

**Title of Grant:** Blended Distance Education/On Site Course Development for Light Sport Aircraft Repairman with a Maintenance Rating

**SP2008 – 140P – FF**

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**Name:** Fred Dyen

**College:** Blue Ridge Community College (BRCC)

**Email:** dyenf@brcc.edu

**Abstract:**

This project developed a blended or hybrid course for the Light Sport Repairman (with a Maintenance Rating) in accordance with FAA Order 8000.84. No other blended or hybrid course existed or was approved by the Federal Aviation Administration in the VCCS or nationally.

**Actual Outcomes:**

Students: At the present time, the direct benefit to students is pending FAA approval for the Light Sport Repairman Maintenance, Airplane course. I have received verbal and email confirmation from the FAA, AFS-610 the Light Sport Standardization Branch of the following:

1. The on-site portion of the curriculum I submitted will be approved. (As of December 2008, BRCC is currently awaiting the letter of authorization from the FAA).
2. The distance education portion of the curriculum will not be approved. The reason given by AFS-610 concerns the holder of the Order (8000.84 PROCEDURES TO ACCEPT INDUSTRY-DEVELOPED TRAINING FOR LIGHT-SPORT REPAIRMEN) AFS 300 in Washington, D.C. Several meetings have been scheduled several times. The initial intent was to schedule Light Sport Repairman Maintenance, Airplane courses in summer 2008. Since the formal letter of authorization did not arrive, BRCC was unable to offer any courses. It is anticipated that the Light Sport Repairman Maintenance, Airplane course will be scheduled in the fall, spring, and summer semester once the letter of authorization has arrived.

College: BRCC will be the second entity approved to offer the Light Sport Repairman Maintenance, Airplane course in the nation and the only educational body to receive such approval from the FAA. I plan to pursue FAA approval for the distance education portion of the LSA and have presented to the FAA Aviation Rulemaking Advisory Committee (ARAC) in Washington D.C One major benefit would be international recognition of the only school to currently offer a blended curriculum for the Light Sport Repairman. Additionally, this would expand the curricular offerings of a new BRCC program.

Community: The community is fully aware of Blue Ridge Community College's intent to expand aviation maintenance training into the Light Sport Repairman arena and is excited about the distance ed option.

VCCS: Findings and methods will help other colleges to develop reproducible research plans for blended skill-based curriculum using the latest developments in computer aided instruction. This course and others will be available to students at other colleges in the VCCS.

Personal and Professional Goals: As the nation's only individual to secure FAA-approval for distance education courses for Part 147 Aviation Maintenance Technology School, this would allow me to "test the waters" in the new FAA Light Sport Aviation Branch and perhaps inspire other colleges to do likewise. Initially, when I contacted FAA AFS-610, the airworthiness inspector I spoke with was excited about the distance education option. He cautioned me that he would need to research the FAA Order and would approve the proposal, as written, if within his purview. As it turned out, the FAA in Washington D.C. determined distance education for maintenance training was within their jurisdiction.

#### **Other Colleges:**

None were invited as there was no event scheduled.

#### **Discussion and Critique:**

This arena is in somewhat uncharted territory as no one has ever proposed any similar course of study to the Federal Aviation Administration. The course description and syllabus were drafted in accordance with the FAA Order 8000.84: Procedures to Accept Industry Developed Training for Light Sport Repairman and Sport Star factory guidance, with considerable leeway drawn from Advisory Circular 147-3A. In deviation from the order's directive of a group of individual documents, I elected to prepare and submit an actual manual fashioned after Title 14 Code of Federal Regulation Part 147 Aviation Maintenance Technician Schools (AMTS) manual. This was extremely well-received by the principal inspector at AFS-610.

At this point (December 2008), I am waiting for a letter of authorization from the Federal Aviation Administration, AFS-610 Light Sport Standardization Branch regarding approval for the Light Sport Repairman Maintenance, Airplane course. As mentioned earlier, I have received verbal approval and an email indicating approval, but still have not received the formal letter of authorization.

#### **Evaluation:**

At this point I am waiting for word from the FAA on approval of the Internet portion of the course prior to preparing any journal articles. Conversations with the principal inspector at AFS-610 indicated that the FAA at AFS-300 had two major concerns regarding distance education. One concern centered on how to verify that the individual who had enrolled in the class was actually the one doing the work. It was intimated that synchronous poly-cast might be the only acceptable method of instruction. The second concern was regarding test taking. The current FAA inclination is to require a third party FAA-approved vendor such as CATS or LaserGrade ONLY to administer any course exams. Both of these concerns are unnecessary, educationally restrictive, and cost prohibitive.

I am hopeful that a productive discussion will ensue from the discussion with the director of AFS-300 and some resolution can be reached on behalf of BRCC and other Aviation Maintenance Technician Schools.

#### **Dissemination:**

I plan to prepare a media blitz as soon as the course is approved as well as journal articles in the Aviation Technician Education Journal, Aviation Maintenance Technology and Aviation Maintenance Magazine. I also plan to share the information at VCCS sponsored conferences and will prepare a presentation at Aviation Technician Education Council annual conference.