



**SCIENCE, TECHNOLOGY, ENGINEERING &  
MATHEMATICS-AVIATION & SPACE EDUCATION  
(STEM-AVSED)  
UPCOMING EVENTS  
FY-2013**

Greetings Counselors, Ambassadors and STEM AVSED Supporters,

Listed below are upcoming AVSED events and if you wish to participate in any of them, please be sure to receive necessary approval and let me know what event interests you.

**After the event, please report your efforts on the Aviation and Space Education database. To access it, go to:**

[http://interarc.faa.gov/employee\\_application/avsed/](http://interarc.faa.gov/employee_application/avsed/)

Or go to:

*My FAA Home Page, to Tools & Resources, then select Aviation & Space Education then click on Report Your Efforts.*

## **AVSED NOTES**

SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS –  
AVIATION AND SPACE EDUCATION (STEM- AVSED)

Please call Joan at 718-553-3371 or Donna Ann Harze at 718-553-3368 if you need any assistance/information on the STEM AVSED programs. Listed are some of the programs that you may want to promote at events:

**FAA/NASA “Smart Skies” - “Fly By Math” and “Line Up with Math”- Grades 5-9:** Two web-based cost-free STEM programs, with Distance-Rate-Time math problems and the challenge of safe separation of two airplanes with the use of pre-algebra and algebra in Air Traffic Control. Included in these programs are the listing of standards for the teachers, teacher materials/resources with teacher guides, student workbooks, videos, and an air traffic control simulator. [www.atcsim.nasa.gov](http://www.atcsim.nasa.gov) or [www.smartskies.nasa.gov](http://www.smartskies.nasa.gov)

## The New Apps for “Sector 33”:

### ON I-PHONE, I-PAD AND ANDROID BASED DEVICES:

<http://www.nasa.gov/sector33>

**“Real World Design Challenge” (RWDC) - Grades 9-12:** Each year, the Federal Aviation Administration, Parametric Technology Corporation (PTC) and several government and industry partners, create a design challenge for students to utilize their skills in real-world applications of STEM. Each participating school is provided \$900,000 worth of Pro Engineer software to use with the challenge, which they can keep at the completion of the competition. Each state will select its top team which will be assigned several components in addition to their original design for the National Challenge in Washington, DC, next spring. Participation by the states is being accepted on a first come, first served basis. For more information, please contact the leader of this competition, Dr. Ralph Coppola, Director of Global Government and Strategic Education Programs of the PTC Corporation at (703)871-5176 or at: [Rcoppola@ptc.com](mailto:Rcoppola@ptc.com)  
[www.realworlddesignchallenge.org](http://www.realworlddesignchallenge.org)

**Build-A-Plane:** This program is dedicated to promoting aviation and aerospace careers by giving young people the opportunity to build real airplanes. Aircraft construction and restoration projects provide an exciting opportunity to motivate students to learn virtually any facet of STEM when applied to this program. There are many unairworthy aircraft and incomplete kit planes available from donors for a Build-A-Plane project. [www.buildaplane.org](http://www.buildaplane.org)

**Aviation Career Education Academies (ACE):** Educational programs for middle and high school students for one day to one week, co-sponsored with many other organizations. The focus is on Science, Technology, Engineering and Mathematics (STEM) and aviation career exploration and careers in aviation. Students experience instruction in aviation history, the physics of flight, field trips to aviation sites and aviation activities.

[http://www.faa.gov/education/student\\_resources/ace\\_camps/](http://www.faa.gov/education/student_resources/ace_camps/)

**Internships:** Internships can be available to students enrolled from an accredited school as a student volunteer at the FAA. Internships, when available are listed on: [www.usajobs](http://www.usajobs)

**Presentations:** FAA representatives/counselors perform outreach on aviation careers and STEM programs at schools, to educators and the public. At Career Fairs/Expo's information/guidance on careers are given and job opportunities are referred to the USAJOBS website. [www.usajobs.gov](http://www.usajobs.gov)

**Educator/Counselor Workshops:** Scheduled FAA educational programs presented to Educators. Optional use of Video Teleconferencing (VTC) enables outreach to distant areas.

**FAA WEBSITE ON STEM-AVIATION AND SPACE EDUCATION:**

[www.faa.gov/education](http://www.faa.gov/education)

**A NEW JOB SHADOW "WALK IN MY BOOTS" PROGRAM**

This is a collaborative program between AFN's STEM-AVSED Program and Flight Standards. The intent of this program is to give students the opportunity to learn first-hand about careers in aviation maintenance, avionics, and engineering by allowing them to work with professionals in these career fields.

**SCHOLARSHIP AND GRANT/AWARDS INFORMATION:**

[http://www.faa.gov/education/student\\_resources/scholarships\\_grants/aviation\\_scholarships/](http://www.faa.gov/education/student_resources/scholarships_grants/aviation_scholarships/)

**INFORMATIONAL MATERIALS/SUPPLIES**

Please keep in mind when you are participating in an AVSED event, we will try to accommodate you with informational handouts.

Registration is now open for the Team America Rocketry Challenge (TARC 2014) Application Packet posted on: [www.rocketcontest.org](http://www.rocketcontest.org)

Need help forming a team or filling out the packet?  
Email [anne.war@aia-aerospace.org](mailto:anne.war@aia-aerospace.org)

Sponsored by: Aerospace Industries Association

Thank you for your support to the STEM Aviation and Space Education Program.

Sincerely,

*Joan*

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