East Valley Institute of Technology

=IS SUCCESS

# Greetings from EVIT Aviation

EVIT is a public Career and Technical (CTE) High School We are located next to Williams Gateway Airport in Mesa AZ







## What is the purpose of the program?

- Industry has a vested interest in training new pilots and aerospace professionals
- We are like a Prep school for aviation
- EVIT students can get a head start
  - Dual enrollment (currently offered at \$84 credit hr)
  - Industry familiarization
  - Internship opportunities
  - Flight training (cost incurred by students)
  - UAV Program (Future expansion of complete certification)

#### **Boeing's Ganzarski: Training Profession Must Advance**

#### Company Predicts 460,000 New Pilots Needed By 2030

If industry forecasts are correct, there's a severe pilot shortage coming. Boeing says 460,000 new commercial pilots will be needed by the year 2030, at the same time the military is moving wholesale into unmanned vehicles, pinching off a major traditional source of new jet pilots. On Tuesday, a Boeing exec explained what he thinks will be needed to close the gap.



Speaking at the Asia Pacific Airline Training Symposium in Bangkok, Roei Ganzarski, chief customer officer, Boeing Flight Services, said the industry must focus on adopting newer methods of instruction that have proven successful in other fields. It's not just a problem with pilots - Boeing forecasts a need for tens-of-thousands of new instructors, and 650,000 new commercial airline maintenance technicians over the next two decades.

Ganzarski commented, "We must advance the training profession in order to attract and retain the passionate and competent talent needed to train the vast numbers of aviation personnel required. We need to train them in a way that is adaptable to a generation steeped in mobile and on-line technology.

"It should no longer be about an instructor's number of flying hours. The next wave of professional instructors should place greater emphasis on student aptitude to ensure students reach their fullest potential."

To meet the demand for new pilots, Boeing estimates that the training industry will need a minimum of 1,200 new pilot instructors every year for the next twenty years.

#### FMI: www.boeing.com

### FLIGHT (AET) PROGRAM

#### **AIRWAY SCIENCE TECHNOLOGY-FLIGHT**

Associate of Applied Science Degree Airway Science Technology Typical Flowchart for Full-time Student

Prerequisite Semester 1	Semester 2	Semester 3	Semester 4	Semester 5
AET 107 PRIVATE PILOT GOUND SCHOOL 5 CR •	AET207&217 Attitude instruments- Navigation INSTRUMENT PROCEDURES 4 CR •	AET203&213 BASIC AIRPLANE SYSTEMS & AERODYNAMICS-PERF. 4 CR •	AET237 MULTI-ENGINE PILOT GROUND SCHOOL 2 CR •	AET227 CERTIFIED FLIGHT INSTRUCTOR GROUND 4 CR •
AET 110 PRIVATE PILOT FLIGHT LAB 2 CR •	AET210 COMMERCIAL PILOT FLIGHT LAB 2 CR •	AET220 COMMERCIAL PILOT FLIGHT LAB 2 2 CR •	AET240 MULTI-ENGINE PILOT FIGHT LAB .5CR •	AET230 CERTITIFIED FLIGHT LAB 1 CR •
CRE101 Critical & Evaluative READING OR TEST EXEMPT 0-3 CR •	AET115 AVIATION METEOROLOGY 3 CR •	AET215 AIRCRAFT POWERPLANTS 4 CR •	AET225 ADVANCED AIRCRAFT SYSTEMS 4 CR •	COM225 PUBLIC SPEAKING 3 CR •
MAT120 INTERMEDIATE ALGEBRA 5 CR •	CIS105 SURVEY OF COMPUTER INFO SYSTEMS 3 CR •	MAT 187 PRECALCULUS 5 CR •	HUMANTIES ANY APPROVED HUMANTIES COURSE 3 CR •	ECN212 MICROECONOMICS 3 CR •
ENG101 FIRST-YEAR COMPOSITION I 3 CR •	ENG102 OR ENG111 FIRST-YEAR COMPOSTION II OR TECHNICAL WRITING 3 CR •	AET205 AIRCRAFT STRUCTURES, SYSTEMS AND MAINTENANCE 4 CR •	PHY111 GENERAL PHYSICS 4 CR •	AET257 READINGS IN AVIATION 3 CR •
12-18 CREDITS	12-15 CREDITS	19 CREDITS	13.5 CREDITS	14 CREDITS

# <u>What classes are available and</u> <u>what do they consist of?</u>

 The first year for all students is an introductory curriculum known as Aviation Spectrum.





### **Dual Enrollment Classes**

Students have option to pay for college credit

 Grade will be based on college scale if seeking college credit

 Regardless of option, student will receive High School elective credits

### Our "classrooms"

• Extensive use of flight training devices to gain a better understanding of everything from flight controls, aircraft instrumentation, communications, cross country navigation and instrument flying.



# Learning how to rivet



Aircraft systems lab where students are exposed to powerplants and their related subsystems





Student demonstrates wind tunnel to Mark Baker. All students build airfoil and fly in wind tunnel to visualize aerodynamic theories discussed in classroom







#### Use of advanced technology for flight planning



EVIT has partnered with Arizona State University to provide interns from their Airport Operations, and Air Traffic control students





#### Air traffic control / airport operations

Students train in our ATC lab to gain an understanding of operations and communication procedure in a simulated airport environment. Each student gets a chance to practice operations from both a pilot's and a controller's perspective.

Student pictured in front is an instrument rated commercial pilot currently working in Chicago as an Air Traffic Controller



#### Student teams build and fly RC aircraft



### **Events and activities**



SONEX Kit Plane Project Kit donated from local EAA chapter EVIT Aviation students hard at work (on a Saturday)

Dave and first year student Holt Bower

Its starting to look like an airplane



Other EVIT students working on the SONEX project Kit donated from local EAA chapter EVIT Aviation students hard at work (on a Saturday)

 Julia Donahue is an EVIT graduate who still helps. She is now enrolled in the A&P program at CGCC. She was the recipient of the "Extra Effort" Award last year



- Senior Derek Rasmussen (left) is now a maintenance intern at Chandler Aviation.
- Graduate Chris Parker (right) received a scholarship and is now attending Embry Riddle for engineering.









### Second Year

### • Semester 1

– Advanced Aircraft Systems (4cr)

- Aviation Meteorology (2cr)

#### – Prep for Semester 2

- Advanced flight planning
- Combine flight and ATC scenarios
- Brush up on Ground School





- Semester 2 (cont)
- Flight Training for PPSEL
- All "Program Completers" must complete FAA written exam
- Internships
  - We currently have 6 various internship opportunities.
  - Students will work in industry and receive HS credit
  - SELECTIONS WILL BE BASED ON CLASS PERFORMANCE AND INTERVIEW
  - Current positions
    - Maintenance, repair station
    - Airport Operations
    - Student generated





 Congratulations to William on his first solo, his instructor is a prior EVIT aviation student



Donica Wolf and Emma Allinger made history this week for being EVIT's first two Aviation girls to solo an aircraft while still in high school over our East Branch Aviation Campus. Donica flew a Cessna 172 airplane & Emma flew a Robinson R44 helicopter. Congratulations- we are so proud of you!! Great job!



## How did we get started??



# Advisory Committee/ Support

- Guide and support your educational and financial needs
- Made up of local industry partners
  - Flight Schools
  - Collegiate programs
  - Repair centers
  - Airport Operations
  - Retired professionals
  - Industry related organizations
    - EAA, Young Eagles, AOPA, NBAA, local

# Partnership with Arizona Pilots Association (APA)



Aircraft Owner's and Pilots Association President Mark Baker visits EVIT Aviation last Fall and congratulates Ephinee Zarogoza on receiving a scholarship from the Arizona Pilots Association.



#### Visit from Summer Aviation Camp



# Scouting organizations

#### Great community service and recruiting opportunity



#### Visit to Cutter Aviation, local FBO catering to VIPs



### Students support the Copper State Fly In



Taylor Izard and Naomi Castillo showing off their acceptance letter for a full scholarship from Copperstate Fly-In committee to attend the EAA Air Venture in Oshkosh Wisconsin



Jacob and Scott went on to complete their A&P
#### Future Women in Aviation

Cameron is presently working on her Airframe and PowerPlant Certification at CGCC, she also works in an avionics shop at Falcon Field

Sydney received a scholarship from WAI to worl Halana is now a flight instructor for University of North Dakota



Becca attends ASU for Airport Management and also interns with EVIT as an instructor

FATE

# Supporting the local Chamber of Commerce at the Aviation Fascination event



Second student from right, Matt Huerta, is a prior EVIT student currently working as a flight <u>instructor</u>

## Students participate in EAA Young Eagle Event



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#### Relationship with our Aviation Universities







### Aviation Day at State Capitol February 26, 2015

Seniors Derek Rasmussen and Kyle Perry promote EVIT



#### Guest speakers





## Where are they now?

Utilize your alumni, they are a great inspiration!

 Michael Charlton is currently working as a radar controller for Chicago Center. He is the youngest certified controller at his facility.



#### Our newest CFI



Halana Perkins, recently started as a Flight Instructor at the University of North Dakota. She is currently teaching other EVIT students.



### Air Force Academy Cadet



### Embry Riddle student



# So what can you do to get started??

- Gather a support group
- Seek guidance from local aviation schools
- Contact COC for local companies
- Attend aviation related events
- Aviation organizations



### Stop by for a visit



### Questions ??

