

Fall South Central Section Meeting Aerospace Education Report October 27, 2018

What we do in Aerospace Education and, in particular, our outreach to bring women and girls into aviation and aerospace is critically important! If your Chapter is not doing at least one Aerospace Activity every year, then it is time to wake up and answer the call of the future! Share your passion for flight!

Pilot Job Demand: Here's what Boeing foresees in the next 10 years: From 2018-2027 an estimated new pilot demand is 790,000 worldwide. Category Breakdown: Commercial: 635,000; Business: 96,000; and Helicopter: 59,000. They also estimate the global fleet to nearly double in that time. In addition, the need for crew members and technicians will increase proportionately.

What might these pilots be flying? For those of us who've enjoyed the building process, this is especially fun, but a jaw-dropper for all. Now they put 3 pilots into it at the last moment. If this is a "Baby" as its name states, isn't it appropriate for a woman to fly it (<https://www.youtube.com/watch?v=DfOFq3fCVdw>)? **CHECK IT OUT!**

Airbus Establishes Pilot Training Program (Kate O'Connor): Airbus announced the launch of its ab initio Pilot Cadet Training Program last week. The company says the program is designed to "help meet global demand for pilots over the next 20 years." Airbus' partner for the program is Escuela de Aviacion Mexico (EAM), which is located close to the Airbus Mexico Training Center in Mexico City.

AvWeb Flash 8/3/2018 (<https://www.avweb.com/eletter/archives/101/4122-full.html?ET=avweb:e4122:513685a:&st=email#231324>)

Don't have a clue where to start or what to offer? The easiest starting place, if you have children or grandchildren, is to **offer to give a presentation** at their school. Long ago we used to the Air Bear program for Kindergarten and First Grade. It was a program to introduce them to the mysteries of the airport and the work people do there. Now a lot of children have more airline miles than I do. And yet there are some, especially disadvantaged youth who have never been to an airport.

Find the local Girl Scout Troop or State organization and offer a **Girl Scout Aviation Day**. It's fun and the scouts can earn an aviation interest badge. There are resources on the SCS website or contact me.

Check out resources on the South Central Section website: (<http://scs99s.org/advisors.htm#Aerospace%20Education>) and The Ninety-Nines International website (<https://www.ninety-nines.org/aviation-and-space-education.htm>) for Aerospace Education ideas.

I am a big proponent of networking rather than re-inventing the wheel. Here are some ideas of where you can go for help and ideas.

The **American Institute of Aeronautics and Astronautics (AIAA)** continues to offer their **Micro Lessons** (www.aiaa.org/MicroLessons/). AIAA is still cranking out excellent lessons with suggested activities lessons on the topic for grades K-2, grades 3-5, grades 6-8 and grades 9-12. Something for everyone!

They now have 72 lessons out there for **free** structured for all ages. I hope maybe some of you went out to look at these outstanding standalone lessons or joined AIAA for FREE as an educator member.



AIAA
SHAPING THE FUTURE OF AEROSPACE

Events Publications

American Institute of Aeronautics and Astronautics

Join Login

Inside This Section

- Aerospace Micro-Lessons
- FIRST LEGO League Grant Program
- Distinguished Mentorship (DM) Program
- DM Program - Speaker Request
- AIAA Foundation Classroom Grant
- AIAA Foundation Educator Achievement Award
- Careers in Aerospace
- Educator Academy
- Educational Resources
- Generation STEM
- STEM K-12 Poster

**Fall South Central Section Meeting
Aerospace Education Report
October 27, 2018**

Lesson 61: Star Wars
Lesson 62: The SR-71
Lesson 63: Weather Patterns in the Solar System
Lesson 64: Asteroid Day
Lesson 65: Neil Armstrong
Lesson 66: The Graf Zeppelin's Polar Expedition
Lesson 67: Asteroid Sample Return Mission (OSIRIS-REx)
Lesson 68: Science, Mathematics, and Art
Lesson 69: Lifting Bodies
Lesson 70: The Aurora Borealis
Lesson 71: Chuck Yeager and the Sound Barrier
Lesson 72: Fire in Space

AIAA also sponsors a number of other programs / opportunities. Check out the side bar above and visit <https://www.aiaa.org/EducationalResources/>.

Drones continue to be in the news these days. Recent natural disasters have been reported upon by news organizations using drone imagery. I bet many of the youngsters you know already have a drone – or want one. Hopefully they know the safety regulations regarding drones. If not – here is a great topic for an Aerospace Education session, made all the more exciting if you have a drone for them to see and maybe fly. A resource for you can be found with your local **Academy of Model Aircraft** (AMA) chapter (<https://www.modelaircraft.org>). Find the nearest club by looking in <https://www.modelaircraft.org/club-finder>. No doubt there is an RC enthusiast nearby to help you.

A personal favorite of mine, and one that grabs youngster's attention very quickly is "**Sector 33**". This is an Air Traffic Control Simulation based on real ATC routes for approach to San Francisco. Visit <https://www.atcsim.nasa.gov/> to learn more or download "Sector 33" for your iPad or Apple phone (<https://www.nasa.gov/centers/ames/Sector33/iOS/index.html>). You can download a demo version to a laptop or computer for use in a group or school setting. I have demonstrated it while youngsters are waiting for their **Young Eagles Flight** at an EAA event. While you are out there, check out all the other fantastic resources on the **NASA website** (<https://www.nasa.gov/offices/education/about/index.html>).

International Aviation Art Contest: Contact your local State Aviation Department and find out if they are sponsoring an Aviation Art Contest. Print some brochures and spread the word to youngsters ages 8-16 ([http://www.nasao.org/wp-content/uploads/2015/09/Final-2019-NASAO-Art-Contest-Brochure WEB.pdf](http://www.nasao.org/wp-content/uploads/2015/09/Final-2019-NASAO-Art-Contest-Brochure_WEB.pdf)).

Civil Air Patrol has an **Aerospace Education Membership** category. Join and enjoy many free aerospace/STEM educational opportunities ranging from receipt of a variety of curriculum materials and STEM Kits to participating in a teacher orientation flight aboard one of our Cessna aircraft at your local airport. This unique membership category is designed for formal or informal educators involved in promoting aerospace/STEM education in classrooms, homeschools, museums, libraries, or other youth organizations (<https://www.gocivilairpatrol.com/programs/aerospace-education/join-as-an-aem/>).

STEM Tidbits: On an erratic basis, I send out an email called **STEM Tidbits** with items I think would be of interest to educators, youth and aviation enthusiasts. The above paragraphs are samples of what STEM Tidbits might contain. If you want to be added to my email group, just

**Fall South Central Section Meeting
Aerospace Education Report
October 27, 2018**

contact me at akwoman86@yahoo.com. It is a blind cc group so I do not share anyone's email address.

Since I became Commander of my local Civil Air Patrol Squadron I find it is more time consuming than I expected. I apologize to South Central Section Ninety-Nines Aerospace Education Chair persons that I have not more actively engaged with you all.

Looking at the SCS Website under Aerospace Education, it appears that no Chapters have submitted any activity updates since 2012! Surely you all have had activities! Don't be shy, tell us what you are doing or have done this year.

1. What activities are you undertaking in your Chapter?
2. Are you connecting with local Girl Scout groups to offer an Aviation Day?
3. How many events have you executed in the last quarter?
4. How can I support your efforts? Do you need activity ideas?
5. Don't forget to visit the Section website (<http://scs99s.org/advisors.htm#Aerospace%20Education>) and The Ninety-Nines International Website (<https://www.ninety-nines.org/aviation-and-space-education.htm>) for Aerospace Education ideas.

Respectfully submitted,

Angie Slingluff
Rio Grande Norte 99s
SCS Aerospace Education Chair

Phone: 907-330-4977
E-mail: akwoman86@yahoo.com