Changes the AMTS primary location.
  - Changes its name, to include the use of additional business names.

NOTE: The AMTS has the responsibility to submit proposed amendments to the FAA in a timeframe that allows the FAA a reasonable amount of time to evaluate and respond to the changes, based on the scope of the proposed amendment(s).

### 1) Change in AMTS Ratings.

a) The AMTS must apply for a change to its certificate whenever it requests to add or remove a rating. An application for amendment under § 147.5 must include information necessary to substantiate the change. The school's Air Agency Certificate and OpSpecs will require amendment based on the change in rating.

b) Prior to approving the rating change, the inspector must ensure the school has adequately addressed required changes to the AMTS facilities, equipment, materials, and instructors to ensure the school meets the requirements of part 147. Ensure the school has:

- 1. A revised curriculum appropriate to the rating change per Volume 6, Chapter 10, Section 5;
- 2. Facilities, equipment, and materials appropriate to the change in ratings per Volume 6, Chapter 10, Section 4; and
- 3. Appropriately qualified instructors to teach the added/revised curriculum material per Volume 6, Chapter 10, Section 2.
- c) Revise AMTS OpSpecs to reflect the new ratings. Prepare the OpSpecs in accordance with the procedures described in Volume 3, Chapter 18, Section 11.
- d) Revise the Air Agency Certificate to reflect the new ratings. When ratings are added, show the date of each issuance in parentheses following the added rating. See Volume 2, Chapter 12, Section 5 for additional information on preparation of an AMTS Air Agency Certificate.

### 2) Change of AMTS Primary Location.

- a) Part 147 does not require specific FAA approval of an AMTS primary location change; however, § 147.3 mandates that an AMTS must not operate without, or in violation of, its certificate and OpSpecs. Both the FAA Air Agency Certificate and the AMTS OpSpecs display the address of the primary location of the AMTS. Therefore, prior to operating/providing training at a new location, an AMTS must make application for a location change on FAA Form 8310-6 in order to amend the Air Agency Certificate and OpSpecs.
- b) Prior to approving the location change, the inspector must ensure the school has adequately addressed required changes to the AMTS facilities, equipment, materials, and instructors to ensure the new location meets the requirements of part 147.
- 1. When a school must operate at both the original location and the new primary location, one location should be considered an additional training location (see subparagraph 6-2147C). Once the location change is complete, the additional location can be removed from the AMTS OpSpec A008, and the below steps completed to approve the new primary location.
- 2. Changes to and/or adding of locations may require the AMTS to update its descriptions of facilities, equipment, or materials (OpSpec A015).
- c) Revise AMTS OpSpecs to reflect the new primary location of the school. Prepare the OpSpecs in accordance with the procedures described in Volume 3, Chapter 18, Section 11.

d) Revise the Air Agency Certificate to reflect the primary location of the school. See Volume 2, Chapter 12, Section 5 for additional information on preparation of an AMTS Air Agency Certificate.

- 3) Change of AMTS Name. Requests for name changes include the AMTS use of additional business names (doing business as (DBA)). DBA are names used by the school and are therefore displayed on the FAA-issued Air Agency Certificate.
- a) The AMTS must indicate the change in name or DBA on the application form and should provide documentation evidencing the legal name/DBA.
- b) The name change must be coordinated with the Aviation Data Systems Branch (AFS-620). The ASI must send an email to 9-AMC-AFS620-Certinfo@faa.gov. Request a name change in the FAA Management Information System (FAAMIS). AFS-620 must be provided with:
  - The full official name of the company;
  - Address of the primary location;
  - The type of certificate and 14 CFR part;
  - FAA certificate number; and
  - Office identifier of the responsible Flight Standards office.
- c) After AFS-620 sends a reply email, the PI completes the configuration change in SAS. This should update the new AMTS name in SAS automation. Refer to the SAS Resource Guide (SRG) for the Certificate Name Change Checklist (CNCC).
- d) Revise AMTS OpSpecs to reflect the new name of the school. Prepare the OpSpecs in accordance with the procedures described in Volume 3, Chapter 18, Section 11.
  - NOTE: For part 147, DBA are not included in AMTS OpSpecs. DBA are only recorded on the AMTS Air Agency Certificate.
- e) Revise the Air Agency Certificate to reflect the new name of the school and any added/removed DBA. See Volume 2, Chapter 12, Section 5 for additional information on preparation of an AMTS Air Agency Certificate.
- **B.** Other Changes Requiring Application. There may be other instances where a certificated AMTS must make application, such as when the CH is requesting a certificate number change during a change of ownership or sale or transfer of assets.
- 1) Change of Ownership/Sale or Transfer of Assets. There is no express provision in part 147 that addresses a change of ownership of an AMTS. A change of ownership does not require application for a new certificate if there has been no change to location, facilities, or personnel. If the new owner amends the Air Agency Certificate rather than obtaining a new certificate, that owner could be held responsible for regulatory noncompliance that occurred by the air agency under the original owner.

2) Change of AMTS Certificate Number. When there are changes in AMTS ownership that include a change of location, facilities, equipment, materials, personnel, or curriculum, the FAA should recommend that the new owner request a new certificate number by undergoing the certification process. Doing so will ensure the new owner is not subject to Freedom of Information Act (FOIA) request and liability issues.

- a) If a new owner requests to retain the existing certificate number, that owner could be held responsible for any actions that were taken by the air agency under the original owner. New owners will be asked to stipulate in writing that they clearly understand the potential of release of information under the FOIA.
- b) A request for a new certificate number will require coordination with AFS-620 and possible completion of the SAS steps for initial certification, in order to activate a new certificate number. If a new certificate number is issued, the Air Agency Certificate will show the issuance date of the new certificate number.

NOTE: The "Date issued" should always reflect the original certification date of the certificate number on the Air Agency Certificate.

NOTE: A change in the certificate number will require reissuance of all the AMTS OpSpecs.

**3)** Additional Business Names (DBA). Additional business names (DBA) are displayed on the FAA-issued Air Agency Certificate. Therefore, requests for addition or removal of a DBA results in an amendment to the certificate. Direct the AMTS owner to make the request by submitting FAA Form 8310-6. See subparagraph 6-2146A3).

#### 6-2147 OTHER CHANGES TO AMTS OPERATIONS.

- **A.** Periodic Review and Revision of OpSpecs. A school may not operate without, or in violation of, its OpSpecs (refer to § 147.3). Periodic review/revision to OpSpecs may be required to ensure current and appropriate information.
- 1) The AMTS should notify its CMT whenever information in any OpSpec requires update.
- 2) If the CMT identifies needed changes, it must coordinate the updates with the AMTS prior to issuance of the revised OpSpec.
- **B. Descriptions Required by § 147.5.** Whenever the AMTS changes any of the following descriptions required by § 147.5, it should notify the FAA to have the applicable OpSpec paragraphs revised to ensure there is no violation of § 147.3:
- 1) OpSpec Paragraph A015. A description of the facilities, including the physical address of the applicant's primary location for operation of the school, and any additional fixed locations where training will be provided, and the equipment and materials to be used at each location.

2) OpSpec Paragraph B001. A description of the manner in which the school's curriculum will ensure the student has the knowledge and skills necessary for attaining a mechanic certificate and associated ratings under part 65 subpart D.

- 3) OpSpec Paragraph A013. A description of the manner in which the school will ensure it provides the necessary qualified instructors to meet the requirements of § 147.19.
- **C.** Additional Training Locations. Each training location of the school, which is in addition to the primary location, must be listed on OpSpec A008. The AMTS should make a request to its responsible Flight Standards office for a new additional training location to be added to the AMTS OpSpec.
- 1) Prior to adding the location to OpSpecs, the CMT should inspect the location as necessary to determine compliance with part 147 requirements.
- a) Verify the curriculum, or portion of the curriculum, that will be used at the additional location. All or a portion of the AMTS curriculum may be taught at an additional training location.
  - NOTE: The regulation states each certificated AMTS must establish, maintain, and utilize a curriculum; both "AMTS" and "curriculum" are stated in the singular. While an AMTS may have only one curriculum, it may have separate curriculum components (i.e., general, Airframe, Powerplant) for the ratings that the AMTS holds.
- b) The facilities, equipment, and materials for each location must be described in the AMTS OpSpec A015.
- c) The facilities, equipment, and materials used at each location must be appropriate to the curriculum or portion of the curriculum and the number of students being taught at that location (refer to § 147.13(b)).
- d) Where applicable, established QC system procedures are revised to describe differing procedures at different locations. AMTS with FAA-approved QC systems must submit revisions to the FAA for approval.
  - e) The location must use instructors meeting the requirements of § 147.19.
- 2) When the CMT has ensured the additional training location meets all applicable part 147 requirements, complete the change request in SAS automation to assign a location identifier and add the location ancillary to the Vitals.
  - NOTE: Use a standard method configuration change to add an additional location to SAS Vitals. The option to add a location will not appear if using a streamlined method.
- 3) Add the additional location information to OpSpec A008 and issue the OpSpec prior to the AMTS conducting training at that location.

NOTE: The additional location must display a copy of the AMTS Air Agency Certificate in accordance with the requirements of § 147.29.

- **D.** Exemptions. P.L. 116-260 requires that exemptions used by an AMTS must be listed in the AMTS OpSpecs.
- 1) Exemptions to 14 CFR requirements cannot be granted by the responsible Flight Standards office. The CH must make a request for exemptions using the procedures outlined in 14 CFR part 11. If an exemption request is received by the responsible Flight Standards office, advise the applicant to refer to part 11 for where to send the request.

NOTE: The responsible Flight Standards office is not typically notified of exemption grants. Request that the AMTS notify the CMT of any exemption the AMTS intends to use.

- 2) Prior to listing an exemption in OpSpec A005, the CMT should ensure the school has appropriate procedures developed to ensure compliance with the specified conditions and limitations of the exemption, as necessary.
- 3) The CMT must add the exemption number and related exemption information to the CH's list of authorized exemptions in OpSpec A005 and issue the OpSpec prior to the school using the exemption.
- 4) Exemptions typically expire every 2 years. The AMTS must make a request for an extension (as specified in part 11), and be granted an extension to the exemption. This will result in a revised exemption number. Therefore, request that the AMTS notify the FAA of the extensions to an existing exemption grant, and request revision to OpSpec A005, prior to using the exemption.

## 6-2148 TASK OUTCOMES.

- **A.** Conduct Debriefing. Brief the CH on the inspection 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 when processing CH change requests and for completion of SAS DCTs. Update the CHAT, as necessary, to record identified hazards or risk.
- **6-2149 FUTURE ACTIVITIES.** Follow Volume 10 to plan future risk-based surveillance in SAS.

**RESERVED.** Paragraph 6-2150.

# Appendix Q. Order 8900.1, Volume 6, Chapter 10, Section 2, Inspect AMTS Organizational Management

#### **VOLUME 6 SURVEILLANCE**

## **CHAPTER 10 PART 147 INSPECTIONS**

## **Section 2 Inspect AMTS Organizational Management**

#### **Source Basis:**

- Part 65, Certification: Airmen Other Than Flight Crewmembers.
- Part 147, Aviation Maintenance Technician Schools.
- Title 49 U.S.C. § 44701, General Requirements.
- Title 49 U.S.C. § 44702, Issuance of Certificates.
- Title 49 U.S.C. § 44707, Examining and Rating Air Agencies.
- Title 49 U.S.C. § 44709, Amendments, Modifications, Suspensions, and Revocations of Certificates.
- Public Law 116-260, Consolidated Appropriations Act, 2021; Division V, Title I, Aircraft Certification, Safety, and Accountability; Section 135, Promoting Aviation Regulations for Technical Training.
- **6-10-2-1 REPORTING SYSTEM(S).** Use Safety Assurance System (SAS) automation and the associated Data Collection Tools (DCT).

NOTE: Title 14 of the Code of Federal Regulations (14 CFR) part 147 functions are listed in Peer Group K of the SAS Master List of Functions (MLF). To view the MLF, see Volume 10, Chapter 1, Section 2.

- **6-10-2-3 OBJECTIVE.** This section provides guidance for conducting certification and surveillance inspections related to an Aviation Maintenance Technician School's (AMTS) organizational management functions. Although an AMTS quality control (QC) system is part of an AMTS's organizational management, QC system inspection is discussed in Volume 6, Chapter 10, Section 7.
- **6-10-2-5 GENERAL DISCUSSION.** See Volume 6, Chapter 10, Section 1 for procedures on preparing for an AMTS inspection, including review of the school's pass rate.

#### A. Safety Programs.

- 1) Reporting Violations. As certificate holders (CH), AMTSs may voluntarily disclose apparent violations of part 147 to the Federal Aviation Administration (FAA) under the Voluntary Disclosure Reporting Program (VDRP).
  - FAA personnel should see Volume 11, Chapter 1, Section 1.
  - Refer AMTSs to the procedures outlined in Advisory Circular (AC) 00-58, Voluntary Disclosure Reporting Program, as revised.
  - The VDRP home page can be found at https://vdrp.faa.gov.

**2) AMTS Procedures.** Encourage the AMTS to incorporate written voluntary reporting procedures into the school's manual(s)/document(s) so that AMTS personnel can follow AMTS expectations should a disclosure be warranted. The procedures should define who is responsible for making disclosures, describe internal AMTS procedures related to disclosures, and include or refer to the applicable procedures of AC 00-58. See Volume 6, Chapter 10, Section 6, Paragraph 6-10-6-7, Other AMTS Procedures, for additional discussion.

NOTE: Part 147 does not require that an AMTS develop procedures related to VDRP or other safety programs.

- **B. Required Personnel.** The only personnel requirements prescribed by part 147 are related to AMTS instructors. Instructor requirements are stated within part 147, §§ 147.5, 147.19, and 147.23.
- 1) Description of Ensuring Qualified Instructors. Section 147.5(b)(3) requires that an applicant for an AMTS certificate and rating must provide the FAA with a description of the manner in which the school will ensure it provides the necessary qualified instructors to meet the requirements of § 147.19. This description is included in the AMTS operations specification (OpSpec) A013. See Volume 3, Chapter 18, Section 11 for additional information on the content of AMTS OpSpecs. After certification, if the AMTS changes the manner in which it ensures it will provide necessary qualified instructors to meet the requirements of § 147.19, then the description in OpSpec A013 must be revised to preclude violation of the AMTS OpSpecs under § 147.3. The AMTS should submit the revised description to the FAA for revision of OpSpec A013.
- **2)** Ensuring Positive Educational Outcomes. Section 147.19(a) requires an AMTS to provide qualified instructors to teach in a manner that ensures positive educational outcomes are achieved.
- a) The FAA interprets positive educational outcomes to refer to the training standards set forth in § 147.17. Therefore, an instructor qualified in accordance with § 147.19(b), must teach in a manner that ensures achievement of the training requirements in § 147.17(a)(2) and (a)(3):
  - Section 147.17(a)(2) states instructors must teach in a manner that ensures the AMTS provides training of a quality that meets the minimum pass rate requirement specified in § 147.25.
  - Section 147.17(a)(3) states instructors must teach in a manner that ensures students have the knowledge and skills necessary to be prepared to test for a mechanic certificate and associated ratings under 14 CFR part 65 subpart D.
- b) The AMTS should be encouraged to provide continued instructor training and periodic assessment for its instructors. Training and assessment would provide the AMTS the means to initially determine, and subsequently ensure, that the AMTS and its instructors meet the requirement to provide qualified personnel who teach in a manner that ensures positive educational outcomes are achieved.

**3) Qualifications for Instructors.** Section 147.19(b) prescribes that AMTS instructors either:

- Hold an FAA mechanic certificate, with one or more appropriate ratings; or
- Be otherwise specifically qualified to teach their assigned content.

NOTE: There is no requirement that AMTS use FAA-certificated mechanic instructors in shop/lab classes.

a) Certificated Instructors. When using instructors that hold an FAA mechanic certificate, the AMTS must ensure that the instructor has the appropriate mechanic certificate rating(s), relative to the specific subject(s) or course content they teach. The AMTS should be able to provide documented evidence to the FAA that the instructor holds an FAA mechanic certificate, with appropriate ratings.

NOTE: AMTS instructors are not exercising the privileges of their mechanic certificate while instructing at an AMTS, and the instructor is not required to meet part 65, § 65.89 requirements to display their certificate.

- b) Specifically Qualified Instructors. When using specifically qualified instructors (i.e., instructors not holding an FAA mechanic certificate) the AMTS must ensure that the instructor is specifically qualified to teach their assigned content. The AMTS must be able to show the FAA documented evidence that any instructor who has not been issued an FAA mechanic certificate is specifically qualified to teach their assigned subject(s) or course content. Some examples of specific qualifications include:
  - Practical experience in the procedures, practices, inspection methods, materials, tools, machine tools, and equipment (in most cases, this should reflect aviation maintenance experience); and
  - Successful completion of formal training designed to qualify the applicant for the specific area of instruction.

NOTE: The regulation does not require that an AMTS provide a list of instructors to the FAA; however, during inspections the FAA should ask for documented evidence to verify the requirements of part 147 are met. A list maintained by the AMTS of all AMTS instructors, their qualifications, and their assigned teaching content would be one way of providing documented evidence of instructor requirements.

4) Student-to-Instructor Ratio. Section 147.19(c) requires that the AMTS ensure the student-to-instructor ratio does not exceed 25:1 for any shop class. The FAA should verify that the AMTS complies with the required ratio for shop/lab classes. The AMTS may choose to provide a lower student-to-teacher ratio (i.e., additional instructors) according to the needs of the class or subject. Additionally, there may be instances where a lower student-to-instructor ratio should be used, such as for safety reasons.

C. Electronic Signatures, Recordkeeping, and/or Manuals/Documents. The FAA encourages AMTS to use electronic signatures, records, and manual/document alternative information technologies to meet applicable part 147 requirements. The FAA has developed performance standards for a CH's use of electronic manual systems, electronic recordkeeping systems, and electronic signatures:

- Volume 3, Chapter 31 outlines the standards to accept an AMTS's use of an electronic recordkeeping system, electronic signatures, and/or manuals.
- An AMTS can find these standards in AC 120-78, Electronic Signatures, Electronic Recordkeeping, and Electronic Manuals.
- 1) Electronic Signatures. Authorization of electronic signatures should be limited to those applied to documents required by the regulation (e.g., when the AMTS chooses to use electronic signatures on the authenticated document issued under § 147.21 or § 147.31). The AMTS should describe its procedures for applying an electronic signature so that the authenticity of the document is verifiable. The procedures, or reference to the procedures, will be included in OpSpec A025.
- **2) Electronic Recordkeeping.** Authorization of electronic records should be limited to those records that are required by, or used to show compliance with the requirements of, part 147. If the AMTS has an FAA-approved QC system, the AMTS should describe its recordkeeping procedures in its QC system, since recordkeeping procedures are mandated by § 147.23(b).
- 3) Electronic Manuals/Documents. Authorization of electronic manuals/documents should be limited to those manuals/documents required by the regulation. Therefore, under part 147, only manuals/documents that make up the FAA-approved QC system should be included in the authorization.

NOTE: AMTS may use other electronic signatures, electronic recordkeeping, or electronic manuals/documents that are outside of the scope of part 147. These uses are outside of the purview of the FAA and should not be included as a part of the A025 authorizations.

4) Authorization. OpSpec A025 is issued to authorize an AMTS to use an electronic recordkeeping system(s), electronic signatures, or electronic manuals/documents. AMTSs who use accreditation to meet the QC system requirements of § 147.23 are not subject to FAA oversight of school procedures, including electronic recordkeeping or manual procedures. Therefore, the OpSpec A025 issued to these schools is not required to contain procedures information.

### D. Other Certificate Requirements.

## 1) FAA Air Agency Certificate.

a) Duration. An AMTS's FAA certificate remains in effect until it is surrendered, suspended, or revoked. Should a school attempt to circumvent possible enforcement

action that could result in a revocation of the school's certificate by surrendering the certificate to stop an investigation before it can be completed, contact FAA General Counsel.

- NOTE: FAA Order 2150.3, FAA Compliance and Enforcement Program, as amended, contains instructions for FAA personnel on refusal to accept voluntary surrender of certificates for cancellation if it appears the surrender is to avoid certificate action. The FAA applies this policy to all FAA-issued certificates.
- b) Display. Pursuant to § 147.29, an AMTS is required to display its FAA Air Agency Certificate at each location of the school, in a place that is visible by and normally accessible to the public. A copy of the FAA Air Agency Certificate may be displayed.
  - 2) AMTS Ratings. An AMTS may be FAA-certificated for the following ratings:
    - Airframe.
    - Powerplant.
    - Airframe and Powerplant.
- a) The ratings issued to an AMTS under § 147.11 correspond to the curriculum certificate of completion the school is authorized to issue under § 147.21. The general portion of the curriculum must be completed as a required part of any rating/curriculum. An AMTS may only issue a graduation certificate upon completion of a specific curriculum's requirements.
- b) See Volume 6, Chapter 10, Section 5, Table 6-10-5A, Curriculum Design Examples, for additional discussion on the relationship between AMTS ratings, curriculum structure/delivery, and when the AMTS can issue a graduation certificate for a completed curriculum.
- **3) AMTS OpSpecs.** See Volume 3, Chapter 18, Section 11 for a discussion of OpSpec standard templates applicable to part 147. See Volume 3, Chapter 18 for additional information on OpSpecs, the Web-based Operations Safety System (WebOPSS), and the procedures for amendment, surrender, and suspension of OpSpecs.
- a) All AMTS OpSpecs are initially prepared and maintained by the responsible Flight Standards office using standard template paragraphs within WebOPSS.
- 1. The PI can request the CH's access to WebOPSS by contacting WebOPSS Technical Support at 9-AWA-AVS-AFS-WebOPSS@faa.gov. The CH personnel should be trained on how to use the system prior to requesting access. Once trained and authorized for access, the industry user will receive access and login instructions from the WebOPSS system administrator via email.
- 2. The Digital Certificate Service (DCS) for signing authorizing documents in WebOPSS is available to purchase by CHs. The AMTS must designate at least one person as authorized to sign and receive OpSpecs and who will be identified in OpSpec A007. WebOPSS will only allow persons listed on A007 to digitally sign an OpSpec.

b) WebOPSS is the FAA's official file location for filing of a CH's WebOPSS authorizations. Authorizations that are digitally signed by the CH in WebOPSS need no additional filing. If the certificated entity does not digitally sign a WebOPSS authorization, the responsible office will issue the OpSpecs manually by providing the AMTS with a paper copy of each applicable OpSpec. Two copies will be provided to the AMTS for signature. The authorized designated person (as listed in OpSpec A007) at the AMTS will sign and date the OpSpecs. The other signed copy is returned to the responsible Flight Standards office and placed in the office's AMTS official file.

NOTE: AMTSs that keep paper copies should be reminded to use and maintain the most recently approved amendment to each issued OpSpec.

**6-10-2-7 PREREQUISITES AND COORDINATION REQUIREMENTS.** See Volume 6, Chapter 10, Section 1 for the prerequisites and coordination requirements when conducting certification or surveillance on part 147 AMTSs.

## 6-10-2-9 REFERENCES, FORMS, AND JOB AIDS.

## A. References (current editions):

- Title 14 CFR Parts 43, 65, and 147.
- Volume 1, Chapter 3, Section 1, Safety Assurance System: Responsibilities of Aviation Safety Inspectors.
- Volume 2, Chapter 12, Certification of a Part 147 Aviation Maintenance Technician School.
- Volume 3, Chapter 18, Operations Specifications.
- Volume 3, Chapter 31, Electronic Signatures, Electronic Recordkeeping Systems, and Electronic Manual Systems.
- Volume 10, Safety Assurance System Policy and Procedures.
- Volume 11, Chapter 1, Section 1, Voluntary Disclosure Reporting for Air Carriers and Regulated Entities.
- Volume 14, Chapter 1, Section 2, Flight Standards Service Compliance Action Decision Procedure.
- AC 00-58, Voluntary Disclosure Reporting Program.
- AC 120-78, Electronic Signatures, Electronic Recordkeeping, and Electronic Manuals.
- **B.** Forms. See Volume 6, Chapter 10, Section 1.
- C. Job Aids. See Volume 6, Chapter 10, Section 1.

## 6-10-2-11 PROCEDURES FOR INSPECTION.

A. Inspect AMTS Safety Programs—VDRP. Determine if:

• The procedures in Volume 11, Chapter 1, Section 1 were followed when reporting voluntary disclosures of 14 CFR.

- The AMTS followed its established procedures (if any) for voluntary reporting.
- The AMTS procedures (if any) are adequate to ensure compliance with the requirements of an acceptable VDRP submission.

## **B.** Inspect AMTS Required Personnel.

1) Determine if each AMTS instructor is teaching in a manner that ensures positive educational outcomes are achieved.

NOTE: Review AMTS pass rates and testing data (see Volume 6, Chapter 10, Section 1, Subparagraph 6-2145B, Review the AMTS's Minimum Passage Rate) to determine if there are deficient areas of student knowledge or skill when taking the FAA tests.

- **2)** Determine if the AMTS has appropriately qualified instructors corresponding with the school's ratings and FAA-approved curriculum, and that each instructor has the appropriate qualifications to teach their assigned AMTS curriculum course content. An appropriately qualified instructor must either:
  - Hold an FAA-issued mechanic certificate with appropriate rating(s) relative to the curriculum content the instructor will teach, or
  - Be otherwise specifically qualified relative to the curriculum content the instructor will teach.
- a) Identify the AMTS instructors and their assigned teaching content. The AMTS should be able to provide documented evidence of the instructor's assigned teaching content. Assigned teaching content may be defined very broadly, or very specifically, as appropriate to the instructor's qualifications.
- b) Review the instructor's qualifications. The AMTS should be able to provide documented evidence of the instructor's qualifications meeting at least one of the following requirements. Compare the instructor's qualifications with the instructor's assigned teaching content.
- 1. When the AMTS instructor holds an FAA mechanic certificate, ensure that the instructor has the appropriate mechanic certificate rating relative to the specific curriculum content the instructor is assigned to teach.
- 2. When the AMTS uses specifically qualified instructors (i.e., instructors not holding an FAA mechanic certificate), ensure that each instructor's special qualifications are appropriate to the specific curriculum content the instructor is assigned to teach. Some examples of specific qualifications include:

• Documented evidence of practical experience in the procedures, practices, inspection methods, materials, tools, machine tools, and equipment (in most cases, this should reflect aviation maintenance experience); or

- Documented evidence of completed formal training, specifically designed to qualify the applicant for the curriculum content to be instructed.
- 3) Review the AMTS description of the manner in which it provides the necessary qualified instructors (refer to § 147.5(b)(3)). Review the description in OpSpec A013 and verify:
  - The AMTS is following its description of the manner in which the school will ensure it provides the necessary qualified instructors to meet the requirements of § 147.19.
  - The overall instructor resources at the AMTS are adequate relative to the AMTS ratings, student enrollment, and course offerings/schedule.

## C. Inspect the AMTS System for Electronic Signatures, Recordkeeping, and/or Manuals/Documents (if applicable).

NOTE: AMTSs that use accreditation to meet the QC system requirements of § 147.23 are not subject to FAA oversight of school procedures, including electronic recordkeeping or manual procedures.

1) OpSpec A025. The responsible Flight Standards office will use OpSpec A025 to authorize the AMTS's use of electronic signatures, electronic recordkeeping, and/or use of electronic manuals/documents.

### 2) Compliance.

- a) Verify the school is using the electronic signatures, recordkeeping, and/or manuals/documents, as authorized on OpSpec A025.
- b) For those schools using an FAA-approved QC system to meet the requirements of § 147.23(a), the inspector should verify:
  - The AMTS has written procedures describing how it uses electronic signatures, electronic recordkeeping, and/or electronic manuals/documents.
  - The AMTS is following its established procedures for how it uses electronic signatures, electronic recordkeeping, and/or electronic manuals/documents.
  - The procedures developed by the AMTS are effective and producing the desired outcome relative to its use of electronic signatures, electronic recordkeeping, and/or electronic manuals/documents.

c) For those schools using accreditation to meet the requirements of § 147.23(a), the inspector should verify that the AMTS is following the electronic signature procedures included (or referenced) in OpSpec A025.

## D. Review AMTS Certificate Requirements.

- 1) Certificate. The inspector should verify:
  - The AMTS Air Agency Certificate (or a copy) is at a place that is visible by and normally accessible to the public.
  - A copy of the certificate is displayed at each training location of the AMTS (i.e., the primary location and each additional training location).
  - The school's name, address, certificate number, and ratings reflect the most recent FAA Form 8310-6 submitted by the school, and that the same information is reflected in the school's OpSpecs.
- 2) OpSpecs. The inspector should ensure:
  - The currently issued/effective OpSpecs in WebOPSS have been issued to the AMTS.
  - The AMTS has access to (i.e., via WebOPSS), or maintains a copy of, currently issued/effective OpSpecs.
  - The AMTS OpSpecs are available to AMTS management personnel.
  - The AMTS is conducting operations consistent with the authorizations and limitations of its issued OpSpecs.
  - The OpSpecs contain current information relative to the AMTS operations.

NOTE: AMTSs that have personnel with access to the automated WebOPSS system and that use digital signatures are not required to keep paper copies of their OpSpecs. Since the AMTS may not operate without, or in violation of, OpSpecs issued under this part, the AMTS should be able to access the signed/issued documents.

#### **6-10-2-13 TASK OUTCOMES.**

- A. Conduct Debriefing. Brief the CH on the inspection results. Discuss all deficiencies, CH corrective actions, and FAA actions. The aviation safety inspector (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 when processing CH change requests and for completion of SAS DCTs. Update the Certificate Holder Assessment Tool (CHAT), as necessary, to record identified hazards or risk.

**6-10-2-15 FUTURE ACTIVITIES.** Follow Volume 10 to plan future risk-based surveillance in SAS.

6-10-2-17 through 6-10-2-33 RESERVED.

# Appendix R. Order 8900.1, Volume 6, Chapter 10, Section 3, Inspect AMTS Training Operations

#### **VOLUME 6 SURVEILLANCE**

#### **CHAPTER 10 PART 147 INSPECTIONS**

## **Section 3 Inspect AMTS Training Operations**

#### **Source Basis:**

- Part 65, Certification: Airmen Other Than Flight Crewmembers.
- Part 147, Aviation Maintenance Technician Schools.
- Title 49 U.S.C. § 44701, General Requirements.
- Title 49 U.S.C. § 44702, Issuance of Certificates.
- Title 49 U.S.C. § 44707, Examining and Rating Air Agencies.
- Title 49 U.S.C. § 44709, Amendments, Modifications, Suspensions, and Revocations of Certificates.
- Public Law 116-260, Consolidated Appropriations Act, 2021; Division V, Title I, Aircraft Certification, Safety, and Accountability; Section 135, Promoting Aviation Regulations for Technical Training.
- **6-10-3-1 REPORTING SYSTEM(S).** Use Safety Assurance System (SAS) automation and the associated Data Collection Tools (DCT).

NOTE: Title 14 of the Code of Federal Regulations (14 CFR) part 147 functions are listed in Peer Group K of the SAS Master List of Functions (MLF). To view the MLF, see Volume 10, Chapter 1, Section 2.

- **6-10-3-3 OBJECTIVE.** This section provides guidance for conducting inspections of a certificated Aviation Maintenance Technician School (AMTS) while the AMTS is operating (i.e., conducting training operations).
- **6-10-3-5 GENERAL DISCUSSION.** See Volume 6, Chapter 10, Section 1 for procedures on preparing for an AMTS inspection and review of the school's pass rate. The AMTS technical operations function (SAS System 4.0 Technical Operations) includes all aspects of how the school trains its students as required by part 147. The inspection areas for SAS Element 4.1.5 (AW) AMTS Training of Mechanics reflects the areas discussed in this section. Areas of deficiency or concern should be communicated with the school following completion of the inspection.
- **A. Observation of Training.** Inspection of AMTS training operations includes observation of the various types of instructional delivery used by the AMTS during the school's part 147 curriculum (e.g., classroom observation, shop/lab class observation, in-person delivery, distance learning delivery, and virtual practical application projects). Inspections should look for safety issues, regulatory noncompliance, and be used to identify where quality of instruction issues may exist. Inspections may be scheduled or unannounced; however, consideration must be

given to avoid disruption of student learning. The following areas should be observed during the inspection:

## 1) Instructional Facilities, Equipment, and Materials.

- a) The FAA should inspect the AMTS facilities, equipment, and materials to verify compliance with the part 147, § 147.13 requirement for the AMTS to provide and maintain the facilities, equipment, and materials that are appropriate to:
  - The rating or ratings held by the school,
  - The curriculum or portion of curriculum being taught at the location, and
  - The number of students taught at the location.
- b) Physical observation of practical application classes can allow additional opportunity for inspection/observation of the functionality of the equipment used for training. There may be instances where practical application classes are conducted through distance learning or using virtual reality equipment. In any instructional delivery variation, the inspection should verify that the facilities, equipment, and materials being used are appropriate to the course content and the expected learning outcome. See Volume 6, Chapter 10, Section 4 for inspection requirements specific to the AMTS facilities, equipment, tools, and materials.
- 2) Curriculum Content and Delivery. During inspections of AMTS training operations, the FAA must determine if the school and its instructors are delivering appropriate curriculum content in a manner that ensures the AMTS is meeting the requirements of § 147.17(a)(1). All types of instructional delivery should be observed during the inspection if possible; however, risk-based decision making should direct the appropriate focus of inspection resources. Specifically, the inspection should determine:
- a) If the school's curriculum, which is designed to align with the Mechanic Airman Certification Standards (ACS), is being used to deliver curriculum content (see Volume 6, Chapter 10, Section 5); and
- b) If the school is following the curriculum description required by § 147.5(b)(2) for the instructional delivery of the curriculum.
- 1. A curriculum description is required by § 147.5(b)(2). The regulation requires that the school describe the manner in which the school's curriculum will ensure the student has the knowledge and skills necessary for attaining a mechanic certificate and associated ratings under 14 CFR part 65 subpart D. The curriculum description should include discussion in the following areas, as applicable:
  - Curriculum Basis.
  - Curriculum Delivery Methods.
  - Curriculum Focus.

2. See Volume 2, Chapter 12, Section 1, Subparagraph 2-1416B7), Curriculum, and Volume 6, Chapter 10, Section 5, Subparagraph 6-10-5-5B, Curriculum Description, for additional discussion on the curriculum description required by § 147.5(b)(2).

- **3) Instructors.** The AMTS instructors should be observed during lecture or practical application activities to ensure quality instruction is provided by qualified instructors.
- a) As required by § 147.19, each certificated AMTS must provide qualified instructors to teach in a manner that ensures positive educational outcomes are achieved. The FAA interprets positive educational outcomes to refer to the training standards set forth in § 147.17. Therefore, instructors qualified in accordance with § 147.19 must provide instruction to achieve the training requirements in § 147.17(a)(2) and (a)(3):
  - Provide training of a quality that meets the minimum pass rate requirement specified in § 147.25.
  - Ensure students have the knowledge and skills necessary to be prepared to test for a mechanic certificate and associated ratings under part 65 subpart D.
- b) Section 147.19(b) requires that instructors either (1) hold a mechanic certificate with one or more appropriate ratings; or (2) if the instructor does not hold a mechanic certificate, is otherwise specifically qualified to teach their assigned content.
- 1. The instructor's qualifications should be reviewed prior to observing the instructor in the classroom to determine the instructor's qualifications (see Volume 6, Chapter 10, Section 2, Subparagraph 6-10-2-11B, Inspect AMTS Required Personnel). Instructors are not required to have their certificate or qualifications available for FAA review while teaching; instead, AMTS management must make this information available for inspection.
- 2. The inspection must verify that instructors are teaching assigned content for which they are qualified. Therefore, instructors holding an FAA mechanic certificate should only teach content appropriate to the ratings on their certificate, and noncertificated instructors should only teach content for which they are specifically qualified to teach.
- c) Verify the student-to-instructor ratio in shop classes. Section 147.19(c) requires at least 1 certificated instructor for every 25 students in each shop class. The instructor may be either FAA-certificated, or otherwise specifically qualified. This ratio is a minimum requirement. The school should recognize when a lower student ratio is needed and adjust its supervision requirements, as necessary. FAA inspections should also observe if the 25 students to 1 instructor ratio is providing adequate instruction and/or supervision of students.
- 4) Training Safety. During inspections, the FAA should verify that training operations are being conducted in a safe manner. The aviation maintenance environment can be dangerous, especially to those who are not knowledgeable of its hazards and risk. To prevent serious injury or death to students and AMTS personnel, the FAA believes that AMTSs would benefit from clear policy and procedures which ensure the safety of its training operations.

Therefore, the FAA highly recommends that AMTSs develop their own internal safety procedures to mitigate hazards associated with performing training operations. (See Volume 6, Chapter 10, Section 6, Subparagraph 6-10-6-7A, Safety Procedures.) If the AMTS has developed procedures, the procedures should be reviewed prior to the inspection of the training operations. The following is a list of examples of training operations that may be high-risk and therefore warrant specific observation by the FAA:

- The use of training equipment, to include tools or other devices, with the capability to operate, actuate, or store energy, or that otherwise has the potential to expose a person to injury.
- The use of chemicals such as cleaners, lubricants, and flammable liquids (refer to material safety data sheets (MSDS)) during training operations.
- The appropriate use of safety briefings and checklists, wherever applicable, by instructors and students, when required by the schools procedures.
- **B.** Training Documentation. The following training documentation should be reviewed during the inspection to determine compliance, as applicable:
- 1) Training Records. If the school has an FAA-approved quality control (QC) system, the school must have recordkeeping procedures. The student training records must be maintained in accordance with the schools procedures. If the school does not have an FAA-approved QC system, the school is expected to follow its accrediting agencies procedures for recordkeeping. The FAA does not have the authority to inspect recordkeeping procedures, or records, not mandated by 14 CFR.

## 2) Graduation Certificate or Certificate of Completion.

- a) In accordance with § 147.21, an AMTS will issue each graduating student an authenticated document upon completion of a curriculum, either:
  - Airframe curriculum, which includes the general curriculum content;
  - Powerplant curriculum, which includes the general curriculum content; or
  - Airframe and Powerplant (A&P) curriculum, which includes the general curriculum content.
- b) Part 65, § 65.77 requires that an applicant present an authenticated document from a certificated AMTS in accordance with § 147.21. The authenticated document should include the following information to ensure compliance with § 147.21 and to identify the issuer as an FAA-certificated AMTS:
  - An authentication, completed by the school;
  - The graduating student's name;
  - The date of graduation;
  - The title of the curriculum that was completed by the student (either Airframe, Powerplant, or A&P); and
  - Information showing the document was issued by an FAA-certificated AMTS, such as the school's FAA Air Agency Certificate number.

NOTE: Inclusion of the AMTS certificate number is not explicitly stated in the regulation. However, the regulation states that an AMTS may issue the document. Inclusion of the school's FAA Air Agency Certificate number clearly shows that the document was issued by an FAA-certificated AMTS. The school's name does not provide the same verification, since schools, both certificated and noncertificated, may share the same or a similar name.

- 3) Early Testing Documentation. Under § 147.31, when a student satisfactorily completes the general portion of a school's curriculum, the school may issue an authenticated document that demonstrates the student's preparedness to take the mechanic general written test in accordance with § 65.75(c).
- a) It is an option for an AMTS to issue a document showing completion of the general portion of a school's curriculum. However, without the document, students of the AMTS must complete an entire curriculum (e.g., either Airframe, Powerplant, or A&P) and be issued a graduation document under § 147.31 before the student will be eligible to take the mechanic general written test.
- b) The authenticated document should include the following information to ensure compliance with § 147.21 and to identify the issuer as an FAA-certificated AMTS:
  - Evidence of the authentication completed by the school;
  - The student's name:
  - Indication the certificate is for completion of only the "general" course content of the school's curriculum;
  - The date the general portion of the curriculum was completed; and
  - Information showing the document was issued by an FAA-certificated AMTS, such as the school's FAA Air Agency Certificate number.

NOTE: Inclusion of the AMTS certificate number is not explicitly stated in the regulation. However, the regulation states that only an AMTS may issue the document, and including the FAA Air Agency Certificate number shows that the document was issued by an FAA-certificated AMTS. The school's name does not provide the same evidence, since schools, both certificated and noncertificated, may share the same or similar name.

**6-10-3-7 PREREQUISITES AND COORDINATION REQUIREMENTS.** See Volume 6, Chapter 10, Section 1 for the prerequisites and coordination requirements when conducting certification or surveillance on part 147 AMTSs.

## 6-10-3-9 REFERENCES, FORMS, AND JOB AIDS.

## A. References (current editions):

- Title 14 CFR Parts 43, 65, and 147.
- Volume 1, Chapter 3, Section 1, Safety Assurance System: Responsibilities of Aviation Safety Inspectors.

• Volume 2, Chapter 12, Certification of a Part 147 Aviation Maintenance Technician School.

- Volume 10, Safety Assurance System Policy and Procedures.
- Volume 14, Chapter 1, Section 2, Flight Standards Service Compliance Action Decision Procedure.
- **B. Forms.** See Volume 6, Chapter 10, Section 1.
- C. Job Aids. See Volume 6, Chapter 10, Section 1.
- **6-10-3-11 PROCEDURES.** The AMTS technical operations function (SAS System 4.0) includes all aspects of how the school trains its students as required by part 147. The inspection areas for SAS Element 4.1.5 (AW) are discussed in this section.
- **A. Observe Training.** FAA observation of training should look for any safety or regulatory concerns. Additionally, observation of training is an important tool to identify where quality of instruction issues may exist, especially if the school is not meeting the minimum passage rate requirement of § 147.25. The inspector should observe both theory and practical instruction, and the different curriculum delivery methods used by the school, such as use of distance learning or virtual equipment use during practical application of knowledge and skills.
- 1) Instructional Facilities, Equipment, and Materials. Verify the school facilities, equipment, and materials are appropriate to the training being conducted. See Volume 6, Chapter 10, Section 4 for inspection requirements related to the AMTS facilities, equipment, tools, and materials.
- 2) Curriculum Content and Delivery. Determine if the AMTS and its instructors are delivering curriculum content in a manner that ensures the AMTS is meeting the requirements of § 147.17(a)(1) by:
- a) Ensuring the school's curriculum, which is designed to align with the Mechanic ACS, is being used, regardless of the method of curriculum delivery. This can be accomplished by observing actual instruction and evaluating against the school's curriculum.
- b) Ensure the school is delivering its curriculum as described in the curriculum description in OpSpec B001. Determine if the AMTS is following its description of the manner in which the school's curriculum will ensure the student has the knowledge and skills necessary to be prepared to test for a mechanic certificate and associated ratings under part 65 subpart D.
- 3) Instructors. Determine if the instructor has knowledge of the subject matter and its relationship to aviation maintenance.
- a) Quality of Instruction. Instructors must teach in a manner that ensures positive educational outcomes are achieved. Observe classes and/or conduct interviews to determine individual instructor knowledge of the course content and ability to convey the information to students.

b) Instructor Qualifications. Observe instruction to determine if the instructor is knowledgeable on the course content they are teaching and that the instructor is teaching content appropriate to their individual qualifications.

- c) Student-Instructor Ratios. In each shop class where practical application projects are being conducted, verify there are no more than 25 students per instructor. Determine if the class may need additional instructors to facilitate learning and/or address safety concerns relative to what is being taught and the specific learning environment.
- 4) Training Safety. Verify that training operations are being conducted in a safe manner. Particular attention should be directed at high-risk training operations.

## **B.** Observe Training Documentation.

1) Training Records. If the AMTS has an FAA-approved QC system, review a representative sample of student records to determine if the school is following its approved procedures related to student records of training.

NOTE: Schools who meet the QC system requirements of § 147.23(a) by being accredited should maintain training records in accordance with their accrediting agency's requirements. The FAA's authority to request/review records does not extend to these records.

- 2) Certificate of Completion. Verify that each graduating student was issued a graduation/completion document. Verify that the school only issued the graduation document to students who completed a curriculum. Ensure the graduation document includes the following information:
  - A form of authentication, applied by the school;
  - The graduating student's name;
  - The date of graduation;
  - The title of the curriculum completed by the student (either Airframe, Powerplant, or A&P); and
  - Information showing the document was issued by an FAA-certificated AMTS.
- 3) Early Testing Documentation. Verify that students issued a general curriculum completion document completed the general portion of the school's curriculum. Ensure the document issued in accordance with § 147.31 includes the following information:
  - A form of authentication, applied by the school;
  - The student's name;
  - Indication the certificate is for completion of only the "general" course content of the school's curriculum;
  - The date the general portion of the curriculum was completed by the student; and
  - Information showing the document was issued by an FAA-certificated AMTS.

#### **6-10-3-13 TASK OUTCOMES.**

**A.** Conduct Debriefing. Brief the certificate holder (CH) on the inspection results. Discuss all deficiencies, CH corrective actions, and FAA actions. The aviation safety inspector (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 when processing CH change requests and for completion of SAS DCTs. Update the Certificate Holder Assessment Tool (CHAT), as necessary, to record identified hazards or risk.

**6-10-3-15 FUTURE ACTIVITIES.** Follow Volume 10 to plan future risk-based surveillance in SAS.

6-10-3-17 through 6-10-3-33 RESERVED.

# Appendix S. Order 8900.1, Volume 6, Chapter 10, Section 4, Inspect AMTS Facilities

#### **VOLUME 6 SURVEILLANCE**

#### **CHAPTER 10 PART 147 INSPECTIONS**

## **Section 4 Inspect AMTS Facilities**

#### **Source Basis:**

- Part 65, Certification: Airmen Other Than Flight Crewmembers.
- Part 147, Aviation Maintenance Technician Schools.
- Title 49 U.S.C. § 44701, General Requirements.
- Title 49 U.S.C. § 44702, Issuance of Certificates.
- Title 49 U.S.C. § 44707, Examining and Rating Air Agencies.
- Title 49 U.S.C. § 44709, Amendments, Modifications, Suspensions, and Revocations of Certificates.
- Public Law 116-260, Consolidated Appropriations Act, 2021; Division V, Title I, Aircraft Certification, Safety, and Accountability; Section 135, Promoting Aviation Regulations for Technical Training.
- **6-10-4-1 REPORTING SYSTEM(S).** Use Safety Assurance System (SAS) automation and the associated Data Collection Tools (DCT).

NOTE: Title 14 of the Code of Federal Regulations (14 CFR) part 147 functions are listed in Peer Group K of the SAS Master List of Functions (MLF). To view the MLF, see Volume 10, Chapter 1, Section 2.

- **6-10-4-3 OBJECTIVE.** This section provides guidance for evaluating the facilities, equipment, and materials for an Aviation Maintenance Technician School (AMTS). This evaluation should be done in the following instances:
  - Initial certification;

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- Addition/change of a rating;
- Addition of a training location;
- Change of location; or
- Surveillance of the AMTS, scheduled or nonscheduled.
- **6-10-4-5 GENERAL DISCUSSION.** Under part 147, § 147.13, each AMTS must provide and maintain the facilities, equipment, and materials that are appropriate to:
  - The rating or ratings held by the school,
  - The curriculum or portion of the curriculum being taught at the location, and
  - The number of students taught at the location.

NOTE: The term "appropriate" should be interpreted to mean that the facilities, equipment, and materials provide a safe and suitable learning environment that results in the ability to meet the training requirements of § 147.17.

NOTE: The safety of students is of utmost importance. Aircraft maintenance tasks can be dangerous and schools must ensure their facilities, equipment, and materials do not contribute to injury or death in the learning environment.

- **A. AMTS Facilities.** AMTS facilities include those located at the primary location of the AMTS, and any additional fixed training location of the AMTS.
- 1) Facility Description. The AMTS must provide the Federal Aviation Administration (FAA) with a description of the facilities that will be used for instruction, as required by § 147.5(b)(1). This description must be included in AMTS Operations Specification (OpSpec) A015, Facilities, Equipment, and Materials. The description must be detailed enough to demonstrate that the AMTS can provide and maintain facilities that are appropriate to:
  - The rating or ratings held by the school,
  - The school's curriculum, and
  - The number of students taught by the school.
- a) The facility description may be included in the OpSpec directly, or by referring to an AMTS document (including document revision information) that contains the description.
- b) In addition to the required description, a reference to a detailed drawing showing the layout and dimensions of the facilities is recommended.
- c) Facility descriptions must include information for each training location of the AMTS.

NOTE: Sometimes, a course of study may be offered at a separate facility due to standards from local, state, and Federal codes that the primary AMTS facility cannot meet (e.g., requirements relating to operation of aircraft and associated noise, fire, and safety hazards). If the AMTS will instruct a course or portion of the curriculum at a separate facility, then the AMTS must consider this an additional training location.

- **2)** Learning Environment. The AMTS facility should provide an environment suitable for learning. Some considerations include:
  - Distractions from learning, such as excessive noise, poor lighting, dust or fumes (poor ventilation), heat and cold (temperature control), and clutter should be considered. For example, classrooms should be separated from the noise and activity of shop and/or hangar environments.
  - Facilities should be of adequate size for the number of students in a classroom, or when accomplishing any of the laboratory or shop projects as

- appropriate to the school's instructional design (e.g., a certain area or piece of equipment cannot accommodate a large number of students, but the school's instructional design ensures it is used by small groups of students at different times).
- Facilities should be located and classes scheduled so that students can travel between classes without cutting into instructional time.
- The school should ensure the laboratory and shop floors are free from clutter, such as extension cords and air hoses.
- 3) Compliance with Local, State, and Federal Standards. All school facilities must conform to any local, state and Federal standards including those imposed by local fire departments, health agencies, and other regulatory agencies. When there is concern of whether the requirements of other agencies are being met by the facility, the AMTS should be referred to the appropriate agency. It is not the responsibility of the FAA to inspect compliance with, or enforce the requirements of, another agency. However, identified concerns should be shared with the AMTS.
- **B. AMTS Equipment.** AMTS equipment includes shop equipment, tools (including hand tools), and instructional aids, such as aircraft, aircraft components, and mock-ups used for learning.
- 1) **Shop Equipment.** AMTS should consider the following guidelines for shop equipment:
  - Have enough shop equipment in place and in satisfactory operating condition to adequately serve the student enrollment and support intended curriculum learning outcomes.
  - Maintain an adequate ratio of instructional aids-to-students in each shop course, which ensures safety and facilitates learning.
  - Shop equipment should be maintained in good working order and be in a condition for safe operation. A system should be in place for routine preventive maintenance and/or replacement.
  - Large, standing equipment should be securely installed and located to provide sufficient aisle space so students can move about freely.
- 2) Tools. The AMTS should provide any necessary tools required to provide appropriate instruction. The tools should be in satisfactory working condition and of the proper kind for the purpose for which they are intended. The AMTS should either provide common hand tools for student use or require students to furnish their own. Requirements for student-furnished hand tools should be clearly communicated to students to ensure learning objectives during training can be met.
- 3) Instructional Aids. The school's instructional aids should be appropriate for the scope and depth of the part 147 curriculum. The AMTS should ensure the complexity of instructional aids is appropriate to the expected level of knowledge and/or skill for the specific course content item. The AMTS should maintain a ratio of instructional aids-to-students which

ensures safety of the students and facilitates learning. Broken or deteriorated instructional aids should be repaired or replaced. Examples of instructional aids include:

- Diagrams;
- Visual aids;
- Computers;
- Interactive software;
- Aircraft and mock-ups of aircraft;
- Engines and engine accessories; and
- Components, such as hydraulic servos, accumulators, etc.
- 4) Part 147 does not require that each school have at least one aircraft currently certificated by FAA, such as was required under previous regulation. However, use of aircraft meeting design and certification standards under 14 CFR is highly encouraged to help meet learning expectations, for the following reasons (for example):
  - The privileges of an FAA mechanic certificate directly relate to aircraft meeting 14 CFR requirements;
  - An aircraft can often provide an all-in-one instructional aid opportunity; and
  - A complete aircraft can assist in familiarizing students with the real-world aircraft maintenance environment.
- 5) Sharing Training Equipment. Sharing of training equipment is acceptable among training locations of an AMTS, as long as equipment is available when needed to deliver the school's curriculum.
- 6) Equipment Description. The AMTS must provide the FAA with a description of the equipment that will be used for instruction as required by § 147.5(b)(1), and the AMTS OpSpecs must include this description as required by Public Law 116-260, Consolidated Appropriations Act, 2021. The description must be detailed enough to demonstrate that the AMTS will provide and maintain equipment that is appropriate to the rating or ratings requested/issued, and the number of students taught. Descriptions must be provided to the FAA relative to equipment located at each training location of the AMTS.

NOTE: The equipment description may be included in the OpSpecs directly, or by referring to an AMTS document (including document revision information) that contains the description.

- **C. AMTS Materials.** The AMTS must describe the materials to be used for instruction. The school must have sufficient materials in stock and properly stored to provide for the student enrollment.
- 1) Materials Description. The AMTS must provide the FAA with a description of the materials that will be used for instruction as required by § 147.5(b)(1). This description must be included in AMTS OpSpec A015. The description must be detailed enough to demonstrate that the AMTS can provide and maintain materials that are appropriate to the rating or ratings

requested, and the number of students taught. Descriptions must be provided to the FAA for materials located at each training location of the AMTS.

NOTE: The materials description may be included in the OpSpecs directly, or by referring to an AMTS document (including document revision information) that contains the description.

- 2) Technical Data. An AMTS should provide a suitable technical data reference access. The technical data should be appropriate for the AMTS ratings. At a minimum, the technical data should include the following:
  - Title 14 CFR parts 1 through 199.
  - Aircraft, engine, propeller, and Type Certificate Data Sheets (TCDS) and specifications.
  - Airworthiness Directives (AD).
  - Aircraft Maintenance Manuals (AMM), relative to the equipment used by the school.
  - Supplemental Type Certificates (STC), relative to the equipment used by the school.
  - Advisory circulars (AC).
  - Other instructional materials, such as textbooks on basic physics, math, hydraulics, and powerplants.
- **D.** Additional Training Locations. When an AMTS has additional training locations, each location should be inspected for compliance with part 147:
  - The facilities, equipment, and materials for each location must be described in the AMTS OpSpec A015.
  - The facilities, equipment, and materials used at each location must be appropriate to the curriculum or portion of the curriculum taught, and the number of students being taught, at that location.

**6-10-4-7 PREREQUISITES AND COORDINATION REQUIREMENTS.** See Volume 6, Chapter 10, Section 1 for the prerequisites and coordination requirements when conducting certification or surveillance on part 147 AMTSs.

## 6-10-4-9 REFERENCES, FORMS, AND JOB AIDS.

## A. References (current editions):

- Title 14 CFR Parts 43, 65, and 147.
- Volume 1, Chapter 3, Section 1, Safety Assurance System: Responsibilities of Aviation Safety Inspectors.
- Volume 2, Chapter 12, Certification of a Part 147 Aviation Maintenance Technician School.

- Volume 10, Safety Assurance System Policy and Procedures.
- Volume 14, Chapter 1, Section 2, Flight Standards Service Compliance Action Decision Procedure.
- **B. Forms.** See Volume 6, Chapter 10, Section 1.
- C. Job Aids. See Volume 6, Chapter 10, Section 1.

**6-10-4-11 PROCEDURES.** Inspect the AMTSs facilities as discussed below. See Volume 6, Chapter 10, Section 1 for procedures on preparing for an AMTS inspection and review of the school's quality of instruction as measured by its pass rate.

- A. Inspect the AMTS Facilities, Equipment, and Materials. Prior to the inspection, the inspector should:
  - Review the ratings held by the AMTS;
  - Review the AMTS curriculum;
  - Verify the curriculum or curriculum content being taught and the number of students being taught at the location; and
  - Review the school's description(s) of its facilities, equipment, and materials required by § 147.5(b)(1) found in the OpSpec A015. The description must cover each training location of the school.

NOTE: The safety of students is of utmost importance. Aircraft maintenance tasks can be dangerous and schools must ensure their facilities, equipment, and materials prevent injury or death in the learning environment.

- **B. AMTS Facilities.** Inspect the AMTS facilities and verify the facilities are appropriate to:
  - The school's ratings;
  - The curriculum or portion of the curriculum being taught, at each training location;
  - The number of students being taught at each training location; and
  - That the facilities provide an environment conducive to learning the expected knowledge and skills (per the AMTS curriculum), and are safe.

NOTE: Observe classroom and shop areas to determine if the areas are safe and provide an environment suitable for learning as discussed in subparagraph 6-10-4-5A2).

- **C. AMTS Equipment.** Verify the AMTS equipment is appropriate to:
  - The school's ratings;
  - The curriculum or portion of the curriculum being taught, at each training location;

- The number of students being taught at each training location; and
- That the equipment provides an environment conducive to learning the expected knowledge and skills (per the AMTS curriculum), and are safe.
- 1) Observe the operation of instructional equipment and determine if the equipment is suitable to complete the practical projects required by the school's curriculum. The equipment does not need to be in an airworthy condition; however, it should be in working order to obtain the expected learning outcome.
- 2) Determine if the AMTS has enough equipment for the number of students being taught. Determine if there are instances where too many students are required to use equipment resulting in safety or learning concerns.
- 3) Determine if there is enough shop equipment in place and in satisfactory operating condition to serve the student enrollment adequately and meet the curriculum practical project requirements. Verify that equipment can be operated in a safe and efficient manner. Equipment should be secure and placement should provide sufficient aisle space so that the students can move about freely. The floor should be free from trip hazards.
- 4) Determine if the AMTS has tools appropriate to its curriculum and appropriate for aircraft maintenance. Verify that tools are in satisfactory working condition for the purpose for which they are to be used. Verify that the school has an adequate supply of tools appropriate to serve the number of enrolled students and ensure proper instruction.
- 5) When the school has students supply certain hand tools, observe student hand tool use and verify that student hand tools are in satisfactory working condition for the purpose for which they are used.
  - **D. AMTS Materials.** Verify the AMTS materials are appropriate to:
    - The school's ratings;
    - The curriculum or portion of the curriculum being taught, at each training location;
    - The number of students being taught at each training location; and
    - That the materials support an environment conducive to learning the expected knowledge and skills (per the AMTS curriculum).
- 1) Verify that the AMTS has sufficient materials in stock and properly stored to provide for the student enrollment.
- 2) Verify that the amount and variety of stock directly reflects the requirements of the curriculum.

#### 6-10-4-13 TASK OUTCOMES.

**A.** Conduct Debriefing. Brief the certificate holder (CH) on the inspection results. Discuss all deficiencies, CH corrective actions, and FAA actions. The aviation safety inspector (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 for completion of SAS DCTs. Update the Certificate Holder Assessment Tool (CHAT) as necessary.
- **6-10-4-15 FUTURE ACTIVITIES.** Follow Volume 10 to plan future risk-based surveillance in SAS.

6-10-4-17 through 6-10-4-33 RESERVED.

## Appendix T. Order 8900.1, Volume 6, Chapter 10, Section 5, Evaluate an AMTS Initial Curriculum or Curriculum Revision

#### **VOLUME 6 SURVEILLANCE**

#### **CHAPTER 10 PART 147 INSPECTIONS**

## Section 5 Evaluate an AMTS Initial Curriculum or Curriculum Revision

#### **Source Basis:**

- Part 65, Certification: Airmen Other Than Flight Crewmembers.
- Part 147, Aviation Maintenance Technician Schools.
- Title 49 U.S.C. § 44701, General Requirements.
- Title 49 U.S.C. § 44702, Issuance of Certificates.
- Title 49 U.S.C. § 44707, Examining and Rating Air Agencies.
- Title 49 U.S.C. § 44709, Amendments, Modifications, Suspensions, and Revocations of Certificates.
- Public Law 116-260, Consolidated Appropriations Act, 2021; Division V, Title I, Aircraft Certification, Safety, and Accountability; Section 135, Promoting Aviation Regulations for Technical Training.
- **6-10-5-1 REPORTING SYSTEM(S).** Use Safety Assurance System (SAS) automation and the associated Data Collection Tools (DCT).

NOTE: Title 14 of the Code of Federal Regulations (14 CFR) part 147 functions are listed in Peer Group K of the SAS Master List of Functions (MLF). To view the MLF, see Volume 10, Chapter 1, Section 2.

**6-10-5-3 OBJECTIVE.** This section provides guidance for evaluating the curriculum or curriculum revision of an Aviation Maintenance Technician School (AMTS) certificated under part 147, or an AMTS applicant. The curriculum evaluation can occur at initial application or when an AMTS proposes a revision. Other changes by the AMTS could prompt a curriculum review, such as changes to AMTS ratings, change of location, changes to the AMTS facilities, or any other time the Certificate Management Team (CMT) determines a need to evaluate the AMTS curriculum to verify compliance with part 147 requirements.

#### 6-10-5-5 GENERAL DISCUSSION.

- **A.** Curriculum/Training Requirements. Part 147 contains the following curriculum requirements:
  - Curriculum description, as required by part 147, § 147.5(b)(2). See subparagraph B for additional discussion.
  - Curriculum document and training requirements, as required by § 147.17(a)(1). See subparagraph C for additional discussion.

**B.** Curriculum Description. The AMTS must describe the manner in which the school's curriculum will ensure the student has the knowledge and skills necessary for attaining a mechanic certificate and associated ratings under part 65 subpart D. The Federal Aviation Administration (FAA) recognizes that there are many methods a school could use to effectively design and deliver curriculum content. Part 147 allows the school to decide the best method for the structure and delivery of its curriculum. The curriculum description should include discussion in the following areas, as applicable:

- Curriculum Basis.
- Curriculum Delivery Methods.
- Curriculum Focus.
- 1) Operations Specification (OpSpec) B001. The curriculum description required by § 147.5(b)(2) must be included in AMTS OpSpec B001. Therefore, whenever the AMTS changes its curriculum description (i.e., curriculum basis, delivery methods, or focus), it must provide those changes to the FAA for amendment of AMTS OpSpec B001. The curriculum description may be included in the OpSpec directly, or by referring to an AMTS document (including document revision information) that contains the description.
- 2) Curriculum Basis. The following are examples of curriculum bases that may be used for AMTS curriculum. There may be other curriculum bases used that are not discussed here. Advisory Circular (AC) 147-3, Certification and Operation of Aviation Maintenance Technician Schools, Appendix B, Related References, lists several references that may assist schools in determining and developing the curriculum basis.
- a) Hours-Based Curriculum. An AMTS may choose to base its curriculum on requiring student completion of a defined number of curriculum hours. For example, the school could base its curriculum on curriculum hours defined for each of the school's ratings:
  - Airframe—1,150 hours (400 general plus 750 Airframe).
  - Powerplant—1,150 hours (400 general plus 750 Powerplant).
  - Combined Airframe and Powerplant (A&P)—1,900 hours (400 general plus 750 Airframe and 750 Powerplant).

NOTE: Part 147 does not prescribe minimum curriculum hours.

b) Credit Hours-Based Curriculum. An AMTS may choose to base its curriculum on requiring student completion of a defined number of credit hours. Credit hours should be based on higher education criteria, such as the credit hour criteria of the school's accrediting body.

NOTE: Part 147 does not prescribe an amount of credit hours.

c) Competency-Based Training (CBT) Curriculum. An AMTS could choose to develop its curriculum using educational practices based on competency and assessment. A standard for CBT has been developed by the International Civil Aviation Organization (ICAO).

> • ICAO Document (Doc) 9868, Procedures for Air Navigation Services— Training, defines CBT and assessment as: "Training and assessment that are characterized by a performance orientation, emphasis on standards of performance and their measurement, and the development of training to the specified performance standards." The ICAO document describes, and the training takes into account, the competencies and behaviors that are considered fundamental for aircraft maintenance personnel.

> • ICAO Doc 10098, Manual on Competency-Based Training and Assessment for Aircraft Maintenance Personnel, provides guidance on a new approach of applying CBT and assessment to aircraft maintenance personnel in accordance with Part III of the Procedures for Air Navigation Services—Training (PANS-TRG) (Doc 9868).

NOTE: Part 147 does not prescribe CBT standards.

3) Curriculum Delivery Methods. The school must ensure that the curriculum delivery method used to teach the various knowledge and skills required to perform aircraft maintenance under 14 CFR will achieve the training requirements put forth in § 147.17. Additionally, the delivery method must ensure that each instructor is able to comply with the instructor requirement to teach in a manner that ensures positive educational outcomes are achieved, as required by § 147.19(a).

NOTE: The FAA does not approve a school's curriculum delivery method.

- a) In-Person. Much of the knowledge and skill training relative to aircraft maintenance is suited to in-person delivery, where students can learn and experience aircraft maintenance in an environment that is similar to what individuals will experience as certificated mechanics.
- b) Distance Learning. There are various methods a school could use to deliver curriculum content that enables access to learning when the source of information and the learners are separated physically by time or distance, or both. Schools should carefully consider what curriculum content is appropriate for distance learning delivery to ensure expected learning outcomes will be met.
- c) Virtual Simulation. Many AMTS are incorporating virtual simulation for conducting practical application of certain skills. For example, virtual welding and virtual paint booths use simulation equipment and technology to provide near-real environments while minimizing the hazards associated with those activities. When virtual simulation is used, the school must ensure that the learning objectives for knowledge and skill are met, just as they would in real-world practical application. Additionally, while the simulated environment may reduce the hazards associated with the task, it is important that students are highly aware of hazards when conducting the real-world task, as well as how to mitigate those hazards, such as with personal protective equipment (PPE).
- 4) Curriculum Focus. An AMTS may enrich portions of its curriculum to develop graduates who are directed toward particular areas of the aviation industry. Examples are schools

that choose to train graduates specifically for employment at commercial airlines, helicopter operations, repair stations, or agricultural aircraft operations. Schools must ensure that the curriculum does not omit content that is in the Mechanic Airman Certification Standards (ACS), as, pursuant to § 147.17(a), curriculum must continually align with the Mechanic ACS (see subparagraph C). Examples of curriculum focus include:

EXAMPLE 1: An AMTS in a rural area may wish to focus on preparing students for General Aviation (GA) and aircraft operations, such as agricultural operations. In this case, airframe subjects, such as wood, dope, fabric, welding, rigging, and corrosion control, would be emphasized for these subjects. Powerplant courses, such as propellers and reciprocating powerplants, including radial and opposed, would also be emphasized in the same ways. On the other hand, turbine engines, electronics, and air conditioning may be deemphasized, while still ensuring all knowledge and skills required by the Mechanic ACS are taught in these areas.

EXAMPLE 2: An AMTS in a metropolitan area may concentrate on preparing students for employment at major airlines. This AMTS would tend to emphasize areas, such as turbine engines, nondestructive inspection (NDI), air conditioning systems, autoflight, electronics, and airline maintenance systems. This AMTS may want to deemphasize its teaching of wood, dope, fabric, welding, and reciprocating engine subjects, while still ensuring all knowledge and skills required by the Mechanic ACS are taught in these areas.

- C. Curriculum. An AMTS must establish, maintain, and utilize a curriculum designed to continually align with Mechanic ACS, as appropriate for the ratings held, pursuant to § 147.17. The "curriculum" refers to the curriculum document(s) that a school must develop, which must align with the Mechanic ACS, depending on the ratings issued to the school under § 147.11. The school's curriculum must be used at all training locations of the school (i.e., different locations may not use different curriculum). However, all or a portion of the curriculum may be taught at any of the school's locations.
- 1) Mechanic ACS. The phrase "mechanic airman certification standards" in § 147.17(a)(1) refers to the standards that have been incorporated by reference in § 147.17(b). The Mechanic ACS contains several high-level subjects. For each subject, the ACS specifies the aeronautical knowledge, risk management, and skill standards that an applicant for a mechanic certificate must know. An AMTS curriculum is required to align with the subject areas and with each of the aeronautical knowledge, risk management, and skill standards included in the Mechanic ACS.
- a) Because part 147 requires use of the Mechanic ACS, which was not already published in the CFR or another location that carries the full force and effect of the law, the FAA incorporated the Mechanic ACS by reference. Incorporation by reference is a mechanism that allows Federal agencies to comply with the requirements of the Administrative Procedure Act (APA) to publish rules in the Federal Register (FR) and the CFR by referring to material published elsewhere. Material that is incorporated by reference has the same legal status as if it were published in full in the CFR.

b) In accordance with Title 5 of the United States Code (5 U.S.C.) § 552(a) and 1 CFR part 51, the FAA makes the Mechanic ACS reasonably available to interested parties. The FAA provides free online public access to view read-only copies of the Mechanic ACS that is incorporated by reference. The Mechanic ACS is available to the public for free viewing online on the ACS web page at https://www.faa.gov/training\_testing/testing/acs. In addition to the free online availability of this material for viewing on the FAA's website, hard copies and printable versions are available from the FAA.

- 2) Aligning the Curriculum with the ACS. As previously discussed, the Mechanic ACS includes high-level subjects (e.g., Fundamentals of Electricity and Electronics, Aircraft Drawings, etc.), and then breaks the high-level subjects into components that include knowledge, risk management, and skill elements relevant to that subject. The knowledge, risk management, and skill elements set forth the standards for certification. Because § 147.17(a)(1) requires a curriculum to align with the Mechanic ACS, the curriculum must align with the standards set forth under the high-level subjects.
- a) An AMTS will be in compliance with § 147.17(a)(1) if the school designs its curriculum to include:
  - 1. The high-level subjects that are listed in the Mechanic ACS; and
- 2. Broader course content items, concepts, and practical projects under each high-level subject, which may encompass several of the more detailed knowledge, risk management, and skill elements listed in the ACS. For example, one broad course content item in the curriculum may encompass several knowledge elements listed in the ACS, while still aligning with the ACS. Similarly, a school could develop a curriculum that includes more content than the ACS, and still be in alignment with the ACS.
  - NOTE: While a curriculum must align with the high-level subjects and the standards set forth under those subjects, this does not mean that an AMTS must copy and paste the entirety of the Mechanic ACS into its curriculum. The intent of the regulation is to remove the prescriptive curriculum requirements from part 147 and provide a more flexible, performance-based standard that enables an AMTS to develop a curriculum that coincides with the Mechanic ACS.
- b) If the curriculum does not align with the knowledge and skill elements contained in the Mechanic ACS, the school would also be in violation of the § 147.17(a)(3) training requirement because the Mechanic ACS contains the knowledge and skill standards that will be evaluated on the FAA written, oral, and practical tests for a mechanic certificate under part 65.
- c) The curriculum must provide the opportunity for the student to obtain and demonstrate skill, as will be required during mechanic certification testing and expected following certificate issuance. Skill components of the ACS which specify the applicant demonstrate the ability to perform an action related to a subject area element should be included into the AMTS curriculum as practical projects with defined performance criteria and outcomes.

**D.** Curriculum Document Design. The regulation does not require a specific design/format for a curriculum. Based on the ratings issued to the AMTS, the AMTS has the flexibility to design its curriculum document structure as desired. The school can only issue a certificate of completion for a completed curriculum, which correspond to the AMTS ratings. The AMTS ratings, curriculum design, and the graduation/completion document issued by the AMTS will affect at what point a student may be eligible to take the FAA written, oral, and practical exams.

**E. Examples of Curriculum Document Design.** Examples of possible curriculum document design have been included in Table 6-10-5A below. There may be additional possibilities that have not been included in the table. The left column reflects the ratings referenced in § 147.11. The middle columns show the possible curriculum designs, standalone or combined. The three columns preceding the "General (early testing)" column show the graduation document (or completion document) a school can issue after the appropriate curriculum is completed. For the last column, please see the footnote.

Table 6-10-5A. Curriculum Design Examples

If the AMTS holds this rating	And curriculum document design is in this format						Then the AMTS may issue completion documentation referencing the following curriculum			
	Airframe (A)	Powerplant (P)	General (G)	Airframe + General (A+G)	Powerplant + General (P+G)	Combined (A+P+G)	Airframe (A)	Powerplant (P)	A & P (single certificate)	General (early testing)
Airframe & Powerplant	X	X	X						X	<b>X</b> <sup>[1]</sup>
						X				
Airframe				X			X			
	X		X							
Powerplant					X			X		
		X	X							

<sup>[1]</sup> A "general" curriculum completion document should only be issued if the AMTS can clearly document completion of the general content of its curriculum.

1) Additional Curriculum Content. The requirement that curriculum content align with the Mechanic ACS is a minimum standard. AMTSs may include additional content in their curriculum that is above and beyond what is included in the Mechanic ACS.

- 2) Safety Information. The aviation maintenance environment can be dangerous, especially to those who are not knowledgeable of its hazards and risk. The FAA recommends that AMTS integrate additional safety policy and procedures (see Volume 6, Chapter 10, Section 6, Paragraph 6-10-6-9, Other AMTS Procedures) into its curriculum document(s). Results of AMTS risk mitigations, such as safety briefings or references to appropriate safety procedures, should be included in the AMTS's curriculum or otherwise be readily available to instructors and students to increase safety awareness prior to high-risk training operations.
- 3) Tests/Evaluations. AMTS may choose to include information in the curriculum on the tests and/or other evaluations that are related to the subjects in the curriculum.
- 4) Practical Project Information. AMTS may choose to include additional information in their curriculum related to practical projects, such as performance criteria, tools, and equipment required for the project, and safety information.

#### F. Revision of the AMTS Curriculum.

1) Section 147.17(a)(1) requires AMTS curriculum to align with the Mechanic ACS. Therefore, when the Mechanic ACS is revised, a corresponding revision to the AMTS curriculum must also be made by the AMTS, no later than the effective date of the change to those standards. The AMTS may also choose to revise its curriculum for other reasons not related to the effective date of the Mechanic ACS.

NOTE: The Mechanic ACS is incorporated by reference, specific to a version, which is delineated in the regulation (refer to § 147.17(b)). When the Mechanic ACS is revised, a corresponding rule must codify the updated version of the ACS into the regulations to become enforceable. The effective date of the updated ACS version will be specified in the corresponding final rule. When the Mechanic ACS is updated, an effective date is not printed in the Mechanic ACS itself; rather, the effective date for AMTS to revise their curriculum to align with the updated Mechanic ACS will be the effective date of the final rule that amends § 147.17(b).

- 2) The curriculum document(s) should use a method to identify revisions to the curriculum, such as a revision level and date, change bars, and/or List of Effective Pages (LEP).
- 3) There is no requirement for the school to submit a revised curriculum to the FAA for review; however, the requirement to maintain the curriculum aligned with the Mechanic ACS is ongoing. Therefore, AMTSs are encouraged to communicate curriculum changes with the FAA CMT, and the FAA will conduct routine surveillance on AMTS curriculum to ensure continued alignment with the Mechanic ACS.
- **6-10-5-7 PREREQUISITES AND COORDINATION REQUIREMENTS.** See Volume 6, Chapter 10, Section 1 for the prerequisites and coordination requirements when conducting certification or surveillance on part 147 AMTSs.

## 6-10-5-9 REFERENCES, FORMS, AND JOB AIDS.

## A. References (current editions):

- Title 14 CFR Parts 43, 65, and 147.
- Volume 1, Chapter 3, Section 1, Safety Assurance System: Responsibilities of Aviation Safety Inspectors.
- Volume 2, Chapter 12, Certification of a Part 147 Aviation Maintenance Technician School.
- Volume 10, Safety Assurance System Policy and Procedures.
- Volume 14, Chapter 1, Section 2, Flight Standards Service Compliance Action Decision Procedure.
- AC 120-78, Electronic Signatures, Electronic Recordkeeping, and Electronic Manuals.
- **B.** Forms. See Volume 6, Chapter 10, Section 1.
- C. Job Aids. See Volume 6, Chapter 10, Section 1.

## 6-10-5-11 PROCEDURES FOR CURRICULUM REVIEW.

## A. Curriculum Description Review.

- 1) Review the curriculum description required by § 147.5(b)(2) to ensure the school describes the manner in which the school's curriculum will ensure the student has the knowledge and skills necessary for attaining a mechanic certificate and associated ratings under part 65 subpart D.
- a) The description should include a discussion on the curriculum basis, curriculum delivery methods, and if the curriculum will focus on the content of certain subject areas over others.
- b) The description must be included in OpSpec B001, or alternatively, the OpSpec can reference an AMTS document, including the document revision information, which contains the curriculum description required by § 147.5(b)(2).
- 2) If the AMTS subsequently changes the curriculum description required by § 147.5(b)(2), then OpSpec B001 must be revised as appropriate.

NOTE: The FAA should conduct inspections to determine if the school is following the curriculum description it has outlined in OpSpec B001. This should be done during the onsite inspection of the school (see Volume 6, Chapter 10 Section 3).

#### B. Curriculum Document Review.

1) During an initial certification, review the AMTS curriculum prior to the demonstration and inspection phase at the AMTS facility. Verify the curriculum aligns with the Mechanic ACS.

2) Following certification of the AMTS, review the AMTS curriculum to determine if the document was revised. If revised, conduct additional review to ensure the AMTS curriculum aligns with the Mechanic ACS. Review of curriculum revisions can be limited to the revised material, or a complete review can be conducted at the discretion of the aviation safety inspector (ASI) and/or CMT.

NOTE: Once the AMTS is certificated, there is no requirement for the school to submit a revised curriculum to the FAA for review. Therefore, the CMT should periodically (e.g., during surveillance activities) determine if the AMTS curriculum has been revised since the FAA last verified it aligned with the Mechanic ACS.

- 3) The curriculum review should ensure the following:
  - The curriculum covers the subjects and items prescribed in the Mechanic ACS.
  - Practical projects have been defined for all skill elements listed in the Mechanic ACS that require practical hands-on or skill demonstration.

#### 6-10-5-13 TASK OUTCOMES.

- **A.** Conduct Debriefing. Brief the certificate holder (CH) on the inspection 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 for completion of SAS DCTs. Update the Certificate Holder Assessment Tool (CHAT) as necessary.
- **6-10-5-15 FUTURE ACTIVITIES.** Follow Volume 10 to plan future risk-based surveillance in SAS.
- 6-10-5-17 through 6-10-5-33 RESERVED.

## Appendix U. Order 8900.1, Volume 6, Chapter 10, Section 6, Evaluate/Approve an AMTS Quality Control System/Procedures

### **VOLUME 6 SURVEILLANCE**

### **CHAPTER 10 PART 147 INSPECTIONS**

## Section 6 Evaluate/Approve an AMTS Quality Control System/Procedures

### **Source Basis:**

- Part 65, Certification: Airmen Other Than Flight Crewmembers.
- Part 147, Aviation Maintenance Technician Schools.
- Title 49 U.S.C. § 44701, General Requirements.
- Title 49 U.S.C. § 44702, Issuance of Certificates.
- Title 49 U.S.C. § 44707, Examining and Rating Air Agencies.
- Title 49 U.S.C. § 44709, Amendments, Modifications, Suspensions, and Revocations of Certificates.
- Public Law 116-260, Consolidated Appropriations Act, 2021; Division V, Title I, Aircraft Certification, Safety, and Accountability; Section 135, Promoting Aviation Regulations for Technical Training.

**6-10-6-1 REPORTING SYSTEM(S).** Use Safety Assurance System (SAS) automation and the associated Data Collection Tools (DCT).

NOTE: Title 14 of the Code of Federal Regulations (14 CFR) part 147 functions are listed in Peer Group K of the SAS Master List of Functions (MLF). To view the MLF, see Volume 10, Chapter 1, Section 2.

### 6-10-6-3 **OBJECTIVE.**

**A. Quality Control (QC) System.** This section provides guidance for evaluating and/or approving an Aviation Maintenance Technician School (AMTS) QC system. The evaluation occurs as part of an original certification, or whenever the QC system is changed following its original approval. Inspectors may also conduct this evaluation at any time the Certificate Management Team (CMT) determines a need to evaluate the AMTS QC system.

NOTE: The regulation does not preclude an accredited school from obtaining a Federal Aviation Administration (FAA)-approved QC system. Therefore, an AMTS may hold both accreditation and an FAA-approved QC system. If obtained, the AMTS must follow its FAA-approved QC system.

**B. Part 147, § 147.23 Compliance.** See Volume 6, Chapter 10, Section 7 for discussion and procedures on conducting an inspection to determine if the AMTS is in compliance with § 147.23, to include following its FAA-approved QC system or meeting accreditation requirements, as applicable.

**6-10-6-5 QC SYSTEM GENERAL DISCUSSION.** Schools that are not accredited within the meaning of Title 20 of the United States Code (20 U.S.C.) § 1001(a)(5) must obtain FAA approval of a QC system. The QC system must be submitted to the FAA for approval during the certification process, and any subsequent revisions to the system must be submitted for approval. The QC system must include procedures for the following:

- Recordkeeping,
- Assessment,
- Issuing credit,
- Issuing of final course grades,
- Attendance,
- Ensuring sufficient number of instructors,
- Granting of graduation documentation, and
- Corrective action for addressing deficiencies.

A. Satisfying § 147.23(b). In order to satisfy § 147.23(b), the QC system submitted to the FAA for approval must clearly describe the school's procedures for each item listed in § 147.23(b). The FAA has defined what an AMTS QC system should include in order to be approved by the FAA in Advisory Circular (AC) 147-3, Certification and Operation of Aviation Maintenance Technician Schools, and in this section.

- **B. Recordkeeping.** The AMTS recordkeeping procedures should describe the types of records the school will produce and retain, related to its training operations and to student completion of the school's curriculum, and for how long.
- 1) **Procedures.** Recordkeeping procedures should encompass all records produced within the QC system to include:
  - Records of assessment of a student's knowledge and skill, as applicable to the curriculum for which the student is enrolled. Records should clearly distinguish between successful performance and unsuccessful performance.
  - Records showing credit granted for course completion at the AMTS and for previous experience and/or previous instruction gained elsewhere, including supporting transcript(s), when applicable. Records should clearly show what subjects areas were credited to the student by the AMTS, and on what basis.
  - Records of the student's grades, to include final course grades, as applicable.
     Records should clearly distinguish between successful performance and unsuccessful performance.
  - Records of student attendance relative to the school's attendance policy.
  - Records of curriculum completion and records showing issuance of graduation documentation, and/or records showing general curriculum course content completion and issuance of general curriculum course content completion documentation.
  - Records showing identified deficiencies of the QC system, and records showing the school's corrections of those deficiencies. If follow-up audits are performed to validate corrective actions, those records should also be retained.

• Examples of the forms the school will use for records described above.

- Record retention procedures should state how long the school will retain its records. It is recommended the school retain records for at least 2 years after the end of the students' enrollment. If applicable, the school's record archival policy should also be described in the recordkeeping procedures.
- 2) Electronic/Digital Recordkeeping. If the AMTS chooses to use electronic/digital recordkeeping, it is recommended that the school incorporate the guidelines put forth in AC 120-78, Electronic Signatures, Electronic Recordkeeping, and Electronic Manuals, in developing its electronic/digital recordkeeping procedures. The FAA will issue operations specification (OpSpec) A025 to authorize digital/electronic recordkeeping.
- **C. Assessment.** Course testing/assessment (not FAA exams), including preparation and post-test reviews, is an important part of the learning process and is considered part of the teaching validation process. Testing should be directly related to the subject matter and consistent with the expected learning outcome.
  - 1) Assessment procedures should include:
    - When and how the school will assess its students;
    - How the school ensures testing integrity in all testing environments (e.g., classroom, shop, computer-based testing, distance learning testing, etc.);
    - How the school ensures test security; and
    - How the school handles instances of cheating on tests, including how cheating affects course credit.
- 2) It is recommended that upon completion of each curriculum subject area, a test should be scheduled. In addition, quizzes may be scheduled at the school's discretion at any time. When testing for subjects that have many hours of instruction, an AMTS should consider planning more than one test or quiz during the instructional unit.
- 3) Test security procedures should include provisions for regular test changes and the secure storage of tests and quizzes.
- **D.** Issuing Credit. The school must have procedures that describe how and when the AMTS will issue credit for a subject or course. QC system procedures should include procedures on the following:
  - The school's procedures for issuing credit for courses taken at the AMTS;
  - If, and under what circumstances, the school credits a student's prior instruction or experience gained elsewhere; and
  - How the school will determine the amount of credit to be given for prior instruction or experience gained elsewhere, that ensures the prior experience/training is equivalent to the curriculum content for which the student is receiving credit.

1) The AMTS should only grant credit for previous instruction that has been satisfactorily completed at:

- An accredited university, college, community college, or junior college;
- An accredited vocational, technical, trade, or high school;
- A military technical school; or
- Another certificated AMTS.
- 2) AMTS should not grant credit for previous training in the following circumstances:
  - If an AMTS Air Agency Certificate has been suspended by the FAA, courses taught during the suspension period cannot be credited retroactively, even if the school becomes re-certificated later, because the AMTS would be operated in violation of § 147.7.
  - An AMTS applicant may not teach students as an AMTS before receiving the FAA certificate and then give credit for that training after the school becomes certificated because the AMTS would be operating in violation of § 147.3.
- 3) The AMTS should only credit previous maintenance experience after examining documented evidence which verifies that experience.
- **4)** The AMTS should describe how the AMTS will determine the amount of credit to be given by, for example:
  - An evaluation of an authenticated transcript from the student's former AMTS (applicable for prior experience),
  - A qualifying entrance test equal to one given to students who complete the corresponding curriculum content at the crediting AMTS (applicable to either prior instruction or prior experience), or
  - Another method that verifies the student's previous training or experience meets the crediting school's curriculum requirements.
- 5) When basing credit on an evaluation of an authenticated transcript, the crediting AMTS should ensure the individual has completed training comparable to that offered by the crediting school, and which meets or exceeds the curriculum content. The AMTS should be able to show documented evidence of the evaluation. Evaluation of a transcript could be based on a combination of the following:
  - Detailed transcripts;
  - Catalog reference course descriptions;
  - Other documents showing the course content on which the credit is being based; and
  - Audits of the class for which the credit is to be based when crediting a specific course on a routine basis. In this circumstance, the AMTS should define its audit schedule within the QC procedures.

6) When using an entrance test to determine the credit to be granted, the test should be equal to one given to students who complete the corresponding curriculum content at the crediting AMTS. This is applicable to either prior instruction or prior experience. As a rule, creditable previous mechanic experience should be aviation maintenance experience comparable to the required AMTS curriculum subject areas.

- EXAMPLE 1: An individual with substantial powerplant experience (no airframe experience) gained while working in the military or at an airline should be considered as having previous experience only within powerplant subject areas.
- EXAMPLE 2: An uncertificated mechanic working for an airline for 5 years only in the tire shop should not be considered to have experience relating to all airframe subjects.
- 7) A school may credit a student seeking an additional mechanic certificate rating with previous satisfactory completion of the general curriculum content. If an individual has obtained an airframe rating or a powerplant rating, that rating indicates the individual has met the knowledge requirements for issuance of a mechanic certificate, which includes knowledge and skills that would be required within the general portion of an AMTS curriculum. Therefore, a student who is seeking an added rating to their mechanic certificate may be issued graduation documentation by the AMTS upon completion of the applicable curriculum, even though the student did not complete the general portion of the AMTS curriculum.
- **E. Issuing of Final Course Grades.** The AMTS QC system must include procedures which describe how the AMTS will issue final course grades. The procedures should describe the AMTS's standards for passing grades to include:
  - The minimum passing grade sufficient to achieve the required knowledge and skills of the school's curriculum;
  - How grade weighting (percentage) and/or grade averaging will be used to determine the final course grade, as applicable;
  - Forms or samples of electronic records the AMTS will use for recording grades;
  - Any other procedures the school uses to determine final course grades; and
  - A description of any audit or verification procedures the AMTS will use to ensure accuracy of the final grade.
- 1) A common academic standard for passing is a minimum score of 70 percent, and the FAA written, oral, and practical tests have a 70 percent minimum passing standard in accordance with part 65, § 65.17. The AMTS should define its standard for a passing final course grade in its QC system procedures (refer to § 147.23(b)). However, it is recommended that the school does not implement a passing standard lower than 70 percent to support the school in meeting the quality of instruction requirements of § 147.25.
- 2) Theoretical portions of the curriculum may have different grading standards from those required in laboratory and shop classes.

**F.** Attendance. An AMTS may have attendance requirements that must be met by students and met as a part of curriculum completion. Attendance requirements are determined by the AMTS and must be described in the school's QC system. Procedures should include attendance procedures describing the following:

- The AMTS attendance policy for courses that are required for curriculum completion.
- How the AMTS will track student attendance when required by its attendance policy.
- Any limitations on student attendance or enrollment, such as limiting class hours in a day/week, or limiting enrollment in additional courses.

NOTE: Depending on the basis of the curriculum, attendance policies can vary greatly. For example, schools basing their curriculum on hours may have more strict or detailed attendance requirements than schools basing their curriculum on credit hours or competency.

- **G. Ensuring Sufficient Number of Instructors.** The school must have QC system procedures describing how they will ensure they maintain a sufficient number of instructors to achieve the school's training requirements. Procedures should include the following:
  - A description of how the AMTS will ensure the 25:1 student-to-instructor ratio required by § 147.19(c) is maintained.
  - A description of any other requirements the AMTS is placing on student-to-instructor ratios for the purpose of achieving the school's training requirements.
- **H. Granting of Graduation Documentation.** The school must have QC system procedures describing how it grants graduation documentation under § 147.21 and completion documentation required for early testing under § 147.31.
- 1) Under § 147.21, when a student satisfactorily completes the required curriculum content for graduation, the school must issue an authenticated document to the graduating student. Graduation documents may only be issued consistent with the school's ratings. The procedures for issuing graduation documentation should include the following:
- a) A description of the document to be issued and what information will be included on the document. At a minimum, the following information should be included on the document in order to meet the requirements of § 147.21(a):
  - Student name, indicating who the document was issued to.
  - School name and Air Agency Certificate number, to indicate who issued the document and that the document was issued by an FAA-certificated AMTS.
  - Authentication, using the method of authentication determined by the school to show the document was issued legitimately.

- The student's date of graduation.
- The name of the curriculum completed by the student (i.e., either "Airframe", "Powerplant", or "Airframe and Powerplant").
- b) A description of the authentication process used by the school to ensure the document was legitimately issued by the school, and a description of designated school personnel authorized to authenticate the document. For example, schools may use a signature, an embossed seal, or some other method to indicate authentication, and may limit the performance of authentication to certain school officials.
- c) The process used to verify the student has passed the curriculum based on the school's standards for issuing final course grades, any attendance requirements, and/or crediting of the AMTS curriculum for courses completed at the AMTS or based on prior instruction or experience.
- d) A description of how the school ensures the student is eligible to receive the graduation document.
- 2) Under § 147.31, when a student satisfactorily completes the general portion of a school's curriculum, the school may issue an authenticated document that demonstrates the student's preparedness to take the FAA mechanic general written test in accordance with § 65.75(c). When a school intends to support the option of the early testing provision, the QC system procedures should include the following:
- a) Procedures describing how the school issues the required document that will allow early testing under  $\S$  65.75(c).
- b) A description of the documentation to be issued and what information will be included on the document. At a minimum, the following information should be included on the document in order to meet the requirements of § 147.31:
  - Student name, indicating who the document was issued to.
  - School name and Air Agency Certificate number, to indicate who issued the document and that the document was issued by an FAA-certificated AMTS.
  - Authentication, using the method of authentication determined by the school to show the document was issued legitimately.
  - The student's date of graduation.
  - Indicate the document demonstrates completion of the general curriculum, or general curriculum content, of the school's curriculum, as applicable.

NOTE: Some schools incorporate the general curriculum content as a part of the Airframe and/or Powerplant curriculum content. Students can still be issued a completion document as long as the school can identify that the student has completed the general curriculum content requirements of the AMTS curriculum.

3) Electronic Signatures. If the AMTS chooses to use electronic signatures on the authenticated document issued under § 147.21 or § 147.31, the school should describe its electronic signature procedures within its QC system. It is recommended that the school incorporate the guidelines put forth in AC 120-78 in developing its electronic signature procedures. Issue OpSpec A025 to authorize the AMTS's use of electronic signatures.

- **I.** Corrective Action for Addressing Deficiencies. The school must have QC system procedures which describe how the school will take corrective action for addressing deficiencies. The term "deficiencies" refers to deficiencies or defects within the school's QC system. The procedures should include a description of the following:
  - How the school will receive and record reports of deficiencies;
  - How the school will determine the cause of the deficiency;
  - How the school will develop, implement, and track correction of deficiencies; and
  - How the school will perform follow-up to ensure deficiencies have been adequately corrected.
- **6-10-6-7 QC SYSTEM FORMAT.** It is recommended the AMTS consolidate its QC system procedures into a single manual/document because the entire QC system receives FAA approval. However, the AMTS may present multiple documents for approval, representing the required QC system procedures. The AMTS should not include procedures that are not specified by § 147.23(b) within the QC system documents being approved by the FAA, unless the additional procedures are clearly noted as being not a part of the FAA-approved QC system.
- **A. OpSpec A027.** FAA approval of the QC system is provided by listing the documents that make up the FAA-approved QC system in OpSpec A027 and indicating the revision level and date of the QC procedures currently approved by the FAA.
- **B.** Revision Control of Manuals/Documents. It is important that the AMTS have a means of maintaining revision control of its QC system manual/procedures, curriculum, and of any other documents that it publishes. This provides a way for both the AMTS and the FAA to verify if the school is maintaining its compliance with the requirements of part 147. The following controls should be included in any manual or document system for revision control, as appropriate.
- 1) Revision Procedures. Define in writing the revision procedures for its manuals/documents to ensure consistent and correct application.
- 2) List of Effective Pages (LEP). The LEP shows the current active pages of the document, to include their date of revision and revision level.
- 3) Record of Revisions. This page is a running list of the revisions that have been applied to the document historically and includes the revision level and date of the revision.
- 4) **Highlights of Revision.** This page is based on the current revision and briefly describes the changes that were implemented within the document. The details should be described on a page-by-page level.

5) Form Control. Forms should include a form-specific revision level identified on the form. Forms may be included within the document, within an appendix, or within a separate forms manual.

- 6) Identify Revised Text. Revised text within the document should be identified. Vertical change bars adjacent to the revised text, highlighting text, or another method of identifying revised text could be used.
- 6-10-6-9 OTHER AMTS PROCEDURES. All AMTS should be encouraged to develop additional procedures regarding their training operations. The procedures should be directed at AMTS personnel and students to provide transparency in expectations. While additional procedures are encouraged, they should not be included in the FAA-approved portion of a school's QC system. Doing so can create confusion when determining regulatory compliance with part 147. Certain additional AMTS procedures may be required by regulation (e.g., some exemptions include a requirement for procedures), or may affect how the AMTS or students comply with a related regulation (e.g., testing under § 65.80). Some examples of other policy and procedures that an AMTS is encouraged to develop are included below.
- **A. Safety Procedures.** The aviation maintenance environment can be dangerous, especially to those who are not knowledgeable of its hazards and risk. To prevent serious injury or death to students and AMTS personnel, the FAA encourages the AMTS to develop clear policy and procedures to ensure the safety of its training operations and conform to local, state, and Federal regulations for workplace safety. The FAA highly recommends that AMTSs contemplate the mitigation of hazards associated with performing high risk training operations, using the following guidelines:
  - Any training equipment used by the AMTS to include tools or other devices, with the capability to operate, actuate, or store energy, or that otherwise has the potential to expose a person to injury, should be evaluated by the AMTS for hazards and safety risk.
  - The use of chemicals, such as cleaners, lubricants, and flammable liquids, (refer to material safety data sheets (MSDS)) during training operations should be evaluated by the AMTS for hazards and safety risk.
  - The AMTS should develop safety policy and procedures that ensure the equipment or chemical's safe use in all training scenarios by mitigating risk to acceptable levels.
  - Safety procedures should include checklists wherever applicable. Training should be provided, to AMTS personnel and students, on the checklists prior to their use.
  - The school's curriculum should include or reference briefings on all safety procedures appropriate to laboratory or shop practical projects. The briefings should be readily available to instructors and students and be used to increase safety awareness prior to high risk training operations.
- **B.** AMTS Safety Programs. As discussed in Volume 6, Chapter 10, Section 2, AMTS may voluntarily disclose apparent violations of part 147 to the FAA under the Voluntary Disclosure Reporting Program (VDRP) (see Volume 11, Chapter 1, Section 1).

NOTE: An AMTS should be encouraged to incorporate written voluntary reporting procedures into the school's procedures so that AMTS personnel can follow AMTS expectations should a disclosure be warranted. The procedures should define who is responsible for making disclosures, describe internal AMTS procedures related to disclosures, and include or refer to the applicable procedures of AC 00-58, Voluntary Disclosure Reporting Program. The VDRP web page can be found at https://vdrp.faa.gov.

- C. Student Testing Under § 65.80. AMTS students may take their FAA oral and practical tests prior to taking their FAA written tests, when done in accordance with § 65.80. Because § 65.80 contains certain requirements that must be met, AMTSs are encouraged to develop written procedures to ensure those requirements are met before the school authorizes the student to test under § 65.80 (i.e., by signing the appropriate blocks on FAA Form 8610-2, Airman Certificate and/or Rating Application). Having written procedures may streamline the FAA approval process for these test authorizations. The procedures should address the following:
- 1) Determine the Student Has Met the § 65.80 Requirements. When an AMTS has determined that a student has met the requirements of § 65.80, the AMTS must sign the appropriate block of FAA Form 8610-2 to show the student is prepared to take the oral and practical tests prescribed by § 65.79. The requirements are as follows:
  - The AMTS must show to the FAA that the student has made satisfactory progress,
  - The student is prepared to take the oral and practical tests prescribed by § 65.79, and
  - The student is in the final subjects of training in the curriculum (i.e., the AMTS must be prepared to show the FAA that the student is in the final subjects of training in the curriculum).
- 2) Requirements for FAA Approval for Testing. Because the regulation requires that the student be in the final subjects of training, the FAA should only approve testing under § 65.80 within 45 calendar-days of the student graduation from the curriculum. For example:
  - If enrolled in the Airframe-only or Powerplant-only curriculum, the student must be within 45 calendar-days of completion of the general and Airframe curriculum or the general and Powerplant curriculum.
  - If the applicant is enrolled in the Powerplant curriculum, and has completed the general and Airframe curriculum, they must be within 45 calendar-days of completion of the Powerplant curriculum.
  - If the student is enrolled in the combined Airframe and Powerplant (A&P) curriculum, they must be within 45 calendar-days of completion of the complete curriculum for the combined A&P.
- 3) AMTS Signature. The AMTS procedures should describe how it will ensure that each student applying to take the FAA oral and practical tests prior to taking the FAA written knowledge tests has met the § 65.80 requirements. The procedures should include who (by title)

is authorized to sign FAA Form 8610-2 on behalf of the AMTS, and the timeframe for submitting the form to the FAA.

- **D.** Exemptions. Many exemptions granted by the FAA have associated conditions or limitations which the exemption holder must meet to be in compliance with the exemption. AMTS should be encouraged to develop procedures to ensure compliance with the conditions and limitations of the exemption it intends to use in order to ensure continued regulatory compliance and safety.
- **E.** Technical Data. The use of appropriate technical data is a cornerstone of aviation maintenance. Accordingly, the FAA recommends that AMTS describe procedures for ensuring access to appropriate technical data applicable to the school's rating(s) and training equipment.
- **F. Precision/Special Tools.** The AMTS should describe procedures for how it will ensure the maintenance of precision/special tools. If the school has a student hand tool policy, such as a requirement that the student supply certain hand tools, this should also be described.
- G. Procedures for FAA Certification of Students (e.g., taking the FAA written, oral, and practical tests after graduation). Since the main goal of most AMTS and AMTS graduates is to obtain an FAA mechanic certificate, it is recommended the AMTS provide students with procedures describing how the student will move forward to the FAA testing process following graduation. The procedures should also describe how the AMTS graduation certificate, or other appropriate documentation, will provide eligibility towards FAA testing.
- **H.** Additional Administrative Procedures. The FAA recommends the AMTS provides whatever additional procedures it deems necessary to ensure its personnel are conducting operations in accordance with the expectations of the AMTS and the requirements of part 147.
- **6-10-6-11 PREREQUISITES AND COORDINATION REQUIREMENTS.** See Volume 6, Chapter 10, Section 1 for the prerequisites and coordination requirements when conducting certification or surveillance on part 147 AMTSs.

### 6-10-6-13 REFERENCES, FORMS, AND JOB AIDS.

## A. References (current editions):

- Title 14 CFR Parts 43, 65, and 147.
- Volume 1, Chapter 3, Section 1, Safety Assurance System: Responsibilities of Aviation Safety Inspectors.
- Volume 2, Chapter 12, Certification of a Part 147 Aviation Maintenance Technician School.
- Volume 10, Safety Assurance System Policy and Procedures.
- Volume 14, Chapter 1, Section 2, Flight Standards Service Compliance Action Decision Procedure.
- AC 120-78, Electronic Signatures, Electronic Recordkeeping, and Electronic Manuals.

- **B.** Forms. See Volume 6, Chapter 10, Section 1.
- C. Job Aids. See Volume 6, Chapter 10, Section 1.

## **6-10-6-15 PROCEDURES FOR EVALUATING/APPROVING AN AMTS QC SYSTEM.** Review the procedures developed by the AMTS for the following:

- **A. Required Procedures.** Ensure the AMTS has developed QC system procedures for each of the following areas required by § 147.23(b):
  - Recordkeeping,
  - Assessment,
  - Issuing credit,
  - Issuing of final course grades,
  - Attendance,
  - Ensuring sufficient number of instructors,
  - Granting of graduation documentation, and
  - Corrective action for addressing deficiencies.
- **B.** Recordkeeping. Ensure the AMTS recordkeeping procedures describe the following relating to the types of records the school will produce:
- 1) Verify procedures describe the AMTS records of test/assessment of a student's knowledge and skill, as applicable to the curriculum for which the student is enrolled. Verify the procedures ensure the records will clearly distinguish between successful performance and unsuccessful performance.
- 2) Verify procedures describe AMTS records for showing credit granted for AMTS course completion and/or for previous experience and/or previous instruction, including supporting transcript(s), when applicable. Verify procedures ensure that records clearly show what subjects areas were credited to the student by the AMTS, and on what basis.
- 3) Verify procedures describe the AMTS records of student's grades, to include final course grades, as applicable. Verify procedures ensure the records will clearly distinguish between successful performance and unsuccessful performance.
- **4)** Verify procedures describe the AMTS records of student attendance, when required by the school's attendance policy.
- 5) Verify procedures describe the AMTS records of curriculum completion and records showing issuance of graduation documentation, and/or records showing general curriculum course content completion and issuance of general curriculum course content completion documentation.
- 6) Verify procedures describe AMTS records for showing identified deficiencies of the QC system, and records showing the school's corrections of those deficiencies. If follow-up

audits are performed to validate corrective actions, verify procedures describe the records for recording those actions.

- 7) Verify the procedures provide examples of the forms the school will use for records described above.
- 8) Verify the procedures describe how and where the AMTS will retain its records, to include record archival procedures, if applicable. Verify the procedures describe how long the school will retain its records.
- 9) If the school will maintain any of the above records electronically/digitally, verify the procedures describe the following:
  - The kind of record to be kept electronically.
  - The name of the electronic system used for creating/maintaining the record.
  - Procedures that address the applicable items described in subparagraphs 1) through 9) for each record being kept electronically.

NOTE: It is recommended that the school incorporate the guidelines put forth in AC 120-78 in developing its electronic/digital recordkeeping procedures.

- **C. Assessment.** Ensure the AMTS has developed QC system procedures describing how it conducts AMTS course testing/assessment (not FAA exams). Verify assessment procedures describe:
  - When and how the school will assess its students.
  - How the school ensures tests are directly related to the subject matter and are consistent with the expected learning outcome.
  - How the school ensures testing integrity in all testing environments (e.g., classroom, shop, computer-based testing, etc.).
  - How the school ensures test security.
  - The records to be kept related to student testing/assessment (see subparagraph B).
- **D.** Issuing Credit. Ensure the AMTS has developed procedures that describe how and when the AMTS will issue credit for a subject or course. Verify crediting procedures describe the following:
  - The school's procedures for issuing credit for courses taken at the AMTS;
  - If, and under what circumstances, the school credits a student's prior instruction or experience gained elsewhere;
  - How the school will determine the amount of credit to be given for prior instruction or experience gained elsewhere, that ensures the prior experience/training is equivalent to the curriculum content for which the student is receiving credit; and
  - The records to be kept related to issuance of credit (see subparagraph B).

**E.** Issuing of Final Course Grades. Ensure the AMTS has developed procedures which describe how the AMTS will issue final course grades. Verify the procedures describe the AMTS's standards for passing grades, to include:

- The minimum passing grade sufficient to achieve the required knowledge and skills of the school's curriculum.
- How grade weighting (percentage) and/or grade averaging will be used to determine the final course grade, as applicable.
- Forms or samples of electronic records the AMTS will use for recording grades (see subparagraph B).
- Any other procedures the school uses to determine final course grades.
- A description of any audit or verification procedures the AMTS will use to ensure accuracy of the final grade.
- **F. Attendance.** The AMTS must describe any attendance requirements that must be met by students. Verify the attendance procedures describe the following:
  - The school's attendance policy for the course, or portions of the course.
  - How the AMTS will track student attendance when required by its attendance policy (see subparagraph B).
  - Any limitations on student attendance or enrollment, such as limiting class hours in a day/week, or limiting enrollment in additional courses.

NOTE: Depending on the basis of the curriculum, attendance policies can vary greatly. For example, schools basing their curriculum on hours may have more strict or detailed attendance requirements than schools basing their curriculum on credit hours or competency.

- **G.** Ensuring Sufficient Number of Instructors. The school must have QC system procedures describing how they will ensure they maintain a sufficient number of instructors to achieve the school's training requirements. Verify procedures include the following:
  - A description of how the AMTS will ensure the 25:1 student-to-instructor ratio, in each shop or laboratory class, as required by § 147.19(c), is maintained.
  - A description of any other requirements the AMTS is placing on student-to-instructor ratios for the purpose of achieving the school's training requirements.
- **H. Granting of Graduation Documentation.** The school must have QC system procedures describing how it grants graduation documentation under § 147.21 and completion documentation required for early testing under § 147.31.
- 1) Relative to § 147.21, when a student satisfactorily completes the required curriculum content for graduation, verify procedures for issuing graduation documentation include a description of the documentation to be issued, to include:

- The student's date of graduation.
- The curriculum completed.
- Student name.
- School's Air Agency Certificate number.
- Authentication.
- 2) Relative to § 147.31, when a student satisfactorily completes the general portion of a school's curriculum, verify the procedures for issuing an authenticated document that demonstrates the student's preparedness to take the mechanic general written test in accordance with § 65.75(c) include a description of the documentation to be issued, to include:
  - Indication the student has completed the general curriculum or general curriculum content.
  - The student's date of completion of general curriculum content.
  - Student name.
  - School's Air Agency Certificate number.
  - Authentication.

NOTE: Some schools incorporate the general curriculum content as a part of the Airframe and/or Powerplant curriculum content. Students can still be issued a completion document as long as the school can identify that the student has completed the general curriculum content requirements of the school.

- 3) Verify procedures include a description of the authentication process used by the school to ensure the graduation or completion documents are legitimately issued by the school.
- **4)** Verify procedures outline what school personnel will be authorized to authenticate the graduation document.
- 5) If the school will use electronic signatures on any of the documents issued under § 147.21 or § 147.31, the school should describe its electronic signature procedures. It is recommended that the school incorporate the guidelines put forth in AC 120-78 in developing its electronic signature procedures.
- I. Corrective Action for Addressing Deficiencies. The school must have QC system procedures describing how the school will take corrective action for addressing deficiencies. The term "deficiencies" refers to deficiencies or defects within the school's QC system. Verify the AMTS procedures include the following:
  - How the school will receive and record reports of deficiencies.
  - How the school will determine the cause of the deficiency.
  - How the school will develop, implement, and track correction of deficiencies.
  - How the school will perform follow-up to ensure deficiencies have been adequately corrected.

## 6-10-6-17 APPROVE OR REJECT THE AMTS QC SYSTEM.

**A. Approve QC System.** When the QC system is found satisfactory using the guidance in paragraph 6-10-6-15, approve the QC system by listing, in OpSpec A027, the FAA-approved documents that make up the AMTS QC system.

NOTE: Procedures must be developed and FAA-approved for all of the areas listed in § 147.23(b) for the AMTS to be in compliance. The AMTS should not include procedures that are not specified by § 147.23(b) within the QC system documents being approved by the FAA, unless the additional procedures are clearly noted as being not a part of the FAA-approved QC system.

- 1) Enter the name/number, revision level, and revision date of the QC manual, manual section, or procedures document being approved by the FAA into the OpSpec table.
- 2) If the AMTS provides its QC system in the format of multiple documents for approval, the OpSpec will allow listing of multiple documents.
- **B.** Reject QC System. If the QC system procedures are not adequate, the FAA must notify the AMTS, in writing, of the details of the deficiencies found.
- C. Electronic Signatures, Electronic Recordkeeping, and Electronic Manuals/Documents. Issue OpSpec A025 to authorize an AMTS to use an electronic recordkeeping system(s), electronic signatures, or electronic manuals/documents. See the following guidance for additional information on issuance of OpSpec A025 for AMTS:
  - Volume 3, Chapter 18, Section 11, Parts A and B Operations Specifications for Part 147 Aviation Maintenance Technician Schools.
  - Volume 6, Chapter 10 Section 2, Inspect AMTS Organizational Management.

NOTE: AMTSs that use accreditation to meet the QC system requirements of § 147.23 are not subject to FAA oversight of school procedures, including electronic recordkeeping or manual procedures. Therefore, the OpSpec A025 issued to these schools is not required to contain procedures information.

### **6-10-6-19 TASK OUTCOMES.**

- **A.** Conduct Debriefing. Brief the certificate holder (CH) on the inspection results. Discuss all deficiencies, CH corrective actions, and FAA actions. The aviation safety inspector (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 when processing CH change requests and for completion of SAS DCTs. Update the Certificate Holder Assessment Tool (CHAT), as necessary, to record identified hazards or risk.

**6-10-6-21 FUTURE ACTIVITIES.** Follow Volume 10 to plan future risk based surveillance in SAS.

6-10-6-23 through 6-10-6-33 RESERVED.

# Appendix V. Order 8900.1, Volume 6, Chapter 10, Section 7, Inspect an AMTS Quality Control System

### **VOLUME 6 SURVEILLANCE**

### **CHAPTER 10 PART 147 INSPECTIONS**

## Section 7 Inspect an AMTS Quality Control System

### **Source Basis:**

- Part 65, Certification: Airmen Other Than Flight Crewmembers.
- Part 147, Aviation Maintenance Technician Schools.
- Title 49 U.S.C. § 44701, General Requirements.
- Title 49 U.S.C. § 44702, Issuance of Certificates.
- Title 49 U.S.C § 44707, Examining and Rating Air Agencies.
- Title 49 U.S.C. § 44709, Amendments, Modifications, Suspensions, and Revocations of Certificates.
- Public Law 116-260, Consolidated Appropriations Act, 2021; Division V, Title I, Aircraft Certification, Safety, and Accountability; Section 135, Promoting Aviation Regulations for Technical Training.

**6-10-7-1 REPORTING SYSTEM(S).** Use Safety Assurance System (SAS) automation and the associated Data Collection Tools (DCT).

NOTE: Title 14 of the Code of Federal Regulations (14 CFR) part 147 functions are listed in Peer Group K of the SAS Master List of Functions (MLF). To view the MLF, see Volume 10, Chapter 1, Section 2.

**6-10-7-3 OBJECTIVE.** This section provides guidance for inspecting an Aviation Maintenance Technician School (AMTS) to ensure the AMTS is either accredited or is following its Federal Aviation Administration (FAA)-approved quality control (QC) system. See Volume 6, Chapter 10, Section 6 for procedures on evaluating and approving an AMTS QC system.

**6-10-7-5 AMTS QC SYSTEM GENERAL DISCUSSION.** As stated in part 147, § 147.23(a), each certificated AMTS must have a QC system, by either:

- Being accredited within the meaning of Title 20 of the United States Code (20 U.S.C.) § 1001(a)(5), or
- Establishing and maintaining a QC system approved by the FAA.

NOTE: The regulation does not preclude an accredited school from obtaining an FAA-approved QC system. If obtained, the AMTS is obligated to follow the FAA-approved system.

NOTE: The regulation applies to the certificate holder (CH); therefore, an AMTS may not use accreditation to meet § 147.23 at one location, and an

FAA-approved QC system to meet § 147.23 at an additional training location of the AMTS.

- **A.** Accreditation. To be accredited within the meaning of 20 U.S.C. § 1001(a)(5) requires a school to be accredited by a Department of Education nationally recognized accrediting agency or association. Pursuant to 20 U.S.C. § 1001(c), the Secretary of Education publishes a list of all nationally recognized accrediting agencies or associations determined to be a reliable authority as to the quality of the education or training offered. The list can be found on the Department of Education website.
- 1) A school can become accredited by seeking recognition from one of the accrediting agencies recognized by the Department of Education. The accreditation may be for the entire institution (institutional accreditation), or limited to a part of an institution or the AMTS program itself (specialized or programmatic accreditation).

NOTE: Schools that meet the QC system requirements by being accredited by a Department of Education nationally recognized accrediting agency or association will be issued operations specification (OpSpec) A027.

NOTE: Preaccreditation does not meet the requirements of § 147.23(a) because the regulation specifically requires "accreditation."

- 2) The Department of Education's recognition of accrediting agencies is limited by statute to accreditation activities within the United States. As such, in order to be accredited within the meaning of 20 U.S.C. § 1001(a)(5), an AMTS must have its primary location within the United States.
  - For an AMTS with the primary location located within the United States, the AMTS's accreditation extends to any additional training locations, whether located within or outside the United States.
  - For an AMTS whose primary location is outside of the United States, accreditation is not recognized by the Department of Education and therefore does not satisfy § 147.23(a)(1). The AMTS must establish and maintain a QC system pursuant to § 147.23(b), applicable to the primary location and any additional training locations, whether located within or outside the United States.
- 3) In order to demonstrate accreditation under § 147.23(a), a school must have documentation that shows the school's accrediting agency and the school's current accreditation status. The following resources can assist in verifying the accreditation status information provided by the AMTS:
- a) Only accreditation by an accrediting agency recognized by the Department of Education is acceptable under part 147. A list of accrediting agencies recognized by the Department of Education is published on their website and can be found here at https://www2.ed.gov/admins/finaid/accred/accreditation\_pg6.html#RegionalInstitutional.

b) The school's accrediting agency must make available to the public the institutions or programs that the agency currently accredits or preaccredits and, for each institution or program, the year the agency will next review or reconsider it for accreditation or preaccreditation (refer to 34 CFR part 602, § 602.23(a)(4)). Verify the school's accreditation directly with the accrediting agency, such as by contacting them or through their website.

- c) The Department of Education website includes an electronic Database of Accredited Postsecondary Institutions and Programs (DAPIP). Individual school names can be searched to view the school's reported accreditation status. The database can be found here at https://ope.ed.gov/dapip/#/home.
  - NOTE: Reporting accreditation status to the Department of Education is voluntary; therefore, this database may not be current. Additional verification of accreditation status may be required.
- d) The public website of each individual AMTS often contains information regarding the school's accreditation status. However, the extent of the information provided varies, and in some cases, may not be easily found.
- **B. FAA-Approved QC System/Procedures.** Schools that are not accredited within the meaning of 20 U.S.C. § 1001(a)(5) must obtain FAA approval of a QC system. The regulation does not preclude an accredited school from obtaining an FAA-approved QC system. An AMTS with an FAA-approved QC system must maintain and follow that system regardless of any accreditation status. The QC system must be submitted to the FAA for approval during the certification process, and any subsequent revisions to the system must be submitted for approval.
- 1) The QC system must include procedures for the following, which are discussed in detail in Volume 6, Chapter 10, Section 6:
  - Recordkeeping,
  - Assessment,
  - Issuing credit,
  - Issuing of final course grades,
  - Attendance,
  - Ensuring sufficient number of instructors,
  - Granting of graduation documentation, and
  - Corrective action for addressing deficiencies.
- 2) The requirement to "maintain" the QC system under § 147.23(a)(2) means that a school must continue to implement the procedures described in its QC system after it is approved by the FAA. If the school makes changes to its FAA-approved QC system, then the school must notify the FAA since the basis for the FAA's approval would have changed. The FAA provides a means of compliance for a QC system and required procedures in Advisory Circular (AC) 147-3, Certification and Operation of Aviation Maintenance Technician Schools (as revised). The means of compliance set forth in the AC is not the only means of satisfying § 147.23; schools may use alternative means of compliance.

**6-10-7-7 PREREQUISITES AND COORDINATION REQUIREMENTS.** See Volume 6, Chapter 10, Section 1 for the prerequisites and coordination requirements when conducting certification or surveillance on part 147 AMTSs.

## 6-10-7-9 REFERENCES, FORMS, AND JOB AIDS.

### A. References (current editions):

- Title 14 CFR Parts 43, 65, and 147.
- Volume 1, Chapter 3, Section 1, Safety Assurance System: Responsibilities of Aviation Safety Inspectors.
- Volume 2, Chapter 12, Certification of a Part 147 Aviation Maintenance Technician School.
- Volume 10, Safety Assurance System Policy and Procedures.
- Volume 14, Chapter 1, Section 2, Flight Standards Service Compliance Action Decision Procedure.
- AC 120-78, Electronic Signatures, Electronic Recordkeeping, and Electronic Manuals.
- **B. Forms.** See Volume 6, Chapter 10, Section 1.
- C. Job Aids. See Volume 6, Chapter 10, Section 1.

## 6-10-7-11 PROCEDURES FOR INSPECTION OF AN AMTS QC SYSTEM.

- **A. Accreditation.** For schools that do not have an FAA-approved QC system, the FAA must verify the AMTS's accreditation status using the following procedures:
- 1) Verify the accrediting agency of the AMTS is recognized by the Department of Education.
- **2)** Determine if the school is currently accredited. Determine if the school lost accreditation for any period of time while holding an FAA Air Agency Certificate issued under part 147.

NOTE: Verify the school holds accreditation status, not preaccreditation status.

- 3) Verify that the school's accrediting agency information listed in OpSpec A027 is correct.
- 4) If the school lost accreditation status for any period of time, and the school does not have an FAA-approved QC system, determine if the AMTS conducted any part 147 training operations during that time period.
- **B. FAA-Approved QC System.** The QC system must be observed to determine if the AMTS is following the system procedures and to determine if the procedures are producing the desired outcome. Each area of the QC system required by § 147.23(b) should be inspected. The

below inspection elements were developed based on the procedures that are expected to be in an AMTS QC system in order to obtain FAA approval (see Volume 6, Chapter 10, Section 6).

NOTE: The inspections described in this section do not apply to AMTSs that use accreditation to meet the QC system requirements of § 147.23. The FAA does not have the authority to inspect AMTS operating requirements (such as procedures required by an accrediting agency) that are not mandated by the FAA.

## 1) Approved QC System/OpSpecs.

- a) Verify the AMTS is using the FAA-approved QC system documents listed in OpSpec A027.
- b) If applicable, verify the AMTS is issued OpSpec A025 when using an electronic recordkeeping system(s), electronic signatures, or electronic manuals/documents. Verify the AMTS is following the procedures listed or referenced in A025. See the following guidance for additional information on the issuance of OpSpec A025 for an AMTS:
  - Volume 3, Chapter 18, Section 11, Parts A and B Operations Specifications for Part 147 Aviation Maintenance Technician Schools.
  - Volume 6, Chapter 10, Section 2, Inspect AMTS Organizational Management.

NOTE: AMTSs that use accreditation to meet the QC system requirements of § 147.23 are not subject to FAA oversight of school procedures, including electronic recordkeeping or manual procedures. Therefore, the OpSpec A025 issued to these schools is not required to contain procedures information.

- **2) Recordkeeping.** The AMTS recordkeeping procedures should describe the types of records the school will produce and retain, and for how long. Recordkeeping procedures should encompass all records produced within the QC system. The following records should be reviewed:
- a) Determine if the AMTS maintains records of assessment of a student's knowledge and skill, as applicable to the curriculum for which the student is enrolled. Verify records clearly distinguish between successful performance and unsuccessful performance.
- b) Determine if the AMTS maintains records showing the school's granting of credit for AMTS courses and for credit granted for previous experience and/or previous instruction, including supporting transcript(s), when applicable. Verify records clearly show what subjects areas were credited to the student and on what basis the credit was granted (i.e., course completion at the AMTS, the school's evaluation of previous experience, or the school's evaluation of previous training).
- c) Determine if the AMTS maintains records of the student's grades, to include final course grades, as applicable. Verify if records clearly distinguish between successful performance and unsuccessful performance.

d) Determine if the AMTS maintains records of student attendance related to the school's attendance policy. Verify if the records include the information required by the school's FAA-approved QC system procedures.

- e) Determine if the AMTS maintains records of curriculum completion and records showing issuance of graduation documentation. Verify if the AMTS maintains records showing general curriculum course content completion and issuance of a general curriculum course content completion document.
- f) Determine if the AMTS maintains records showing identified deficiencies of the QC system, and records showing the school's corrections of those deficiencies. Determine if follow-up audits are performed to validate corrective actions, and verify if the AMTS maintains records of those audits.
- g) Verify the AMTS is using the forms as described in the school's FAA-approved QC system.
- h) Verify if the AMTS is retaining its records for the timeframes stated in the school's FAA-approved QC system. Determine if the AMTS is following its record archival policy as described in the school's FAA-approved QC system, if applicable.
- i) Verify the AMTS has been issued OpSpec A025 to document the school's use of digital/electronic recordkeeping procedures, if applicable.
- **3) Assessment.** Determine if the AMTS is following its FAA-approved QC system procedures on how the school conducts course testing/assessment:
- a) Verify that testing is directly related to the subject matter and done at a level consistent with the expected learning outcome.
- b) Verify that the AMTS is following its procedures on when and how the school will assess its students.
- c) Verify that the school ensures testing integrity in all testing environments (e.g., classroom, shop, computer-based testing), as described in its procedures. Determine if the school's procedures are effective in ensuring test integrity.
- d) Verify that the school follows its procedures for ensuring test security. Determine if the school's procedures are effective in ensuring test security.
- **4) Issuing Credit.** Determine if the AMTS is following its FAA-approved QC system procedures on how and when the AMTS will issue credit for a subject or course:
- a) Verify that the school is following its procedures for issuing credit for AMTS courses.
- b) Verify that the school is following its procedures for determining when credit will be granted for prior instruction or prior experience.

c) Verify that the school is following its procedures for determining how much credit it will grant for prior instruction or prior experience.

- d) Determine if the school granted credit for any training provide by the AMTS before it was FAA-certificated, or when the AMTS Air Agency Certificate was suspended.
- **5) Issuing of Final Course Grades.** Determine if the AMTS is following its FAA-approved procedures for issuing final course grades:
- a) Determine if the school's minimum passing grade is sufficient to achieve the required knowledge and skills of the school's curriculum.
- b) Verify that the AMTS is following its procedures for grade weighting (percentage) and/or grade averaging as applicable.
- c) Verify that the AMTS is using the forms described in its FAA-approved QC system for recording student grades.
- d) Determine if the AMTS is following all of its procedures relating to determination of final course grades.
- e) Determine if the AMTS is following its procedures for conducting audits or verification to ensure accuracy of the final grade.
- **6) Attendance.** The QC system approved by the FAA should include attendance procedures. Determine if the school is following its approved procedures related to the following, as applicable.
- a) Verify that the AMTS is tracking student attendance as described in its procedures.
- b) Verify that the school is ensuring that any limitations placed on attendance are being followed.
- 7) Ensuring Sufficient Number of Instructors. The QC system approved by the FAA should include procedures describing how the AMTS will ensure it maintains a sufficient number of instructors to achieve the school's training requirements, as applicable. Determine if the AMTS is following its approved procedures related to the following, as applicable.
- a) Verify that the AMTS is following its procedures to ensure the 25:1 student-to-instructor ratio in each shop or laboratory class, as required by § 147.19(c). Determine if the school's procedures are effective in ensuring the ratio is maintained.
- b) Determine if the AMTS is following any other procedures to ensure a sufficient number of instructors, as directed in its FAA-approved QC system.
- 8) Granting of Graduation/Completion Documentation. The school must have QC system procedures describing how it grants graduation documentation under § 147.21 and

completion documentation required for early testing under § 147.31. Determine if the school is following its approved procedures related to the following, as applicable.

- a) Determine if the AMTS followed its QC system procedures for the granting of graduation documentation under § 147.21, to include its procedures to verify the student has passed the curriculum based on the school's standards for issuing final course grades, any attendance requirements, and/or crediting of AMTS courses or crediting based on prior instruction or experience.
- b) Verify that the authentication of the document issued under § 147.21 meets the procedures described in the QC system.
- c) Determine if the school verified the student is eligible to receive the graduation certificate.
- d) Determine if the AMTS followed its QC system procedures for the granting of completion documentation under § 147.31.
- e) Verify that the authentication of the document issued under § 147.31 meets the procedures described in the AMTS QC system.
- f) Determine if the school verified the student is eligible to receive the completion document issued under § 147.31.
- g) If the school uses electronic signatures to issue the graduation or completion documents issued under § 147.21 or § 147.31, determine if the AMTS is following the procedures for use of those signatures as provided in the AMTS FAA-approved QC system or OpSpec A025. Verify that OpSpec A025 indicates the school will use electronic signatures for this purpose.
- 9) Corrective Action for Addressing Deficiencies. The school must have QC system procedures which describe how the school will take corrective action for addressing deficiencies. The term "deficiencies" refers to deficiencies or defects within the school's QC system. Determine if the school is following its approved procedures related to the following, as applicable.
- a) Determine if the AMTS is receiving and recording reports of deficiencies as described in the procedures.
- b) Verify that the AMTS is determining the cause of the deficiency as described in the procedures.
- c) Determine if the AMTS is developing, implementing, and tracking correction of deficiencies as described in the procedures.
- d) Verify that the AMTS is performing follow-up to ensure deficiencies have been adequately corrected, as described in the procedures.

## **6-10-7-13 TASK OUTCOMES.**

**A.** Conduct Debriefing. Brief the CH on the inspection results. Discuss all deficiencies, CH corrective actions, and FAA actions. The aviation safety inspector (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 for completion of SAS DCTs. Update the Certificate Holder Assessment Tool (CHAT), as necessary, to record identified hazards or risk.
- **6-10-7-15 FUTURE ACTIVITIES.** Follow Volume 10 to plan future risk based surveillance in SAS.

6-10-7-17 through 6-10-7-33 RESERVED.