

# Aerospace Education Newsbrief

from

## CIVIL AIR PATROL

*September 2009*

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

- 1. NEW! Special events happening during October:**
  - World Space Week (Oct. 4-10) – [www.worldspaceweek.org](http://www.worldspaceweek.org)
  - Earth Science Week (Oct. 11-17) - <http://www.earthsciweek.org/>
  - Red Ribbon Week (Oct. 17-25) - <http://www.imdrugfree.com/>
  - Character Counts Week (Oct. 18-24) – <http://charactercounts.org/programs/ccweek/index.php>
- 2. AEX Application and Completion Report Now Online!** It is now even easier to participate in the CAP Aerospace Education Excellence Award (AEX) Program. You can go online in CAP e-services and apply electronically and submit your completion report electronically. When you apply, you will receive an email confirmation and soon after you will receive your AEX books in the mail. Upon completion of the program, simply fill out the electronic report online and receive your plaque and certificates in the mail in about 2 weeks. **Apply after Oct. 1 for the 2009-2010 award year!** If you need to find out more go to <http://members.qocivilairpatrol.com/ae> and check under the appropriate AEX column.
- 3. Air Force Association (AFA) grant cycle deadline for CAP Educator Grants is September 30, 2009.** Complete the application for the educator grant at: [http://members.qocivilairpatrol.com/aerospace\\_education/aem\\_specific/educator\\_grants\\_and\\_scholarship\\_information.cfm](http://members.qocivilairpatrol.com/aerospace_education/aem_specific/educator_grants_and_scholarship_information.cfm) . NOTE: Deadline for AFA Grant cycle for units will be December 31, 2009. Information can be found at: [http://members.qocivilairpatrol.com/aerospace\\_education/internal\\_specific/grants\\_and\\_scholarships.cfm](http://members.qocivilairpatrol.com/aerospace_education/internal_specific/grants_and_scholarships.cfm).
- 4. NEW! AFA Now Accepting Applications for Educator Grants** – If you are a teacher and would like to apply for another grant (in addition to the CAP AFA grant), you may apply for a \$250 grant by going to <http://www.afa.org/ae/aid/educator.asp> for an application and further information. The deadline for applications is **November 13, 2009.**
- 5. NEW! ACE Program for 2009-2010:** Although formal registration for the Aerospace Education Connections in Education (ACE) is closed for this year, we still have a few slots available. If you are interested please respond quickly by reviewing the necessary information on our website at [www.capmembers.com/ae](http://www.capmembers.com/ae) and clicking on ACE or emailing [ace@capnhq.gov](mailto:ace@capnhq.gov).

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

6. **NEW! 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>.
7. **NEW! 2010 Team America Rocketry Challenge Accepting Applications** – Registration is open for the Team America Rocketry Challenge 2010, a national model rocket competition for U.S. students in grades 7 through 12. Participation is limited to the first 750 teams, who register by **Nov. 30, 2009**. For more information, visit <http://www.rocketcontest.org/>.
8. **NEW! 2009-2010 Fundamental Aeronautics Student Competitions** – The Fundamental Aeronautics Program has announced its new competitions for the academic year. Students from an accredited high school, secondary school or home school can participate by sending in the notice of intent by **Dec. 15, 2009. (Projects are due March 1, 2010.)** Students from an undergraduate or graduate college or university must send in the notice of intent by **Jan. 15, 2010. (Projects are due May 3, 2010.)** The competition is to research and design an amphibious tiltrotor vehicle with civilian applications.  
For more information about the contest, visit <http://aero.larc.nasa.gov/competitions.htm>.
9. **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.
10. **“Capture the Colorful Cosmos” Astrophotography Project** - Students, teachers, individuals and families can “Capture the Colorful Cosmos” this summer. From July through September 2009, participants can use MicroObservatory, an online network of robotic telescopes controlled over the Internet. Anyone with an email address can use the MicroObservatory robotic telescopes to request electronic images of astronomical objects. Select images from this project will be featured on the NASA and International Year of Astronomy websites beginning on Labor Day. Images must be submitted by **Sept, 30, 2009** to qualify. (Participants 13 or younger will need a parent or guardian to enter their photos for them.) To find out more go to <http://www.cfa.harvard.edu/seuforum/iycosmos/individual.htm>.
11. **“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 2009-2010. 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).
12. **Top Stars Contest for Educators!** - Do you think you're a Top Star? Would you like to be recognized for all the time and effort you put into your lesson plans? U.S. formal (K-12, college) and informal educators are invited to submit their best examples of how they incorporate information from NASA's Hubble Space Telescope to teach science, technology, engineering and mathematics education. Those selected as "Top Stars" and "Gold Stars" will receive national recognition and awards. Top Stars will be selected periodically during the 2009-2010 school year. Entries will be

accepted through **Jan. 2, 2010**. For more information, visit <http://topstars.strategies.org>. **NOTE: You can send a copy of your lesson to [jstone@capnhq.gov](mailto:jstone@capnhq.gov) and we will also consider using it in a future publication and giving you the credit for development.**

- 13. NASA Education Invites Students to Drop Everything!** – Competition for high school and students in grades 6-9, allows students to design and build an experiment that will be operated in a NASA research drop tower. Teams will be competing for the opportunity to participate in the Dropping In a Microgravity Environment (DIME) experiment. Proposals are due on **November 2, 2009**. For more information go to <http://spaceflight systems.grc.nasa.gov/DIME.html> .
- 14. NASA Announces the Waste Limitation Management and Recycling Design Challenge**  
– Students in grades 5-8 can participate in a challenge designed to create a Sustainable Water Recycling System for the moon. Teams of up to six students will design a water recycling system for the unique environment of the moon. The winning team will earn a trip to NASA's Kennedy Space Center in Florida. Entries are due **February 1, 2010**. For more information and contest rules, please visit <http://wlmr.nasa.gov/> .
- 15. Commemorate the 40<sup>th</sup> Anniversary of the Apollo 11 Moon Landing Mission With the New Do-It-Yourself Podcast Topic Module: Rocket Evolution** – Students can easily build a podcast or multimedia product about past, present and future rockets with this NASA collection that puts video, audio, images and information at their fingertips. DIY podcasts modules not only make it easy for students to build multimedia products, but they make it easy for teachers to meet national education standards and to work with other educators to make podcasting projects a cross-curricular activity. To learn more and to start making podcasts, visit <http://www.nasa.gov/audience/foreducators/diypodcast/index.html> .
- 16. 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/> .
- 17. CAP Aerospace Education Institute and Fly-a-Teacher** – This opportunity for AEMs will be held in Seattle, Washington. This is a CAP Pacific Region sponsored workshop. For more go to <http://edgerton.us/aem/> . **Note: This event has been rescheduled for October 9-11, 2009.**
- 18. 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/>: **Space Thrills Poster (Grades K-4); NASA Student Launch Initiative 2009-2010 Flier (Grades 7-12); X-15 To the Edge of Space Poster (All Grades); Comet on a Stick! (Grades 3-5); Black Hole Math (Grades 10-12); Solar Math (Grades 6-11); Image Scale Math (Grades 6-8); Lunar Math – (Grades 6-12); Radiation Math (Grades 6-12).**
- 19. The latest additions include: 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> .

**20. 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> .

**21. 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>

**22. 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>

***Information for Aerospace Education Officers.....***

**23. Fly-a-Teacher Flights** - need to be complete and paperwork for reimbursement filed by the end of the fiscal year – Sept. 30, 2009. Please contact Judy Stone at [jstone@caphnq.gov](mailto:jstone@caphnq.gov) with your plans (number of teachers flying, date, and estimated cost.) We appreciate those wings that have taken advantage of this motivating and educational outreach program this past year and hope that others join the effort in the 2009-2010 fiscal year!

**24. CAP Aerospace Education Member (AEM) contact information** – CAP Region and Wing Commanders, DCS/AEs and DAEs in each region and wing now 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, Fly-a-Teacher events, 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>

**25. Information for CAP Directors of Aerospace Education (DAE) pertaining to the Yeager Test:** CAP members can now 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. 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. If the DAE is not assigned to the wing HQ, please contact [ae@caphnq.gov](mailto:ae@caphnq.gov) for specific permissions. (NOTE: A Form 127 and CAPC 20 are only needed if the exam is taken with pencil/paper.) This process should streamline the CAP Yeager test process and make the reporting easier for all concerned.

**More AE Information.....**

- 26. CAP Aerospace Education materials can now be ordered online!** In an effort to provide AEMs, AEOs, and AE Affiliates the tools needed to promote the AE program in local communities, you can receive a complete set of AE materials for presentation to prospective educators. You can now 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 our mailroom will process and fill your order. If you need any further assistance, please contact [ae@capnhq.gov](mailto:ae@capnhq.gov).
- 27. 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>
- 28. Scott Crossfield Foundation website 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.
- 29. Adams State College Offers Graduate Credit Opportunities for CAP Educators!** Adams State College in Alamosa, Colorado, is offering up to six hours of graduate credit for completing specific requirements in association with CAP's Aerospace Education Excellence Program (AEX) lessons. See <http://members.qocivilairpatrol.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)
- 30. 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.qocivilairpatrol.com/emergency\\_services/advanced\\_technologies/index.cfm](http://members.qocivilairpatrol.com/emergency_services/advanced_technologies/index.cfm).
- 31. Embry-Riddle Offers New Scholarship for CAP Members!** Embry-Riddle Aeronautical University - World-Wide Campus is offering CAP members an opportunity to receive a scholarship for either undergraduate or graduate hours. To find out more about this scholarship, go to <http://members.qocivilairpatrol.com/ae> .
- 32. Look for the latest offerings on NASA TV.** <http://www.nasa.gov/multimedia/nasatv/index.html>

***Thank you for promoting aerospace education all across our great nation!***

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

