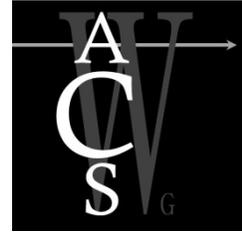


June 28, 2017

Mr. Kevin Morgan, Supervisory Aviation Safety Inspector  
Flight Standards Service, General Aviation Branch, Aircraft Maintenance Division (AFS-350)  
Federal Aviation Administration  
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Dear Mr. Morgan,

The Aviation Rulemaking Advisory Committee's (ARAC) Airman Certification System Working Group submits for Federal Aviation Administration's (FAA) consideration, recommendations to align training regulation and guidance with the airman testing standards.

The ARAC working group was tasked with developing recommended testing standards, training guidance, test management, and reference materials for the aircraft mechanic certificate with airframe and powerplant (A&P) ratings. The Aviation Maintenance Technician (AMT) Airman Certification Standards (ACS) will replace current practical test standards (PTS), and clearly define minimum knowledge, risk management and skill requirements for A&P mechanics. Once completed, it will provide the framework for the Knowledge Exam (written), oral and practical mechanic tests; and subsequently, a guide for revising handbooks, oral questions, practical projects and the knowledge test bank.

As you know, 14 Code of Federal Regulations (CFR) part 147 governs certification requirements for aviation maintenance technician schools (AMTS). Completion of an AMTS program is one way to satisfy experience requirements for an A&P certificate (see [§ 65.77](#)). In the absence of a comprehensive testing standard, training standards (i.e., curriculum requirements) provided in part 147 has effectively provided the framework for the skill and knowledge required of an A&P mechanic. While we understand and appreciate how we got to this point, it is the working group's opinion that the standard is misplaced.

Title 14 CFR part 65 sets forth the knowledge, experience and skill requirements for a mechanic certificate (see [§65.75](#), [§65.77](#) and [§65.79](#)). Requisite knowledge and skill is verified through written, oral and practical tests (see [§65.75\(b\)](#) and [§65.79](#)). The AMT ACS is the guidance that sets forth specifics on what a candidate must know, consider and do to successfully pass those tests. Part 65 is therefore the impetus for testing *and* training. In contrast, part 147 should be reserved for dictating AMTS certification and operating requirements, not mechanic knowledge and skill standards.

The working group therefore makes the following recommendations:

- 1. Revise part 65 to provide the baseline standard for mechanic knowledge and skill requirements**

Incorporating general knowledge and skill elements in part 65 would ensure that testing and training standards fall directly out of the regulation.

Until formal rulemaking can take place, the AMT ACS would provide the requisite specificity. The standard would be “enforceable” through part 65, which requires applicants to pass an agency-developed and -controlled mechanic test.

**2. Remove any reference to curriculum requirements or subject areas from part 147**

As stated above, part 65 is the impetus for testing *and* training. The inclusion of required curriculum or subject headings in part 147 creates a separate, inflexible, and inconsistent standard that training organizations will be forced to reconcile for decades to come.

**3. Reference the AMT ACS in AMTS operations specifications to ensure that training and testing are directly correlated**

Utilizing the AMT ACS as the basis for curriculum ensures that the agency can enforce AMTS adherence to the standard, requires schools to adjust their curriculum as mechanic knowledge and skill requirements evolve, and utilizes less government resources to maintain and update separate training specifications.

If the agency elects to dictate any specific curriculum requirements through the part 147 operation specification, it should directly mirror the subject areas provided for in the AMT ACS (see attachment 1). The agency should also ensure there is a mechanism available to update AMTS operations specifications as the AMT ACS periodically evolves.

**4. Utilize the ARAC Airman Certification System Working Group as the driver for changes to training requirements**

The working group will periodically review and update the AMT ACS to ensure it is in line with mechanic knowledge and skill requirements as technology evolves. The working group would therefore be the vehicle to ensure that training and testing keeps up with ever-evolving safety considerations.

We thank you for your consideration of these recommendations and stand by to provide support and expertise as needed.

Sincerely,



David Oord, ACSWG Chair  
Senior Director, Regulatory Affairs  
Aircraft Owners and Pilots Association



Jackie Spanitz, AMT ACS Subgroup Co-chair  
Curriculum Director  
Aviation Supplies & Academics, Inc.



Janeen Kochan, PhD, FRAeS, AMT ACS Subgroup Co-chair  
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Attachment 1 AMT ACS subjects

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## Attachment 1 AMT ACS (FAA-S-ACS-1) Subjects

### General

Fundamentals of Electricity and Electronics  
Aircraft Drawings  
Weight and Balance  
Fluid Lines and Fittings  
Aircraft Materials, Hardware, and Processes  
Ground Operations and Servicing  
Cleaning and Corrosion Control  
Mathematics  
Regulations, Maintenance Forms, Records, and Publications  
Physics for Aviation  
Inspection Concepts and Techniques  
Human Factors

### Airframe Structures

Metallic Structures  
Non-Metallic Structures  
Aircraft Finishes  
Flight Controls  
Airframe Inspection

### Airframe Systems

Landing Gear Systems  
Hydraulic and Pneumatic Systems  
Environmental Systems  
Aircraft Instrument Systems  
Communication and Navigation Systems  
Aircraft Fuel Systems  
Aircraft Electrical Systems  
Ice and Rain Control Systems  
Airframe Fire Protection Systems  
Rotorcraft Fundamentals

### Powerplant Theory and Maintenance

Reciprocating Engines  
Turbine Engines  
Engine Inspection

### Powerplant Systems and Components

Engine Instrument Systems  
Engine Fire Protection Systems  
Engine Electrical Systems  
Lubrication Systems  
Ignition and Starting Systems  
Fuel Metering Systems  
Engine Fuel Systems  
Engine Induction Systems  
Engine Cooling Systems  
Engine Exhaust and Reverser Systems  
Propellers

