

# Aerospace Education Newsbrief

from

## CIVIL AIR PATROL

*August 2009*

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

- 1. CAP will hold its summer National Board in San Antonio, Texas, on Sep 2-5, 2009 –**  
CAP members: Please join us for informative meetings and sessions. AE will hold several sessions during National Board and two new awards will be given at this National Board: Aerospace Teacher of the Year and Aerospace Education Officer of the Year. For registration information, go to <http://www.capmembers.com/>.
- 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. Now is the time to join us for this exciting program! 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. ACE Program for 2009-2010:** There is still time for elementary teachers who are members of CAP to make a reservation to participate in the Aerospace Connections in Education (ACE) Program. Find details, including the reservation link, by clicking "ACE" at [www.capmembers.com/ae](http://www.capmembers.com/ae).
- 5. NEW! 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.

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

- 6. NEW! Training Workshop for Afterschool Universe Astronomy Program** – Afterschool Universe is a hands-on astronomy program targeting middle school settings outside regular school hours. It explores basic astronomy concepts through hands-on activities and focuses on a journey through the universe beyond the solar system. A free, two-day training workshop is being held on **Sept. 10-11, 2009** in Oakland, California. Registration for this workshop is due **August 28, 2009**. Register by visiting <http://universe.nasa.gov/au/register.html>.
- 7. NEW! “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/iyacosmos/individual.htm>.
- 8. NEW! “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).
- 9. NEW! 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. The deadline for the current submission period is August 30, 2009. 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 consider using it in a future publication and giving you the credit for development.**
- 10. 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> .
- 11. 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/> .

- 12. 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> .
- 13. Hands-on Astronomy and Earth Science Education Workshops for Grade 4-12 Teachers on Sept. 12-13, 2009** – A weekend of hands-on workshops and informative science talks will be offered as part of the 120<sup>th</sup> anniversary meeting of the nonprofit Astronomical Society of the Pacific. These workshops will take place at the Westin Hotel near the San Francisco Airport in Millbrae, California. For more information on this opportunity, visit <http://www.astrosociety.org/events/2009mtg/workshops.html>.
- 14. 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/> .
- 15. Education Alley, "Discover What's Out There," returns as part of AIAA Space 2009 Conference & Exposition** – Registration is now open and space is limited! Supported by the AIAA Precollege Outreach Committee, Education Alley will invite pre-college students and teachers to attend presentations, view exhibits, and talk with engineers about the reasons why they have become part of this exciting industry. This event will be held Sep 15-17, 2009, in Pasadena, California at the Pasadena Convention Center. For more information, go to <http://www.aiaa.org/content.cfm?pageid=230&lumeetingid=2272> .
- 16. Entries Now Being Accepted for Top Stars: Educators Invited to Submit Examples of Inspiring Uses of Hubble in Education** – U.S. formal (K-12, college) and informal educators are invited to submit their best examples of using NASA's Hubble Space Telescope for science, technology, engineering or mathematics education. Those selected as "Top Stars" will receive national recognition and awards. Entries will be accepted through **January 2, 2010**. For more information, visit <http://topstars.strategies.org>.
- 17. CAP Aerospace Education Institute and Fly-a-Teacher** – This opportunity for AEMs will be held in Seattle, Washington on August 8-9. 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 2009 Exploring Space Lectures** will feature world-class scholars discussing astronomy, the vastness of the universe, the search for Earth-like planets and our unpredictable sun. The lectures will be held at the National Air and Space Museum in Washington, D.C., and are free to attend. Tickets are required. If you are unable to attend the lectures, they will be webcast live for free viewing online. Lecture videos will also be archived. For complete program and dates, go to <http://www.nasm.si.edu/events/lectures/esls/esls.cfm> .

19. **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).**

20. 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> .

21. **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> .

22. **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>

23. **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.....***

24. **NEW! Fly-a-Teacher Flights** - need to be complete and paperwork for reimbursement filed by the end of the fiscal year – Sept. 30, 2009. If you have teacher orientation flights that you need to get in before the end of the year, there is still some money left to accomplish this. 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!

25. **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 program 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>

**26. 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@capnhq.gov](mailto:ae@capnhq.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.....**

**27. CAP Aerospace Education materials can now be ordered online!** AEMs, AEOs, and AE Affiliates can now order one copy of 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).

**28. The 2<sup>nd</sup> Edition of the CAP AE textbook, *Aerospace: The Journey of Flight* and accompanying Teacher's Guide is now 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>

**29. Scott Crossfield Foundation website can be found at:**

[www.scottcrossfieldfoundation.org](http://www.scottcrossfieldfoundation.org) - 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 Scott Crossfield's legacy to teachers.

**30. Adams State College Offers Graduate Credit Opportunities for CAP Educators!** Adams State College in Alamosa, Colorado, is now 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.gocivilairpatrol.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)

**31. 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. For licensing and to receive your disk, contact Dr. Jeff Montgomery at [jmontgomery@capnhq.gov](mailto:jmontgomery@capnhq.gov) .

**32. See what STK (Satellite Tool Kit) Training is available for 2009.** Go to:

[http://members.gocivilairpatrol.com/emergency\\_services/advanced\\_technologies/index.cfm](http://members.gocivilairpatrol.com/emergency_services/advanced_technologies/index.cfm) and scroll down the page to: STK "Intro to STK" training session locations for 2009.

**33. 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.gocivilairpatrol.com/ae> .

**34. 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***

