



Designation: F3639 – 23

Standard Guide for Automatic Flight Control System Technician¹

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1. Scope

1.1 The purpose of this guide is to address the fundamental subject knowledge activities and functions for avionics professionals to be titled Automatic Flight Control System (AFCS) Technician.

1.2 This guide is the basis for the Automatic Flight Control System Technician (AFCS) certification, an endorsement to the Aircraft Electronics Technician (AET) certification. Candidates must be a certified AET to take the certification exam associated with this guide.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*²

F3060 Terminology for Aircraft

F3245 Guide for Aircraft Electronics Technician Personnel Certification

2.2 *FAA Standards:*³

FAA AC43.13-1B Acceptable Methods, Techniques, and Practices – Aircraft Inspection and Repair (with Change 1), 1998

FAA AC43.13-2B Acceptable Methods, Techniques, and Practices – Aircraft Alterations, 2008

FAA Federal Aviation Regulations for Aviation Maintenance Technicians

FAA-H-8083-30A Aviation Maintenance Technician Handbook – General, 2018

FAA-H-8083-31 Aviation Maintenance Technician Handbook – Airframe Volume 1, 2012

FAA-H-8083-31 Aviation Maintenance Technician Handbook – Airframe Volume 2, 2012

3. Terminology

3.1 See Terminology F3060.

3.2 See Guide F3245, Section 6 Core Competencies – Common Maintenance Practices, Fundamentals of On-Equipment Maintenance and Aircraft Fundamentals.

3.3 See Table 1 for knowledge level definitions relating to the education requirements for Automatic Flight Control System (AFCS) technicians.

4. Significance and Use

4.1 The guide is intended to be used to assess competencies of qualified individuals who wish to become certified as an Automatic Flight Control System technician through a program such as the National Center for Aerospace and Transportation Technologies (NCATT).

4.2 The guide is intended to be used in concert with a certification provider's structure and materials for management, exam delivery, and candidate preparation.

5. Test Knowledge Requirements

5.1 The following subject knowledge areas shall be assessed by levels (referenced in Table 1) of competency in the exam items.

5.2 *Risk Management*—Level 2 can determine and apply the following:

5.2.1 *Safety*—Can identify and apply the safety practices in the workplace in accordance with applicable standards and practices.

5.2.1.1 Reference AET standard for safety.

5.2.1.2 *Maintenance Considerations*—Can describe proper use and provide simple examples of safe practices when associated with the operational considerations (circuit breaker lockout and identifying collars, control locks, control pins and

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from Federal Aviation Administration (FAA), 800 Independence Ave., SW, Washington, DC 20591, <http://www.faa.gov>.