Cape Cod Community College AMTS

Curriculum Subject Guide for AMT 105 General Curriculum, Subjects Items 11 and 12

Part 147, Appendix B, Subject C – Weight and Balance

Subject: Weight and Balance

Item 11. Weigh aircraft (Level 2)
T – 4.25 Hrs / L – 8.5 Hrs

Item 12. Perform complete weight-and-balance check and record data (Level 3)
T – 10 Hrs / L – 15 Hrs

Classroom time:	14.25 hours
Lab or shop time:	23.5 hours
Test time:	2.25 hours
Total Time:	40 hours
Teaching Level	2 and 3
Project 1A & 1B	Project 2
Item 11 – 8.5 Hrs	Item 12 – 15 Hrs
	0.25 Hrs
Theory Test 1	Practical Test 1
	2.0 Hrs

Prerequisite(s)

(1) None

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.

Items 11 & 12:

Student Performance Goal(s)

Given: Cessna 402C manufacturer's aircraft specifications

Performance: Provided with the 402C weight and balance information, the student will solve five problems involving computation of the empty center of gravity of an airplane.

Standard: Computation of empty center of gravity will be accurate to one-tenth inch.

Given: Necessary data to compute center of gravity loading on the Cessna 402c and the Piper 24-250

Performance: The student will compute the forward and aft center of gravity condition on the Cessna 402C and the Piper 24-250 aircraft. The student will describe the hazards associated with exceeding the limits and will determine the necessary ballast, baggage reduction or loading schedule to preclude exceeding the approved limits.

Standard: Problems will be solved to an accuracy of one-tenth inch.

Given: Sample loading schedules and equipment specifications for the Cessna 402C.

Performance: The student will compute the effects of equipment changes on the empty center of gravity of the airplane. The student will prepare a loading schedule after solving a problem involving maximum baggage, cargo load or maximum gross loaded center of gravity conditions.

Standard: The computed center of gravity will be accurate to one-tenth inch. The loading schedule will meet FAA and/or manufacturer's requirements.

Given Weight, loads and balance information applicable to a helicopter.

Performance: The student will solve one problem requiring computation of center of gravity of a helicopter.

Standard: The computed center of gravity will be accurate to one-tenth inch.

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