

**Kansas State University Polytechnic Campus**  
**Undergraduate Assessment of Student Learning Report**  
**Bachelor of Science in Aeronautical Technology (BATN)**  
**Professional Pilot Option**  
**2016-2017**

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**A. Program Information**

Program: Professional Pilot  
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Program assessment website: <http://www.salina.k-state.edu/aviation/performance.html>

**B. Outcome Reporting**

**Student Learning Outcome**

1. Demonstrate the ability to work on diverse multi-disciplinary teams. (Diversity)
2. Demonstrate a global perspective on sustainable aviation business practices. ( Knowledge)
3. Choose ethical courses of action within the operational environment. (Professional integrity)
4. Demonstrate a lifelong commitment to personal excellence through service and continuing education. (Knowledge)
5. Appraise unsafe operational conditions within the aviation environment. (Professional Integrity)
6. Evaluate the effectiveness of oral and written communication skills. (Communications)
7. Creatively solve technical problems related to the aviation workplace using math and science. (Critical thinking)

**Assessment Method(s)**

SLO 1 (Teamwork) is evaluated in BUS 315 Supervisory Management using a rubric to grade a major assignment submitted in that class. All aviation students take BUS 315. Our expectation is that all students will perform at the acceptable level and that 8 out of 10 will be at the proficient level or higher.

SLO 2 (Global perspective on sustainable business practices) are measure by the number of students we enroll in COT 499 which includes a trip to Europe to study International Project Management, Concepts in Global Logistics, Marketing Italy: Culture and the Italian Tourist Industry, or Marketing and Rural Development. Topics rotate by semester. Our goal is to enroll 10 students each academic year.

SLO 3 (Ethical courses of action) Professional Pilot Students will demonstrate knowledge of ethical decision making by the scores on their final exams in AVT 340 Human Factors. All professional pilot students are required to take AVT 340.

SLO 4 (Lifelong Learning) PPIL 312 students will demonstrate knowledge of the lifelong commitment to continuing education necessary to being a professional. Students are assessed on quizzes covering regulations and instructor responsibilities and professionalism. 80% will score will be acceptable and higher and 70% will be proficient or higher.

SLO 5 (Appraise aviation operations) PPIL 387 and PPIL 416 students will demonstrate knowledge of aviation operations by applying knowledge in identifying and solving problems in professional practice.

SLO 6 (written) is evaluated in ENGL 302 Technical Writing using a rubric to grade a major paper submitted in that class. All aviation students take ENGL 302 and those taking it in the fall, spring and summer semesters are included in our sample. Our expectation is that all students will perform at the acceptable level and that 8 out of 10 will be at the proficient level or higher.

SLO 6 (oral) is evaluated in AVT 445 Aviation Law on oral research presentations. All professional pilot students take this class results are from the fall and spring semesters. Our expectation is that all students will be at the acceptable level and that 8 out of 10 will be at the proficient level or higher.

SLO 7 (Professional Pilot 1) Systems Training requires students to describe the operation and limitations of advance aircraft systems. Seventy five out of 100 students will score 75% or better on the systems portion of the final examination in PPIL 325.

SLO 7 (Professional Pilot 2) All professional pilot students take end of course practical tests for PPIL 113, PPIL 114, PPIL 213, PPIL 263, PPIL 314, and PPIL 483. Our goal is that 8 out of 10 students pass the FAA practical test on the first attempt.

#### Indirect Measures

SLO 1 is measured by the senior survey. Our goal is that 8 out of 10 students will rate their progress on their ability to work as a member of a team as some or very much.

SLO 3 is measured by the senior survey. Our goal is that 8 out of 10 students will rate their progress of understanding the ethical standards of the aviation discipline as some or very much.

SLO 4 is measured by the senior survey. Our goal is that 8 out of 10 students will rate their progress as a lifelong learner as some or very much.

SLO 6 is measured by two items on the senior exit survey. Our goal is that 9 out of 10 students will rate their improvement in oral and written communications as some or very much.

## Results

SLO 1 is assessed by a teamwork project in BUS 315 that is scored with a rubric.

### Team Work Project Data

Students	Years	Unacceptable	70/100 acceptable	80/100 Proficient	90/100 exemplary
34	2014-2015	12	2	7	13
34	2015-2016	9	4	6	13
13	2016-2017	5	0	4	4

SLO 2 Global perspective on sustainable business practices

### COT 499 Enrollment

Years	Students Enrolled
2012-2013	5
2013-2014	8
2014-2015	7
2015-2016	9
2016-2017	7

SLO 3 Ethical courses of action

### AVT 340 – Human Factors Final Exam Data

Students	Years	Unacceptable		70/100 Acceptable		80/100 Proficient		90/100 Exemplary	
		Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
40	2011-2012	4	10%	8	20%	17	42.5%	11	27%
46	2012-2013	1	3%	8	17%	17	37%	20	43%
64	2013-2014	11	16%	11	16%	23	39%	19	29%
37	2014-2015	0	0%	3	8%	16	43%	18	48%
75	2015-2016	2	3%	2	3%	31	41%	40	53%
20	2016-2017	8	40%	1	5%	3	15%	8	40%

## SLO 4 Lifelong Learning

PPIL 312 FIA Regulations Quiz – 3.3.1f									
Students	Years	Unacceptable		70-79		80-89		90-100	
				Acceptable		Proficient		Exemplary	
23	2011-2012	1	4.3%	2	8.7%	2	8.7%	18	78.3%
29	2012-2013	4	13.8%	5	17.2%	5	17.2%	15	51.7%
45	2013-2014	2	4.4%	5	11.1%	11	24.4%	27	60.0%
33	2014-2015	6	18.2%	9	27.3%	8	24.2%	10	30.3%
42	2015-2016	11	26.2%	12	28.6%	4	9.5%	15	35.7%
20	2016-2017	5	25.0%	9	45.0%	2	10.0%	4	20.0%

## PPIL 312 FOI Instructor Responsibilities and Professionalism Quiz – 3.3.1f and 3.3.2.1

Students	Years	Unacceptable		70-79		80-89		90-100	
				Acceptable		Proficient		Exemplary	
24	2011-2012	1	4.2%	0	0.0%	3	12.5%	20	83.3%
29	2012-2013	1	3.4%	0	0.0%	3	10.3%	25	86.2%
46	2013-2014	1	2.2%	4	8.7%	6	13.0%	35	76.1%
33	2014-2015	3	9.1%	2	6.1%	4	12.1%	24	72.7%
41	2015-2016	2	4.9%	3	7.3%	1	2.4%	35	85.4%
21	2016-2017	4	19.0%	1	4.8%	2	9.5%	14	66.7%

## SLO 5

Professional Pilot Students will demonstrate appropriate aeronautical decision making based on meteorological conditions, human factors and safety. 75% of the students will score 85% or better on scenario #2 in PPIL 387 Crew Resource Management 1, and scenario #4 in PPIL 416 Crew Resource Management 2.

PPIL 387 CRM 1 – offered fall semester  
 PPIL 416 CRM 2 – offered spring/summer

2012-2013	Total Students	Unacceptable <75%	Acceptable 75%-84.9%	Proficient 85%-100%	Percentage (PROFICIENT)
PPIL 387	12	4	4	4	33
PPIL 416	16	0	4	12	75
2013-2014	Total Students	Unacceptable <75%	Acceptable 75%-84.9%	Proficient 85%-100%	Percentage
PPIL 387	24	2	6	16	66
PPIL 416	18	0	2	16	88
2014-2015	Total Students	Unacceptable <75%	Acceptable 75%-84.9%	Proficient 85%-100%	Percentage
PPIL 387	12	2	4	6	50
PPIL 416	No data available				

2015-2016	Total Students	Unacceptable <75%	Acceptable 75%-84.9%	Proficient 85%-100%	Percentage
PPIL 387	32	0	14	18	56
PPIL 416	19	0	4	12	63
2016-2017	Total Students	Unacceptable <75%	Acceptable 75%-84.9%	Proficient 85%-100%	Percentage
PPIL 387	18	0	4	10	56
PPIL 416	13	0	6	7	54

### SLO 6 (written)

SLO 6 / AABI Criteria 3.3.1.e is assessed by a written assignment in ENGL 302 Technical Writing that is scored with a rubric. *The reporting for this assessment was modified beginning in Fall 2014. The decision was made to use the class grade for technical writing rather than one individual assignment, as this provides a more holistic view of technical writing skills.*

#### Written Communication

Students	Years	Unacceptable	70/100 Acceptable	80/100 Proficient	90/100 Exemplary
35	2011-2012	8	2	8	17
None Received	2012-2013				
37	2013-2014	3	3	7	24
<i>Assessment changed in fall 2014 to utilize entire class grade rather than one assignment</i>					
38	2014-2015	6	3	16	13
45	2015-2016	5	4	16	20
33	2016-2017	6	5	6	16

### SLO 6 (oral)

Students	Years	Unacceptable	70/100 Acceptable	80/100 Proficient	90/100 Exemplary
34	2012-2013	0	4	15	15
38	2013-2014	1	13	4	23
54	2016-2017	1	0	2	51

### SLO 7 Professional Pilot 1

	Total Students	<75%	>75%	% Proficient
Spring 15	16	0	16	100
2015-2016	42	1	41	98
2016-2017	24	3	21	88

### SLO 7 Professional Pilot 2

	Initial Testing	Total Students	Unacceptable	Proficient	% Proficient
2014-2015	PVT	70	12	58	83
2015-2016	PVT	67	14	53	79

2016-2017	PVT	54	12	42	78
2014-2015	IRA	55	10	45	82
2015-2016	IRA	62	15	47	76
2016-2017	IRA	78	13	55	71
2014-2015	COM	45	7	38	84
2015-2016	COM	31	6	25	81
2016-2017	COM	49	10	39	80
2014-2015	CFI	31	3	28	90
2015-2016	CFI	41	7	34	83
2016-2017	CFI	33	10	23	70
2014-2015	CFII	23	2	21	91
2015-2016	CFII	30	2	28	93
2016-2017	CFII	31	2	29	94
2014-2015	ME	37	3	34	92
2015-2016	ME	38	4	34	89
2016-2017	ME	26	0	26	100

### Assessment 1 Narrative

SLO 1 Needs work. We still have 5 out of 13 at the unacceptable level and only 8 out the 13 or 62% at the proficient level. We desire 80% to be at the proficient or higher level. In looking at the data, some of the students that were included in the data may have dropped the class after this assignment was performed (several scores were zero). Better data collection may yield more usable results.

SLO 2 Needs work. We have around 7 to 8 students going each year. We have had several students express an interest in going to Switzerland for International Marketing/Communications in the spring. We hope to make our goal of 10 students in 2017-2018. We may adjust our goals to be a percentage of our students rather than a hard number.

SLO 3 Needs work. We had a significant decrease in students scoring in the “acceptable” or higher categories. This was also tied with a significant decrease in students enrolling in this required course. We will monitor this to determine if it were an anomaly or a trend.

SLO 4 Met goals. We had a significant decrease in students scoring in the “acceptable” or higher categories. This was also tied with a significant decrease in students enrolling in this required course. We will monitor this to determine if it were an anomaly or a trend.

SLO 5 Needs work. We have 55% of our students at the proficient level. Some of this deficiency may be a result of confusion of crewmember responsibilities. In the fall of 2017, we adjusted this to pair an experienced “captain” with a neophyte first officer for these scenarios.

SLO 6 (Written) Needs work. We achieved 22 out of 33 at the proficient level or higher, but had 6 students at the unacceptable level. We need to identify students who are struggling and get them assistance sooner.

SLO 6 (Oral) Met goals. We are at the 53 out of 54 proficient or higher level with only 1 student at the unacceptable level.

SLO 7 (Professional Pilot 1) Met. We were at 88% at the proficient level.

SLO 7 (Professional Pilot 2) Needs Work. 79% students are at the proficient level which is close to our goal of 80%, but we had 57 out of 271 students at the unsatisfactory level.

### **C. Program Self Review**

#### **Faculty Review of Annual Assessment Data**

The results will be electronically distributed to the faculty so that they could review the results prior to the next department meeting on October 27, 2017. These results will be discussed at that meeting.

#### **Future Plans**

On May 9, 2017, the Professional Pilot faculty met and identified metrics that would more closely measure our accrediting body (Aviation Accrediting Board International) outcomes and our program outcomes. We are also beginning work on using Canvas to gather data for us.