

**Title of Grant:** Designated Mechanic Examiner Training and Test Development

**F2008 – 194P-PF**

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**Abstract:**

This project was to allow the instructor to 1) pursue training from the Federal Aviation Administration (FAA) to become a Designated Mechanic Examiner (DME) and 2) develop a series of non-credit examinations for graduates of the Aviation Mechanics Technician Program and others in the aviation industry. This proposal would have allowed the VCCS to effectively fulfill a need to provide local testing for students striving to become FAA- certified aviation maintenance technicians.

This grant was to encourage application to the FAA National Examiner Board and fund the subsequent training required for a Designated Mechanic Examiner (DME). Currently, there are no local DMEs, thus requiring extensive travel and additional expense to students and other qualified aviation individuals who desire to complete the certification testing requirements as an FAA mechanic with both airframe and powerplant ratings.

The Initial Technical Personnel Examiner Seminar was to cover the objectives specified for the course of study in the Aviation Mechanic Examiner's Handbook, FAA Order 8610.4. This course is a three-day intensive seminar for newly appointed DMEs and is required as a condition of the designation.

No other college in the VCCS offers the ability to test FAA mechanic applicants who qualify in accordance with Title 14 Code of Federal Regulations Part 65.

I intended to develop a minimum of three separate tests: an airframe exam, powerplant exam, and airframe and powerplant exam. For example, the requirements for the Oral and Practical test for the Airframe and Powerplant was to consist of a minimum of 176 oral question covering 44 subject areas and one practical project in each of those subject areas. The FAA expected the three exams to be dramatically different.

Former designees who have relocated to another FSDO or IFO and requested reinstatement shall be treated as initial applicants and will be required to submit an application to the NEB for initial evaluation and recommendation.

**Actual Outcomes:**

I completed an application to the Federal Aviation Administration (FAA) National Examiner Board and was chagrined to learn that they had interpreted the regulations differently than in the past. In the opinion of the National Examiner Board I was ineligible to become a Designated Mechanic Examiner (DME) because I had not been actively involved in working on certificated aircraft, merely training students to do so. Tantamount in their concern was the six months I spent developing curriculum for the

aviation maintenance technology program. In further checking with the local FAA Flight Standards District Office (FSDO), I was informed that they did not see a need for any additional DMEs. There are currently three in the Richmond FSDO and the closest one who is willing to travel to give exams lives in Virginia Beach (a distance of 225 miles). The local FSDO indicated that even if I were to become eligible they would not appoint me (or anyone else) unless one of the current DMEs retired or passed on. (This is a very different attitude than when Blue Ridge Community College (BRCC) initiated their application for an aviation maintenance technician school and when they were advised to hire a faculty member who was or had been a DME.)

This required that I take a different approach to the grant in order to accommodate the testing needs of the students. I began contacting DMEs and was able to set up an affiliation with one of the three DMEs, C. B. Ayscue. In negotiations, Mr. Ayscue will travel to Shenandoah Valley Regional Airport at his own expense and conduct Oral and Practical exams for BRCC's Aviation maintenance graduates at the standard rate charged by all Virginia DMEs. Additionally, negotiations are underway to allow Mr. Ayscue to utilize the facility to conduct exams for other than BRCC AMT graduates for a nominal user's fee (payable by the applicant).

Students and Community: The major benefit was to allow affordable test access to the aspiring aviation students who have completed an FAA-approved Title 14 CFR Part 147 Aviation Maintenance Technician School (AMTS).

College: The major benefit was to be a local testing option for the graduates of the AMTS, without necessitating relocation to a remote site for the week-long test, resulting in higher student satisfaction.

Community: The community would benefit from having a "one-stop" shop that could provide both the educational training and national testing "in-house".

VCCS: Findings and methods will help other colleges to develop reproducible testing plans for a blended skill-based curriculum. I am always willing to share my expertise with other institutions.

Personal and Professional Goals: I was unable to reinstate myself as a Designated Mechanic Examiner, a designation I previously held for 21 years, perhaps the most disappointing aspect of this endeavor.

The initial need to develop exams was negated by the inability to become a DME. However, I did develop a series of exams and these are available to the affiliated Designated Mechanic Examiner. As an aside, I did take it upon myself to establish another affiliation for BRCC with Charlottesville Flight Center so that the written exams would be readily available for the AMT graduates. A further advantage of this affiliation is it negates the requirement that graduates travel to the Richmond FSDO to present their graduation certificate(s) to qualify to take the written exams. Additionally, I am working with Professional Air Solutions, a local flight school to establish a LaserGrade Written Test Center that would be located next door to the BRCC AMT facility. This would minimize any commute for the AMT graduates, as well as providing testing services for a variety of students in Nursing, Veterinary Technology, etc.

**Other Colleges:** n/a

**Discussion and Critique:**

1. I was disappointed that I was unable to qualify to become a Designated Mechanic Examiner, however, I feel that the solution arrived at will benefit the students in the way originally intended. Graduates of

the AMT program will be able to take their Oral and Practical exams at the same location where they have been trained. This will provide both an economic advantage over traveling to a remotely located DME as well as allowing them to test in the same location they trained in.

2. A second benefit to the students is to allow them to bypass presenting themselves in person to the FAA FSDO. By securing the affiliations, I am able to provide documentation that will bypass the FAA for the AMT graduates.

3. As far as changes or alternatives, the only thing I can think to do differently is to reapply to the National Examination Board after the Richmond FSDO realizes there is a need for additional DMEs.

**Evaluation:**

Considering my initial expectations and the reduction of my funding request to less than half, I feel that the Commonwealth has received acceptable value for their investment. I never anticipated the that the National Examiner Board would change the way the regulations have been interpreted in the past, nor the local Flight Standards District Office would change their attitude regarding DMEs. As far as the framework of my grant, the major intent has been met.

**Dissemination:**

I have prepared a Title 14 Code of Federal Regulation Part 147 Manual revision that will be given to the FAA FSDO Principal Maintenance Inspector this Saturday, March 14, 2009. I also plan to share the information with any interested colleagues and will discuss the findings at Aviation Technician Education Council annual conference.

Additionally, I have developed a matrix to explain the procedures the student is required to follow to obtain an FAA Certificate as a Mechanic with Airframe and Powerplant ratings. This has been posted on an AMT Organization Page for all AMT students.