

Cape Cod Community College AMTS

Curriculum Subject Guide for AMT 233 Airframe Curriculum, Subject Items 54 and 55

Part 147, Appendix C, Part 2, Subject J – Fire Protection Systems

Subject: Fire Protection Systems

Item 54. Inspect, check, and service smoke and carbon monoxide detection systems (Level 1)

T – 1.0 Hrs / L – 0.0 Hrs

Item 55. Inspect, check, service, troubleshoot, and repair aircraft fire detection and extinguishing systems (Level 3)

T – 1.75 Hrs / L – 6.0 Hrs

Classroom time: 2.75 hours

Lab or shop time: 6 hours

Test time: 1.25 hours

Total Time: 10 hours

Teaching Level 1 and 3

Project 1

Item 55 – 6 Hrs

Theory Test 1

0.25 Hrs

Practical Test 1

1.0 Hrs

Prerequisite(s)

- (1) Satisfactory completion of General Curriculum Module Course Interruptions: All interruptions or changes in course sequence will be in accordance with the Order of Instruction policy, located in Cape Cod Community College's Operations Manual, page 17.

Item 54:

Student Performance Goal(s)

Given: 14 CFR Federal Aviation Regulations for Aviation Maintenance Technicians, Aviation Maintenance Technician Handbook – Airframe, Volume 2 (FAA-H-8083-31), Chapter 17. Written information and completion type essay statements concerning photoelectric, visual smoke detectors, and chemical type carbon monoxide detectors.

Performance: The student will complete six statements concerning how smoke is detected by photo-electric and visual methods, how air sampling is accomplished for smoke detection, and uses of chemical type CO₂ detectors.

Standard: Correctly complete at least four statements, identify and understand the Fire Protection System lessons and score a passing grade on course quiz.

Item 55:

Student Performance Goal(s)

Given: 14 CFR Federal Aviation Regulations for Aviation Maintenance Technicians, Aviation Maintenance Technician Handbook – Airframe, Volume 2 (FAA-H-8083-31), Chapter 17. AVOTEK AS360 Operation Manual. AVOTEK AS360 Fire Detection and Extinguishing System Trainer.

Performance: The student will trace the mockup's circuit of a fire detection system and activate the system alarm by heat applied to a fire detector on the mock-up and use a tester or volt ohm-meter to locate a malfunction introduced into the mock-up circuit and correct the malfunction.

Standard: In accordance with the information provided, the circuit, will be accurately traced, the alarm will operate, and the malfunction will be located and corrected to return-to-service condition. The student will identify and understand the Fire Protection System lessons and score a passing grade on course quiz and practical test.

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