

Aerospace Education Newsbrief

from

CIVIL AIR PATROL

November 2009

ATTENTION! We will begin sending out our E-Newsbriefs on the first of each month.

News Flash!!!.....

- 1. 2009-2010 AEX Award Program-** Make sure that YOUR unit or classroom participates and completes the AEX Award Program to receive 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. For more details, go to www.capmembers.com/ae and check under the appropriate AEX column for CAP units (Aerospace Education Officers) or for schools (Aerospace Education Members).
- 2. Air Force Association (AFA) AE Grant Cycle Deadline for CAP Unit Grants is December 31, 2009.** Complete the application for the unit grant at: http://members.gocivilairpatrol.com/aerospace_education/internal_specific/grants.cfm.
NOTE: The twenty September Teacher Grant Recipients are found at the Announcements section at www.capmembers.com/ae. The next deadline for AFA Grant cycle for educators will be March 31, 2010. Information can be found at: http://members.gocivilairpatrol.com/aerospace_education/aem_specific/educator_grants_and_scholarship_information.cfm
- 3. 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/aef/aid/educator.asp> for an application and further information. The deadline for applications is **November 13, 2009** with recipients named in January.
- 4. K-6 ACE Program for 2009-2010:** Although initial registration for the K-6 Aerospace Education Connections in Education (ACE) Program is closed for this year, we still have a few slots available. This grade level specific program is open to any teacher member of CAP. If you, or a teacher you know, may be interested in integrating this exciting aerospace-themed program for grades K-6 into the curriculum, please respond quickly by reviewing the necessary information on our website at www.capmembers.com/ae and clicking on ACE or emailing ace@capnhq.gov.

Contests, Workshops and NASA Opportunities.....

5. **NEW! Disney Parks and NASA “Launch” Buzz Lightyear Mission Patch Design Challenge** – This design challenge is for children 6-12 years of age in the 50 United States and District of Columbia. Now, through Nov. 6, children and parents can go online and download materials to design a custom Buzz mission patch. Along with the mission patch design, children must submit a brief essay (up to 100 words) discussing the inspiration for their design. The winner, parent and two guests will receive a three day, two night vacation to Walt Disney World Resort in Lake Buena Vista, Florida, as well as a VIP tour of the Kennedy Space Center in Cape Canaveral, Florida. For more, visit www.DisneyParks.com/Buzz .
6. **NEW! Compete for Prizes and Build Students’ Science Skills with ExploraVision** – The ExploraVision competition awards more than \$240,000 in savings bonds each year to winning teams. K-12 students in small groups (2-4), led by a teacher/coach, create a vision of future technology relevant to their lives or to society in general. To get more details, visit <http://www.dmail.exploravision.org/?lid=evm20090928> .
7. **NEW! 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 .
8. **NEW! 2009-2010 NASA Education Resource Showcase Series** – NASA’s Digital Learning Network (DLN) presents a series of videoconferences to assist educators in staying current on NASA education resources and related products. Check out the events planned for November 2009 through May 2010 by going to <http://dln.nasa.gov/dln/content/webcast/> .
9. **NEW! 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> .
10. **NEW! NASA Exploration Launches “My Exploration” Web Site** – On **October 28, 2009**, NASA launched the first flight of a new era with the flight test of the Ares I-X rocket. In recognition of the flight test, NASA has launched a new Web site to involve the public in the exciting and historic event. To find out about the videos you can post and the links to latest news and information on Flickr, Facebook, Twitter and YouTube, go to <http://www.nasa.gov/myexploration> .
11. **NEW! NASA Endeavor Science Teaching Certificate Project to Begin Accepting Applications for Cohort 2** – This project awards one-year fellowships each year to over 40 current and prospective teachers. Endeavor Fellows take five graduate courses in an innovative, online format from the comfort of their home or school. Applications for Cohort 2 and will be accepted through **Nov. 10, 2009**. For more information, visit <http://www.us-satellite.net/nasa/endeavor/index.cfm>.

- 12. NEW! NASA Teacher Training Opportunity: Goldstone Apple Valley Radio Telescope Proram** - The Lewis Center for Educational Research 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> .
- 13. 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>.
- 14. 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/>.
- 15. 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>.
- 16. 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 , 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.
- 17. “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. (Click on USA for end-of-year USA locations.)

- 18. 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 and we will also consider using it in a future publication and give you the credit for development.**
- 19. 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/>.
- 20. Commemorate the 40th 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>.
- 21. 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/>.
- 22. 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).
- 23. Look for the latest offerings on NASA TV at <http://www.nasa.gov/multimedia/nasatv/index.html>. The November NASA Television Education File Schedule is found at <http://www.nasa.gov/audience/foreducators/topnav/schedule/index.html>.**
- 24. 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>.

25. 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> .

26. 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>

27. 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.....

28. CAP Fly-a-Teacher Flights – We are ready to begin a new year flying teachers so get your plans set for the 2009-2010 fiscal year. Invite new AEMs (Aerospace Education Members) in your wing to receive an orientation flight and get their students excited about aerospace. Or, invite teachers in your community to become AEMs and fly. 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@capnhq.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! To find out more, go to the Fly-a-Teacher section at www.capmembers.com/ae.

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, 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.capnhq.gov/CAP.eServices.Web/Default.aspx>

30. Information for CAP Directors of Aerospace Education (DAE) pertaining to the Yeager Test: 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 should streamline the CAP Yeager test process and make 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. If the DAE is not assigned to the wing HQ, please contact ae@capnhq.gov for specific permissions.**

More AE Information.....

- 31. CAP Aerospace Education materials can be ordered online!** AEMs and AEOs can now 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. 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.
- 32. The 2nd 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.
***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>
- 33. Scott Crossfield Foundation website can be found at:** 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.
- 34. 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 <http://members.gocivilairpatrol.com/ae> for further information, or go directly to http://www2.adams.edu/extended_studies/independent/aex/aex.php
- 35. 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. For more information about STK and CAP's aligned implementation initiatives, go to http://members.gocivilairpatrol.com/emergency_services/advanced_technologies/index.cfm.

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

Sincerely, the CAP AE Team

