

**Central Washington University  
Assessment of Student Learning – Aviation**

**Academic Year of Report:** Fall 2011 to Spring 2012 (inclusive)  
**College:** CEPS  
**Department** Aviation  
**Program** Bachelor of Science in Professional Pilot\*  
Specializations: Flight Officer (FO) & Commercial Pilot (CP)

\*Beginning Fall 2011 the B.S. Flight Technology was split into two degrees: B.S. Professional Pilot and B.S. Aviation Management. Course prefixes were changed to AVP (*Pilot*) or AVM (*Management*) as appropriate.

Check here if your assessment report covers all undergraduate degree programs: [X]

Check here if your assessment report covers all graduate degree programs: [ ]

**1. What student learning outcomes were assessed this year, and why?**

The four learner outcomes listed below were assessed this year because data were collected for all areas (knowledge, skills and attitudes) pertaining to those criteria and programs. The department will assess other specializations in the Aviation Management degree after the department has hired an experienced full-time management faculty member to assist with this task.

**1. Apply the foundational *knowledge, skills and attitudes* necessary to fly commercial transport aircraft in a safe and efficient manner.** This outcome relates to *Department Goal 1* - Provide for an outstanding academic, professional growth experience for students at all CWU locations, *College Goal 2* - Prepare students to participate in an increasingly diverse economy and environment, *University Goals 1* - Maintain and strengthen an outstanding academic and student life on the Ellensburg Campus *and 6* - Build inclusive and diverse campus communities that promote intellectual inquiry and encourage civility, mutual respect and cooperation. Assessments were conducted to meet department and Federal Aviation Administration (FAA) Title 14 Code of Federal Regulations (CFR) Part 141 regulatory and quality of instruction standards.

**2. Interpret, calculate and analyze meteorological, aerodynamic, performance and loading factors to conduct safe and efficient commercial flights.** This outcome relates to *Department Goal 1* (see above), *College Goal 2* (see above) and *University Goals 1 and 6* (see above). Assessments were conducted to meet department and FAA Title 14 CFR Part 141 regulatory and quality of instruction standards.

**3. Demonstrate *knowledge, skills and attitudes* to effectively operate aircraft airframe, powerplant, navigation and communication systems in a multi-crew environment, including crew resource management (CRM), hazardous attitudes assessment, and aeronautical decision making (ADM).** This outcome relates to *Department Goal 1* (see above), *College Goal 2* (see above) and *University Goals 1 and 6* (see above). Assessments were conducted to meet department and FAA Title 14 CFR Part 141 regulatory and quality of instruction standards.

**4. Describe the physiological and psychological limitations to flight crew performance (including personal limitations, hazardous attitudes and antidotes, and pilot decision making) and effectively manage these limitations in the flight environment.** This outcome relates to *Department Goal 1* (see

above), *College Goal 2* (see above) and *University Goals 1 and 6* (see above). Assessments were conducted to meet department and FAA 14 CFR Part 141 regulatory and quality of instruction standards.

## **2. How were they assessed?**

### **A) Methods of Assessment, and B) Who was assessed:**

Outcomes 1, 2, 3, and 4 were assessed at the Ellensburg campus through **national FAA certification written examinations** (25 students enrolled in AVP 142, 20 students enrolled in AVP 242, 22 students enrolled in AVP 354 and 10 students enrolled in AVP 448), **FAA end of course (EOC final) written examinations** (25 students enrolled in AVP 142, 20 students enrolled in AVP 242, 26 students enrolled in AVP 352, 23 students enrolled in AVP 354 and 10 students enrolled in AVP 448), and **FAA EOC practical flight test examinations** (38 students enrolled in lab AVP 103, 16 students enrolled in AVP 203, 10 students enrolled in AVP 301, 17 students enrolled in AVP 306 and 10 students enrolled in AVP 401 who completed these labs by the end of Spring 2012 quarter).

Note: With the exception of AVP 352, taught winter 2012 at the Moses Lake Center (MLC), these courses and examinations were all taught at the CWU campus. With the exception of AVP 352, MLC students transfer in to CWU with equivalents completed at Big Bend Community College.

All examinations were graded based on FAA computer test standards or FAA practical flight test standards pertinent to the certificate or rating for which the student was enrolled.

Skills assessed include the following (non-comprehensive) list of content *knowledge*, operational *skills* and appropriate *attitudes* as applied to each lab course, EOC exam, or FAA certificate as listed in documents FAA-S-8081-14A, FAA-S-8081-4D, FAA-S-8081-12B, or FAA-S-8081-6C with Changes 1 & 2). See [http://www.faa.gov/training\\_testing/testing/](http://www.faa.gov/training_testing/testing/) for full text of those criteria – those documents are far too extensive to include in this report.

Aircraft control (all flight maneuvers required for FAA certifications)  
Flight planning and decision making  
Navigational skills  
Aircraft systems knowledge  
Airport operations  
Air traffic control procedures (VFR and IFR) and radar services  
Meteorological considerations  
Interpretation and application of weather reports and forecasts  
Theory and application of instrument navigation  
Assessment of hazardous attitudes  
Application of pilot decision making skills  
Situational awareness  
Workload management  
Aeromedical factors  
Aerodynamics  
Weight and balance  
Night operations  
High altitude operations  
Federal Aviation regulations and publications  
The National Airspace System  
Airworthiness requirements

Fundamentals of instruction  
Human behavior  
Commercial pilot operations  
Instrument flight rules  
Pilot certification and logbook endorsements  
Flight Instructor responsibilities

In addition, Outcomes 1 through 4 were partially assessed through surveys given to 28 students at the Ellensburg campus who completed AVP 142, 22 students at the Ellensburg campus who completed AVP 242 and 16 students at the Ellensburg campus who completed AVP 354. The Likert-scale survey is designed to measure students' perceptions of their experience in these courses.

Outcome 2 was also partially assessed through pass rates of 36 students who completed AVP 211 Meteorology for Pilots and 22 students who completed AVP 312 Aviation Weather Services. These two courses are not taught by CWU at the MLC, so only Ellensburg students were assessed.

Crew resource management (CRM) skills in Student Learner Outcome 3 were also partially assessed through pass rates of 14 students who completed AVP 489 Turbojet FTD, CRJ-200 winter 2012, spring 2012 and summer (carry-over from spring) 2012 quarters. This course is not offered at the MLC, so only Ellensburg students were assessed.

Outcome 4 was also partially assessed through surveys given to 19 students at the Ellensburg campus who completed AVP 337 Aviation Physiology & Survival (one section) and 13 students at the Moses Lake Center who completed AVP 337 Aviation Physiology & Survival (one section). It was also partially assessed through surveys given to 12 students at the Ellensburg campus who completed AVP 340 Human Factors in Flight (one section). The Likert-scale survey is designed to measure self-perception of improvement of knowledge of the physiological and psychological limitations of pilot performance and improvement in their ability to effectively manage these limitations in the flight environment as a result of taking these courses.

Outcome 1, along with measures of general satisfaction with the CWU and Midstate Aviation flight training program, was partially assessed through a survey given to 9 graduating senior Ellensburg campus Flight Officer (FO) & 3 graduating senior Ellensburg campus Commercial Pilot (CP) students who participated in the "Senior Exit Survey" at the end of the spring 2012 quarter.

**C) When it was assessed:**

**Students were assessed each quarter depending on which FAA course they were enrolled in:**

**Fall quarter 2011:** AVP 103, AVP 203, AVP 301, AVP 306, AVP 401

**Winter quarter 2012:** AVP 103, AVP 142, AVP 203, AVP 242, AVP 301, AVP 306, AVP 352, AVP 401

**Spring quarter 2012:** AVP 103, AVP 203, AVP 301, AVP 306, AVP 354, AVP 448, AVP 401

Students enrolled in AVP 142 and AVP 242 were assessed through a survey administered at the end of winter quarter 2012.

Students enrolled in AVP 354 were assessed through a survey administered at the end of spring quarter 2012).

Students enrolled in AVP 211 Meteorology for Pilots and AVP 312 Aviation Weather Services, were assessed at the end of winter 2012 quarter.

Students enrolled in AVP 489 Turbojet FTD, CRJ-200 were assessed in the quarter they took the course (winter 2012, spring 2012 and summer 2012).

Students who completed AVP 337 Aviation Physiology & Survival and AVP 340 Human Factors in Flight were assessed through surveys administered at the end of their respective quarters (fall 2011, spring 2012).

**3. What was learned? The following tables show stated criteria and goals for each criterion.**

**Criteria 1, 2, 3, 4, 5 and 6 below are applicable to all four student learning outcomes:**

Students will:

1. Apply the foundational knowledge, skills and attitudes necessary to fly commercial transport aircraft in a safe and efficient manner.
2. Interpret, calculate and analyze meteorological, aerodynamic, performance and loading factors to conduct safe and efficient commercial flights.
3. Demonstrate knowledge, skills and attitudes to effectively operate aircraft airframe, powerplant, navigation and communication systems in a multi-crew environment, including crew resource management (CRM), hazardous attitudes assessment and aeronautical decision making (ADM).
4. Describe the physiological and psychological limitations to flight crew performance (including personal limitations, hazardous attitudes and antidotes, and pilot decision making) and effectively manage these limitations in the flight environment.

**Criterion 1: Ellensburg campus students enrolled in FAA ground schools passed national FAA certification written examination on the first attempt with a minimum score of 80%.**

Quarter	Class	*n	Criterion 1 Passed FAA written exam on the first attempt with a minimum score of 80%.		Goal for Criterion 1: 80% of students met criterion 1.		CWU Average Test Score, FAA written		FAA National Average Airmen Knowledge Test Scores (2011 stats)	
			FOI	FIA	FOI	FIA	FOI	FIA	FOI	FIA
Win12	AVP 142	22/25	88%		Exceeded		89%		84.3%	
Win12	AVP 242	9/20	45%		Not Met		79%		78.5%	
Spr12	AVP 354	18/22	82%		Exceeded		89.5%		86.4	
Spr12	AVP 448**	10/10	FOI 100%	FIA 100%	FOI Exceeded	FIA Exceeded	FOI 91%	FIA 84.7%	FOI 74.9	FIA 79.3

\*n = number of students who passed FAA written exam on the first attempt / number of students who completed FAA written exam

\*\* formerly AVP 358

**Criterion 2: Ellensburg campus students enrolled in FAA ground schools passed FAA end of course (EOC final) written examinations on the first attempt with a minimum score of 80%.**

Quarter	Class	*n	Goal for Criterion 2 Passed EOC written exam on the first attempt with a minimum score of 80%.	Goal for Criterion 2: 80% of students met criterion 2
Win12	AVP 142	25/25	100%	Exceeded
Win12	AVP 242	19/20	95%	Exceeded
Win12	AVP 352	14/14	100%	Exceeded
Win12**	AVP 352	11/12	92%	Exceeded
Spr12	AVP 354	23/23	100%	Exceeded
Spr12	AVP 448	9/10	90%	Exceeded

\*n = number of students who passed EOC written exam on the first attempt / number of students who completed EOC written exam

\*\*Taught at MLC

**Criterion 3: Ellensburg campus students enrolled in flight labs passed FAA end of course (EOC) practical flight test examination on the first attempt.**

Quarter	Class	*n	Goal for Criterion 3 % Passed EOC flight exam on the first attempt	Goal for Criterion 3: 80% of students met criterion 3
Fall 11	→ AVP 103	13/16	81%	Exceeded
	→ AVP 203	1/1	100%	Exceeded
	→ AVP 301	3/4	75%	Not met
	→ AVP 306	4/4	100%	Exceeded
	→ AVP 401	6/7	86%	Exceeded
Win 12	→ AVP 103	5/5	100%	Exceeded
	→ AVP 203	0/0	n/a	n/a
	→ AVP 301	3/5	60%	Not met
	→ AVP 306	6/6	100%	Exceeded
	→ AVP 401	1/2	50%	Not met
Spr12	→ AVP 103	14/17	82%	Exceeded
	→ AVP 203	14/15	93%	Exceeded
	→ AVP 301	1/1	100%	Exceeded
	→ AVP 306	6/7	86%	Exceeded
	→ AVP 401	1/1	100%	Exceeded
<b>TOTALS</b>				
<b>Total</b>	<b>AVP 103</b>	<b>32/38</b>	<b>84%</b>	<b>Exceeded</b>
<b>Total</b>	<b>AVP 203</b>	<b>15/16</b>	<b>94%</b>	<b>Exceeded</b>
<b>Total</b>	<b>AVP 301</b>	<b>7/10</b>	<b>70%</b>	<b>Not met</b>
<b>Total</b>	<b>AVP 306</b>	<b>16/17</b>	<b>94%</b>	<b>Exceeded</b>
<b>Total</b>	<b>AVP 401</b>	<b>8/10</b>	<b>80%</b>	<b>Met</b>

\*n = number of students who passed EOC flight exam on the first attempt / number of students who completed EOC flight exam

**Criterion 4: Survey results from 28 students at the Ellensburg campus who completed AVP 142.**

<b>Question:</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>	
1. The AVP 141/142 Private Pilot Ground School has met the requirements required by the Federal Aviation Regulations.			1 4%	6 21%	21 75%	
2. The Private Pilot Ground School training met my expectations.			1 4%	11 39%	16 57%	
3. I feel that the Private Pilot Ground School has prepared me to pass the FAA Written Test.			2 7%	8 29%	18 64%	
4. I was able to understand aircraft performance information and how to go about calculating it.				15 54%	13 46%	
5. The Private pilot ground school gave me an overall good understanding of airplane aerodynamics and aircraft systems.			1 4%	8 29%	19 67%	
6. After the ground school, I am now able to distinguish between the different classes of airspace and identify the rules for each.		1 4%	3 10%	8 29%	16 57%	
7. The Federal Aviation Regulations (FAR's) were presented in a way that allowed me the understand them.			2 7%	9 32%	17 61%	
8. When going through the basic meteorological process, I was able to understand the information being presented.			1 4%	12 42%	15 54%	
9. If I had difficulty on certain subject areas, I was able to obtain help outside the classroom.			4 15%	6 21%	18 64%	
10. I am overall satisfied with the Aviation classes that I have taken so far.			1 4%	8 29%	19 67%	
11. I feel that the Private Pilot Courses (AVP 141, 142, 221, 211) has prepared me to be a safe and competent private pilot.				6 21%	22 79%	
12. I feel that the training received in the FAA 141 ground school classes and the FAA 141 flight training received at Midstate were complementary in terms of timing and instruction.		1 4%	3 10%	8 29%	16 57%	
<b>Total</b>		0 (0%)	2 (<1%)	19 (21%)	105 (31%)	210 (63%)

<b>Quarter</b>	<b>Students Surveyed</b>	<b>n</b>	<b>Goal for Criterion 4</b>	<b>Goals for Criterion 4:</b>
			80% percent agree or strongly agree	80% of students surveyed met criterion 4
Winter 12	AVP 142	28	94%	Exceeded

**Criterion 5: Survey results from 22 students at the Ellensburg campus who completed AVP 242.**

<b>Question:</b> <b>Instrument Pilot Ground School</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
1. The AVP 242/242 Instrument Pilot Ground School has met the requirements required by the Federal Aviation Regulations.				6 (27%)	16 (73%)
2 The Instrument Pilot Ground School training met my expectations.		1 (4.5%)	1 (4.5%)	9 (41%)	11 (50%)
3. I feel that the Instrument Pilot Ground School has prepared me to pass the FAA Written Test.			3 (13.5%)	14 (63.5%)	5 (23%)
4. I was able to understand the flight instruments and understand how they operate.		1 (4.5%)	1 (4.5%)	7 (32%)	13 (59%)
5. Holding was presented to me in a way that allowed me to understand and conduct holding.			3 (13.5%)	8 (36.5%)	11 (50%)
6. Through the instrument ground school, I am now able to interpret and understand instrument approach charts.			2 (9%)	7 (32%)	13 (59%)
7. If I had difficulty on certain subject areas, I was able to obtain help outside the classroom.			2 (9%)	5 (23%)	15 (68%)
8. I have seen program changes occur as a result of the feedback that I have provided.	2 (9%)	2 (9%)	9 (41%)	6 (27.5%)	3 (13.5%)
10. I am overall satisfied with the Aviation classes that I have taken so far.		1 (4.5%)	1 (4.5%)	9 (41%)	11 (50%)
11. I feel that the Instrument Pilot Courses (AVP 241, 242, 312) has prepared me to be a safe and competent instrument pilot.			2 (9%)	10 (45.5%)	10 (45.5%)
12. I feel that the training received in the FAA 141 ground school classes and the FAA 141 flight training received at Midstate were complementary in terms of timing and instruction.		1 (4.5%)	1 (4.5%)	12 (54.5%)	8 (36.5%)
<b>Total</b>	2 (1%)	6 (3%)	25 (10%)	93 (38%)	116 (48%)

Results from question 9, which is structured differently than the rest of the questions above, are included below:

9. The quality of instruction I have received this year compared to last year has:	N/A 2 (7%)	Decreased 2 (20%)	Same 11 (33%)	Improved 7 (40%)
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<b>Quarter</b>	<b>Students Surveyed</b>	<b>n</b>	<b>Goal for Criterion 5</b> 80% percent agree or strongly agree	<b>Goals for Criterion 5:</b> 80% of students surveyed met criterion 5
Winter 12	AVP 242	22	86%	Exceeded

**Criterion 6: Survey results from 16 students at the Ellensburg campus who completed AVP 354.**

<b>Question:</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
1. The AVP 354 Commercial Pilot Ground School has met the requirements required by the Federal Aviation Regulations.				6 (37%)	10 (63%)
2 The Commercial Pilot Ground School training met my expectations.		1 (6%)	1 (6%)	6 (38%)	8 (50%)
3. I feel that the Commercial Pilot Ground School has prepared me to pass the FAA Written Test.			4 (25%)	7 (44%)	5 (31%)
4. The advanced systems were presented to me in a way that allowed me to understand them.			1 (6%)	10 (63%)	5 (31%)
5. I was able to understand advanced aircraft performance information and how to go about calculating it.		1 (6%)	1 (6%)	6 (38%)	8 (50%)
6. The weight and balance and weight shift formula were covered enough to give an understanding of their operations.			2 (13%)	8 (50%)	6 (37%)
7. If I had difficulty on certain subject areas, I was able to obtain help outside the classroom.				3 (19%)	13 (81%)
8. I have seen program changes occur as a result of the feedback that I have provided.	1 (6%)		6 (38%)	6 (38%)	3 (18%)
10. I am overall satisfied with the Aviation classes that I have taken so far.			2 (13%)	5 (31%)	9 (56%)
11. I feel that the Commercial Pilot Courses (AVP 354, 322, 340) has prepared me to be a safe and competent instrument pilot.			1 (6%)	5 (31%)	10 (63%)
<b>Total</b>	1 (1%)	2 (1%)	18 (11%)	62 (39%)	77 (48%)

Results from question 9, which is structured differently than the rest of the questions above, are included below:

9. The quality of instruction I have received this year compared to last year has:	Decreased: 2 (12%)	Same: 7 (44%)	Improved: 7 (44%)
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<b>Quarter</b>	<b>Students Surveyed</b>	<b>n</b>	<b>Goal for Criterion 6</b>	<b>Goals for Criterion 6:</b>
Spring 12	AVP 354	16	80% percent agree or strongly agree	80% of students surveyed met criterion 6
			87%	Exceeded



**Criterion 7 results below apply to Student Learner Outcome 2:** Interpret, calculate, and analyze meteorological, aerodynamic, performance and loading factors to conduct safe and efficient commercial flights.

Ellensburg campus students enrolled in AVP 211 Meteorology for Pilots and AVP 312 Aviation Weather Services who passed the course with a minimum of 80% mastery level.

Quarter	Class	n	Goal for Criterion 7 Passed course with a minimum score of 80%.	Goals for Criterion 7: 80% of students in each course met criterion 7
Winter 12	AVP 211	36	83%	Exceeded
Winter 12	AVP 312	22	95%	Exceeded

**Criterion 8 results below apply to Student Learner Outcome 3:** Demonstrate *knowledge, skills, and attitudes* to effectively operate aircraft airframe, powerplant, navigation and communication systems in a multi-crew environment, including crew resource management (CRM), hazardous attitudes assessment and aeronautical decision making (ADM).

Ellensburg campus students enrolled in AVP 489 Turbojet FTD, CRJ-200 who passed the course with a minimum of 80% mastery level.

Quarter	Class	n	Goals for Criterion 8 Passed course with a minimum score of 80%.	Goals for Criterion 8: 80% of students in course met criterion 8
Fall 11	AVP 489	0	n/a	n/a
Winter 12	AVP 489	2	100%	Exceeded
Spring 12	AVP 489	8	100%	Exceeded
Sum 12	AVP 489	4	100%	Exceeded

**Criterion 9 results below apply to Student Learner Outcome 4:** Describe the physiological and psychological limitations to flight crew performance (including personal limitations, hazardous attitudes and antidotes, and pilot decision making) and effectively manage these limitations in the flight environment.

**Results for 19 students who completed AVP 337 Aviation Physiology & Survival and participated in the survey below at the Ellensburg campus Spring 2012.**

Question: "As a result of taking AVP 337 ...	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. ...my understanding of the physiological aspects of flight has grown considerably."				8 (42%)	11 (58%)
2. ...I'm more confident in my ability to recognize the physiological limitations of flight"				8 (42%)	11 (58%)
3. ... I'm more confident in my ability to successfully avoid the hazards associated with these physiological limitations"			1 (5%)	7 (37%)	11 (58%)
4. ...I believe my ability to make safe aeronautical decisions has significantly improved"				7 (37%)	12 (63%)
Total	0 (%)	0 (%)	1 (1%)	30 (40%)	45 (59%)

Quarter	Students Surveyed	n	Goal for Criterion 9 80% percent agree or strongly agree	Goals for Criterion 9: 80% of students surveyed met criterion 9
Spring 2012	AVP 337	19	99%	Exceeded

**Results for 13 students who completed AVP 337 Aviation Physiology & Survival and participated in the survey below at the Moses Lake Center Spring 2012.**

<b>Question: “As a result of taking AVP 337 ...</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
1. ...my understanding of the physiological aspects of flight has grown considerably.”				3 (23%)	10 (77%)
2. ...I’m more confident in my ability to recognize the physiological limitations of flight”				4 (31%)	9 (69%)
3. ... I’m more confident in my ability to successfully avoid the hazards associated with these physiological limitations”				5 (38%)	8 (62%)
4. ...I believe my ability to make safe aeronautical decisions has significantly improved”				6 (46%)	7 (54%)
<b>Total</b>	<b>0 (0%)</b>	<b>0 (0%)</b>	<b>0 (0%)</b>	<b>18 (35%)</b>	<b>34 (65%)</b>

<b>Quarter</b>	<b>Students Surveyed</b>	<b>n</b>	<b>Goal for Criterion 9 80% percent agree or strongly agree</b>	<b>Goals for Criterion 9: 80% of students surveyed met criterion 9</b>
Spring 2012	AVP 337	13	100%	Exceeded

**Results for 12 students who completed AVP 340 Human Factors in Flight and participated in the survey below at the Ellensburg campus Fall 2011.**

<b>Question: “As a result of taking AVP 340 ...</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
1. ...my understanding of the psychological aspects of flight has grown considerably.”				4 (33%)	8 (67%)
2. ...I’m more confident in my ability to recognize the psychological limitations to flight and avoid them”				3 (25%)	9 (75%)
3. ...I believe my ability to make safe aeronautical decisions has significantly improved”			1 (8%)	5 (42%)	6 (50%)
4. ...I better understand the concepts of crew resource management and as a result I feel I can effectively use all available resources to achieve safe and efficient flight.”			1 (8%)	4 (33%)	7 (59%)
<b>Total</b>	<b>0 (%)</b>	<b>0 (%)</b>	<b>2 (4%)</b>	<b>16 (33%)</b>	<b>30 (63%)</b>

<b>Quarter</b>	<b>Students Surveyed</b>	<b>n</b>	<b>Goal for Criterion 9 80% percent agree or strongly agree</b>	<b>Goals for Criterion 9: 80% of students surveyed met criterion 9</b>
Fall 2011	AVP 340	12	96%	Exceeded

**Criterion 10 results below partially assess Student Learner Outcome 1:** Apply the foundational knowledge, skills, and attitudes necessary to fly commercial transport aircraft in a safe and efficient manner. It is also included to indicate overall general strengths and weaknesses, from the graduate’s perspective, of the CWU and Midstate Aviation flight training program.

Results for 9 graduating senior Flight Officer (FO) & 3 Commercial Pilot (CP) students who participated in the “Aviation Senior Exit Survey” at the Ellensburg campus Spring 2012.

	N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Central Washington University’s Aviation Department programs met my expectations.					3	9
2. This program prepared me for entry into the aviation industry.					1	11
3. I felt confident in the Aviation Department’s faculty knowledge.					4	8
4. Aviation Department faculty were approachable.					1	11
5. Aviation Department faculty effectively taught industry-related material.					1	11
6. Aviation Department faculty varied delivery methods of course material.				2	3	7
7. Aviation Department faculty conducted themselves professionally.					1	11
8. Aviation Department faculty treated me with respect.						12
9. The academic advising provided by the faculty every quarter was useful in completing my degree.	1					11
10. I felt knowledgeable about the activities taking place in the department.					3	9
11. I felt confident in Aviation Department’s part-time lecturer’s knowledge.	1		1		3	7
12. Aviation Department part-time lecturers effectively taught industry related material.	1		1	1		8
13. Text books required for Aviation courses were relevant to course material.					4	8
14. Aviation curricula appear relevant to the aviation industry.				1	1	10
15. I have had an opportunity to provide feedback to the Aviation Department.					1	11

16. Changes occurred as a result of feedback I have provided.	1		1		7	3
17. I understand why changes may not have occurred as a result of feedback provided.	2		1		2	7
18. Aviation Department curricula and Midstate Aviation curricula are complementary.			1	2	5	4
19. Effective communication existed between Midstate Aviation and the Aviation Department.			2	3	5	2
20. Expectations listed in the Standard Operating Procedures in relation to the completion of flight training were reasonable.		1		2	5	4
21. I was scheduled enough on the Master schedule to complete my certificates/ratings on time.				2	4	6
22. Midstate Aviation flight instructors were approachable.			1		2	9
23. Midstate Aviation flight instructors treated me with respect.			1		3	8
24. Midstate Aviation flight instructors returned my inquiries.	1			1	2	8
25. Midstate Aviation flight instructors used scheduled flight time effectively.				2	3	7
26. Midstate Aviation flight instructors used scheduled ground time effectively.				3	3	6
27. I felt confident in Midstate Aviation flight instructors' knowledge.					3	10
28. Midstate Aviation flight instructors conducted standardized instruction.		1		1	2	8
29. Midstate Aviation flight instructors were prepared for lessons.					5	7
30. Midstate Aviation flight instructors were available to meet my scheduling needs.			1	1	2	8
31. Midstate Aviation flight instructors conducted themselves professionally.					2	10
32. The Chief Flight Instructor and Assistant Chief Flight Instructor were approachable.		1	1	1	4	5
33. The Chief Flight Instructor and Assistant Chief Flight Instructor		2			2	8

treated me with respect.							
34. Midstate Aviation office personnel were approachable.					1	11	
35. Midstate Aviation office personnel treated me with respect.					2	10	
36. Midstate Aviation office personnel considerably communicated with me regarding scheduling issues.				1	2	9	
37. Midstate Aviation office personnel considerably communicated with me regarding charges to my account.			1		3	8	
38. Aircraft rental rates are comparable to other flight schools with equivalent aircraft.		4	1	3	1	3	
39. The quality of Midstate Aviation aircraft are above average.				1	2	9	
40. The maintenance of Midstate Aviation aircraft is excellent.					1	11	
41. The flight training I received from Midstate Aviation prepared me well for a career as a professional pilot.	1				1	10	
<i>Please rate the following questions</i>							
42. How would you rate the overall quality of flight instruction received from your flight instructors at Midstate Aviation, Inc.?			1		3	8	
43. How would you rate the overall quality of instruction you received from Aviation Faculty?					2	10	
44. How would you rate the overall quality of the CWU Aviation program?					4	8	
<b>Total</b>		9 (<2%)	9 (<2%)	14 (3%)	27 (5%)	109 (21%)	360 (68%)
<b>Total with "N/As" dropped</b>		-- (0%)	9 (<2%)	14 (3%)	27 (5%)	109 (21%)	360 (69%)

Quarter	Students Surveyed	n	Goal for Criterion 10 80% percent agree/strongly agree and good/very good	Goals for Criterion 10: 80% of students surveyed met criterion 10
Spring 12	Graduating Seniors	12	*90%	Exceeded

\*"N/As" dropped from total to compute percentage for Criterion 10

**Summary:**

- Criterion goal 1 was exceeded in 4 of 5 FAA certification examinations associated with AVP 142, 242, 354 and 448, compared to only 1 out of 8 administered during the previous review period. This significant improvement was brought about by taking the measures recommended in the previous assessment report (e.g., assigned additional homework, created more comprehensive and challenging midterm, stage and final examinations, etc.)
- Mean FAA certification examination scores (Criterion 1) were above national means for 5 out of 5 FAA certification examinations associated with AVP 142, 242, 354 and 448. This is a slight improvement over the previous review period where they were above national mean scores for 7 out of 8 examinations.
- Criterion goal 2 was exceeded in 6 out of 6 FAA end of course (EOC final) written examinations administered in association with AVP 142, 242, 352, 354 and 448. This is a slight improvement over the previous review period where it was exceeded in 6 out of 7 examinations.
- Criterion goal 3 was met or exceeded in 4 FAA end of course (EOC) practical flight examinations associated with AVP 103, 203, 306 and 401, but not met in 1 associated with AVP 301. Last year they were also exceeded in 4 out of 5 courses. These results basically mirror the previous review period except different courses were involved. The percentage who passed the EOC practical flight examination for AVP 301 and 401 during the previous review period was 93% and 72%, respectively. For this review period the percentage for 301 and 401 was 70% and 80%, respectively.
- Survey results continue to improve (Criteria 4, 5, 6, 9 & 10). Responses were very positive with 86% to 99% percent of responses indicating “Agree” or “Strongly Agree” for all surveys administered (this compares to a range of 80% to 93% for the previous reporting period).
  - Survey results improved for AVP 142: 94% of responses were “agree” or “strongly agree;” last year it was 93%.
  - Survey results improved for AVP 242: 86% of responses were “agree” or “strongly agree;” last year it was 84%.
  - Survey results improved for AVP 354: 87% of responses were “agree” or “strongly agree;” last year it was 80%.
  - Average survey results improved for AVP 337 (two sections): 99% of responses were “agree” or “strongly agree;” last year it was 93%.
  - Survey results improved for AVP 340: 96% of responses were “agree” or “strongly agree;” last year it was 91%.
  - Senior Exit survey results remained the same in Spring 2012: 90% of responses were “agree” or “strongly agree;” last year it was 90%.
- Criterion goal 7 was exceeded for students enrolled in AVP 211 and AVP 312. The percentage of students who passed the aviation weather courses with a minimum score of 80 percent decreased slightly to 83% of students enrolled in AVP 211 and remained the same at 95% of students enrolled in AVP 312.
- Criterion goal 8 was exceeded for all 14 senior students enrolled in AVP 489 Turbojet FTD, CRJ-200.
- The above data shows that goals were met or exceeded with the exception of one major area:

**Criterion 3**

- Results for AVP 301 did not meet the goals (7 out of 10 students, or 70%) during the present reporting period, while they did (13 out of 14, or 93%) for the previous period.



**4. What will the department or program do as a result of that information?**

- The department feels that only minor changes are needed to improve the program.
- **Criterion 3**  
Lower performance in AVP 301 may simply be the result of lower participation numbers. For example, an increase from 70% to 80% of students meeting completion standards in this course would only require one additional student (8 of 10 students) to pass the EOC practical examination on the first attempt. Therefore, apart from discussing this with the Chief Instructor at Midstate Aviation, the organization contracted to provide this training, the department does not plan to do anything as a result of this information.

**5. What did the department or program do in response to the feedback from last year's assessment report?**

- Last year's assessment report received the highest possible program scores for all five areas in the *2010-2011 Assessment of Student Learning Report: Feedback for the Department of Aviation*. There were no suggestions for improvement and only one comment: "*Great work on assessing and improving student learning outcomes!*"
- However, there were two suggestions from the feedback provided to the department for the previous reporting period (*2009-2010 Assessment of Student Learning Report: Feedback for the Department of Aviation*). The following suggestions from this feedback document are direct quotations; the department acted on the second suggestion, but was unable to act on the first:
  1. One aspect that the program may seek to review or amend is the linking of course grades to goals. There are many factors involved with the creation of a course grade many of which may not actually be measuring specific goals, skills or attitudes. The program is advised to consider assessing a specific task or assignment in a course which connects to a specific outcome being evaluated.
  2. Were the established standards of mastery, especially for the surveys, set too high or too low?
- The department decided that the standard of mastery for pass rates in upper division FAA-related courses — 90% pass rate with a minimum score of 80% — is unrealistic and was changed to 80% to be consistent with lower division courses.

**6. Questions or suggestions concerning Assessment of Student Learning at Central Washington University:**

-none