

Aviation Flight Program Assessment Report

Department of Aviation Management and Flight

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Introduction

This report and one accompanying attachment represent the assessment report for the SIU Aviation Flight Program for 2011. Data for the report were collected during the Fall Semester, 2011, which is the semester selected by the faculty for program assessment activity.

List of direct measures of assessment

• The Aviation Flight Program consists of eight flight courses (AF 199 – AF 207B), five classroom theory courses and three elective courses AF304, AF305 and AF306. Knowledge and flight proficiency must be demonstrated during end of course checks in one-on-one oral and flight examinations with the Chief (or an Assistant Chief) Flight Instructor. The five classroom theory courses implement traditional evaluation methods for performance.

• All students must demonstrate the aeronautical skills and knowledge as well as acquire the piloting experience necessary to meet the requirements set forth by Federal Aviation Administration (FAA) Practical Test Standards appropriate to the course. Advancement to each subsequent course is predicated on satisfactory completion of the earlier prerequisite course.
As noted on the accompanying Assessment Data Report for Aviation Flight, in the Private Pilot Certification area, a total of 9 out of 52 total students did not meet the expectations for the FAA Practical Test Standards for this area. This is a total of 17.3% of the students. Since this is the first certificate area that a student is tested on in the Aviation Flight program, it is expected that some failures will occur. This percentage is one that deserves some positive attention in future semesters to examine reasons for the students not meeting expectations.

In the other certificate and rating areas, the following results were achieved:

A. All but one student out of 29 met expectations in the Instrument Rating area. The one student that did not meet expectations represents a total of 3.4% of students.

B. All 29 students met expectations in the Commercial Certificate area.

C. All but one out of 15 students met expectations in the multi-engine rating area. This one student represents 6.7% of the students.

2) List of indirect measures of assessment

The following indirect measures of assessment were used for Aviation Flight program assessment this year:
Student performance is assessed via the following standardized exams:

- FAA Private Pilot Written Exam Score (for AF 201B)
- FAA Instrument Pilot Written Exam Score (for AF 206)
- FAA Commercial Pilot Written Exam Score (for AF 207A)

Local stage written exams are administered for all flight courses.

Oral and flight performance evaluations are administered for all flight courses.

All of the above items are taken into account in the total assessment results reported in the accompanying assessment data report for Aviation Flight.

3) Actions taken in the recent past as result of assessment

The following actions have been taken to improve the program as a result of the program assessment:

- Local stage written exams have been revised for flight courses to better reflect the learning outcomes of the AF flight courses and to reflect ongoing regulatory changes.
- The following FAA approved Training Course Outlines (TCO’s) have been rewritten and approved by FAA:
  - *AF203,* AF204, *AF207A, *AF207B and *AF300
• Continued use/ modification of TCO cross-country procedures to allow for student selected cross-country destinations as an alternative to preselected/repetitive cross-country destinations. This has helped to further enhance student cross country planning, execution and skill building.

• Continued use by faculty and students of the SIUC Aviation Flight Practical Test Standards for AF201A and 201B to improve check ride preparation for students and check ride standardization by check airmen.

• Developed AF306 as an elective to offer our Frasca 172R/G1000 TruFlite Flight Training Device (FTD) and provide glass cockpit training and use of autopilot for single engine operations in a simulated environment.

• Incorporated major AF curriculum changes to AF203, AF204, AF207A, AF207B and AF300. This was done to incorporate recently acquired Cessna 172R/G1000 equipped aircraft into the flight training regimen and to meet changing student and regulatory needs.

• A major upgrade of the Cessna 310R fleet was identified as necessary and is nearly complete. This includes new paint, new interiors and most importantly, new touchscreen avionics (Garmin GTN750 GPS) with multi-function display. These changes will be completed by February, 2012. The new cockpit
technology has been incorporated into the revised AF207B curriculum and the multi-engine flight training profile.

- Incorporated a Redbird crosswind simulator to improve student crosswind proficiency.

**Actions planned for the near future as a result of assessment.**

- The department will consider revisions to any AF courses to extend the use of the newly acquired Cessna 172R/G1000 aircraft as determined by the assessment of the use of the Cessna 172R/G100 aircraft during the Spring Semester via the AF curriculum committee and affected AF faculty. It is envisioned that future curriculum refinement will have these aircraft used in AF206 (the instrument flight training course) to a greater extent.

- Continue integration of the Frasca 172R/G1000 TruFlite FTD into existing coursework as allowed by FAR Part 141 (the Federal Aviation Administration’s “Pilot School” regulation).

- Acquisition of additional Frasca 172R/G1000 TruFlite FTD’s to better complement the recently acquired Cessna 172R/G1000 aircraft and better facilitate the migration of their offering into AF206.
• Acquisition of a Frasca Regional Jet (CRJ) FTD as a superior training platform for the AF305 “Airline Operations and Turbine Transition” course. This equipment has been identified in proposed federal regulations as a proposed equipment need for this course and it is likely that these proposed federal aviation regulations will make it an essential piece of equipment for our students seeking employment with air carriers.

• Continue work on SIUC Aviation Flight Practical Test Standards for all courses to improve check ride preparation for students and check ride standardization by check airmen.