

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

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

Section 1 General

**2-1411 PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY
CODES.**

A. Maintenance: 3230.

B. Avionics: 5230.

2-1412 OBJECTIVE. This section provides guidance for certificating an Aviation Maintenance Technician School (AMTS) under Title 14 of the Code of Federal Regulations (14 CFR) part 147, Aviation Maintenance Technician Schools.

2-1413 GENERAL. This section prescribes procedures for evaluating applications for AMTS certification. The certification of an AMTS is not limited to schools physically located within the United States; however, the Administrator is not currently issuing certificates to schools physically located outside the United States.

NOTE: An applicant for certification of a school physically located outside the United States must show that the need exists to certificate airmen to perform maintenance of U.S.-registered civil aircraft and that no alternative through a bilateral agreement or similar agreement exists.

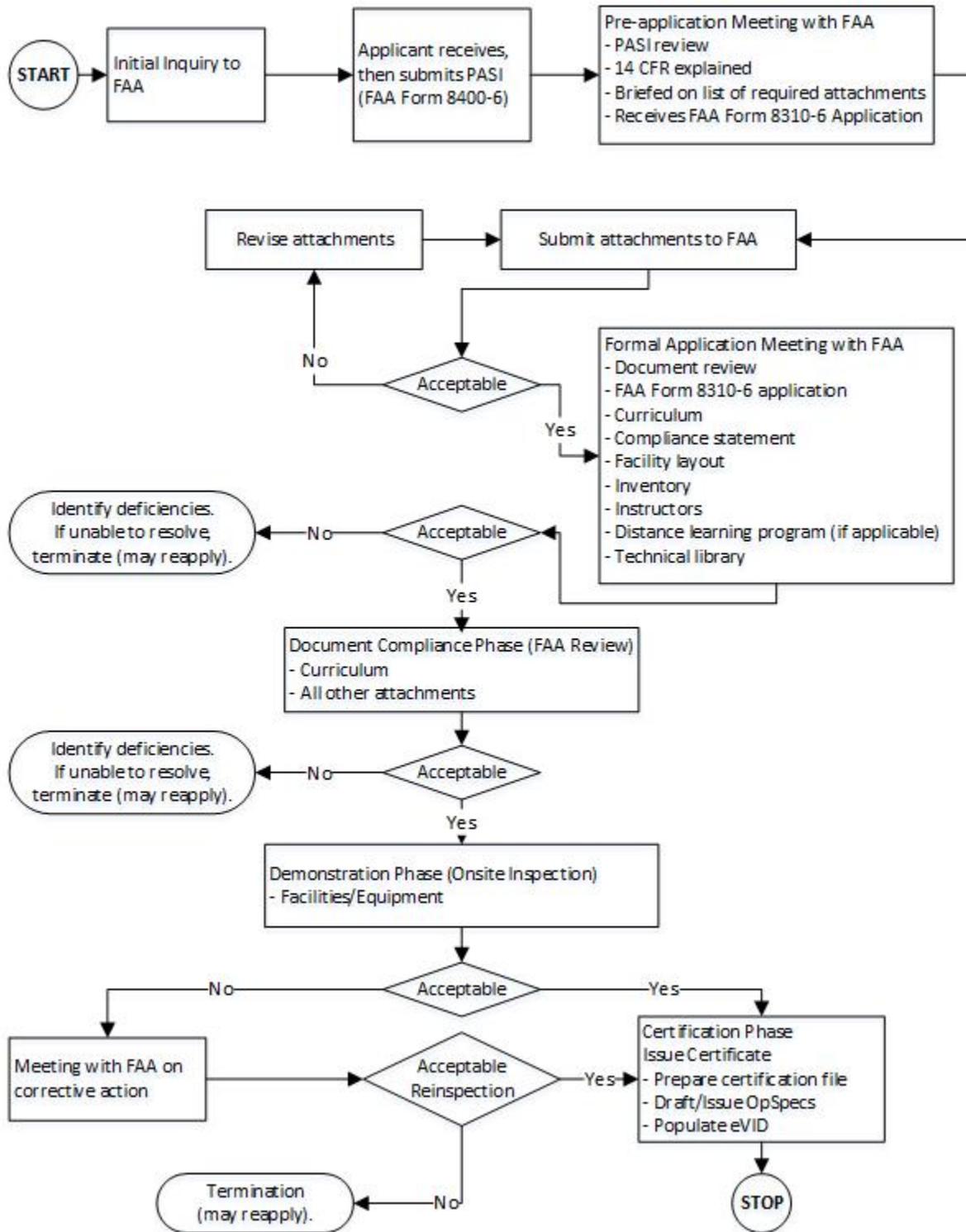
A. Certification Process. The certification process provides for interaction between the applicant and the Federal Aviation Administration (FAA) from initial inquiry to issuance or denial of an AMTS Certificate. It ensures the thorough review, evaluation and testing of programs, systems, and methods of compliance (see Figure 2-36, Certification Process Flowchart). The certification process consists of the following five phases:

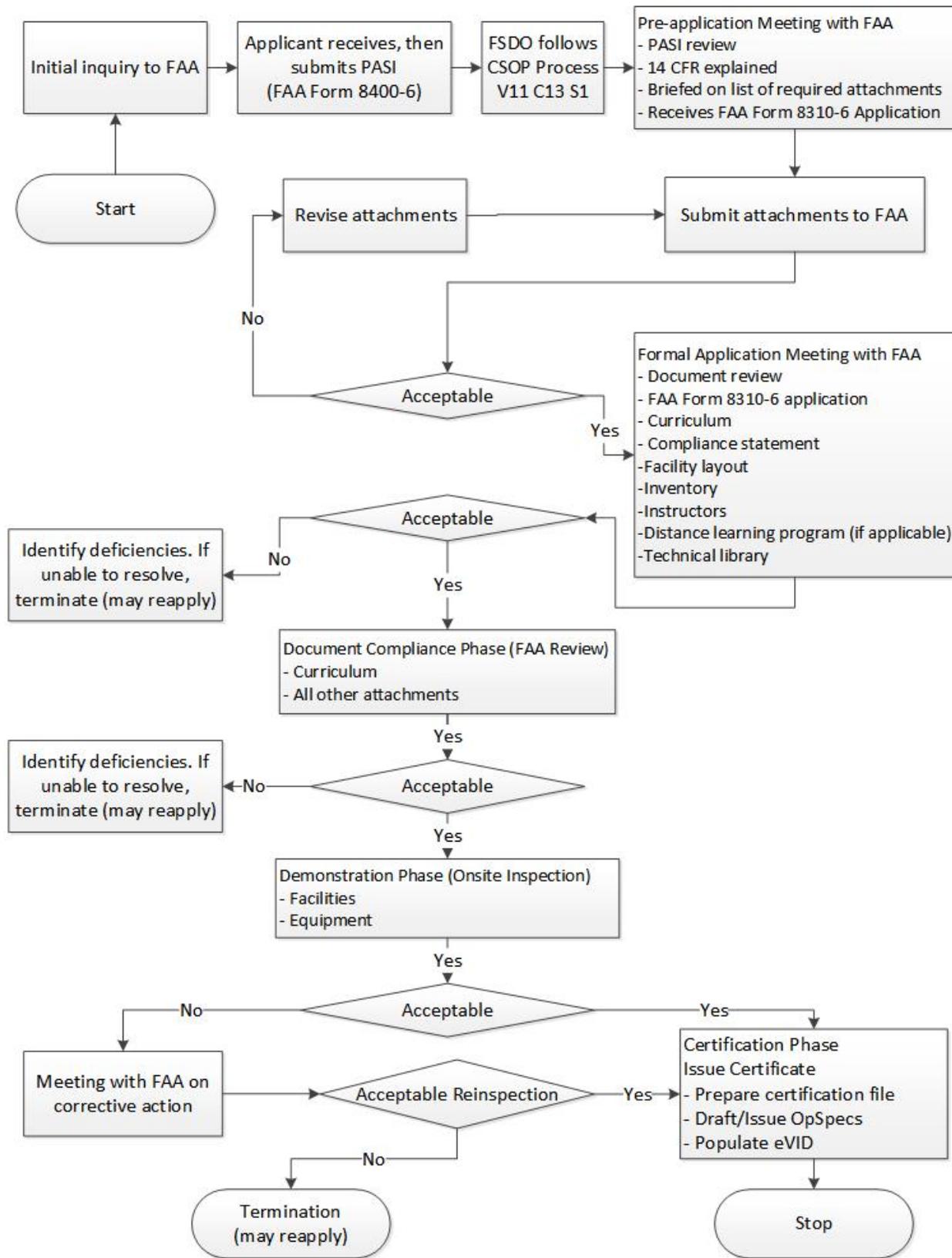
- Preapplication phase,
- Formal application phase,
- Document compliance phase,
- Demonstration and inspection phase, and
- Certification phase.

B. Authority. Part 147 and Title 49 of the United States Code (49 U.S.C.) § 44707 provide regulatory and statutory authority for certificating an AMTS.

C. Aviation Safety Inspector's (ASI) Responsibility. ASIs should not become involved in determining the market need for the AMTS, the selection of resource personnel (consultants), or materials. ASIs must remain objective in evaluating the applicant's facilities, personnel, and curriculum content.

Figure 2-36. Certification Process Flowchart





2-1414 PREAPPLICATION PHASE.

A. Initial Inquiry. Upon initial contact from an applicant requesting part 147 certification, the receiving office must first find out if the AMTS will reside within the geographic boundaries of the Flight Standards District Office (FSDO). If the applicant has contacted a FSDO that does not have geographic responsibility, the applicant will be directed to the appropriate FSDO. The applicant is directed by the ASI as to which regulations he or she must meet and where he or she may obtain copies of the regulations. The FSDO should direct the applicant to the Web site at http://www.faa.gov/regulations_policies/ for applicable regulations; advisory circulars (AC); FAA orders, notices, and bulletins; and other pertinent information applicable to part 147 AMTS certification. The applicant should be provided with an initial overview of the certification process.

B. The Preapplication Statement of Intent (PASI). The applicant is ~~given a blank~~instructed to download a FAA Form 8400-6, Preapplication Statement of Intent, from [FAA.gov](http://www.faa.gov) and should be provided instructions on how to complete it and where to send it. The submission of a PASI expresses intent by the applicant to initiate certification. It also allows the FAA to plan activities and commit resources. Therefore, a potential applicant should submit a completed PASI only after reviewing the appropriate regulations and advisory material to include applicable ACs, notices, and Order 8900.1 guidance. The applicant should consider the personnel, facility, equipment, and documentation requirements for certification and operation.

C. ~~FSDO Coordination with Regional Office (RO). Certification Services Oversight Process (CSOP).~~ Upon receipt of a completed PASI ~~from the applicant,~~ the FSDO manager or the office manager's designee ~~reviews the~~creates a new PASI for completeness Summary Form and accuracy. ~~When the PASI is determined to be complete, the preapplication phase can continue. Otherwise, the PASI will be returned to the applicant for correction~~enters the applicant into CSOP per Volume 11, Chapter 13, Section 1, Flight Standards Certification Services Oversight Process.

1) The FSDO manager should use the PASI to evaluate the complexity of the proposed operation and to ensure that trained and experienced ASIs are available to participate as certification team members.

2) The FSDO manager notifies the ~~RO~~Regional Flight Standards Division (RFSD) of the PASI. The ~~RO~~RFSD may use the PASI to assess the FSDO workload and forecast its staffing needs.

D. Establish Certification Team. ~~With RO authorization~~When it is determined to proceed with the certification process, the FSDO manager or the airworthiness unit supervisor establishes the team members to conduct the certification: consistent with Volume 11, Chapter 13, Section 1 and the CSOP standard operating procedure (SOP). The team will consist of at least one Maintenance ASI from the certificating FSDO, one Avionics inspector, and, if required, one regional representative. Additional Airworthiness ASIs may be utilized as needed. One team member will be designated as the certification project manager (CPM). ~~Regional and/or headquarters (HQ) participants may not serve as~~The FSDO will obtain a precertification number from the CPM Aviation Data Systems Branch (AFS-620).

~~1) The FSDO manager forwards one copy of the PASI and a list of certification team members and their particular areas of specialty to the RO.~~

~~2) The FSDO will obtain a precertification number from the Aviation Data Systems Branch (AFS-620).~~

NOTE: ~~Regional~~RFSD or headquarters (HQ) representatives may serve as active members or advisors of the certification team. These representatives should attend both the preapplication and the formal application meetings. They should also be present during facility inspections. CSOP provides the option for RFSD initial certification teams.

E. Responsibilities of the CPM. The team member designated as the CPM must have completed appropriate training (FAA Course ~~#21000113~~, and 21000113, Aviation Maintenance Technician Schools and its eLMS prerequisite course 27100162). The CPM should preferably have previous experience in the certification of an AMTS under part 147.

1) The CPM must serve as the primary spokesperson for the FAA throughout the certification process. Consequently, the CPM must thoroughly coordinate all certification matters with all other specialists assigned to the certification project.

2) The CPM must be responsible for ensuring that all certification tasks are complete, and must coordinate all correspondence to and from the applicant following the guidance of Volume 11, Chapter 13, Section 1 and the CSOP SOP.

3) The CPM must notify the FSDO manager of any information that may significantly affect or delay the certification project.

4) The CPM must ensure that individuals involved with the certification project and FSDO manager are kept fully informed of the current status of the certification.

5) The CPM must keep the ~~RO~~RFSD informed of any unusual aspects of the certification process.

6) The CPM must ensure that an application for a certificate and rating, or for an additional rating, under part 147 is made on a form and in a manner prescribed by the Administrator, and submitted with:

- a) A description of the proposed curriculum;
- b) A list of the facilities and materials to be used;
- c) A list of its instructors, including the kind of certificate and ratings held and the certificate numbers; and
- d) A statement of the maximum number of students it expects to teach at any one time.

NOTE: The CPM would benefit from the use of the AMTS Certification Process Guide located in the current edition of AC 147-3, Certification and Operation of Aviation Maintenance Technician Schools, Figure 4-1, to document the certification progress. The CPM may use their own checklist in the certification process as long as the requirements of the certification phases are met. The development of a working certification file or checklist containing the AMTS Certification Process Guide could assist the CPM in collecting, completing, and storing the documents as the certification process progresses. This could be completed and converted to the certification file required at the completion of certification.

F. Responsibilities of the Certification Team Members. It is the responsibility of each team member to respond to a CPM request for assistance and keep the CPM informed of the status of the certification. Immediately bring any discrepancy that may delay the certification effort to the attention of the CPM.

G. Aircraft Maintenance Division (AFS-300). When requested by the ~~RORFSD~~, AFS-300 will determine if HQ's participation is appropriate and, ~~within 5 working days of receipt of the PASI~~, will notify the ~~RORFSD~~ of the determination and the name(s) of any AFS-300 participants. ~~Regional~~RFSO and HQ representatives may serve as active members of the team or as advisors. These representatives may attend both the preapplication and the formal application meetings. They also may be present during facility inspections.

~~Note: —The CPM does not schedule a preapplication meeting until the applicant has reviewed these requirements and has completed the PASI.~~

H. Preapplication Meeting and Discussion Topics. The FSDO manager or unit supervisor will advise the applicant of the necessity for a preapplication meeting. In preparation for the preapplication meeting, the CPM should remind the applicant that the key management personnel should attend the meeting and should be prepared to discuss, in general terms, various aspects of the applicant's proposed operation.

1) The preapplication meeting should be held in the FSDO that will have oversight responsibility for the AMTS. This will allow the applicant to become familiar with the FSDO personnel. However, if the applicant's facility is available, the CPM may request to hold the meeting at the applicant's facility to verify that it meets the requirements for the ratings requested.

NOTE: Regional certification teams normally perform preapplication meetings at the RFSO consistent with the guidance of Volume 11, Chapter 13, Section 1 and the CSOP SOP.

2) During the preapplication meeting, the applicant should provide the FAA with an AMTS point of contact (POC). Encourage the applicant to ask questions during the discussion. Applicants should be thoroughly familiar with the certification phase requirements before continuing with the certification process. It is important, therefore, that the CPM be thoroughly prepared to conduct the meeting.

3) Open discussion of the applicant's intent for AMTS certification should take place while the FAA offers answers to any questions the applicant has regarding the application process. At a minimum, the following should take place during the preapplication meeting:

- a) Discuss FAA expectations of the AMTS to include ethical considerations, meeting minimum regulatory compliance with part 147 to qualify for certification, and maintaining consistent regulatory compliance at all times after certification.
- b) Discuss the five phases of certification and the requirements of each phase.
- c) Discuss what the applicant may expect from the FAA during and after certification.
- d) Verify the applicant is aware of the regulatory requirements and FAA policies regarding certification and operation of an AMTS.
- e) Inform the applicant of the three types of air agency ratings that may be issued (i.e., Airframe, Powerplant, and Airframe and Powerplant (A&P)).
- f) Provide instruction on the completion of FAA Form 8310-6, Aviation Maintenance Technician School Certificate & Ratings Application.
- g) Verify the applicant understands the purpose and content of the formal application documents.
- h) Discuss the AMTS requirement to provide written procedures on specific processes including tool control, use of cleaners, lubricants, and flammable liquids.
- i) Discuss AMTS procedures for administrative procedures and recordkeeping processes.
- j) Discuss and verify that the applicant understands part 147, § 147.31 regarding crediting students for previous training and experience.
- k) Inform the applicant that the school may not teach students before certification as an AMTS and then give credit for that training after certification (refer to §§ 147.3 and 147.31(c)(1)(iv)).
- l) Verify that the applicant understands that when granting credit for previous ~~AMT~~Aviation Maintenance Technician (AMT) experience (refer to § 147.31(c)(2) and (3)), only documentary evidence and testing is permitted, comparable to the required curriculum subjects.
- m) Explain to the applicant the various methods that may be used to determine the amount of credit to be given to students for previous training under § 147.31(c)(1).
- n) Discuss the requirements for a written approved system for minimum standards for graduation and methods of determining final grades (refer to § 147.31).

o) Discuss the requirement for written approved procedures for recording and controlling attendance, and provisions for course makeup when curriculum subjects are missed.

p) Discuss the procedures for taking FAA written knowledge tests, oral (knowledge) and practical (skill) tests, and for overall certification requirements found in the current edition of FAA Order 8900.2, General Aviation Airman Designee Handbook.

q) Discuss the requirement for procedures to maintain, keep, and distribute student records and transcripts (§ 147.33).

r) Discuss the significance and issuance of part 147 AMTS operations specifications (OpSpecs).

s) Discuss the content of a compliance statement listing each applicable part 147 section and the necessity for providing either a brief narrative or a specific reference to a document that describes the manner of compliance with the part 147 regulation.

t) Discuss with the applicant the purpose of the AMTS and its role in qualifying the student to perform the duties of an ~~Aviation Maintenance Technician (AMT)~~ AMT for particular ratings or rating under 14 CFR part 65 subpart D.

u) Discuss with the AMTS applicant the importance of the contribution made to aviation safety by a properly trained and certificated AMT.

v) Discuss with the AMTS applicant the need to develop AMTS operating policies and procedures addressing allowances to deviate from the approved curriculum order of instruction on a case-by-case basis due to unexpected interruptions such as inoperative mockups, inclement weather, hospitalized instructor, etc.

w) Discuss with the AMTS applicant the need for the AMTS to incorporate policies and procedures addressing the reporting of interruptions that cause deviations in the order of instruction in the approved curriculum to the principal inspector (PI).

x) Discuss with the AMTS applicant the issuance of OpSpecs as dictated by the AMTS-specific operations.

y) Discuss program implementation requirements for distance learning if the AMTS intends to develop a distance learning curriculum as a teaching delivery method to enrolled AMT students. Distance learning is widely utilized for delivering instruction by lecture, visual demonstration, discussion, knowledge of general principles and, with the proper training support equipment, is a viable option for teaching some practical applications or developing fundamental manipulative skills.

NOTE: Although encouraged, do not coerce applicants to exceed part 147 regulatory requirements.

I. Preapplication Meeting Discussion of Documents.

1) Inform the applicant of the following certification documents required to be submitted for review during the formal application meeting. It is important that the CPM be thoroughly prepared to conduct the meeting.

2) Inform the applicant to develop the following:

a) An event_scheduling calendar developed by the applicant that identifies, documents and forecasts the step-by-step completion of the certification process as outlined in the five phases of certification.

b) Two completed copies of FAA Form 8310-6.

c) A compliance statement listing each applicable part 147 section and providing either a brief narrative or a specific reference to a document that describes the manner of compliance with the regulations.

d) A description of the proposed curriculum. Emphasize that the actual curriculum must receive approval before certification.

NOTE: The event_scheduling calendar should be developed in a way that ensures the certification process covers all phases of certification. The applicant should develop a Schedule of Events (SOE) that ensures the certification process is sound, and is agreeable to the CPM. The applicant and the CPM should review the schedule periodically to ~~make certain~~ensure steps are not missed. A copy of the completed ~~schedule of events~~SOE should be retained by the CPM in the certification file.

NOTE: For further guidance on curriculum requirements, see Volume 2, Chapter 12, Section 2.

e) A student enrollment statement indicating the maximum number of students to be taught for each rating during each enrollment period. The FAA Form 8310-6 application will also show this information.

f) A written description of standards for graduation.

g) A written description of attendance and missed course content makeup procedures.

h) A written description of grading procedures.

i) An inventory of the materials, equipment, and tools to be used. Advise the applicant to detail which tools the school will provide and which the students must furnish.

j) A written description of the facilities to be used for instruction. Ask the applicant to provide detailed drawings with dimensions of classrooms and laboratory/shop facilities. The drawings should show the relative location of each school facility.

k) A list of instructors showing any required certificate number(s), ratings, and subjects to be taught by each.

NOTE: Each subject in the proposed curriculum must be accounted for on the instructor listing. Ensure that the applicant understands that technical maintenance courses other than certain general subjects must be taught by appropriately certificated airframe and/or powerplant AMTs. Inform the applicant that at least one certificated instructor is required for every 25 students in each shop or laboratory class (refer to § 147.23).

l) A written description of the method that ensures access to appropriate and current technical data necessary for the rating(s) sought. The procedures should demonstrate the ability to access or possess the current information.

3) The data should include the following:

~~a) CFRs,~~

- Code of Federal Regulations (CFR),
- Type Certificate Data Sheets (TCDS),
- Airworthiness Directives (AD),
- Supplemental Type Certificates (STC),
- Maintenance manuals, and
- ACs.

J. Conduct Precertification Inspections. If possible, visit the proposed school before a formal application is filed. Inspect and make necessary recommendations regarding the following:

- Classrooms,
- Work areas,
- Materials,
- Laboratories,
- Technical data,
- Instructional aids,
- Other areas as needed, and
- Distance-learning-associated equipment, materials, and documents (if applicable-~~)).~~

2-1415 FORMAL APPLICATION PHASE. The formal application phase requires a formal application meeting to present the required certification documents and discuss those issues relevant to the particular application.

A. Schedule and Conduct Formal Application Meeting. The CPM meets with the official(s) representing the school. Review the submitted formal application and documents, including the ~~schedule of events:SOE.~~ Determine whether the applicant has submitted all documents, and if they are complete.

B. Review the Following. If all documents are complete, review FAA Form 8310-6, the compliance statement, the curriculum, standards for graduation, attendance and makeup procedures, grading procedures, facility layout, and the instructor qualifications for conformity to the regulations.

NOTE: If discrepancies exist in the documents, return the documents to the applicant with a letter identifying the discrepancies. It should be clearly explained to the applicant the need to correct the document deficiencies in a timely manner to facilitate continuance of the certification process.

1) Compliance Statement. To benefit the applicant, development of a compliance statement assists in the certification process by showing in writing how the applicant intends to meet the requirements of each section of the part 147 rule. The compliance statement must list each applicable part 147 section and provide a brief narrative or a specific reference to a manual or other document describing the planned method of compliance with the regulation.

2) Curriculum. For guidance on curriculum requirements see Volume 2, Chapter 12, Section 2.

a) Practical projects referring to § 147.21(d) include all functions specified in the curriculum that involve hands-on tasks. Therefore, practical projects should include any task taught to Level 2 or 3, as specified in part 147 appendices and OpSpecs, since all of these require some practical application.

b) Section 147.38 addresses the maintenance of curriculum requirements. Title 14 CFR prescribes minimum standards for certification and operation. These standards may be exceeded beyond what the rule requires, but only as part of an approved curriculum.

3) List of Instructors and Qualifications. The certificate number, ratings, and subjects must be listed for each instructor. There must be at least 1 certificated instructor for every 25 students in each shop or laboratory class (refer to § 147.23). Evaluate the suitability of noncertificated instructors to teach certain general courses on an individual basis.

4) Student Enrollment Statement. This statement indicates the maximum number of students to be taught for each rating during each enrollment period. Do not count students enrolled in other non-FAA-approved courses toward the maximum allowable part 147 enrollment.

NOTE: Non-FAA-approved courses may not detract from the part 147 schools ability to provide for a quality education (due to facility overcrowding, equipment over use, etc.). PIs must be cognizant of the effect non-FAA-approved courses may pose.

5) Diagram and Description of Facilities. This description must include a facility layout plan indicating the relative location of classrooms to shops/laboratories, including dimensions, and the relative location of each facility to each other facility when there is more than one site or location for the school.

6) Inventory of Equipment, Materials, and Tools. The inventory must detail which tools the school will provide and which tools the students must furnish.

7) Accept or Deny Formal Application. Acceptance or denial of the formal application is based on inclusion of all required materials as detailed in the preapplication meeting. The proposed methods of compliance are not being evaluated at this stage. Based on the initial review of the formal application and any meetings with the applicant, accept or deny the application. Advise the applicant in writing of the results. If the application is denied, return the application and attachments with a letter stating the reasons for denial.

2-1416 DOCUMENT COMPLIANCE PHASE.

A. Review Documents. Thoroughly review the applicant's curriculum and other documents to ensure that each complies with the applicable regulations. Approve, accept, or deny each document as appropriate. Documents reviewed during this phase must include:

- 1) FAA Form 8310-6.
- 2) Statement of compliance- (SOC).
- 3) Curriculum (refer to § 147.21).
- 4) Distance learning curriculum (if applicable).
- 5) Instructor requirements and qualifications (refer to § 147.23).
- 6) For student verification purposes, applicants for an AMTS must have FAA-accepted procedures to ensure they can provide confirmation of student graduation to the FAA, a requesting ~~DME~~, Designated Mechanic Examiner (DME), or an approved testing center.
- 7) Minimum standards for graduation and a method of determining final grades (refer to § 147.31).
- 8) Procedures for recording and controlling attendance.
- ~~9) Provisions for makeup classes (refer to § 147.31) covering the following:~~
 - ~~a) All missed projects, and assignments in a subject must be made up in order for the student to take the final exam and receive credit for the subject.~~
- 9) All makeup work will be supervised or verified by Absence and missed material. Section 147.31(e) requires an approved system for recording student attendance. The system must show hours of absence allowed and how the missed material will be made available to the student. The system must ensure that all graduates will have completed all appropriate curriculum requirements (refer to § 147.31(c)).
 - a) Instructors must supervise and verify completion of practical project requirements. Other missed materials may be made available through:

1. Communication of subjects and/or chapters covered in a course textbook;

~~2. Availability of an instructor qualified in that subject presentation;~~

3. Makeup Availability of class materials; and

4. Assignments directly attributable to the missed subject matter, such as, but

not limited to:

- Supplementary reading assignments must be the material missed;

~~b) Student makeup for lecture must be documented and will consist of at least one (or a combination of) the following:~~

~~• Instructor presents the missed subject material to the student.~~

- Student completion of a written essay;

~~• Student writes 300 to 500 word essay per missed lecture hour on the subject missed.~~

- Student completes 10 to 15 completion of questions, answers, and references on material missed in class per hour;
- Student will write a 150 word outline per hour and make an A student oral presentation to the instructor on the subject area missed based on an outline; and/or

~~• Student lecture through the use of an approved distance learning program.~~

- Student makeup for missed shop projects Other methods acceptable to the Administrator.

~~e) A student must be supervised by a qualified instructor.~~

~~b) complete all makeup assignments, class assignments, and exams missed in a module must be completed by the last day of that module before an instructor can administer any written, oral, or practical test.~~

c) Failure of a student to complete all makeup assignments and material within the school's approved allotted time period may result in the student being required to repeat that subject. Any exceptions will be at the discretion of school officials

NOTE: Instructors cannot use the material from distance learning offerings to make up material missed from a classroom or lab offering, or vice versa.

10) Written procedures for taking FAA written (knowledge), oral (knowledge), and practical (skill) tests and for certification requirements found in Order 8900.2.

11) Procedures for maintaining, keeping, and distributing student records and transcripts (refer to § 147.33).

12) Procedures for tool control.

13) Procedures for updating the technical data library.

14) Facility layout (refer to §§ 147.13 and 147.15).

B. Document Deficiencies. If you find deficiencies in any document submitted by the applicant, return the document with a letter identifying the deficiency.

NOTE: The certification team must be ready to offer suggestions, but not mandate how to improve the product but should avoid writing the applicant's documents.

C. If Necessary, Terminate the Certification Process. If the documents submitted are consistently found to be of insufficient quality, schedule a meeting with the applicant to discuss each deficiency in detail. Advise the applicant that continuing the certification process is impractical and the option for the applicant to reapply for certification.

1) Complete Item 13 of FAA Form 8310-6, by marking the "Disapproved" box or by indicating that the application was withdrawn, as appropriate.

2) Return the application with a letter advising the applicant of the reasons for termination. Advise the applicant that a new PASI is required to initiate the certification process again.

3) Forward two copies of the letter to the ~~regional Flight Standards division (RFSD)-RFSD~~.

4) Notify AFS-620 of the project's termination.

2-1417 DEMONSTRATION AND INSPECTION PHASE. In this phase, the certification team makes an onsite inspection to determine whether the applicant's proposed procedures and programs are effective. At this time, the applicant demonstrates that the facilities and equipment are safe and satisfactory (see Volume 2, Chapter 12, Section 3). Emphasis is on compliance with the regulations. Throughout the demonstration and inspection phase, the CPM must ensure that each aspect of the applicant's required demonstration is first documented, then observed, and then either approved or disapproved.

A. Evaluate Suitability of Facilities, Equipment, Tools, and Materials.

1) **FacilityFacilities.** The instructional aids, laboratory and shop equipment, and physical layout of the facilities must meet the requirements outlined in §§ 147.15, 147.17, and 147.19. The applicant should keep in mind that the facilities must constitute an environment suitable for learning. Excessive noise, dust, fumes, heat, cold, and clutter could distract the

applicant during development of the AMTS facility. The ratings that the school proposes to obtain will influence the layout of the AMTS facility.

2) Equipment. An AMTS is required to have sufficient shop equipment in place and in satisfactory operating condition to adequately serve the student enrollment and meet shop/project subject requirements. The equipment must be situated so students can operate it in a safe and efficient manner- (see criteria for distance learning, as applicable-).).

3) Tools. The AMTS must provide an inventory of special tools required to provide instruction. All special tools must be in satisfactory working condition for the purpose for which they are to be used. Section 147.19 requires the AMTS to furnish an adequate supply of special tools appropriate to the ratings and curriculum of the AMTS.

4) Materials. The AMTS must provide a list of materials required for instruction. The school must have sufficient materials in stock and properly stored to provide for the approved student enrollment- (see criteria for distance learning, as applicable-).).

5) Quantities of Necessary Items. The amount of materials and the kinds of equipment and tools students will use also depends on the curriculum and number of students. For example, the applicant must demonstrate that the school has the appropriate tools and equipment to accomplish each project.

B. Observe Demonstrations and Conduct Inspections. Verify that the applicant's proposed procedures and programs are effective, and that facilities and equipment are safe and satisfactory. Follow the procedures in Volume 2, Chapter 12, Section 3. Verify compliance with the regulations as follows:

- Facilities meet the requirements of §§ 147.13 and 147.15;
- Instructional aids meet the requirements of § 147.17; and
- Materials, special tools, and shop equipment meet the requirements of § 147.19.

C. Distance Learning Program ~~Surveillance.~~ ~~As an alternative to classroom training, the distance learning instruction delivery method continues to develop utilizing distance learning technology. The initial implementation and subsequent surveillance of.~~ A distance learning program ~~requires~~will ensure compliance with all part 147 requirements, including curriculum approval as required by § 147.38. Issuance of OpSpec A026, Authorizations/Limitations, is required prior to conducting distance learning. Specifically, an acceptable distance learning program will include written policy and procedures ~~and at a minimum, the following describing:~~

- 1) How the distance learning program will be administered.
- 2) A description of the examination and testing process.
- 3) Methods for ensuring the integrity of student work and compliance with FAA minimum standards, as listed in part 147 appendices A, B, C, and D.
- 4) Procedures for proctoring computer-based exams in a remote location.

5) Procedures to ensure distance learning course records are kept in compliance with the approved curriculum.

6) A description of the technology (i.e., hardware and software) to be utilized.

7) Proper identification of courses available through distance learning.

~~1) An electronic Learning Management System (eLMS) of sufficient hardware and software technology to accomplish comprehensive storage, handling and tracking of to track all aspects of the distance learning program-~~

~~a) Student online distance learning, including attendance tracking/recording.~~

~~b) Student online distance learning, participation tracking/recording.~~

~~2)8) Student online distance learning, and performance measurement tracking/recording (including comparisons to traditional classroom test scores and completion rates).~~

~~3) Ensure the AMTS has been issued OpSpec A026, Authorizations/Limitations, prior to conducting distance learning.~~

~~4) Distance learning course list availability.~~

~~5)9) FAA "read-only" access to the eLMS (to facilitate surveillance).~~

~~6) Report availability for analysis of distance learning test scores in comparison to traditional classroom test scores.~~

~~7) Report availability for analysis of distance learning course completion times in comparison to traditional classroom completion times.~~

~~8) Verification by AMTS: Distance learning courses combined with traditional classroom AMTS courses meet at a minimum curriculum requirements defined by part 147.~~

9)10) Identification of students that are not seeking certification but are enrolled in AMTS distance learning courses. Regulatory requirements would not apply to these students.

~~Note: — Deficiencies found within the distance learning program during surveillance must be identified, documented, and brought to the attention of the AMTS for necessary correction. An AMTS with approval to conduct distance learning must continually operate to meet the requirements of the approved distance learning program to enable continued approval authorization to conduct distance learning.~~

D. Document Deficiencies. If deficiencies exist, provide a list of discrepancies to the applicant. Schedule a meeting to discuss in detail the appropriate corrective action to be taken. Place documentation in the certification file.

1) If the applicant does not demonstrate compliance or if discrepancies cannot be resolved, send a letter of denial and a list of discrepancies.

2) Inform the applicant that the CPM must be notified in writing of all corrective action taken.

2-1418 CERTIFICATION PHASE. An applicant is entitled to the issuance of an Air Agency Certificate with appropriate rating(s) and OpSpecs after accomplishing the following:

- The certification process is completed;
- Each unsatisfactory item has been corrected;
- The FSDO has determined that the applicant has met all regulatory requirements and understands the related responsibilities;
- The FSDO has determined that the applicant is capable of complying with 14 CFR on a continuing basis; and
- The applicant has demonstrated capability of conducting operations in a safe manner.

A. Issue Air Agency Certificate. When the applicant has met all regulatory requirements, the CPM will accomplish the following:

- 1) Ensure all deficiencies have been documented and addressed.
- 2) Ensure all items in the CPM file are closed and satisfactory.
- 3) Review ~~schedule of events~~SOE for completeness.
- 4) Complete Item 13 of FAA Form 8310-6.
- 5) Approve the curriculum by signing and dating the List of Effective Pages (LEP) and revision pages, or issue a letter of approval indicating the date and revision status:
 - a) Obtain a final certificate number from AFS-620.
 - b) Prepare FAA Form 8000-4, Air Agency Certificate. Ensure that the FSDO manager signs the certificate. Give the original certificate to the new certificate holder. Make a copy for the certification file.
- 6) Prepare (as applicable) part 147 AMTS OpSpecs:
 - A001, Issuance and Applicability (mandatory).
 - A002, Definitions and Abbreviations (mandatory).
 - A003, Ratings (mandatory).
 - A004, Summary of Special Authorizations and Limitations- (mandatory).
 - A005, Exemptions (optional).
 - A006, Management Personnel (mandatory).
 - A007, Designated Persons (mandatory).
 - A012, Affiliated Designated Mechanic Examiners (DME) (optional).

- A013, Instructors (mandatory).
- A025, Recordkeeping System (mandatory).
- A026, Authorizations/Limitations (optional).
- B002, Required Minimum Curriculum for General (Part 147 Appendix B) (mandatory).
- B003, Required Minimum Curriculum for Airframe (Part 147 Appendix C) (mandatory for AMTS with either an airframe rating or combined A&P ratings) (optional).
- B004, Required Minimum Curriculum for Powerplant (Part 147 Appendix D) (mandatory for AMTS with either a powerplant rating or combined A&P ratings) (optional).

B. PI Drafts and Signs OpSpecs. The appropriate Airworthiness PI will draft and sign the OpSpecs showing the limitations issued. Issue all mandatory and any applicable optional FAA OpSpecs with appropriate ratings.

NOTE: Air Agency Certificates and OpSpecs are legal documents. Language should clearly specify the authorizations, ratings, and/or limitations being approved. When filling out these forms, erasures, strikeovers, or typographical errors must not exist on the completed document.

C. Prepare Certification File. Once the applicant receives AMTS certification, prepare a part 147 Air Agency Certification file to be kept at the FSDO for documented future review of the complete certification process. The file must include the name and title of each ASI who assisted in the certification. The CPM signs the file. The file must contain at least the following:

- Copy of the PASI;
- Completed FAA Form 8310-6;
- Letter of Compliance (i.e., ~~statement of compliance (SOC)~~; an SOC);
- Applicant's ~~schedule of events~~ SOE;
- Copy of the signed FAA Form 8000-4, ~~Air Agency Certificate~~ issued;
- Copy of the OpSpecs issued to the AMTS;
- Copy of the approved curriculum;
- List of the instructors, their qualifications, and the courses they will be teaching;
- Facility layout;
- Procedures for updating the technical data library; and
- Summary of all discrepancies encountered during certification.

D. Distribute Application FAA Form 8310-6. Distribute FAA Form 8310-6, retaining the original form in the FSDO and forwarding one copy to the ~~ROR~~ RFSD.

2-1419 COORDINATION REQUIREMENTS. This task requires coordination with Maintenance ASIs, Avionics ASIs, the RFSD, and HQ.

2-1420 REFERENCES, FORMS, AND JOB AIDS.

A. References (current editions):

- Title 14 CFR Part 147.
- Title 49 U.S.C. § 44707.
- ~~Title 14 CFR Part 147.~~
- FAA Order 8900.1, Flight Standards Information Management System (FSIMS).
- FAA Order 8900.2, General Aviation Airman Designee Handbook.

B. Forms:

- FAA Form 8000-4, Air Agency Certificate.
- FAA Form 8310-6, Aviation Maintenance Technician School Certificate and Ratings Application.
- FAA Form 8400-6, Preapplication Statement of Intent.

C. Job Aids. Job Task Analyses (JTA): 2.4.14, 3.4.32, 3.4.34, and 3.4.36.

2-1421 TASK OUTCOMES.**A. Complete the PTRS Record.**

B. Complete the Task. Completion of this task will result in one of the following:

- Issuance of an Air Agency Certificate and OpSpecs;
- A letter to the applicant indicating the denial of the certificate; or
- A letter to the applicant confirming termination of the certification process by the applicant.

C. Document the Task. File all supporting paperwork in the certificate holder's ~~holder~~/applicant's office file and update the enhanced Vital Information Database (eVID).

2-1422 FUTURE ACTIVITIES. Observe the school during the first 90 days of operation. Additional inspections may be necessary to determine compliance with the applicable CFRs. The ASI may direct changes in the methods or techniques of operation. Perform followup and surveillance inspections as required.

RESERVED. Paragraphs 2-1423 through 2-1445.

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

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

**Section 2 Evaluate Part 147 Aviation Maintenance Technician School's
Curriculum/Revision and Instructor Qualifications**

**2-1446 PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY
CODES.**

A. Maintenance: 3384 (initial)/3385 (revision).

B. Avionics: 5384 (initial)/5385 (revision).

2-1447 OBJECTIVE. This section provides guidance for evaluating the curriculum or curriculum revision of an Aviation Maintenance Technician School (AMTS) certificated under Title 14 of the Code of Federal Regulations (14 CFR) part 147.

2-1448 GENERAL.

A. Definitions.

1) Accreditation. Accreditation is the process used in U.S. education to ensure that schools, postsecondary institutions, and other education providers meet, and maintain, minimum standards of quality and integrity regarding academics, administration, and related services. This term refers exclusively to schools accredited within the United States.

2) Approved Noncertificated Instructors (Specialized Instructors). Individuals who are not certificated but who have been found qualified by the AMTS to teach mathematics, physics, basic electricity, basic hydraulics, drawing, and similar subjects. The applicant is required to maintain a list of the names and qualifications of specialized instructors, and upon request, provide a copy of the list to the Federal Aviation Administration (FAA).

3) Asynchronous Learning. The method of teaching that takes place utilizing prerecorded developed training preserved for the learner to participate in whenever the time is most convenient. Technology such as email, e-courses, online forums, and audio and video recordings make this possible. Asynchronous learning is considered more flexible than synchronous learning.

4) Aviation Technician Education Council (ATEC). An AMTS industry association.

5) Certificated Instructors. Those instructors who hold FAA Mechanic Certificates and the ratings appropriate for the AMTS subjects to be taught.

6) Certification. This term refers to AMTS certificated as an air agency by the FAA.

7) Certification Project Manager (CPM). The person assigned as a team lead during an air carrier or air agency initial certification who provides guidance and written notification to the applicant during each phase of the certification project.

8) Common Hand Tools. Small, ordinary tools such as ratchets, sockets, and screwdrivers. This should not be considered an all-inclusive list, but simply an example for the ~~ASI~~ aviation safety inspector (ASI) to consider.

~~9)~~ **9) Distance Learning.** A method of delivering education and instruction, often on an individual basis, to students who are not physically present with an instructor in a traditional setting such as a classroom. Distance learning enables participation access to learning when the source of information and the learners are separated physically by time, or distance, or both.

~~10)9)~~ **Distance Education.** ~~Distance education courses that require physical on-site participation for any reason (i.e., taking examinations) can be referred to blended or hybrid courses of study.~~ Distance learning is known by other terms such as e-learning, home study, self-guided training, virtual classroom, distributed training, computer-based training (CBT), web-based training (WBT), and others.

~~11)10)~~ **Flight Standards District Office (FSDO).** The FAA certificate-holding district office (CHDO) with geographic oversight of a particular AMTS.

~~12)11)~~ **Focused Curriculum.** Curriculum directed toward a particular area of the aviation industry. Examples include: Rotorcraft, Transport Category, and Agricultural Aircraft.

~~12)~~ **Instruction Hour.** The educational unit hour, as used by an AMTS, that consists of a time period of 50 to 60 minutes. This instructional time period conforms to the existing practices at many education institutions.

13) Instructional Aids. Equipment used to provide instruction. Examples include diagrams, visual aids, computers, interactive software, aircraft, and ~~mock-ups~~ mockups of aircraft, engines, and components, as well as actual components, such as magnetos and fuel controls. An instructional aid is not required to meet return to service standards.

~~14)~~ **Instruction Hour.** ~~The educational unit hour, as used by an AMTS, that consists of a time period of 50 to 60 minutes. This instructional time period conforms to the existing practices at many education institutions.~~

~~15)14)~~ **Laboratory.** Facilities for providing instruction in general principles that may require student demonstrations or participation. Determination of what laboratory equipment is required depends on the subject taught and the teaching level at which it is taught.

~~16)15)~~ **Letter of Compliance or Statement of Compliance. (SOC).** A compliance statement listing each applicable part 147 section and providing either a brief narrative or a

specific reference within the document(s) describing the manner of compliance with the regulation.

17)16) Maintenance Training Review Board (MTRB). The MTRB is an advisory board to plan, coordinate, and advise the FAA regarding the certificated AMTS required curriculum specific to part 147 appendices A, B, C, and D.

18)17) Operation Specifications (OpSpecs). OpSpecs are approved documents identified by OpSpec paragraphs containing the authorizations, limitations, and certain procedures under which each kind of operation is to be conducted. Operational variables such as multiple ratings, management and designated personnel, affiliated Designated Mechanic Examiners (DME), exemptions, authorization/limitations, and approved manual systems are identified in applicable OpSpec paragraphs and approved through the issuance of those OpSpec paragraphs. OpSpecs are maintained in an Internet Accessible program known as Web-based Operations Safety System (WebOPSS).

19)18) Practical Project. A hands-on assignment that requires the use of manipulative skills taught at a teaching Level of 2 or 3. A practical project generally does not include nonmanipulative activities such as book reports. However, for certain required subjects such as maintenance publications, the use of FAA directives or manufacturers' data constitutes a practical project.

19) Principal Avionics Inspector (PAI). The avionics representative of the FSDO with principal responsibility for the certification and surveillance of a part 147 AMTS.

20) Principal Maintenance Inspector (PMI). The maintenance representative of the FSDO with principal responsibility for the certification and surveillance of a part 147 AMTS.

~~21) Principal Avionics Inspector (PAI). The avionics representative of the FSDO with principal responsibility for the certification and surveillance of a part 147 AMTS.~~

22)21) Practical Test Standards (PTS). PTS are a guide for students, instructors, the FAA, and Examiners to know what is expected on a test.

23)22) Ratings. An AMTS may be certificated for the following ratings: airframe, powerplant, or combined Airframe and Powerplant (A&P). The general portion of the required curriculum is not a rating, but it is a required part of all the ratings.

24)23) Rote Knowledge. A memorizing process using routine or repetition, often without full attention or comprehension. This may include facts such as an air agency's history, organization, and general policies and procedures. Committing an airplane's maintenance manual limitation section to memory, or getting a basic understanding of an airplane's systems by memory could also be rote knowledge.

25)24) Shop. Facilities for providing instruction on projects taught at teaching Level 2 or 3. The shop environment should resemble a typical aviation repair facility.

~~26~~25) **Shop Equipment.** Machinery and supportive equipment, such as air compressors, work stands, racks, benches, fabricating devices, sheet metal equipment, and battery chargers.

~~27~~26) **Simulated Approval for Return to Service.** A measured standard of instructing students' academic and manipulative skills in which to prepare them with the needed skills to maintain and properly return aircraft, parts, or components to service.

~~28~~27) **Special Tools.** Highly specialized tools, such as tension meters, micrometers, and torque wrenches.

~~29~~28) **Synchronous Learning.** Learning that takes place when two or more people are communicating in real time, "live." Sitting in a classroom, talking on the telephone, and chatting via instant messaging are examples of synchronous communication.

~~30~~29) **Teaching Levels.** Three levels of instruction with varying degrees of difficulty.

a) Level 1 requires:

1. Knowledge of general principles, but no practical application.
2. No development of manipulative skill.
3. Instruction by lecture, demonstration, and discussion.

b) Level 2 requires:

1. Knowledge of general principles, and limited practical application.
2. Development of sufficient manipulative skill to perform basic operations.
3. Instruction by lecture, demonstration, discussion, and limited practical application.

c) Level 3 requires:

1. Knowledge of general principles, and performance of a high degree of practical application.
2. Development of sufficient manipulative skills to simulate return to service.
3. Instruction by lecture, demonstration, discussion, and a high degree of practical application.

~~31~~30) **Troubleshoot.** To systematically analyze and identify malfunctions, and to identify the source of trouble in an airframe, powerplant, or aircraft component. For the purposes of AMTS, the item of equipment or simulator training aids must be in operating condition. For example, a turbine powerplant must be operational for the student to troubleshoot.

B. Curriculum Background. Part 147, § 147.21 sets forth the minimum curriculum requirements. Maintenance of curriculum requirements is set forth in ~~part 147,~~ § 147.38.

1) Practical projects referred to in § 147.21(d) include all functions specified in the curriculum that involve hands-on tasks. Therefore, practical projects should include any task taught to Level 2 or 3, as specified in part 147 appendices, since all of these require some practical application.

2) Section 147.38 addresses the maintenance of curriculum requirements. Generally, part 147 prescribes minimum standards for certification and operation. These standards may be exceeded, but only when they are part of an approved curriculum.

3) An AMTS must adhere to its approved curriculum. Any new course material the school wishes to add must be incorporated into the approved curriculum and approved by the FAA before it may be used. This does not prohibit a school from teaching other non-FAA-approved courses, such as refresher courses or academic courses required to complete a degree program. However, those courses must be clearly distinguishable and separate from approved AMTS courses. In addition, other courses offered must not detract from the quality of instruction or any portion of the FAA-approved part 147 curriculum.

4) An AMTS should strive to keep its approved curriculum current to meet industry needs or standards by revising courses as appropriate. It must be made clear, however, that these revisions require FAA approval before they can be implemented.

C. Curriculum Components. The FAA must approve the curriculum or revision. The part 147 approved curriculum will consist of the following for each subject:

- Subjects taught (part 147 appendices B, C, and D);
- Course descriptions/content (theory and lab proportions);
- Teaching level requirements (part 147 appendix A);
- A list of minimum required school tests to be given;
- The total number of hours required for successful completion;
- Required practical projects with corresponding lab hours;
- A schedule of required tests or quizzes for each subject area;
- Order of instruction or prerequisites for each subject area;
- Interruptions in the order of instruction;
- Courses (as approved by OpSpec A026, [Authorizations/Limitations](#)) to be delivered using distance learning technology;
- Portions of part 147 required hours to be delivered via distance learning; and
- Method of delivery for curriculum components taught through distance learning.

NOTE: Each certificated AMTS must include an explanation of the procedures it will utilize to comply with part 147 subpart C, Operating Rules, in its curriculum procedures document/manual. The AMTS may have a separate section capturing those operating rules as specified in part 147 subpart C addressed in a compliance statement covering each part 147 section. See Volume 2, Chapter 12, Section 1 for further information regarding curriculum approval.

D. Textbooks. It is not a requirement of part 147 to have textbooks approved as a part of this process; however, if specific textbooks are approved as part of the curriculum, any change to a different text will require FAA approval as a revision. FAA-H-8083 series are automatically approved, and supplemental texts do not require approval.

2-1449 CURRICULUM REQUIREMENTS.

A. Hours of Instruction.

1) Minimum Hours Specified by § 147.21. The number of hours of instruction offered by a curriculum must be at least the minimum specified by § 147.21. The school may offer more hours of instruction; however, regardless of the number of hours offered, the FAA must approve the entire AMTS curriculum at the time of initial certification or any subsequent revisions to the curriculum as requested by the AMTS.

2) Deviations to the Curriculum. The following blocks of time are not to be included in calculating the minimum number of instructional hours specified in § 147.21:

- Time used to take the FAA oral and practical test,
- Time spent in taking the FAA knowledge test, and
- Specific FAA test-prep courses.

B. Order of Instruction. The curriculum must describe the order of course progression for each rating offered. For example, basic electricity would be a prerequisite for Aircraft Electrical Systems. The order of instruction or prerequisites must be identified and evaluated by the FAA during the curriculum approval process during initial certification and during review of subsequent curriculum revisions.

1) Interruption in the Order of Instruction (Curriculum). Interruptions causing deviations from the approved course curriculum (however frequent) must be reported by the AMTS to the principal inspector (PI). Reporting of an interruption in the order of instruction allows for discretionary surveillance by the PI. Allowances to deviate from the approved curriculum order of instruction may be permitted on a case-by-case basis (inoperative ~~mock-~~
~~upsmockups~~, hospitalized instructor, etc.) in accordance with procedures described in the curriculum and/or the school's operating procedures.

2) Revisions to the Curriculum. Deviations that are deemed to be continuous, on-going will necessitate a revision to the curriculum and subsequent FAA approval. The assigned PI will monitor all interruptions in the order of instruction to ensure that these interruptions do not detract from the quality of instruction. Prolonged or extended continuous interruptions in the order of instruction may require FAA approval by the appropriate FSDO.

NOTE: The FAA does not consider student-induced interruptions in training due to absence (illness, financial problems, vacation, etc.) as a change in the order of instruction. These types of interruptions may require makeup provisions covering the missed subject matter.

C. Subjects Prescribed by Part 147. The curriculum must cover the subjects and items prescribed in part 147 appendix B, and in appendices C or D, as applicable.

1) Subjects that are submitted for approval as part of the curriculum will not be made part of the curriculum until approved by the FAA.

2) Each subject item must be taught at the minimum level of proficiency as defined in part 147 appendix A. When the school wishes to teach a subject item to a level beyond the requirements, the teaching level must be made part of the approved curriculum. Subject items must not be taught to a level less than that shown in the approved curriculum.

3) Additional subjects/courses that are required by the school for their purposes (i.e., degree programs) must not be submitted as part of the FAA-approved curriculum.

4) A distinction must be made between additional courses/subjects that are part of the approved curriculum under part 147, and those that are not.

5) The teaching of additional subject material beyond the requirements of part 147 appendices B, C, and D items will require additional instruction hours beyond those required by § 147.21.

6) The teaching of subject items beyond the requirements of part 147 appendices B, C, and D will not require additional instructional hours beyond those required by § 147.21.

D. Practical Application Projects.

1) The curriculum must list the practical projects that must be completed for each subject item. There must be sufficient practical projects to address the requirements of part 147 appendices B, C, and D, as applicable. The curriculum must include enough detail to evaluate the practical projects for correct teaching level, for equipment and tools needed, and for performance standards and objective grading criteria.

2) The teaching level must be specified for each project under each subject item. The minimum teaching level is specified in the part 147 appendices. As in the case of theoretical courses, if the teaching level is to exceed the 14 CFR requirements, it must be specified as such in the curriculum.

3) The curriculum must show an appropriate amount of time for each subject area, consistent with the levels and definitions as specified in part 147 appendix A. ASIs who approve, or have oversight for the operation of, an AMTS will review and monitor curriculums to ensure they do not provide insufficient or excessive time allotments based on criteria associated with the rule.

4) The curriculum must provide that each task in each subject item is accomplished. For example, if a project requires that the student inspect and repair to accomplish a practical project, a requirement for both inspection and repair must be included in the project plan.

5) The ASI should ensure that instructional hours for each subject are distributed in a manner which allows both adequate theory instruction (Levels 1, 2, and 3) and sufficient lab/shop instruction (Levels 2 and 3) to obtain the required practical application (teaching level) for the item being taught.

E. Scheduling of Tests. Upon completion of each curriculum subject, a test ~~shall~~must be scheduled. Additional tests and quizzes may be administered during the subject being taught.

F. Grading Criteria. A generally accepted academic standard for passing (including the FAA written exams) is a minimum of 70 percent. However, the school may require a higher minimum passing grade. All theoretical and practical portions of each subject listed in the curriculum must be passed to the approved grading standard. Each practical project must be passed to the approved standard.

G. Makeup Provisions. ~~Section 147.21 specifies the minimum hours required for Airframe, Powerplant, or a combined A&P curriculum. Absence and the curriculum must be approved by its FAA CHDO. The FAA has always required that attendance and hours missed be controlled to establish that a graduate has indeed completed those minimum hourly requirements either through in-school attendance or the approved makeup system. Missed Material. Section 147.31(c) requires an approved system for determining final course grades and for recording student absence/attendance. The system must show hours of absence allowed and show how the missed material will be made available to the student for makeup. This. The system for recording absence must ensure that all graduates will clearly show if the student has have completed those minimum hourly all appropriate curriculum requirements (refer to § 147.31(c)).~~

1) ~~Instructors must supervise and verify completion of practical project requirements, either through in-school attendance or through use of the approved makeup system. Other missed materials may be made available through:~~

2) ~~All missed time, projects, and assignments in a subject must be made up in order for the student to take the final exam and receive credit for the subject.~~

a) ~~All makeup work will be supervised or verified by Communication of subjects and/or chapters covered in a course textbook;~~

a)b) ~~Availability of an instructor qualified in that subject. presentation;~~

c) ~~Makeup Availability of class materials; and~~

d) ~~Assignments directly attributable to the missed subject matter, such as, but not limited to:~~

- ~~Supplementary reading assignments must be the material missed;~~

3) ~~Student makeup for missed lecture(s) may consist of at least one, or a combination, of the following:~~

a) ~~Instructor presents the missed subject material to the student.~~

~~b) The student sits in another section of the same course and receives the missed lecture subject material.~~

- ~~• The student completes a completion of a written essay of 300 to 500 words, or an equivalent project, on the material missed during a lecture hour.;~~
- ~~• The student completes a minimum Student completion of 10 written answers to questions, providing answers, and references if applicable, on the material missed during a lecture hour.;~~

~~e) The A student writes an outline of a minimum of 150 words and makes an oral presentation to the instructor based on the material missed during a lecture hour.~~

~~d) The student receives an oral exam from the instructor on material that is missed during a lecture hour.~~

- ~~• Should the student miss a quiz an outline; and/or exam that was given during the lecture period, a makeup quiz, or exam, is completed as applicable.~~
- ~~• Any other method Other methods acceptable to the Administrator.~~

~~2) Failure to A student must complete all makeup assignments within the , class assignments, and exams missed in a module before an instructor can administer any written, oral, or practical test.~~

~~4)3) Failure of a student to complete all makeup assignments and material within the school's approved allotted time period may result in the student being required to repeat that subject.~~

~~5) Makeup assignments, class assignments, and exams missed in a module must be completed by the last day of that module.~~

NOTE: Instructors cannot use the material from distance learning offerings to make up material missed from a classroom or lab offering, or vice versa.

2-1450 CURRICULUM DELIVERED USING DISTANCE LEARNING TECHNOLOGY.

A. Background. Various new information-sharing systems continue to be developed as learning management systems. Many of these systems consist of modern training products, several of which are being used efficiently and effectively today in the delivery of aviation courses conducted by accredited universities and air carrier training programs approved by the FAA. This type of training delivery method is known as “distance learning.” In addition to proven effectiveness of modern training products, distance learning affords a low-cost alternative to classroom training. Distance learning is an alternative method of learning that is timely and appropriate in today’s challenging economic environment.

B. AMTS Approval and Implementation of Distance Learning Programs.

1) A certificated AMTS proposing the implementation of distance learning should submit a request to the local FSDO requesting information and/or approval for authorization to conduct distance learning.

2) The responsible PI should provide source references of distance learning program guidance to the AMTS as requested. If the AMTS has submitted a proposed distance learning program, the PI must review the entire program for written policies, procedures, and equipment sufficient to conduct distance learning prior to any authorization and approval of the program.

NOTE: Approval for the AMTS to utilize distance learning as a teaching delivery method does not alleviate the AMTS from meeting all part 147 requirements. If the AMTS does not meet the minimum requirements to support implementation of distance learning, the PI must not approve distance learning for the AMTS by issuance of OpSpec A026 until minimum requirements have been satisfied.

C. Distance Learning Program Surveillance. As an alternative to classroom training, the distance learning instruction delivery method continues to develop utilizing distance learning technology. The initial implementation and subsequent surveillance of a distance learning program requires written policy and procedures and, at a minimum, the following:

1) An electronic Learning Management System (eLMS) of sufficient hardware and software technology to accomplish comprehensive storage, handling, and tracking of all aspects of the distance learning program, including:

- a) Student online distance learning attendance tracking/recording.
 - b) Student online distance learning participation tracking/recording.
 - c) Student online distance learning performance measurement tracking/recording.
- 2) AMTS to have issuance of OpSpec A026 prior to conducting distance learning.
- 3) Distance learning course list availability.
- 4) FAA “read-only” access to the eLMS (to facilitate surveillance).
- 5) Report availability for analysis of distance learning test scores in comparison to traditional classroom test scores.
- 6) Report availability for analysis of distance learning course completion times in comparison to traditional classroom completion times.
- 7) Verification by the AMTS to ensure distance learning courses combined with traditional classroom AMTS courses meet minimum curriculum requirements defined by part 147.

8) Identification of students who are not certification-seeking but are enrolled in AMTS distance learning courses. Regulatory requirements would not apply to these students.

NOTE: Deficiencies found within the distance learning program during surveillance must be identified and brought to the attention of the AMTS for necessary correction. An AMTS with approval to conduct distance learning must continually operate to meet the requirements of the approved distance learning program to enable continued approval authorization to conduct distance learning.

D. Advantage of Distance Learning. An advantage of distance learning is the versatility and flexibility of time management for today's student. The flexibility provided through distance learning promotes a learning environment conducive to efficient and thorough training made available often on a schedule and at a location of the student's choosing apart from a traditional classroom.

1) Curriculum subjects delivered through the distance learning delivery method adopted from part 147 appendices B, C, and D must be FAA -approved. The teaching materials and equipment utilized to support distance learning may be accepted by the FAA. The quality of instruction must continue to meet or exceed the established baseline standards of the instructor--led traditional classroom training it is intended to replace.

NOTE: Initial implementation of distance learning by an AMTS should be approved cautiously. The implementation of distance learning as an alternative to the classroom environment by the AMTS for teaching required subject areas or items should be integrated into the AMTS curriculum in structured steps based on the AMTS demonstrated ability to design and implement a distance learning system. A distance learning program should be implemented while maintaining the current traditional classroom environment. Distance learning, if implemented properly, can be an alternative delivery method designed to be delivered concurrently with traditional classroom courses. It is recommended that distance learning subjects be approved in phases or through an initial approval process followed by a trial period prior to issuing final approval. This structured incremental progression of distance learning implementation will allow for the identification and correction of problem areas as well as the overall feasibility for the AMTS to support distance learning.

2) All assigned FAA inspectors to an AMTS that conducts distance learning ~~shall~~**must** be given access to the distance learning eLMS as a read-only authorization to the instructional delivery, testing, and discussion methods utilized for distance learning by the part 147 AMTS.

3) Distance learning is primarily suited for delivering instruction by lecture, visual demonstration, discussion, and knowledge of general ~~principals~~**principles**, but not practical application and no development of manipulative skill. Distance learning may not be suitable for teaching some subject matter in an approved AMTS curriculum.

4) However, curriculum subjects that have been typically taught encompassing paper laboratory assignments may be found to be suitable for distance learning. Distance learning is not suitable for teaching certain aspects of the subject matter listed in an AMTS curriculum. It is most suited for subjects that can be taught entirely by using distance learning methods. Examples would include, but may not be limited to: Basic Electricity, Aircraft Drawings, Federal Aviation Regulations, and Mathematics. Distance learning delivery is not restricted to just the general curriculum topics. It may be suited for delivering the theory portions of A&P subjects as well. Subjects that have typically been taught using only lecture (or lecture and paper) laboratory assignments may also be suitable for distance learning. In addition, an AMTS may design combination distance learning and onsite laboratory format that would combine lecture material presented utilizing distance learning with an on-campus session(s) to cover required laboratory material and testing.

5) Curriculum subjects taught utilizing distance learning may also remain available within the AMTS as a traditionally offered classroom course for those students wishing to attend in this manner. Prior to accepting a student for enrollment into distance learning, the AMTS must determine if the student has personal access to required computer equipment as well as sufficient computer skills essential for the successful completion of a course delivered via distance learning.

6) Distance learning should be limited to instruction that can be easily delivered through computer-based use. The ASI should keep in mind that a student completing a course delivered by distance learning must successfully complete all specific course requirements as specified in the AMTS-approved program.

7) While it is expected that proposals to implement distance learning will vary in instructional methodology and content, approved course programs should address the following items:

- A description of the course content and a listing of specific student course requirements;
- A breakdown of the number of distance learning course hours in the approved traditional 1,900-hour curriculum;
- Maximum student enrollment for classes that include Level 2 and/or Level 3 content, in accordance with § 147.23;
- A system and method to be used for timely and appropriate interaction between students and instructor(s);
- A description of how the distance learning class is administered; and
- A specification on the calendar time allowed for the completion of the course.

E. Evaluation, Testing and Assessment. This section includes a description of the examination and testing process, and also methods for ensuring the integrity of student work and compliance with part 147 appendices A, B, C, and D.

1) Testing and evaluation are intended to verify that learning occurred and the trainee attained the planned learning objectives. Testing may be the most important aspect of any

training program and, as such, should produce valid and reliable results. Consequently, the design of tests and the procedures for conducting tests are critical.

2) Testing for students participating in distance learning activity can be a special challenge. Testing can be accomplished through a variety of methods, including: oral evaluation, practical exercises on desktop computers or specialized part-task training devices, paper-based, or computer-based exams proctored by an evaluator.

NOTE: Proctored exams (testing) at a remote location may only be accomplished within the facilities of another active AMTS or accredited educational institution, or through an approved remote proctoring system. The procedure must be documented in a written agreement between each participating AMTS while holding the originating part 147 AMTS responsible for all aspects of the test. The process and agreements will then be made a section within the AMTS procedures manual and accepted by each respective FAA office with geographic oversight of each AMTS location.

3) The testing method used and the types of questions employed should suit the objectives to be tested and the demographics of the target population. Keep in mind that knowledge objectives are typically assessed by written, electronic, or oral testing.

4) Skill objectives are typically assessed by a combination of written, electronic, oral testing, and thorough task performance demonstration. Skill items utilizing specialized tools and equipment or any form of measurement device, therefore, are not suitable for accomplishment within the distance learning approval process.

F. Recordkeeping.

1) Distance learning records must be retained by the AMTS in accordance with the § 147.33 recordkeeping requirements/timeframes.

2) An instructor or designated AMTS representative must keep records of course activities to include: students enrolled, assignments completed, and grades assigned.

3) For distance learning classes, the record of the student's successful completion of all course requirements must be documented to meet the § 147.33(a)(1) attendance record requirement.

G. eLMS Description Requirements.

1) A description of the technology hardware and software to be utilized.

2) A listing of the reference material required for the successful completion of the distance learning and classroom course content.

H. Considerations for Distance Learning.

1) **System Considerations and Performance.** Distance learning computerized storage space should be sufficient to accommodate all current training materials and scalable enough to accommodate future materials.

2) **Reliability and Availability.** A distance learning system should have sufficient redundancy and fault tolerance to provide continuous availability to required training materials 24 hours per day, ~~seven~~7 days per week (barring scheduled system maintenance downtime).

3) **Security.** Only authorized personnel may have access to the system. The AMTS may choose to allow various users to access the system via different methods, links, and times. Access rights should be controlled by a system administrator. The certificate holder's security plans must describe how the system will recognize and deal with attempted security breaches. The AMTS is responsible to ensure that system security for the distance learning eLMS is adequate to ensure proper protection of materials and users, but not so rigid that it impacts the ability for training management and training development personnel to efficiently accomplish their duties.

2-1451 REVISIONS TO THE CURRICULUM. Changes to the approved curriculum must be approved before implementation. Changes in the curriculum may include changes in any of the following:

- Teaching level;
- Hours of instruction;
- Testing;
- Makeup provisions;
- Course descriptions (theory and lab proportions);
- Equipment or facilities affecting instruction in theoretical subjects or the accomplishment of practical projects;
- Order of instruction such as changes in the logical sequence of instruction;
- Addition or deletion of a rating;
- Interruptions in the order of instruction; and/or
- Distance learning program.

2-1452 CREDIT FOR PREVIOUS INSTRUCTION OR EXPERIENCE.

A. Crediting Previous Instruction at a Certificated AMTS. The AMTS must use either a reliable method of evaluating documentation or an entrance test to ensure that previous instruction is comparable to that offered by the crediting AMTS. When not using an entrance test, schools should be encouraged to use transcripts, course descriptions, and other documents to determine the credit to be granted.

1) AMTS students may take a course of study for one rating (either airframe or powerplant). The course of study will include the general curriculum subjects. A person returning to, or applying to, an AMTS to further study for a second rating after having graduated from an AMTS will not be required to retake the general curriculum subjects. This applies to

individuals having acquired one rating through experience or as an AMTS graduate. The general curriculum subjects must be separate and distinct from both the A&P curriculum subjects and must conform to the requirements of part 147 appendices A and B.

2) If a certificated AMTS is under suspension by the FAA, courses taught during the suspension period must not be credited retroactively, even if the school becomes re-certificated later.

3) An AMTS applicant must not teach students as an AMTS before school certification is granted, and then give credit for that training after the school becomes certificated.

4) A school may not credit a student with instruction that was completed satisfactorily at another AMTS before receiving its certification (§ 147.31(c)(1)(iv)).

B. Crediting Previous Instruction From Other Schools (Non-AMTS, Accredited and Non-Accredited). As a general practice, credit may be granted only for subjects that apply to the general portion of the curriculum, including (but not limited to) mathematics, basic physics, and similar subjects.

NOTE: Accreditation, as referenced in part 147 and the current edition of AC 147-3, Certification and Operation of Aviation Maintenance Technician Schools, refers to schools accredited within the United States. A certificated AMTS may not grant credit for maintenance instruction received outside the United States.

C. Crediting Previous Instruction From Military Technical Schools. When credit is granted, it may be granted only on the basis of an entrance test, as specified in § 147.31(c)(2)(iii).

D. Credit for Previous Experience. Previous mechanic experience must be aviation maintenance experience to be considered for credit. Credit for all previous experience must be documented and demonstrated by testing. The test must be equal to the test given to students who complete the comparable required curriculum subjects at the school.

2-1453 INSTRUCTOR QUALIFICATIONS AND FACULTY REQUIREMENTS.

A. Faculty Requirements.

1) An instructor must hold an FAA Mechanic Certificate with ratings appropriate to the subjects that the instructor teaches.

2) Individuals listed as instructors, lab assistants, or teaching assistants should also hold appropriate Mechanic Certificates and ratings. However, the AMTS may provide specialized instructors who are not certificated mechanics to teach mathematics, physics, basic electricity, basic hydraulics, drawing, and similar subjects.

B. Student/Teacher Ratios. Section 147.23 requires at least ~~one~~1 certificated instructor for each 25 students in each shop or laboratory class.

NOTE: The ASI should monitor the student/teacher ratios and alert the school when the ratios have/will exceed the limitations set forth by § 147.23. The school has the option to add another instructor(s) on a temporary or permanent basis depending on the staffing needs at the time. This will assure the student/teacher ratio of no more than 25 will be maintained continuously. Under certain circumstances, the AMTS has the option to apply for an exemption to the rule by petitioning the office of rulemaking.

C. Performance. The ASI should encourage the school to provide for regular assessment of instructor performance.

2-1454 PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Prerequisites. ~~Prerequisites.~~ The ASI performing the inspections must have completed FAA Course 21000113, Aviation Maintenance Technician Schools and its eLMS prerequisite course 27100162. The ASI must also have knowledge of the regulatory requirements of 14 CFR parts 43, 65, and 147.

B. Coordination. This task may require coordination with certification team members, regional specialists, and other Maintenance or Avionics ~~ASIs~~ASIs.

2-1455 REFERENCES, FORMS, AND JOB AIDS.

A. References (current editions). FAA Order 8900.2, General Aviation Airman Designee Handbook.

B. Forms. FAA Form 8310-6, Aviation Maintenance Technician School Certificate and Ratings Application.

C. Job Aids. ~~JTAs:~~Job Task Analyses (JTA): M3.4.32, M2.4.14, 3.4.36.

2-1456 PROCEDURES.

A. Review the Curriculum. For an initial certification, thoroughly analyze the curriculum before the date of the team inspection. Ensure the following:

- The number of hours meets the requirements of § 147.21;
- The curriculum fulfills the requirements of part 147 appendices A, B, C, and D;
- Instructor qualifications match the subjects being taught;
- All subjects taught to Level 2 or 3 involve some practical hands-on projects or skill demonstration;
- Instructional hours for each subject should be distributed in a manner which allows both adequate theory instruction (Levels 1, 2, and 3) and sufficient lab/shop instruction (Levels 2 and 3) to obtain the required practical application (teaching level) for the item being taught;

- The curriculum shows a list of minimum required school tests to be given. This could be a separate document, or be provided within the course outlines;
- The curriculum states the minimum standards for a student to successfully complete the requirements for FAA certification;
- Grading criteria for academic and practical subjects have been developed;
- Makeup provisions are included; and
- Procedures for crediting previous experience or instruction have been developed.

B. Review Operating Rules. Review the school's operating policies and procedures, in accordance with Operating Rules in part 147 subpart C. The school's operating policies and procedures should describe how the AMTS will comply with the regulations which are not addressed within the curriculum. The school's operating procedures may be included in a Letter of Compliance (i.e., ~~statement of compliance (SOC))an SOC~~) or within a separate manual or document.

C. Review Instructor Qualifications. Review Mechanic Certificates of the instructors required to maintain mechanic certification for currency and pending certificate action.

D. Review OpSpecs. Determine that the following actions are complete:

- Mandatory OpSpec paragraphs have been issued;
- Optional applicable OpSpec paragraphs have been issued;
- AMTS maintains a current set of OpSpecs; and
- AMTS operating in accordance with the OpSpecs.

2-1457 TASK OUTCOMES.

A. Complete the PTRS Record.

B. Complete the Task. Completion of this task will result in the following:

1) If curriculum/revision/instructor qualifications are approved:

a) For an initial certification, review and complete the FAA Form 8310-6. Attachments to FAA Form 8310-6 must include the following:

- The proposed curriculum;
- A list of required practical projects;
- A list of minimum required tests to be given;
- List of facilities and equipment to be used;
- Photographs or floor plans of facilities;
- A list of instructors' names, with certificate type, certificate numbers, ratings held, type, and subject(s) to be taught; and
- A template of a student record.

b) Approve the curriculum by signing and dating the List of Effective Pages (LEP) and revision pages.

c) Update OpSpecs as necessary, and verify that they are complete.

2) If curriculum/revision/instructor qualifications are not approved:

a) For an initial certification, complete FAA Form 8310-6. Fill out FAA Form 8310-4, Aviation Maintenance Technician School Inspection Report, which is on the back of FAA Form 8310-6.

b) Send a letter to the school outlining the deficiencies and explaining why the curriculum is unacceptable and requires revision. In all cases, reference the applicable 14 CFR parts.

c) If an instructor is found to be unqualified or otherwise ineligible to teach the subjects as designated by the school curriculum, notify the school in writing, detailing the specific problem.

2-1458 FUTURE ACTIVITIES. Routine surveillance.

RESERVED. Paragraphs 2-1459 through 2-1475.

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

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

**Section 3 Evaluate Part 147 Aviation Maintenance Technician School Facilities,
Equipment, Materials, Tools, and Records**

**2-1476 PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS)
ACTIVITY CODES.**

A. Maintenance: 3230.

B. Avionics: 5230.

2-1477 OBJECTIVE. This section provides guidance for evaluating the facilities, equipment, materials, and tools for an Aviation Maintenance Technician School (AMTS). The evaluation occurs as part of an original certification, addition of a rating, curriculum change, or change of location.

NOTE: The criteria in this section isare applicable for both initial certification and a currently certificated AMTS.

2-1478 GENERAL.

A. Definitions.

- 1) **Common Hand Tools.** Small, ordinary tools, such as ratchets, sockets, etc.
- 2) **Instructional Aids.** Equipment used to instruct, such as ~~mock-ups~~mockups, diagrams, visual aids, aircraft, engines, components, etc.
- 3) **Shop Equipment.** Machinery, fabricating devices, spray paint equipment, battery chargers, etc.
- 4) **Special Tools.** Highly specialized tools, such as tension meters, micrometers, torque wrenches, etc.

B. Appropriate Equipment and Facilities. An AMTS must have instructional equipment and suitable facilities appropriate to the ratings taught and approved by the Federal Aviation Administration (FAA). Materials and tools must be of a type, quantity, and quality appropriate to the needs of the curriculum and the number of students.

2-1479 PRE-- AND POST--INSPECTION ACTIVITY.

A. Initial Certification. The certification team will approve the curriculum before formal inspection of the facility. During the preapplication meeting, the certification project manager (CPM) may request a briefing and an informal inspection of the facility. The applicant

may request that an aviation safety inspector (ASI) informally evaluate the facility to see if it appears to be within the guidelines of Title 14 of the Code of Federal Regulations (14 CFR) part 147. ~~This~~The ASI may ~~be accomplished~~accomplish this before completion of the facility, but only after the applicant submits FAA Form 8400-6, Preapplication Statement of Intent.

B. Added Rating/Curriculum/Location Change. The AMTS must request in advance any change to its rating or curriculum. When adding a rating or executing a change in curriculum or location that affects facilities, equipment, materials, ~~or~~ tools, etc., the office manager or airworthiness unit supervisor will determine whether one ASI or a team is necessary to accomplish the site inspection.

1) To add a rating, see the appropriate ~~sections~~paragraphs on changes to curriculum in Volume 2, Chapter 12, Section 2, and refer to the appropriate 14 CFR sections on changes to equipment, materials, tools, and records found below.

2) For changes to curriculum, see curriculum requirements as found in Volume 2, Chapter 12, Section 2.

3) For change in location within the district office geographic boundaries, the district office must make a detailed analysis of the change in plans and their effect on the following:

a) The students in training, whether or not in actual attendance during the time of the change.

b) Instructional hours as shown in the curriculum. There must not be a loss of instructional hours as a result of these changes.

c) The school's method of meeting the certification requirements, particularly space requirements and curriculum according to part 147, §§ 147.15 and 147.21.

4) The school must receive approval in writing.

5) Revise operations specifications (OpSpecs) as appropriate to reflect applicable changes.

~~6) If a change has been made without approval, the district office must begin an enforcement investigation procedure to ensure compliance.~~

6) If a deviation does not involve intentional, reckless, or criminal behavior, and the organization is qualified and willing to cooperate, the Flight Standards Service (AFS) will resolve the issue through the use of compliance tools, techniques, concepts, and programs.

7) For the addition of a distance learning (~~DL~~) program, see Volume 2, Chapter 12, Section 1, subparagraph 2--1417C.

C. Amendment to or Transfer of Certificate. The AMTS must apply for a change to its certificate if changing the location of the AMTS. The air agency must notify the FAA in

writing at least 30 days before the date of the change. The FAA may prescribe conditions the air agency must follow while moving to the new address/location. If the AMTS accomplishes the change in location without approval, the Air Agency Certificate will be revoked. (Refer to § 147.41.)

1) Change of FAA District. When the location is a change to another FAA district office or region, the application for approval must go to the district office and receive coordination through each respective region that has current and/or future certificate responsibility. The originating district office will contact and coordinate directly with the receiving district office while maintaining close coordination with the affected Regional ~~Office(s) (RO)~~ **Flight Standards Division (RFSD)**. The school remains the responsibility of the originating district office until approval of the change or transfer. See Volume 2, Chapter 1, Section 2, for additional information.

2) Sale or Transfer of Assets. A new certificate number is not required when there is a change in ownership or operator name, but the privileges of an AMTS Air Agency Certificate are not transferable. If the holder of the Air Agency Certificate sells or transfers its assets, the new owner must apply for an amended certificate. The principal inspector (PI) must contact the Aviation Data Systems Branch (AFS--620) and give an explanation of the changes prior to any certificate changes. In rare cases where the certificate number does change, the designator element of the certificate number will remain the same. The type certificate (TC) code and the numeric or alpha suffix element should be appropriately changed to form the new certificate number (see Volume 2, Chapter 1, Section 3, and Volume 3, Chapter 34, Section 3).

3) Liability Issues. The ASI should recommend a new certificate number due to the Freedom of Information Act (FOIA) and liability issues. ASIs should inform prospective owners that they may be held liable for the work performed under previous management if they keep the same certificate number. New owners must stipulate in writing that they clearly understand the potential of release of information under the FOIA before receiving permission to retain the old certificate number.

4) Certificate Number. If the new owner elects to retain the original certificate number, the revised Air Agency Certificate (FAA Form 8310--6, Aviation Maintenance Technician School Certificate and Ratings Application) will show the original certification date in the "Date Issued" field. If issuing a new certificate number, prepare a new Air Agency Certificate using the effective date of the new certificate. The "Date Issued" should always reflect the original certification date for the certificate number identified on the Air Agency Certificate.

5) Change in Ownership. A change in ownership may or may not affect the status of an AMTS. If the operational relationship that established an AMTS continues unchanged, a change to the certificate number may not be required. If that relationship no longer exists, the certificate number identifying the AMTS cannot be retained by the new owner.

6) Role of Regional General Counsel Office. ASIs should contact their Regional General Counsel office when faced with questions concerning whether limited liability corporations or changes in stockholder ownership constitute a transfer of AMTS assets.

2-1480 DEMONSTRATION ACTIVITY. Ensure compliance with regulations as follows:

- That facilities meet the requirements of §§ 147.13 and 147.15;
- That instructional aids meet the requirements of § 147.17;
- That materials, tools, and shop equipment meet the requirements of § 147.19; and
- That the ~~DL~~distance learning electronic Learning Management System (eLMS) meets the program requirements of § 147.21.

2-1481 FACILITIES. The instructional equipment, shop equipment, hand tools, and physical layout of the building must meet the requirements outlined in §§ 147.15, 147.17, and 147.19. The ASI should keep in mind that the facility must constitute an environment suitable for learning. The AMTS should defer facility issues concerning safety suitability or industry standards to local, State, and/or Federal guidelines specific to Occupational Safety and Health Administration (OSHA) requirements and regulations.

A. Classroom Areas. An area suitable for classroom instruction may not be suitable for lab and/or shop. With appropriate scheduling and consideration of factors such as ventilation, lighting, noise, and temperature control, an area appropriate for lab and/or shop may be acceptable for classroom instruction.

B. Shop Environment. Ventilation must be such that it properly removes fumes from painting, fueling, degreasing, composite areas, etc., from the immediate work area and does not allow them to pass into other instructional areas.

C. Facility Size and Location.

1) Facilities must be adequate to hold the number of authorized students participating in any of the shop/lab projects designated for that area.

2) Facility locations and class schedules must be so that students can travel between classes without cutting into instructional time. ASIs should pay special attention to situations in which the students cannot go easily and quickly from one class to another.

2-1482 EQUIPMENT.

A. Instructional Equipment.

1) The instructional aids required in § 147.17 must be appropriate to the scope and depth of the curriculum of the school. The ASI must determine whether the complexity of instructional aids is appropriate to the specific teaching level of the subject item.

2) In some situations, the school may choose to use active aircraft for instructional purposes in the shop. This is permissible as long as the aircraft is on the premises at the time of instruction. The ASI must remind the school that active aircraft used to comply with §§ 147.17(a)(2) and 147.17(d) must become part of the approved instructional equipment and must be available as specified in § 147.37.

3) The ASI must ensure compliance with requirements for the ratio of instructional equipment to students in each shop course. Section 147.17(c) requires that a maximum of eight students may work at any one unit of equipment at a time. However, the ASI may determine whether or not eight students are too many to complete a certain project safely and competently, such as when using live aircraft for the demonstration of gear retraction systems.

B. Shop Equipment.

1) The ASI must determine if enough equipment is in place and in satisfactory operating condition to serve the student enrollment adequately and meet shop project requirements.

2) The location of equipment must be so that its operation can be in a safe and efficient manner. The installation of large standing equipment must be secure. The placement of large pieces of equipment should provide sufficient aisle space so that the students can move about freely. The ASI must determine if the floor is free from clutter and items such as extension cords.

2-1483 MATERIALS. The school must have sufficient materials in stock and properly stored to provide for the approved student enrollment. To ensure adequate instruction, the amount and variety of stock should directly reflect the requirements of the curriculum.

2-1484 TOOLS.

A. Tool Standards. For subjects taught at Level 3, all tools must be in satisfactory working condition and of the proper kind for their intended purpose. Section 147.19 requires the school to have an adequate supply of materials and tools appropriate to the curriculum of the school.

B. Student Hand Tool Policy. The school may either provide common hand tools or require students to furnish their own. In either case, the school must establish a policy on provision of common hand tools. The school must list any tools that it requires the student to furnish. The school will furnish special tools, such as cylinder hold-down wrenches, micrometers, etc.

2-1485 PREREQUISITES AND COORDINATION REQUIREMENTS.

~~**A. Prerequisites.** Previous experience with certification or surveillance of part 147 schools is desirable.~~

A. Prerequisites. The ASI performing the inspections must have completed FAA Course 21000113, Aviation Maintenance Technician Schools, and its eLMS prerequisite course 27100162. The ASI must also have knowledge of the regulatory requirements of 14 CFR parts 43, 65, and 147.

B. Coordination. This task requires coordination with Avionics ASIs and certification team members, as appropriate.

2-1486 REFERENCES, FORMS, AND JOB AIDS.**A. References (current editions):**

- FAA Order 8900.2, General Aviation Airman Designee Handbook, ~~and~~.
- Advisory Circular (AC) 147-3, Certification and Operation of Aviation Maintenance Technician Schools.

B. Forms:

- FAA Form 8000-4, Air Agency Certificate (for initial certification), ~~and~~.
- FAA Form 8310-6, Aviation Maintenance Technician School Certificate and Ratings Application.

C. Job Aids: Job Task Analyses (JTA): 3.4.32, 3.4.34, and 3.4.36.

- ~~Job Task Analysis (JTA) 3.4.32,~~
- ~~JTA 3.4.34, and~~
- ~~JTA 3.4.36.~~

2-1487 PROCEDURES.

A. Review the Applicant's File. Before inspecting the facility, review the applicant's application and Flight Standards District Office (FSDO) file. Check history for previous ~~non-compliant~~ noncompliant trends. Check the curriculum or proposed curriculum for currency. Take a copy of the curriculum and OpSpecs. Prior to visiting the facility, make sure you have a copy of the facility diagram to confirm that the facility layout mirrors the diagram. Review OpSpecs to ensure that all mandatory paragraphs are current. Additionally, determine if any applicable, optional ~~OpSpec paragraphs~~ OpSpecs are required and issued.

B. Inspect the Facility. Compare the curriculum against the instructional aids, shop equipment, and hand tools at the site. Compare the physical layout with the facility layout plan.

1) Check the instructional aids for agreement with the curriculum. Determine if the items required for each course are actually at the site as required by the approved student enrollment level.

2) Determine whether all instructional aids are actually operable and safe to use. For example, a retractable landing gear instruction device should operate properly.

3) Ensure that adequate stocks of operational/maintenance instructions, parts manuals, and technical data are at the site, according to the requirements of the curriculum.

4) Determine if the number and size of classrooms and shop areas are consistent with the facility layout submitted with the curriculum. Ensure that the lighting and ventilation are adequate.

- 5) Verify that the tools, materials, and shop equipment match the inventories required by the curriculum. Ensure the proper storage of these items.
- 6) Verify that a recordkeeping system is in place for tool inventory and updating of technical instructional materials.
- 7) Inform the applicant by letter of any discrepancies noted. Make a record of such deficiencies in the remarks section of FAA Form 8310-6, as appropriate.
- 8) Determine that AMTS maintains a current set of OpSpecs.
- 9) Determine that AMTS is operating in accordance with the OpSpecs.

C. AMTS Approval and Implementation of ~~DL~~Distance Learning Program.

- 1) A certificated AMTS proposing the implementation of ~~DL~~distance learning should submit a request to the local FSDO requesting information and/or approval for authorization to conduct ~~DL~~distance learning.
- 2) The responsible PI should provide source references of ~~DL~~distance learning program guidance to the AMTS as requested. If the AMTS has submitted a proposed ~~DL~~distance learning program, the PI must review the entire program for written policies, procedures, and equipment sufficient to conduct ~~DL~~distance learning prior to approval authorization of the program.

NOTE: Approval for the AMTS to utilize ~~DL~~distance learning as a teaching delivery method does not alleviate the AMTS from meeting all requirements of part 147. If the AMTS does not meet the minimum requirements to support implementation of ~~DL~~distance learning, the PI must not approve the ~~DL~~distance learning for the AMTS, nor issue OpSpec A026, Authorizations/Limitations, until such time that the program and its requirements are found satisfactory to the FAA.

D. ~~DL~~Distance Learning Program Surveillance. As an alternative to classroom training, the ~~DL~~distance learning instruction delivery method continues to develop utilizing ~~DL~~distance learning technology. The initial implementation and subsequent surveillance of a ~~DL~~distance learning program requires written policy and procedures and, at a minimum, the following:

- 1) An ~~electronic Learning Management System (eLMS)~~ of sufficient hardware and software technology to accomplish comprehensive storage, handling, and tracking of all aspects of the ~~DL~~distance learning program, including:
 - a) Student online ~~DL~~distance learning attendance tracking/recording.
 - b) Student online ~~DL~~distance learning participation tracking/recording.
 - c) Student online ~~DL~~distance learning performance measurement tracking/recording.

2) AMTS to have issuance of OpSpec A026, Authorizations/Limitations, prior to conducting DLdistance learning.

3) DLDistance learning course list availability.

4) FAA “read--only” access to the eLMS (to facilitate surveillance).

5) Report availability for analysis of DLdistance learning test scores in comparison to traditional classroom test scores.

6) Report availability for analysis of DLdistance learning course completion times in comparison to traditional course completion times.

7) Verification by AMTS: DLdistance learning courses combined with traditional classroom AMTS courses meet, at a minimum, curriculum requirements defined by part 147.

8) Identification of students thatwho are not seeking certification but are enrolled in AMTS DLdistance learning courses. Regulatory requirements would not apply to these students.

NOTE: Deficiencies found within the DLdistance learning program during surveillance must be identified and brought to the attention of the AMTS for necessary correction. An AMTS with approval to conduct DLdistance learning must continually operate to meet the requirements of the approved DLdistance learning program to enable continued approval authorization to conduct DLdistance learning.

2-1488 TASK OUTCOMES.

A. Complete the PTRS Record.

B. Complete the Task. Completion of the task will result in approval or disapproval of a facility.

C. Document the Task:

1) If Facility Is Approved.

a) For an initial certification or added rating, complete FAA Form 8310-6, as applicable. Attach the appropriate documents, as required. Make a copy of the form and all pertinent documents, and retain a copy for the district office file.

b) For a curriculum or location change that affects facilities, equipment, or tools, complete FAA Form 8310-6, as applicable. Retain a copy of the form for the district office file.

c) Update OpSpecs as necessary and verify that they are complete.

2) If Facility Is Disapproved.

a) Mark FAA Form 8310-6 “Disapproved²” and return to the applicant with attachments. Retain a copy for the office file.

b) Write a letter to the applicant stating the reasons for disapproval. Advise the applicant to resubmit a new application when the discrepancies are corrected. Upon receipt of a new application, reschedule the facility inspection.

2-1489 FUTURE ACTIVITIES. Routine surveillance.

RESERVED. Paragraphs 2-1490 through 2-1505.

VOLUME 6 SURVEILLANCE
CHAPTER 10 PART 147 INSPECTIONS

Section 1 General

6-2140 PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES.

A. Maintenance: 3650, 3659, 3661.

B. Avionics: 5650, 5659, 5661.

6-2141 OBJECTIVE. This chapter provides guidance for conducting surveillance of certificated Aviation Maintenance Technician Schools (AMTS).

6-2142 GENERAL.

A. Inspections. A certificated AMTS must be monitored for adherence to its curricula and continued compliance with the certification requirements and operating rules. The aviation safety inspector (ASI) performing the inspections must have completed Federal Aviation Administration (FAA) Course 21000113, Aviation Maintenance Technician Schools and its electronic Learning Management System (eLMS) prerequisite course 27100162. The ASI must also have knowledge of the regulatory requirements of Title 14 of the Code of Federal Regulations (14 CFR) parts 43, 65, and 147.

B. Inspection Scheduling. ~~Title 14 of the Code of Federal Regulations (14 CFR)~~ Part 147, § 147.43 allows inspection of a school at any time to determine its compliance with part 147.

1) Formal Inspections. The purpose of a formal inspection is to determine whether the school continues to meet the requirements under which it was certificated.

a) In accordance with § 147.43, normally such an inspection is made once every 6 months to determine if the AMTS continues to meet certification requirements. For the formal inspection, ~~Federal Aviation Administration (FAA)~~ Form 8310-6, Aviation Maintenance Technician School Certificate ~~&and~~ Ratings Application, is utilized. The information collected on this form is necessary to ensure that AMTS meets the minimum requirements for the procedures and curriculum set forth by the FAA in part 147. The information will be used to validate the certificated AMTS's continued eligibility and regulatory compliance.

b) At the inspection exit briefing, the inspector must provide the school ~~must be provided~~ with notification of discrepancies found during the formal inspection. Within 5 workingbusiness days of the exit briefing, the inspector will provide a -written followup list of areas of noncompliance ~~will be provided~~ to the school. The school must initiate immediate corrective action to demonstrate regulatory compliance and must provide the district office with written notification of the action taken.

c) Before beginning subsequent inspections and surveillance of the AMTS, the ~~aviation safety inspector (ASI)~~ will review the AMTS office file at the certificate-holding district office (CHDO), the operations specifications (OpSpecs), approved curriculum, and existing AMTS-related PTRS entries to identify any previous deficiencies noted during previous inspections. The inspector will inspect the AMTS to validate the level of regulatory compliance in these areas.

2) Informal Inspections. An informal inspection will be less comprehensive than a formal inspection. This inspection may be unannounced, at the inspector's discretion. The purpose of the informal inspection is to evaluate a specific area of the operating rule for regulatory compliance by the AMTS, or to ensure the program is effective.

a) The frequency of informal inspections will vary according to the needs of the individual school and the FAA workload. At a minimum, however, there must be no fewer than two informal inspections per school year.

b) The inspector must notify the school ~~must be notified~~ in writing of deficiencies found during the informal inspection. The discrepancies must be recorded and the record placed in the office file for reference and followup purposes.

NOTE: In the written notification, the inspector must explain to the school the timeframe within which the discrepancies must be corrected.

C. Review the Applicant's File. Before inspecting the facility, review the applicant's application and Flight Standards District Office (FSDO) ~~office~~-file. Check for any previous violation history. Check the curriculum or proposed curriculum for currency. Take a copy of the curriculum, OpSpecs, and facility layout to the school site. During review of a current curriculum, ensure FAA approval is evident by means of an FAA signature or stamp on a control or cover page.

D. Review OpSpecs. Determine that the following is complete:

- Mandatory OpSpecs are issued.
- Optional applicable OpSpecs are issued.
- AMTS maintains a current set of OpSpecs.
- AMTS is operating in accordance with the OpSpecs.

E. AMTS Approval and Implementation of Distance Learning Programs.

1) A certificated AMTS proposing the implementation of distance learning should submit a request to local FSDO requesting information and or approval for distance learning.

2) The responsible principal inspector (PI) should either provide source references of distance learning program guidance to the AMTS as requested, or if the AMTS has submitted a program, the PI must review the entire program for written policies, procedures, and equipment sufficient to conduct distance learning prior to approval authorization of the program.

NOTE: Approval for the AMTS to utilize distance learning as a teaching delivery method does not alleviate the AMTS from meeting all requirements of part 147. If the AMTS does not meet the minimum requirements to support implementation of distance learning, the PI must not approve distance learning for the AMTS. The PI must also ensure OpSpec A026, Authorizations/Limitations, is not issued until all of the minimum requirements are met.

F. Distance Learning Program Surveillance. As an alternative to classroom training, the distance learning curriculum delivery method continues to develop utilizing distance learning technology. The initial implementation and subsequent surveillance of a distance learning program requires written policy and procedures and, at a minimum, the following:

1) An ~~electronic Learning Management System (eLMS)~~ of sufficient hardware and software technology to accomplish comprehensive storage, handling, and tracking of all aspects of the distance learning program, including:

- a) Student online distance learning attendance tracking/recording.
- b) Student online distance learning participation tracking/recording.
- c) Student online distance learning performance measurement tracking/recording.

2) AMTS to have issuance of OpSpec A026, Authorizations/Limitations, prior to conducting distance learning.

3) Distance learning course list availability.

4) FAA learning management system read-only access (surveillance).

5) Report availability for analysis of distance learning test scores in comparison to traditional classroom test scores.

6) Report availability for analysis of distance learning course completion times in comparison to traditional course completion times.

7) Verification by AMTS: Distance learning courses combined with traditional classroom AMTS courses meet, at a minimum, curriculum requirements defined by part 147.

8) Identification of students who are not seeking any certificates but are enrolled in AMTS distance learning courses. Regulatory requirements would not apply to these students.

NOTE: Deficiencies found within the distance learning program during surveillance must be identified and brought to the attention of the AMTS for necessary correction. An AMTS with approval to conduct distance learning must continually operate to meet the requirements of the approved distance learning program to enable continued approval authorization to conduct distance learning.

6-2143 SURVEILLANCE OBJECTIVES.

A. Instruction Time. Based on a variety of indicators, it is apparent that some schools do not provide the number of hours of instruction specified in their approved ~~curriculum~~curricula. One of the objectives of surveillance is to ensure that typical “time loss” items do not affect curriculum hours.

1) The inspector must be aware of the following:

- Instructors ill or on leave (in small schools, this could result in classes being dismissed or students being sent to a room to study);
- Teachers’ strikes;
- Weeks during which students are scheduled for private study and/or testing outside of the approved curriculum;
- Class outings that take time away from instructional hours;
- Student achievement days, sports days, and special-event days;
- Teachers’ meetings and grading days;
- Absences beyond those permitted in the FAA-approved curriculum;
- Classroom time spent on ~~non-instructional~~noninstructional activities, such as school administrative work and pep rallies; and
- Any other activity that intrudes on instructional time.

2) Published school calendars, individual student enrollment schedules, student makeup schedules, and class schedules are good sources of surveillance information.

B. Credit for Prior Instruction or Experience.

1) School records must show the basis for crediting previous instruction or experience, including records of tests and copies of documents. School records must also ~~must~~ indicate the exact curriculum subjects to which previous instruction is credited.

2) Section 147.31(c)(1) and (2) allows credit for instruction satisfactorily completed at the following:

- An accredited university, college, or junior college;
- An accredited technical school, trade school, vocational school, or high school;
- A military technical school; or
- A certificated AMTS.

NOTE: Accreditation, as referenced in part 147, refers to schools accredited within the United States. Foreign ~~AMTS~~AMTSs are not eligible for FAA certification. Therefore, no credit may be granted for prior instruction in foreign schools.

NOTE: Section 147.31(c)(1)(iv) must not be interpreted as requiring a student to retake the general portion of the curriculum after successfully completing

one rating and enrolling in a course of study for the other rating. The general portion is not required to be taken twice, provided that it is clearly separate from both the Airframe and Powerplant (A&P) portions and conforms to the requirements of part 147 appendices A and B.

3) The recordkeeping requirements of § 147.33 for previous experience or instruction are applicable. See Volume 2, Chapter 12, Section 2, for details.

C. Progress Records or Charts. Progress records or charts need not show grades for practical laboratory work if these grades are available in another record.

D. Transcripts. Grade transcripts must be available to the student regardless of whether the student graduates. Upon request, each certificated AMTS ~~shall~~must provide a transcript of the student's grades to each student who has graduated from that school or who leaves before graduating. An official of the school ~~shall~~must authenticate the transcript. The transcript must state the curriculum in which the student was enrolled, whether the student satisfactorily completed that curriculum, and the final grades the student received.

1) The transcript must be clearly distinguishable from a graduation certificate and must be limited to only those subjects required under part 147.

2) A student will be issued a graduation certificate or certificate of completion only if all curriculum requirements have been completed, either by taking and passing the specified courses or by being correctly credited.

E. Quality of Instruction. A school must provide instruction of such quality that during any 24-calendar-month period, a prescribed percentage of its graduates will be able to pass the appropriate FAA written test on the first attempt. This information is available by review of the following reports:

- School Norms vs. National Passing Norms (Report 8080-08).
- Aviation maintenance test applicant listing.

1) Corrective action may need to be initiated if the percentages fall below those specified in § 147.38(a).

2) While poor test performance alone may not indicate poor instruction, it may be an indication that some aspects of the school operation are inadequate or ineffective.

3) Use of the AMTS norm.

F. School Norms. When an individual school norm is significantly lower than the national norm (i.e., in excess of the requirements of § 147.38(a)), an asterisk will appear next to the 2-year school norm score on the 8080-08 Report. The responsible region/district office may obtain more detailed performance information to assist in determining problem areas by requesting an aviation maintenance test applicant listing from the Airman Testing Standards Branch (AFS-630). The 8080-08 Report and the aviation maintenance test applicant listing data may be shared freely with the school to which it refers.

G. AMTS Norm ~~vs.~~ Versus National Passing Norms, Form 8080-08, and Associated Reports in the Series. This series of reports provides information to the school and the responsible FAA region and district offices about the test performance of school graduates. The reports are used to monitor school performance and to determine whether schools meet the quality of instruction provisions of § 147.38(a). The reports are posted quarterly (6 weeks after the end of each calendar-year quarter) to the publicly accessible FAA Norms Web site at http://www.faa.gov/data_research/aviation_data_statistics/test_statistics/. Two years of norms reports are maintained and available on the Web site. The report data is available to the public and may be shared freely with the school to which it refers, as well as any other party.

1) Report 8080-08 is the basic report of the series. It contains a record of test activity and performance of graduates of the subject schools who apply for a mechanic written test for the first time within 60 days after graduation.

2) The aviation maintenance test applicant listing contains a record by applicant name of the test performance for graduates from a subject school for a time period specified by the requestor and is produced on request by AFS-630.

3) “Non-school” reports are quarterly reports arranged by the region in which the testing occurred. These reports are made for the following:

- Applicants who graduate from a certificated school and who take the mechanic tests for the first time within 60 days of graduation (Report 8080-09).
- Applicants who graduate from a certificated school, but who take the mechanic tests for the first time more than 60 days after graduation (Report 8080-07).
- Applicants who qualify for testing through actual experience and are not graduates of a certified school (Report 8080-04).

H. Review OpSpecs. Determine that the following is complete:

- Mandatory OpSpecs are issued.
- Optional applicable OpSpecs are issued.
- AMTS maintains a current set of OpSpecs.
- AMTS is operating in accordance with the OpSpecs.

I. Distance Learning Program Surveillance. See subparagraph 6-2142F.

6-2144 PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Prerequisites:

- Knowledge of ~~14 CFR~~ parts 43, 65, and 147; and
- Successful completion of ~~appropriate Airworthiness Inspector Indoctrination course(s)~~ FAA Course 21000113, Aviation Maintenance Technician Schools.

B. Coordination. This task may require coordination with Avionics inspectors.

6-2145 REFERENCES, FORMS, AND JOB AIDS.

A. References (current editions):

- Title 14 CFR Parts 43, 65, and 147.
- Volume 2, Chapter 12, Certification of a Part 147 Aviation Maintenance Technician School.
- Figure 6-96, Read Values for AC Form 8080-08.

B. Forms:

- Norms Report 8080-04, Non-School NORMs vs National Passing NORMs.
- Norms Report 8080-07, Region NORMs vs National Passing NORMs (Exceeding 60 Days).
- Norms Report 8080-08, School NORMs vs National Passing NORMs.
- Norms Report 8080-09, Region NORMs vs National Passing NORMs (Within 60 Days).

C. Job Aids. General Aviation Job Task Analysis (GA JTA): 2.4.14.

6-2146 PROCEDURES.

A. Review FAA Office Files Relating to the School.

1) Review the school's approved curriculum, OpSpecs, and enhanced Vital Information Database (eVID). Take a copy of the curriculum, OpSpecs, and facility layout to the school site for reference and validation.

2) Check the inspection history, if applicable.

B. Review Enrollment Records. Determine that the number of students enrolled is not more than the number approved in the school's application. Determine if the school can effectively instruct the number of students actually enrolled.

C. Review Student Records. Determine whether records are available for all students. Select the records of one or two recently graduated students and one or two current students, and perform a total verification ensuring:

1) The attendance system shows the hours of absences allowed and makeup provisions for subject material missed. See Volume 2, Chapter 12, Section 2, paragraph 2-1449.

2) The attendance system does not permit the time required to makeupmake up missed material to be deducted from regular instruction time. See Volume 2, Chapter 12, Section 2, paragraph 2-1449.

3) The approved attendance system is being followed.

4) Recordkeeping meets the requirements of § 147.33.

D. Examine the System for Determining Final Course Grades. Ensure the system reliably distinguishes between successful students and unsuccessful students. See the curriculum in Volume 2, Chapter 12, Section 2.

- 1) Ensure all grade reports and records identified, as part of the approved grading system, meet the recordkeeping requirements of § 147.33.
- 2) Ensure that the approved grading system is being followed.

E. Ensure Maintenance of Instructor Requirements. Determine whether instructor resources are adequate and effective, meeting the requirements of § 147.36.

- 1) Check the instructor/student ratio against the maximum allowable ratio of 1:25 in a shop or lab. If necessary, require a lower ratio in any shop or lab to provide adequate instruction and supervision of students.
- 2) Determine if instruction given by specialized instructors is well coordinated with aviation technical subjects (*i.e.*, math instructors might teach Weight and Balance (W&B) principles). Evaluate the suitability of noncertificated instructors to teach certain general courses on an individualized basis.
- 3) Determine whether the school has positive control over what is taught and when it is taught, in accordance with its approved curriculum.
- 4) Observe classes and conduct interviews to determine individual instructor effectiveness. While it is permissible to talk to instructors and/or students in an ongoing lab or shop session, try to avoid disrupting any theory class while it is in session.
- 5) As discussed in Volume 2, Chapter 12, Section 2, encourage the school to assess instructor performance regularly and provide for instructor improvement.

F. Ensure School Space Usage Allows for Appropriate Separation of Classes in Session (§ 147.15(a)). See Volume 2, Chapter 12, Section 3.

G. Examine the AMTS Norm ~~vs.~~ Versus National Passing Norms (Aeronautical Center (AC) Form 8080-08) to Identify Any Deficiencies. Determine the cause(s) of poor test performance and discuss with the school ways of improving the overall school program. See Volume 2, Chapter 12, Section 1, for guidance in the use of the National Passing Norms. Obtain from the school records the names and graduation dates of all graduates for the 24-month period desired. Ensure the ending date of the 24-month period is at least 60 days before the current date.

1) For a record search to obtain subject grades for each individual, forward the list of names and graduation dates to:

Regulatory Support Division
Federal Aviation Administration
 Airman Testing Standards Branch, AFS-630
 P.O. Box 25082
 Oklahoma City, OK 73125

Or email to: 9-AMC-AFS630-Norms@faa.gov.

~~1) If the record search indicates significant deviation from the norm, initiate corrective action.~~

2) ~~If the AMTS but does not take corrective action involve intentional, reckless, or its response criminal behavior, and the organization is unsatisfactory, initiate enforcement action qualified and willing to cooperate, the Flight Standards Service (AFS) will resolve the issue through the use of compliance tools, techniques, concepts, and programs.~~

6-2147 TASK OUTCOMES.

A. ~~PTRS.~~ Complete the PTRS Record.

B. Complete the Task. Notify the school in writing of any deficiencies found during the inspection.

6-2148 FUTURE ACTIVITIES.

- Ensure that any deficiencies have been corrected.
- If necessary, increase surveillance.

Figure 6-96. Read Values for AC Form 8080-08**A. SCHOOL NORMS ~~V~~S~~V~~E~~RSU~~S~~ NATIONAL PASSING NORMS 8080-08.~~**

Please email all questions regarding this report or any other NORMs related information to:
9-AMC-AFS630-NORMS@faa.gov.

All the data in the report is for the first test attempts within 60 days of the graduation date.

Partial completions or retakes are not included in this data.

AMA – Airman Maintenance Technician Airframe.

AMG – Airman Maintenance Technician General.

AMP – Airman Maintenance Technician Powerplant.

Quarter Data.

Number of Applicants – Total number of applicants taking the test for the first time within 60 days of graduation from the school during the quarter.

Number of Applicants Passed – Total number of applicants passing the test on the first attempt within 60 days of graduation during the quarter.

Percentage of Applicants Passed – The percentage of applicants passing the test on the first attempt within 60 days of graduation during the quarter.

Average Grade – The average grade of first test attempts within 60 days of graduation during the quarter.

Two-Year Accumulative Data.

School Applicants – The total number of applicants taking the test for the first time within 60 days of graduation from the school during the 2-year period.

School NORM – The percentage of applicants passing the test on the first attempt within 60 days of graduation during the 2-year period.

National Applicants – The total number of applicants from all part 147 schools taking the test for the first time within 60 days of graduation during the 2-year period.

National NORM – The percentage.

B. NON-SCHOOL NORMS ~~V~~S~~V~~E~~RSU~~S~~ NATIONAL PASSING NORMS 8080-04.~~

Please email all questions regarding this report or any other NORMs related information to:
9-AMC-AFS630-NORMS@faa.gov.

All the data in the report is for the first test attempts who did not report graduating from a school.

Partial completions or retakes are not included in this data.

AMA – Airman Maintenance Technician Airframe.
AMG – Airman Maintenance Technician General.
AMP – Airman Maintenance Technician Powerplant.

Quarter Data.

Number of Applicants – Total number of applicants taking the test for the first from the region during the quarter.

Number of Applicants Passed – Total number of applicants passing the test on the first during the quarter.

Percentage of Applicants Passed – The percentage of applicants passing the test on the first attempt during the quarter.

Average Grade – The average grade of first test attempts during the quarter.

Two-Year Accumulative Data.

Region Applicants – The total number of applicants taking the test for the first time from the region during the 2-year period.

Region NORM – The percentage of applicants passing the test on the first attempt during the 2-year period.

C. REGION NORMS VS VERSUS NATIONAL PASSING NORMS (EXCEEDING 60 DAYS) 8080-07.

Please email all questions regarding this report or any other NORMs related information to:
 9-AMC-AFS630-NORMS@faa.gov.

All the data in the report is for the first test attempts exceeding 60 days of the graduation date.

Partial completions or retakes are not included in this data.

AMA – Airman Maintenance Technician Airframe.
AMG – Airman Maintenance Technician General.
AMP – Airman Maintenance Technician Powerplant.

Quarter Data.

Number of Applicants – Total number of applicants taking the test for the first time exceeding 60 days of graduation from the region during the quarter.

Number of Applicants Passed – Total number of applicants passing the test on the first attempt exceeding 60 days of graduation during the quarter.

Percentage of Applicants Passed – The percentage of applicants passing the test on the first attempt exceeding 60 days of graduation during the quarter.

Average Grade – The average grade of first test attempts exceeding 60 days of graduation during the quarter.

Two-Year Accumulative Data.

Region Applicants – The total number of applicants taking the test for the first time exceeding 60 days of graduation from the region during the 2-year period.

Region NORM – The percentage of applicants passing the test on the first attempt exceeding 60 days of graduation during the 2-year period.

National Applicants – The total number of applicants from all part 147 schools taking the test for the first time exceeding 60 days of graduation during the 2-year period.

National NORM – The percentage of all applicants from all part 147 school passing the test on the first attempt exceeding 60 days of graduation during the 2-year period.

D. REGION NORMS VSVERSUS NATIONAL PASSING NORMS (WITHIN 60 DAYS) 8080-09.

Please email all questions regarding this report or any other NORMs related information to:
9-AMC-AFS630-NORMS@faa.gov.

All the data in the report is for the first test attempts within 60 days of the graduation date.

Partial completions or retakes are not included in this data.

AMA – Airman Maintenance Technician Airframe.

AMG – Airman Maintenance Technician General.

AMP – Airman Maintenance Technician Powerplant.

Quarter Data.

Number of Applicants – Total number of applicants taking the test for the first time within 60 days of graduation from the region during the quarter.

Number of Applicants Passed – Total number of applicants passing the test on the first attempt within 60 days of graduation during the quarter.

Percentage of Applicants Passed – The percentage of applicants passing the test on the first attempt within 60 days of graduation during the quarter.

Average Grade – The average grade of first test attempts within 60 days of graduation during the quarter.

Two-Year Accumulative Data.

Region Applicants – The total number of applicants taking the test for the first time within 60 days of graduation from the region during the 2-year period.

Region NORM – The percentage of applicants passing the test on the first attempt within 60 days of graduation during the 2-year period.

National Applicants – The total number of applicants from all part 147 schools taking the test for the first time within 60 days of graduation during the 2-year period.

National NORM – The percentage of all applicants from all part 147 school passing the test on the first attempt within 60 days of graduation during the 2-year period.

RESERVED. Paragraphs 6-2149 through 6-2150.