

# March 2018 Number 3 **Experimental Aircraft Association**

Chapter 135 News



## Next Chapter Meeting ♦ Saturday, March 10, 2018

Todd Freeland has recently completed an upgrade on his 182 and will discuss the process.

Additionally, we will do a series of roundtable discussions. We are asking that anyone who is considering or decided upon an ADS-B Out solution to bring info on whatever unit rates highest in their considerations to share with others. We will have an Ask The CFI session with discussions on Foreflight and other EFBs. And one of my favorites, catching up on what we have been up to over the winter and what our aviation plans are for the upcoming flying season.

There will be a board meeting at 5:00 with emphasis on plans for programs and activities for the upcoming months. As always, the board meeting are open to everyone and we welcome your input and ideas.

### What is the Aviation Technology Academy?

The Aviation Technology Academy (ATA) program is unique. In existence since 1943 it is one of only two Federal Aviation Administration Airframe and Powerplant (A&P) Part 147 high school level programs in the United States. The Des Moines Public Schools A&P program is a federally sanctioned program that allows high school students and adults to be trained as FAA Certified mechanics. The Aviation program is unique among the offerings available to Central Campus students due to being the only program where a student can not only obtain a Federal A&P license that allows them to immediately obtain employment in the aircraft industry, a field that is in desperate need of technicians and pilots.

Earn an Associates Degree along with their federal Certifications. This is due to their affiliation with Indian Hills Community College which has an adults only companion A&P program and is the college accrediting agency for the ATA.

The ATA is also unique because it also offers post high school students the ability to either complete Certification requirements (if not finished in high school) or start the Airframe,

Powerplant or Pilot training programs. Some students have chosen to complete their Certification post high school. Post high school course work is paid for by the students, not DMPS, as for all Central Campus adult students.

The program also offers FAA Part 141 pilot training and is open to high school, post high school students and adults. The Pilot program includes online ground school with interactive classroom instruction and an FAA approved Aviation Flight Training Device, or AFTD (Flight Simulator).

The program is divided into four main areas of study: General, Airframe, Powerplant and Pilot Training. FAA Certificates certify that the student is qualified to work on aircraft with separate certificates for Airframe and for Powerplant. A student may work on one or both during their time in the program, depending on their desire of study.

The Program teaches all aspects of how to operate, diagnose and repair aircraft from the standpoint of the mechanic and the pilot, including:

- 1. The theory of flight dynamics, fixed wing and rotary
- 2. Troubleshooting of flight systems
- 3. Periodic Maintenance requirements
- 4. Inspection and Repair of airframe components
- 5. Inspection and Repair of powerplants (reciprocating & turbine aircraft engines)

In the A&P course a greater variety of technical skills are taught than taught in all high school programs combined. So a student who is inclined toward a technical career is exposed to a wide variety of possibilities, not just aviation. This includes:

- 1. Electricity (three levels of theory and application)
- 2. Hydraulics and pneumatics
- 3. Fine woodworking
- 4. Sheet metal construction, forming and repair
- 5. Welding (gas, MIG and TIG)
- 6. Composites and fabrics (including carbon fiber and Kevlar)
- 7. Hand tool and Power tool uses
- 8. Precision measuring and calibrating tools (both mechanical and electrical)
- 9. Variety of highly sophisticated testing instruments
- 10. Nondestructive testing methods
- 11. Painting methods and application
- 12. Mathematics
- 13. Physics
- 14. How to read and understand governmental & industrial technical manuals, diagrams and schematics

All classes are approved for and eligible for Military benefits as well as State and Federal student loans.

The Aviation Technology Academy is a unique and valuable resource for all the central Iowa students and adults. The skills learned at the Academy are applicable to a large number of industries seeking people with technical skills.

Submitted by Ralph Briggs



Des Moines Aviation Technology Academy Tour February EAA Chapter 135 Meeting Field Trip





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We have \$280 in YE credits this year so beat the bushes for an applicant to go to EAA air academy. Got a text from a former YE, 2 years ago we gave him a ride and several subsequent rides as he displayed a keen interest. This summer he earned his private license and is attending Embry riddle for aeronautical science and ATP ratings. This was a serious kid, after the first flight I asked him what his aviation interest was and he said" I want to be a captain for South West Airlines". On about his 4th "YE" flight I asked what maneuvers he wanted to do "stalls and slow flight" was the response. So the program works as intended:)

### SPACE BALLET

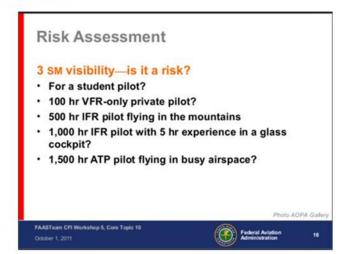
A.J. Hummel, EAA Chapter 135, Vice President



I've been fortunate in my life time to watch just about every space launch, as a kid on the television set in the living or nowadays on the computer. The Space X launch of their Falcon Heavy test rocket and release of a Telsa automobile in space was very cool. How exciting it was to see a new age of space exploration unfolding before our eyes. We've come a long way since the first Mercury launch in the early sixties (1961 actually). Some may be too young to remember, while others may have a favorite mission which might have been of significant importance. Still, we remember that one mission which went wrong and

brought our nation to a standstill and our flags to half-staff. Motionless, we prayed for those astronauts that succumb to circumstances beyond their control. This type of flight is high risk to say the least, although Starman didn't have a lot of training but eamed a slot in history never to be seen or heard from again as he rode off in the Tesla. The short eleven minute launch of the most powerful rockets to date was in itself unbelievable while the Telsa release was something poems are written of or others may see it as a ballet. I'm not schooled in fine arts but I chose the latter.

Pilots learn to manage RISK which is somewhat less or perhaps a different type than an astronaut deals with although the outcome will be the same if you fail to identify, assess severity, what's the probability, accept it and mitigate. So safe flying and manage that RISK. Review the official RISK Management handbook for additional information and refresher. <a href="https://www.faa.gov/regulations\_policies/handbooks\_manuals/aviation/media/faa-h-8083-2.pdf">https://www.faa.gov/regulations\_policies/handbooks\_manuals/aviation/media/faa-h-8083-2.pdf</a>



WEATHER	Improv-	4.00	Yes	No
Starting point		_		
Ceiling within 500° VFR Wx mins				
WX at VFR Mins				
WX below VFR Mins				
En route				
Ceiling within 500' VFR WX mins				
WX at VFR Mins				
WX below VFR Mins				
Destination				
Ceiling within 500' VFR WX mins				
WX at VFR Mins				
WX below VFR Mins				
IFR				
WX for IAP to be flown < 2000-3				
Alternate sirport required				
Forecast WX at alt. <800-2				
WX at or below 400-1				
	1			

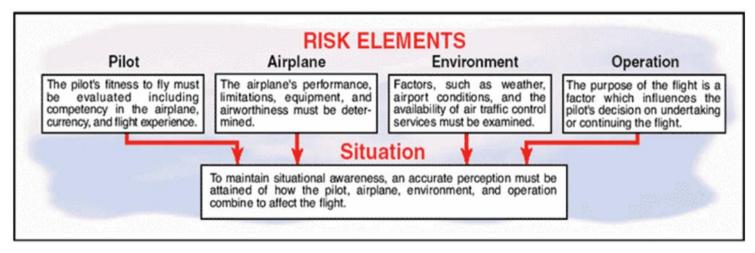
MISSION PROFILE	Yes	No
Night		
Scene, new LZ or no IAP within 5 miles		
Concerns related to availability of fisel		
Terrain (mountainous)		
WX within 500' of mins at destination/alt		
Pilot not recent on IAP to be flown		
Flight conducted overwater		
Winds > 30 kts, gusts > 15 kts		
Severe WX, icing, thunderstorms		

Overall assessment: Can the mission be completed as requested?

Totals from the Weather Chart: For any more than 6 thaded items checked "Yes," exercise extreme caution and re-brief options.

If "Yes" box and adjacent "Deteriorating" box are checked, VFR flight is not recommended or flight should be rejected.

Combined Totals from the Weather and Mission Profile Charts: For any more than 6 items checked "Yes," exercise extreme caution and re-brief options. If in excess of 10 items checked "Yes" or shaded, flight should be rejected.



# Iowa State University's Flying Cyclones

# Ames Fly-In

Saturday April 21st 7am-11am Ames Municipal Airport

Come to the airport to check out cool airplanes and see them in action! All-you-can-eat pancake breakfast and airplane rides available at this family-friendly open house.

# Fly in or Drive in Pancake Breakfast

**Pilot-in-Command - Free** 

Adults - \$10

Children 12 & under - \$6



Questions? www.flying.stuorg.iastate.edu/ Email: flying@iastate.edu

Find us on Facebook!



## Iowa Department of Transportation Office of Aviation Calendar

#### **MARCH 2018**

#### SUNDAY, MARCH 17

Ottumwa Regional Airport (OTM)

Iowa 99s monthly meeting

11 a.m. - 3 p.m.

Phone: 563-650-0342 (Jenny Myren)

Email: iowa@ncs99s.org Facebook: Iowa 99s

Website: http://iowa.ncs99s.org

#### **APRIL 2018**

#### SATURDAY, APRIL 21

Ames Municipal Airport (AMW)

Iowa State Flying Cyclones

Fly-in Breakfast 7 a.m. – 11 a.m.

Email: awinter@iastate.edu

Website: www.flying.stuorg.iastate.edu/ames flyin.php

#### Estherville Municipal Airport (EST)

Iowa 99s monthly meeting

11 a.m. - 3 p.m.

Phone: 563-650-0342 (Jenny Myren)

Email: iowa@ncs99s.org Facebook: Iowa 99s

Website: http://iowa.ncs99s.org

#### WEDNESDAY, APRIL 25 - FRIDAY, APRIL 27

#### 2017 Iowa Public Airports Association Conference

Renaissance Hotel Des Moines, Iowa

515-727-0667 (Sue Heath)

Email: sheath@iowaairports.org

Website: www.iowaairports.org

#### **MAY 2018**

#### SATURDAY, MAY 12 - SUNDAY, MAY 13

Iowa City Municipal Airport (IOW)
lowa 99s compass rose painting

9 a.m. - 5 p.m.

Phone: 563-650-0342 (Jenny Myren)

Email: iowa@ncs99s.org Facebook: Iowa 99s

Website: http://iowa.ncs99s.org

#### **JUNE 2018**

#### SUNDAY, JUNE 17

### Carroll Municipal Airport (CIN)

Iowa 99s monthly meeting

11 a.m. - 3 p.m.

Phone: 563-650-0342 (Jenny Myren)

Email: iowa@ncs99s.org Facebook: Iowa 99s

Website: http://iowa.ncs99s.org

#### **JULY 2018**

#### MONDAY, JULY 23 - SUNDAY, JULY 29

EAA AirVenture Oshkosh, WI 920-426-4800

Email: <a href="mailto:communications@eaa.org">communications@eaa.org</a>
Website: <a href="mailto:www.airventure.org">www.airventure.org</a>

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	Name:	
	EAA No.:	
	Address:	
	Phone:	
	Email:	



## **EAA Chapter 135**

Marc Broer 5285 NW 6th Drive Des Moines, IA 50313-1713

# **Chapter 135 Officers 2018**

President: Ralph Briggs	. 515-554-8187 rbriggs55@gmail.com
Vice President: Al Hummel	. 515-783-9092 hummel7304@gmail.com
Treasurer: Brant Hollensbe	. 515-221-0970 bhollenbe@mchsi.com
Secretary: Brant Hollensbe	. 515-221-0970 bhollenbe@mchsi.com
Newsletter	
Coordinator: Marc Broer	. 515-289-2625 marc@countylineprinting.com
Young Eagles	
Coordinator: Alan Core	. 515-961-4524 indypurr@juno.com
Board:	
	.515-334-3339 stuart@rauhnet.com
Rick Ross	. 515-360-0105 rross7104@gmail.com
Dave Schuler	dave.schuler@rainhail.com
Paul Reinke	. 515-367-2105 preinke@
	energycontroltechnologies.com
Paul Steingrabe	.515-265-1317 casdogs@g.com
Mike Graber	.515-993-3421 mgraber914@msn.com