

# AAB International

 <b>Arizona State University</b>	<b>Arizona State University</b>
	<b>Ira A. Fulton Schools of Engineering</b>
	<b>B.S. Aeronautical Management Technology, Air Transportation Management</b>
<b>August 17, 2020</b>	<b>Student Achievement Data</b>

## Program Objectives

The following Aviation Program objectives have been established:

### Societal Relevance and a Community Resource

- Increase opportunities for undergraduate and graduate student academic success and prepare the student for entry into the aviation community upon graduation by strengthening collaboration and partnership efforts with the air transportation industry.
- Seek business and industry input to academic program development to ensure graduates are trained and educated to meet the needs of the air transportation industry.
- Increase collaborative research opportunities with other University Aviation Association (UAA) colleges and universities, particularly those accredited by the Council on Aviation Accreditation, by expanding the graduate program.
- Increase the number of collaborative relationships or partnerships between ASU and businesses, organizations, government agencies, etc.
- Continue to develop specific high altitude physiology short course formats to serve the needs of the air transportation industry that will make the altitude chamber operation self-sufficient.

### Campus Community and Learning Environment

- Attract all qualified undergraduate and graduate students, enhance the number of special opportunities available, increase student academic success, and increase and promote faculty and student involvement in community and public service activities.
- Increase the percent of faculty involved in providing consulting or professional services to the general community.

- Actively enhance opportunities on ASU's Polytechnic campus for women, minorities, individuals with disabilities and veterans, which will prepare the student for transition into the international aviation community upon graduation by developing an appreciation and respect for diversity in the workplace.

### **Core Academic Experiences**

- Create and improve resources available on ASU's Polytechnic campus for instruction, research and creative activity, and professional service.
- Develop opportunities for faculty with extramural funding for research and/or creative activity.
- Increase the percentage of faculty significantly involved in publications, applied projects and professional service, and the number of graduate students supported by extramural funding.

### **Professional Preparation**

- Continue to prepare students with realistic airline-type training and education to easily transition into flight positions.
- Continue to develop the air transportation management concentration by revising the curricula based upon input from industry leaders and, in particular, the Aviation Program Industry Advisory Board.
- Provide students with additional employment opportunities by providing airline dispatcher courses.
- Continue to develop the Air Traffic Management Program by revising the curricula to incorporate changes in the technology, equipment, and procedures used by air traffic controllers and the aviation industry.
- Increase the number of undergraduate and graduate students holding internships during the year. Identify funding sources to increase learning opportunities by integrating leading-edge technology into current academic class activities.
- Continue to develop and improve the academic and operational efficiency of the altitude chamber, and integrating a high-altitude chamber experience into the professional flight and the air transportation management curricula.

### **Scholarship**

- Maintain and improve the intellectual and cultural environment on campus, as well as to identify opportunities for faculty scholarship.
- Increase external funds generated for instruction, research and creative activities, and professional service.
- Increase opportunities for collaborative research with industry and government agencies, and identify areas of possible application for developing technologies to solve current industry problems, such as airport/aircraft noise, hazardous materials, pollution, airport/aircraft security, and air transportation education and training.

- Continue to develop specific research agendas for the high altitude physiology program, pilot screening and selection, and other areas particularly pertaining to applied research and teaching.

## **Program Assessment Measures**

The Aviation Program requires that all courses be evaluated at the conclusion of the academic year with enhancements implemented prior to the fall semester. Courses may also be modified between fall and spring semesters as necessary.

The Arizona State University Academic Program Assessment Report is completed on a yearly basis to also assess learning objectives and program outcomes. This assessment includes a specified measure, performance criterion, results, observations, and program self-assessment. An example of this assessment follows.

Modifications and enhancements to courses and the academic programs are based on input from industry employers, the Aviation Industry Advisory Board (AIAB), evaluation of student achievement by faculty as well as annual assessments conducted by the ASU Office of Evaluation and Educational Effectiveness (UOEEE). Additionally, some changes may also be implemented to conform with Aviation Accreditation Board, International (AABI) accreditation criteria.

## Program Assessment Results

<b>Outcome 1: Demonstrate an ability to apply current techniques and strategies to develop components of the air transportation industry.</b>	
<b>What do these results indicate about the extent to which students from this program possess the knowledge or skill reflected in Outcome 1? How do your results support this conclusion?</b> Please use the space below to indicate whether or not each performance criterion was met and to describe components of the program you believe contributed to this result.	
It is critical that students be able to transfer the knowledge, skills and attitudes into novel situations. The assessment measures below were met.	<b>Outcome 1 met?</b> Yes

<b>Measure 1.1</b>	Students' knowledge will be assessed by development of a profitable airline utilizing the Airline Online simulation utilized in AMT 489.		
<b>Performance Criterion 1.1</b>	This measure will be met if the airlines developed by students exhibit a profit by the completion of the simulation exercise.	<b>Was the Performance Criterion Met?</b> Yes	
<b>Results</b>	Students worked in teams of 3 to develop and operate an airline using an internet-based simulation, Airline Online. In this simulation, students hire, train and pay employees. They have to contend with labor issues, including strikes. They also have to establish a headquarters, purchase/lease and configure their aircraft. Develop routes, schedules and fares. Deal with competition, fluctuating fuel prices, and variations in demand. All student team airlines were successful in achieving profitability in their airlines.		
<b>Number of Observations Included in Assessment (e.g., number of students, papers, projects)</b>	17 teams	<b>Proportion of <a href="#">Target Population Assessed</a></b>	100%
<b>Data Collection Challenges or Issues [if applicable]</b>	None		

<b>Measure 1.2</b>			
<b>Performance Criterion 1.2</b>		<b>Was the Performance Criterion Met?</b>	
<b>Results</b>			
<b>Number of Observations Included in Assessment (e.g., number of students, papers, projects)</b>		<b>Proportion of <a href="#">Target Population Assessed</a></b>	
<b>Data Collection Challenges or Issues [if applicable]</b>			

\*Ideally, the eligible population includes only students enrolled in your program. In cases where vital courses have students from various programs, specify when the population may include non-majors. The measure may be targeting, graduating students, alumni, students in junior level or capstone courses. The measure should be specific and the proportion should be of that group.

**Outcome 2: Demonstrate an ability to utilize aviation management theories to evaluate and develop practical business solutions for air transportation industry problems.**

**What do these results indicate about the extent to which students from this program possess the knowledge or skill reflected in Outcome 2? How do your results support this conclusion?** Please use the space below to indicate whether or not each performance criterion was met and to describe components of the program you believe contributed to this result.

For this measure, student achievement is measured by their success in solving a real-life problem in the aviation industry. Students work in teams of three with an industry sponsor so provide resolution to an issue the sponsor is currently working on.	<b>Outcome 2 met?</b> Yes
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<b>Measure 2.1</b>	Students will complete capstone projects in partnership with industry partners to solve 'real-world' aviation issues.		
<b>Performance Criterion 2.1</b>	Industry partners will provide evaluations of individual student work while working on capstone projects in AMT 491. 80% of students will earn a rating of a 3 or higher on a 4-point scale rubric	<b>Was the Performance Criterion Met?</b> Yes	
<b>Results</b>	Industry partners for all student teams rated team performance above 98%.		
<b>Number of Observations Included in Assessment (e.g., number of students, papers, projects)</b>	7	<b>Proportion of <u>Target Population</u> Assessed</b>	100%
<b>Data Collection Challenges or Issues [if applicable]</b>			

<b>Measure 2.2</b>			
<b>Performance Criterion 2.2</b>		<b>Was the Performance Criterion Met?</b>	
<b>Results</b>			
<b>Number of Observations Included in Assessment (e.g., number of students, papers, projects)</b>		<b>Proportion of <u>Target Population</u> Assessed</b>	
<b>Data Collection Challenges or Issues [if applicable]</b>			

\*Ideally, the eligible population includes only students enrolled in your program. In cases where vital courses have students from various programs, specify when the population may include non-majors. The measure may be targeting, graduating students, alumni, students in junior level or capstone courses. The measure should be specific and the proportion should be of that group.

## Program Self-Assessment

Please summarize how the assessment results for the 2016-17 academic year will impact your academic program in the coming year. Consider what the assessment data indicate are programmatic strengths or weaknesses and areas of possible development.

The assessment results seem to indicate that students are not only learning the requisite knowledge and skills for success in the aviation industry, but are able to apply and transfer that to new, unique situations.

Please summarize how the assessment results for the 2016-17 academic year will impact your assessment process for the coming year. Please consider revisions to your plan, sampling strategies, data collection, or any other areas.

This same assessment criterion will be used again in the future as both activities are culminating events for seniors in the program.

# Graduate Rate and Types of Employment

<b>Concentration:</b>	<b>Year:</b>	<b>Number of Graduates:</b>
Air Transportation Management	2020	27

<b>Bachelor- Aeronautical Management Technology (Air Transportation Management)</b>			
Total Respondents	Still Looking	Employed, Military, Continuing Education and Otherwise Engaged	FSE Employment Rate
5	2	3	60%
		Continuing Ed	ASU- Aviation Management and Human Factors
		Air Transport Components	Account Manager
		Unlisted	Flight Instructor