

Program Review Report
Department of Aviation
Central Washington University
Conducted March 14-15, 2012
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I. General

The program review for the Department of Aviation was conducted over a two-day period. The first day was spent in Ellensburg meeting with faculty and students on the CWU campus and included a trip to Bowers Field to tour the CWU Aviation Training Center as well as meet with Midstate Aviation personnel and tour their facility. The second day was spent at the CWU-Big Bend Community College (BBCC) Moses Lake site meeting with administrators, faculty, and students as well as touring the facilities. Materials reviewed included: the Department of Aviation Self-study and related documentation; Standard Operating Procedures for flight training with Midstate Aviation; and, the CWU website.

II. Faculty

The Aviation faculty consists of five full-time personnel, including the BBCC site. All faculty are very well qualified academically, with one holding a doctoral degree, and all have essential aviation credentials and experiences that spans across the many facets of aviation. Recent budget cuts has resulted in an open position not being funded. This reduction in faculty has caused the elimination of multiple course sections thereby increasing enrollments for existing faculty. Faculty have not been provided salary increases in several years, and low salary ranges have complicated the ability to attract faculty with the necessary experience. There also seems to be a lack of opportunity for promotion for non tenure-track faculty. In spite of their extensive responsibilities and heavy workloads, current faculty are extremely motivated and dedicated to the students, program and institution.

In addition, the Department is currently only staffed with a half-time administrative assistant. Due to the high volume of work, it would be beneficial to acquire additional staff.

Strengths:

- Faculty with appropriate academic and aviation credentials
- Extensive experience within various aspects of aviation
- Highly motivated, with a desire for continuous improvement
- Dedicated to student success

Challenges:

- Heavy workload that includes many responsibilities beyond teaching
- Unfilled faculty line

Recommendations

- Need for a faculty member with aviation management experience (Note: an additional faculty line will be provided as the Aviation program continues initiatives with aviation institutions in China, Viet Nam and South America.)

- An additional faculty search may be desirable to prepare for anticipated growth in the Aviation program
- Evaluate salary ranges to attract qualified faculty
- Consider promotion opportunities for non tenure-track faculty.
- Hire additional administrative assistance

III. Facilities

CWU campus:

CWU faculty currently occupy office space in Black Hall and aviation students attend classes there as well as throughout other classroom buildings on the Ellensburg campus. Flight simulators are housed in the new Aviation Training Center (ATC) adjacent to Bowers Field. The ATC includes a small computer classroom and faculty office space in addition to simulator spaces.

The environment within Black Hall is professional and allows for quality interaction between department faculty, staff and students. The newly developed ATC provides an attractive, functional space for flight simulators and instruction.

Strengths:

- Department office space is professional and accessible to students and faculty
- Location of offices and classroom space on the Ellensburg campus allows faculty and students access and interaction with other campus facilities and personnel
- ATC facility is functional and aesthetically pleasing

Challenges:

- None apparent at this time

Recommendations:

- May wish to begin development of a plan to expand the ATC facility to accommodate future expansion and growth of the aviation programs

Moses Lake site:

The Moses Lake facility is bright and open. It includes office spaces for faculty and flight instructors, as well mediated classrooms with 'SmartBoards', and an open area for students to work. The dispatch area is well organized and appears to be managed efficiently and effectively. Flight simulators are currently in a corner of the facility in a very small space. Simulators appear to be dated, however, and may need replacement.

The aircraft hangar is large enough to allow for storage of all BBCC aircraft. The related maintenance area appears suitable and adequate to conduct aircraft repairs and maintenance.

Strengths:

- Facility is bright and open and appears to provide a good working environment
- Separate offices for flight instructors allows for productive flight instruction/briefings/debriefs
- Availability of SmartBoards for instruction in classrooms

Challenges:

- Small space for simulators
- Simulators appear to be dated

Recommendations:

- Consider building or finding a larger location to house flight simulators
- Acquire new flight simulators

IV. Program/Curriculum

The curricula were recently revised due to the FAA terminating support for the Airway Science degree. The revised curricula appear to be focused and provide students with the necessary knowledge and skills to be able to transition into their desired aviation field. Overall, faculty appear to be keenly aware of student learning outcomes and focus on preparing students for success in the aviation industry, in particular the airlines. Some conversations involved perhaps eliminating the Certified Flight Instructor (CFI) rating from the Flight Officer degree program curricula to possibly save students money. Strong consideration must be given to this decision due to the impending FAA regulation focusing on First Officer qualifications. While the details of this ruling are not expected to be available until summer 2012, as currently written, the new rule will require First Officers to have 1,000 Pilot in Command (PIC) flight time. In order to acquire these flight hours, it is essential that pilots possess a CFI rating so that they can flight instruct to gain these hours. Otherwise, attainment of this amount of PIC time will be nearly impossible and certainly cost prohibitive. In addition, recent research has found that pilots who have the CFI rating perform better in initial operating experience when they begin training at an airline. (Smith, G., Bjerke, E., NewMyer, D., Niemczyk, M., & Hamilton, R. (2010).)

It is also expected that students graduating from institutions that have flight programs accredited through Aviation Accreditation Board International (AABI) will be considered qualified for First Officer positions with lesser PIC hours due to the quality of instruction received through these programs. Again, please see Smith, G., et. al., (2010) for additional information. In conversations with Dr. Hoover, it appears as though application for AABI accreditation review is in process.

With recent changes to the Post 911 GI Bill (Chapter 33), US military veterans are now able to receive higher amounts of funding for flight training received at public institutions. With the number of veterans expected to increase over the next several years, implementing the mechanism to accept this funding for flight training is critical. Aviation faculty are currently working with the flight provider, Midstate Aviation, to determine how to implement processes to accept GI Bill funding.

Strengths:

- Focus on student learning outcomes
- Continuous improvement of curricula to prepare students for industry
- Preparing for AABI accreditation review
- Determining processes necessary to accept GI Bill funding.

Challenges:

- None apparent at this time

Recommendations:

- Continue to require flight students to acquire the CFI rating

V. Students

Discussions were conducted with students from both the Ellensburg and Moses Lake sites. Most discussions occurred in group settings, but several one-on-one conversations also took place. A majority of the students participating in these discussions were in the Flight Officer program.

Overall, students are very happy with the aviation programs. They find the faculty to be very knowledgeable and dedicated to student success. Flight students indicated that the flight instruction provided by Midstate Aviation and Big Bend Community College is very good and prepares them well. They also expressed that they feel the aircraft at both facilities are well maintained.

Specific student statements:

CWU

- Faculty want students to have an understanding of concepts
 - Will spend extra time with students as needed
- Faculty are well respected and very experienced
- Faculty appear to be passionate about what they are doing
- Faculty encourage students to set high standards and be the best they can be
- Beneficial having different instructors for courses – they all offer their own perspectives and experiences which enables students to have a broader understanding
- Don't like having an outside flight provider at Ellensburg because flight fees are more expensive than at BBCC
- Would like to fly into controlled airspace more
 - Get this experience in the flight simulators but would also like to have practical experience in the aircraft
- Students weighing over 185 pounds aren't allowed to fly the C-150 due to weight and balance issues therefore have to rent a more expensive aircraft
 - Seems to be a discrimination issue
- Possibly offer an Air Traffic Control degree option
- Possibly offer an Airframe and Powerplant (A & P) licensing option
- Seems to be a good relationship between faculty and Midstate Aviation
- Would like more information on scholarships
- Aircraft repairs are done quickly

BBCC

- Affiliation between BBCC and CWU is great
- Would prefer to use DAR instead of CAP system
- Chose BBCC because of pricing, reputation, and senior flight instructors who have practical experience

Recommendations:

- May wish to acquire Personal Computer Aviation Training Devices (PCATD) to supplement instruction at both the Ellensburg and BBCC sites
- BBCC flight simulators outdated and should be replaced. May also consider finding a larger space in which to house them.

VII. Midstate Aviation

A meeting was held with Andy McIrvin, Chief Flight Instructor, for Midstate Aviation at the Midstate facility. Based on discussions, it appears as though there is a good working relationship between Midstate and CWU. Both entities utilize Standard Operating Procedures (SOP) that provide direction for daily operations and assist in ensuring consistency of implementation. Weekly meetings are conducted between Mr. McIrvin and CWU faculty to discuss student progress and other items of concern.

The Midstate facility has individual offices for Flight Instructors, which is used for ground instruction with students. Midstate is also a Computer Assisted Testing Service (CATS) site, which is able to offer FAA written examinations for students. The Midstate maintenance facility appeared to be well equipped and able to provide repairs and service in an efficient manner.

In discussions with Mr. McIrvin, he indicated he is interested in determining how to allow qualified students who are US military veterans to have the ability to utilize post-911 GI Benefits. He also tries to employ CWU graduates as flight instructors. Through the hiring process he has noticed that students may need assistance in developing professional resumes. He is also interested in conducting more marketing with CWU.

Strengths:

- Appears to be a good working relationship between Midstate Aviation and CWU
- Interest in attracting more students through the acceptance of GI Benefits and joint marketing efforts
- Well-maintained aircraft

Challenges:

- Current inability to accept post 911 benefits
- Lack of marketing

Recommendations:

- Contact other institutions to determine how they are able to accept post 911 benefits
- Work with the Veterans Administration to determine the criteria necessary to allow for utilization of the post 911 benefits for flight training
- It was suggested to Mr. McIrvin to perhaps consider flying aircraft to airshows and other aviation events to use as a static display to advertise the CWU Aviation programs.

VIII. Library Resources

Not reviewed on this visit.

IX. Information Literacy
Not reviewed on this visit.

X. Budget
Not reviewed on this visit.

XI. Potential/Future Directions

Based on my review of the program evaluation materials, conversations with CWU Administration, faculty and students, as well as those with Midstate Aviation personnel and BBCC faculty, staff and students, in addition to the tours of the various facilities, it appears that the CWU Aviation Department is well-positioned to be a hub for aviation education and training in the northwest and western United States. The department faculty, with support from University administration, are focused on both quality and expansion and view aviation as a 'signature program' for the institution. Continued outreach internationally into China, Viet Nam, and elsewhere will also allow the department to gain a well-deserved international reputation. It is suggested that the University and Department continue to develop matriculation agreements with community colleges in the are, too.

The few challenges currently being faced include:

- University funded marketing to generate awareness locally and regionally specifically for the Aviation department
- Hiring additional faculty and administrative assistance
- Acceptance of post-911 GI Benefits

Faculty and University administrators should be commended for recognizing aviation as a critical component in the domestic and world economy as well as a satisfying career path for students. I wish you much deserved continued success!