

# Aerospace Education Newsbrief

from

## CIVIL AIR PATROL

*March 2010*

### ***News Flash!!!.....***

1. **NEW! 24<sup>th</sup> Annual A. Scott Crossfield Teacher of the Year Award “Call For Entries”** – The National Aviation Hall of Fame is seeking entries for the A. Scott Crossfield Teacher of the Year Award, which includes a \$1,500 cash stipend. For details and additional information (including submission forms), go to [www.nationalaviation.org](http://www.nationalaviation.org). The deadline for nominations is **May 1, 2010**.
2. **NEW! AEO Schools for 2010** – To find out about the dates and locations of the 2010 AEO Schools (National and Regional), go to the AE calendar at [www.capmembers.com/ae](http://www.capmembers.com/ae) . As soon as details and registrations have been released, we will add the information to this calendar with a link for more information.
3. **AFA/CAP National AE Cadet of the Year nominations are due to NHQ from Region by March 15**. Nomination forms can be found at [www.capmembers.com/ae](http://www.capmembers.com/ae) under the AFA link or in CAPP 15.
4. **Air Force Association (AFA) AE Grant Cycle Deadline for CAP Educator Grants is March 31, 2009**. Complete the application for the educator grant at: [http://members.gocivilairpatrol.com/aerospace\\_education/aem\\_specific/educator\\_grants\\_and\\_scholarship\\_information.cfm](http://members.gocivilairpatrol.com/aerospace_education/aem_specific/educator_grants_and_scholarship_information.cfm) NOTE: The twenty December Unit Grant Recipients are posted on the Announcements section at [www.capmembers.com/ae](http://www.capmembers.com/ae). The next deadline for AFA Grant cycle for *units* will be June 30, 2010. Information can be found at: [http://members.gocivilairpatrol.com/aerospace\\_education/internal\\_specific/grants.cfm](http://members.gocivilairpatrol.com/aerospace_education/internal_specific/grants.cfm).

### ***Contests, Workshops, Resources and NASA Opportunities.....***

5. **NEW! GLOBE at Night Event Taking Place March 3-16, 2010** – Take part in an international event to observe the nighttime sky and learn more about light pollution around the world. Global Learning and Observations to Benefit the Environment at Night is an easy observation and reporting activity that takes approximately 15-30 minutes. For more information about this event, visit <http://www.globe.gov/GaN>.
6. **NEW! NASA’s Electronic Professional Development Network (ePDN) Offers Certificates for STEM Educators** – NASA’s Learning Environments and Research Network and the Georgia Institute of Technology have teamed up to create the ePDN. Applications are now open for two courses: “How to Represent & Interpret One Variable Data” (**deadline to sign up is March 15, 2010**) and “What is Project-Based Inquiry Learning?” (**deadline to sign up is April 1, 2010**). Certificate programs (52 hours) in robotics, mathematics, Earth/space science and technology are available (individual courses or complete certificate program may be taken for CEUs). For more information, go to <http://www.nasaepdn.gatech.edu>.

7. **NEW! NASA Teams With USA TODAY to Create the No Boundaries Project and Student Contest** – This project is designed to help students explore careers in science, technology, engineering and mathematics (STEM). The goal is for students to work in small groups to develop a creative project (Web site, video, podcast, song, etc.) that markets careers in STEM areas to teens. These student groups will then present their projects to their classmates and a class of younger peers. After completing the projects, groups are encouraged to enter the No Boundaries National Competition. All contest entries must be submitted to USA TODAY no later than **April 15, 2010**. To learn more go to <http://www.usatoday.com/educate/nasa/index1.html>.
8. **NEW! The American Institute of Aeronautics and Astronautics (AIAA) presents the “2010 Inside Aerospace Forum”** – The forum will take place on **May 11-12** in Arlington, Virginia, and will bring together leaders from the United States and abroad for a candid discussion of how to make aviation more energy efficient and “green” and how to effectively use aerospace technology to understand and limit climate change. The theme is “Making a Difference: Aerospace Leadership for Energy and Environmental Challenges.” To find out more, go to <http://www.aiaa.org/content.cfm?pageid=230&lumeetingid=2366>.
9. **NEW! 2010 Life and Work on the Moon Art and Design Contest** – Entries from high school and college students will be accepted in three categories: two-dimensional, three-dimensional and digital, including video on the theme “Life and Work on the Moon.” Entries are due no later than **April 15, 2010**. For more information about the contest, visit <http://artcontest.larc.nasa.gov/>.
10. **NEW! 2010-11 Green Aviation Student Competition** – This challenge invites high school students to propose ideas and designs for future aircraft that use less fuel, produce less harmful emissions and make less noise. The contest spans a full calendar year, so students have multiple opportunities to enter. The deadline for the first round is **May 1, 2010** and for the second round in **December 2010**. Students are asked to submit a well-documented paper and a short video to explain their ideas. For more information, visit [http://aero.larc.nasa.gov/era\\_high/competitions\\_high\\_era.htm](http://aero.larc.nasa.gov/era_high/competitions_high_era.htm).
11. **NEW MARCH Listings! Look for the latest offerings on NASA TV** – The March NASA Television Education File Schedule is found at <http://www.nasa.gov/audience/foreducators/topnav/schedule/index.html>. NASA TV’s main site can be located at <http://www.nasa.gov/multimedia/nasatv/index.html>.
12. **Celebrate the Launch of the Solar Dynamics Observatory with Tweetups and Launch Events** – The Solar Dynamics Observatory launched in February 2010 and many teachers, museums, libraries and individuals participated in the launch. As the process continues, there are many ideas for updated information and involvement activities found at <http://sdo.gsfc.nasa.gov/mission/launch/hostevents.php>. Also, through Twitter, the SDO team has made it possible for anyone interested to have access to materials and assistance. For more information, go to <http://sdo.gsfc.nasa.gov/sdoisgo/>.
13. **NASA Langley Research Center/National Alliance of Black School Educators Lecture Series for 2010** – The last of several free, interactive programs will be broadcast through webcasts March 3, 2010. For information on this webcast event, visit <http://dln.nasa.gov/dln/>.

- 14. Connect with The Space Place and SciJinks through Facebook and Twitter** – The Space Place is an extensive, content-rich Web site from NASA for upper elementary-age kids and their teachers, parents, and anyone else who likes a simple, readable, fun presentation of a wide range of space and Earth science and technology topics – <http://spaceplace.nasa.gov>. (On Facebook, <http://facebook.com/nasaspaceplace> and on Twitter, <http://twitter.com/nasaspaceplace>.)
- SciJinks is a highly interactive Web site that provides middle-school students and audiences of all ages an amazing science education opportunity. Provided by NOAA and NASA, the web site transports visitors to the wild world of weather to learn about predicting global weather patterns – <http://scijinks.gov>. (On Facebook, <http://www.facebook.com/scijinks> and on Twitter, <http://twitter.com/scijinks>.)
- 15. NASA Education’s Act Now page highlights upcoming NASA opportunities available for teachers and students.**  
<http://www.nasa.gov/audience/foreducators/topnav/actnow/index.html>  
[http://www.nasa.gov/audience/forstudents/k-4/home/Act\\_Now\\_Students.html](http://www.nasa.gov/audience/forstudents/k-4/home/Act_Now_Students.html)
- 16. NASA Invites Young People to Take Virtual Space Station Spacewalks** – A new video game based on actual work astronauts performed during the course of several NASA missions is available online. To take a virtual spacewalk in the Station Spacewalk game, visit [http://www.nasa.gov/multimedia/3d\\_resources/station\\_spacewalk\\_game.html](http://www.nasa.gov/multimedia/3d_resources/station_spacewalk_game.html).
- 17. NASA Launches New Careers Web Page** – NASA Education has launched a new Web page that serves as a starting point to learn about jobs at NASA. Visit the site to learn more about scientists, technical experts, engineers, mathematicians, physicists, accountants, astronauts, pilots, astronomers and experts in many other fields. Visit the new NASA Education Careers Web page at <http://www.nasa.gov/education/careers> .
- 18. NSAA (Norton Space and Aeronautics Academy) Teacher Training Opportunity: Goldstone Apple Valley Radio Telescope Program** - The Lewis Center for Educational Research in Apple Valley, California, announces an opportunity for K-12 teachers to participate in a unique program. This program uses radio astronomy to provide an opportunity for students to experience real science and to learn that science is an ongoing and actual discovery is possible. Students and teachers team with scientists to conduct cutting-edge research leading to discovery. In 2010, the teacher training program will also include Radio Jove. Radio Jove is a hands-on educational activity that brings the radio sounds of the sun, Jupiter, the Milky Way galaxy, and terrestrial radio noises to students, teachers and the public. To bring this program into the classroom, teachers must attend a five-day class. Teacher training classes are scheduled to take place at the Lewis Center on **March 8-12, July 19-23, and October 25-29, 2010**. To find out cost and requirements for this program, visit <http://www.lewiscenter.org/gavrt/opportunities.php>. For more information about GAVRT and Radio Jove, visit <http://www.lewiscenter.org/gavrt/> and <http://radiojove.gsfc.nasa.gov> .
- 19. Online Training for Teaching Hands-on Engineering Activities with NASA and DESIGN SQUAD** – an online workshop has been developed for educators and afterschool leaders to build their skills and confidence in guiding kids through engineering activities like those found in the On the Moon Educator Guide from NASA. For more information about this self-guided online workshop go to <http://pbskids.org/designsquad/parentseducators/workshop/welcome.html>.

- 20. The National Museum of the U.S. Air Force Officials Launch Virtual Tour** – Museum officials launched a free museum tour podcast on their website so visitors have access to a wealth of information as they tour the museum. The podcast, available at [www.nationalmuseum.af.mil](http://www.nationalmuseum.af.mil), acts as a virtual tour when visitors are exploring the application on a computer. Tour segments for the Early Years Gallery and Air Power Gallery are now available to the public. More segments will be added throughout 2010.
- 21. The Educational Materials section of NASA’s web site offers classroom activities, educator guides, posters and other types of resources that are available for use in the classroom.** Check out the latest offerings at this wonderful site at <http://www.nasa.gov/audience/foreducators/topnav/materials/listbytype/>. Other resources for educators include: NASA Education Spacesuits and Spacewalks web site at [www.nasa.gov/education/spacesuits/](http://www.nasa.gov/education/spacesuits/); and the new Robotics web site at <http://www.nasa.gov/educators/robotics>.
- 22. “From Earth to the Universe” Exhibit on Display Worldwide** – This collection of astronomical images that showcase the most dramatic views of the universe will be exhibited in over 250 locations throughout the world in 2010. These exhibits, held in public parks, airports, art centers and at other unique sites, will bring the wonders of the universe right to you. To find dates and locations for the exhibit, visit [http://www.fromearthtotheuniverse.org/table\\_events.php](http://www.fromearthtotheuniverse.org/table_events.php). (Click on USA for end-of-year USA locations.)
- 23. NASA Invites You to Send Your Name to Mars** – Submit your name to be included on a microchip that will be sent to Mars as part of NASA’s Mars Science Laboratory mission, scheduled to launch in 2011. The “Send Your Name to Mars” Web page enables anyone to take part in the mission by sending his or her name to the Red Planet. To submit names, visit <http://marsprogram.jpl.nasa.gov/msl/participate/sendyourname/>.
- 24. 2010 NASA Education Resource Showcase Series with Digital Learning Network (DLN)** - NASA presents a series of videoconferences to assist educators in staying current on NASA education resources and related products. During the videoconferences, participants will be able to submit questions to the presenter that will be addressed during the presentation. In the coming months, the following topics will be covered:
- **NASA eProfessional Dev Network – Robotics Course: Mar. 31, 2010, 4-5 p.m. EDT**
  - **MoonWorld: April 28, 2010, 4-5 p.m. EDT**
  - **On the Moon: May 26, 2010, 4-5 p.m. EDT**
- For more information about these videoconferences and to sign up online, visit <http://dln.nasa.gov/dln/content/webcast/>.
- 25. Lockheed Martin, the Space Foundation and SpaceClass announced the launch of a strategic online education collaboration called *Orion’s Path*.** *Orion’s Path* is an interactive lesson on SpaceClass -- the only web-based education program using videos and virtual science labs to engage students in research being conducted for space exploration. Lesson contents meet National Learning Standards for middle school grades and use of the site is free to teachers. To sign up, go to <http://www.lockheedmartin.com/products/Orion/OrionsPath.html>.
- 26. NASA Announces eClips for Educators and Students** – This web-based educational project is offered free to every student and educator in the country, from kindergarten level through lifelong learners. NASA eClips are short, five- to 10-minute video segments available on-demand via the Internet for the current school year. Check out the potential of this project at <http://www.nasa.gov/education/nasaclips>.

**27. National Space Biomedical Research Institute** – This institute focuses on the effects of long-term spaceflight on the human body and how to counter any negative effects it might have. The institute provides educators with valuable teacher activity guides on Bones and Muscles, Food and Fitness, and Sleep and Daily Rhythms. To find out more about NSBRI go to <http://www.nsbri.org>. The link to the teacher guides is <http://www.nsbri.org/Education/Materials.html>.

***Information for Aerospace Education Officers (AEOs).....***

**28. CAPP 15 online**– Aerospace Education Officers will be pleased to know that the newly-revised CAPP 15 (Aerospace Education Officers Handbook) is online under the forms and publications link at [www.capmembers.com](http://www.capmembers.com). The revised CAPP 215 and the AE Specialty Track tests will be available on-line in mid-March.

**29. CAP Aerospace Education Member (AEM) contact information** – CAP Region and Wing Commanders, DCS/AEs and DAEs in each region and wing have accessibility to the names and contact information of Aerospace Education Members in their wings and regions. We would like you to know who these outstanding people are so you can invite them to AE workshops and teacher flights and any other relevant programs that would apply to Aerospace Educators for your area. This information can be found in e-services under Member Reports and Aerospace Education links and requires permissions received from your commander.  
<https://www.caphnq.gov/CAP.eServices.Web/Default.aspx>

**30. CAP Teacher Orientation Program (TOP) Flights** – Wings are making plans for teacher flights in 2010 and are involving teachers in the complete experience by implementing teacher workshops prior to the flights. Invite current AEMs (Aerospace Education Members) and new teachers to join as AEMs and share with them an orientation flight and workshop that will help them get their students excited about aerospace. Remember to keep the Wing Commander and your wing POC (usually the Director of Aerospace Education) informed and supportive of your efforts. Please contact Judy Stone at [jstone@caphnq.gov](mailto:jstone@caphnq.gov) with plans (number of teachers flying, date, and estimated cost). To find out more, go to the Teacher Orientation Program (TOP) Flights section at [www.capmembers.com/ae](http://www.capmembers.com/ae).

**31. Information for CAP Directors of Aerospace Education (DAEs) pertaining to the Yeager Test:** **NOTE: Members taking the Yeager test need only take and pass one of the two tests provided on the Yeager test site. The second test is for those who may need to take the test a second time to receive credit for passing.** CAP members receive immediate feedback when they take the Yeager Test online! After successfully passing the test online, the member will automatically have his/her accomplishment posted to his/her records and the Yeager Certificate will be available for download as a pdf. (NOTE: A Form 127 and CAPC 20 are only needed if the exam is taken with pencil/paper.) This process is streamlining the CAP Yeager test process and making the reporting easier for all concerned. **DAEs can track which wing members have taken and passed the online test by logging in at <https://ntc.cap.af.mil/login.htm> and going to “Test Reports” in the left column of the menu. This link is restricted to those assigned to CAP region or wing HQ and who have specific permissions. If a DAE is not assigned to the wing HQ, he/she should contact the wing commander and ask for specific permissions via the Web Security Administrator.** Remember: This system has tracked the Yeager Award since March 2004, so all of the members that took the Yeager on paper before then were not tracked.

**More AE Information for Educators (AEMs) and AEOs.....**

- 32. 2010 Aerospace Education Excellence (AEX) Award Program-** Make sure that YOUR unit or classroom participates and completes the AEX Award Program to receive a classroom plaque and participant certificates. Any CAP unit or any K-12 teacher who is a CAP member can participate! Apply easily and electronically in CAP e-services. You will receive an email confirmation and your AEX books will arrive in the mail soon after. To receive your unit or classroom plaque and participant certificates, simply fill out the electronic report on line upon completion of the program. To apply and report online, go to <http://www.capnhq.gov> and enter e-services with your password or follow the first time user steps to enter e-services.
- 33. Adams State College Offers Graduate Credit Opportunities for CAP Educators!** Adams State College in Alamosa, Colorado, is offering graduate credit for completing specific requirements in association with CAP's Aerospace Education Excellence Program (AEX) lessons. See [www.capmembers.com/ae](http://www.capmembers.com/ae) for further information, or go directly to [http://www2.adams.edu/extended\\_studies/independent/aex/aex.php](http://www2.adams.edu/extended_studies/independent/aex/aex.php)
- 34. CAP Aerospace Education materials can be ordered online!** AEMs and AEOs can order the tools needed to promote the AE program in their local communities and schools. AEOs can receive a complete set of AE materials for presentation to prospective educators. **Order one copy** of each our materials via our online ordering system. Sign in at CAP's e-services: <https://www.capnhq.gov/CAP.eServices.Web/Default.aspx>. Look on the far right column and find CAP Materials and click Submit Order. You will find a drop down menu where you should choose AE Materials. Fill out the order form and the mailroom will process and fill your order. If you need any further assistance, please contact [ae@capnhq.gov](mailto:ae@capnhq.gov).
- 35. The 2<sup>nd</sup> Edition of the CAP AE textbook, *Aerospace: The Journey of Flight*, and accompanying Teacher's Guide is available for purchase\*\* through Vanguard Industries** – The book may be purchased for \$20.35 and the Teacher's Guide may be purchased from Vanguard Industries for \$8.25 :  
[http://www.vanguardmil.com/store/index.php?main\\_page=index&cPath=6\\_383\\_387&zenid=6044a0e8c93b91526f4cf28cbd681887](http://www.vanguardmil.com/store/index.php?main_page=index&cPath=6_383_387&zenid=6044a0e8c93b91526f4cf28cbd681887).
- \*\*The textbook is also downloadable in CAP e-services. After entering e-services, go to Aerospace Downloads in the left column and click there to see the textbook chapters.*  
<https://www.capnhq.gov/CAP.eServices.Web/Default.aspx>
- 36. Scott Crossfield Foundation web site can be found at:**  
[www.scottcrossfieldfoundation.org](http://www.scottcrossfieldfoundation.org) – To continue the legacy of famed pilot, Scott Crossfield, and CAP's AE Award namesake, you can share memories of Scott Crossfield on this site. If you have a story to tell, you can go to the "Tell A Story" section and add your story. At this site, you may also make a donation to the foundation in order to maintain and perpetuate Scott Crossfield's legacy to teachers.

**37. Satellite Tool Kit (STK) for the Classroom** – Analytical Graphics, Inc. (AGI) is offering the leading off-the-shelf satellite software package to CAP's educator members at no cost. This program is an awesome program to educate about satellites to cadets and students. For licensing and to receive your disk, contact Dr. Jeff Montgomery at [jmontgomery@capnhq.gov](mailto:jmontgomery@capnhq.gov). For more information about STK and CAP's aligned implementation initiatives, go to [http://members.gocivilairpatrol.com/emergency\\_services/advanced\\_technologies/index.cfm](http://members.gocivilairpatrol.com/emergency_services/advanced_technologies/index.cfm).

***Thanks to EACH of you for promoting aerospace education  
all across our great nation!***

***Sincerely, the CAP NHQ AE Team***

