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CyberPatriot I a Huge Success

The 26-27 February 2009 Concept Demonstration of a National High School Cyber Defense Competition was held in Orlando, FL, in conjunction with AFA's 25th Annual Air Warfare Symposium. Seven Air Force Junior Reserve Officer Training Corps (AFJROTC) teams and one Civil Air Patrol (CAP) team from the greater Orlando area competed — all were given names of prominent former Air Force or Civil Air Patrol Leaders. Winners were selected on each day of the competition, and Team Spaatz (for General Carl "Tooley" Spaatz, first USAF Chief of Staff) took Thursday and Overall honors. Friday's winner was Team Wilson (for Gil Robb Wilson, CAP co-founder), a composite team from the Florida CAP Wing.



General Norton Schwartz, Chief of Staff, USAF, talks with Team Schriever of Dr. Phillips HS, during *CyberPatriot I*.

CyberPatriot I got high marks from the participants, with all praising the network security knowledge they gained and voicing a strong desire to attend next year's competition. Over half of the students said they were more likely to attend college as a result of the experience.

The competitors faced a series of cyber attacks and their mission was to defend and maintain service on a virtualized network of computers representative of a typical commercial network. The teams competed on a commercial platform called *TeamDefend*, donated by Science Applications International Corporation (SAIC). SAIC personnel led by Chief Systems Engineer Duke Ayers performed the functions of "Red Team" (the attackers) and "White Team" (exercise administrators). Jim Jaeger of General Dynamics Advanced Information Systems served as overall "Referee" for the competition.



Day One Winners and Overall *CyberPatriot I* Champions, Team Spaatz of Osceola HS, Kissimmee, FL, are flanked by General Stephen Lorenz, Commander AETC, and Vice Chairman for Aerospace Education, S. Sanford Schlitt,

(CIAS) at the University of Texas at San Antonio. CIAS hosts the National Collegiate Cyber Defense Competition. White is also an Air Force Reserve Colonel assigned to Air Force Cyber Command (Provisional).

The competition was led by Professor Greg White, Director of the Center for Infrastructure Assurance and Security

AFA Attends NSTA National Conference

AFA hosted an informational booth during the National Science Teachers Association (NSTA) National Conference, held in New Orleans, 19-22 March 2009. During the four-day conference, over 500 attendees visited the AFA booth and took away information on local chapters, grant and scholarship opportunities, as well as membership. Ann Sagle and Hurlburt Chapter member Jeri Martin manned the booth. Jeri's temporary duty costs and attendance fees were covered by the Hurlburt Chapter. Bill Yucuis, AFA Central Florida Chapter Executive Vice President was also in attendance, sponsored by *USA TODAY*. Bill and his school were winners of the *USA TODAY* 2008 No Boundaries competition (see next article). On Saturday, AFA and *USA TODAY* held a 90-minute joint workshop for attendees. Also in attendance, were a number of AFA members, former chapter and state teachers of the year, and former AEF Board members. This was AFA's fifth year participating in this event. Held annually, the National Conference attracts over 8,000 STEM educators.

***USA TODAY* — No Boundaries: An Exploration of STEM Careers**

No Boundaries, a *USA TODAY* education initiative in partnership with NASA, encourages students to explore future careers in science, technology, engineering, and math (STEM). Students explore STEM careers through stimulating project-based learning and team competition.

No Boundaries targets students in grades 7-12 and is designed as a team-centered cooperative learning program. No Boundaries is cross curricular, requires minimal teacher preparation, aligns to national standards, and includes assessment rubrics. Students who submit their final No Boundaries career presentation projects to the National No Boundaries competition are eligible to win cash awards and VIP passes to a NASA shuttle launch. For more information, visit www.noboundaries-stemcareers.com. While there, be sure to click on "Meet the 2008 Winners." The first winner that appears is from Lyman High School, Longwood, FL, and if you click on the teacher's name, you'll find a nice article about AFA Central Florida Chapter Executive Vice President, Bill Yucuis the teacher of one of the 2008 winners!

AFA Participates in *USA TODAY* Education Advisory Panel

On Thursday, 12 March 2009, Ann Sagle participated in the *USA TODAY* Education Advisory Panel meeting. AFA has held an advisory position with *USA TODAY* Education since 2004. This year's panel discussions included conversations about using *USA TODAY* as a source for student reading in science, technology, engineering and math. Keynote speakers Dr. James Williams and Dr. Folasade Oladele of the Buffalo, NY, public schools, addressed the needs of students in underperforming schools for resources to increase their reading proficiency and thereby their scholastic achievement in all subject areas, including math and science. It was noted that the Miami Dade Public Schools (FL) have adopted the *USA TODAY* program as their standard reading program of choice, and that the Hillsborough (FL) School District is also using the *USA TODAY* program as their reading resource of choice. AFA and *USA TODAY* have been educational partners for 18 years.

Field Trip Brings Inspiration to North Carolina AFJROTC Unit

The South West Edgecombe High School AFJROTC unit (NC-945) returned from a Curriculum in Action (CIA) trip to the Smithsonian Institute and Kitty Hawk, North Carolina. They used the inspiration of the trip to build their own full scale mockup of the original Wright Flyer. When they asked their instructors if they could build the replica, instructors thought the cadets wanted to build a scale model.



The Wright Flyer debut in a Pinetops, NC, parade.



Cadets mate the upper wing on their Wright Flyer

Not so! At no cost to the Air Force, mentors guided the cadets through a project most adults would not attempt. In the end, this project brought together the school and community. The cadets at NC-945 know they can succeed in life by Aiming High and working together as a team.

The AFJROTC instructor is now trying to find a home for the replica that will preserve the cadets' efforts. **If you know of anyone near Rocky Mount or Goldsboro, NC, who would be interested in housing/displaying the Flyer, contact Greg Winn, at AFJROTC at: Greg.Winn@MAXWELL.AF.MIL.**

2009 AIAA Foundation Educator Achievement Award

Jeri Martin, Hurlburt Aerospace Education member, Hurlburt and Florida Region Teacher of the Year, former Aerospace Education Foundation Trustee and 8th grade physical science teacher in Pace, Florida, is one of seven nationally chosen American Institute of Aeronautics and Astronautics (AIAA) Foundation Educator Achievement Award winners. She will be honored at the AIAA Aerospace Spotlight Awards Gala in May at the Ronald Reagan Building and International Trade Center in Washington, DC.

The AIAA Foundation presents the Educator Achievement Award every two years to precollege educators demonstrating exemplary efforts in exciting K-12 students about the study of mathematics, science, and related technical studies and preparing them to use and contribute to tomorrow's technologies.

2009 AIAA and AFA Partner on *Inside Aerospace*

Limited time to SAVE \$100 to attend *INSIDE AEROSPACE*! This forum for aviation and space leaders is set for 12-13 May 2009 at the Doubletree Hotel Crystal City in Arlington, VA. The theme of *Building and Retaining the Aerospace Workforce* convinced AFA to partner with AIAA in developing the forum agenda, and an impressive array of presenters is already on board. Early registration (and the \$100 savings) ends 13 April – check out: <http://www.aiaa.org/content.cfm?pageid=230&lumeetingid=2206> for more details!

Aerospace Education Council Exploratory Team Provides Findings

An AEC Exploratory Team composed of Boyd Anderson, Grant Hicinbothem and Mike Peters completed a study on the current support states are providing for Aerospace Education activities. A briefing was presented to the AEC in Orlando in February, and it will be presented to the Region Presidents in April. General recommendations drafted by the team are: the Aerospace Education Council should accumulate data for all AE Foundations and Organizations, use this data to inform and assist states, and that the Aerospace Education Council should continue to increase the visibility of the AE mission and resources. Results of the study are available at http://www.afa.org/members/AENews/Mar09/AEC_Exploratory_Team.pdf

Visions of Exploration Newsletter

In last month's Aerospace Education Newsletter, the story "The New Visions Newsletter is a Must See" touted the combined *USA TODAY* and AFA e-news website. If you haven't already done so, click on the link and peruse the March issue: http://www.usatoday.com/educate/afa/monthly_news/march2009/3-11-09.html

Alan Shepard Technology in Education Award

Rick Soria, Hurlburt Aerospace Education member, has been named the 2009 recipient of the Alan Shepard Technology in Education Award. Given by the Astronauts Memorial Foundation (AMF), the National Aeronautics and Space Administration (NASA), and the Space Foundation, the award will be presented March 30 during the Opening Ceremony of the 25th National Space Symposium in Colorado Springs, Colorado.

Soria was selected for his role in creating the Engineers for America (EFA) program, an innovative elementary school initiative that promotes science, technology, engineering and math (STEM) education through hands-on flight, aviation and aerospace activities. The program has two major components: a two-day "Teach the Teacher" workshop that prepares teachers to use aviation-based resources and activities to integrate STEM into the classroom; and one-day "Reach the Student" events at the U.S. Air Force Armament Museum near Elgin Air Force Base which gives students a unique opportunity to conduct experiments in an interesting and inspiring venue.

AFA Pitsenbarger Awards Presented at Travis AFB

Pitsenbarger Awards provide a one-time grant of \$400 to selected top USAF enlisted personnel graduating from the Community College of the Air Force (CCAF) who plan to pursue a baccalaureate degree. The grants coincide with the CCAF graduation ceremonies held each Spring and Fall. The Fall 2008 graduation and scholarship presentation occurred at Travis AFB on November 13, 2008. Chapter 113 Treasurer George “Buck” Buchanan attended and assisted in the presentation at the CCAF Graduation. Recipients of the Pitsenbarger Award at Travis AFB in 2008 were: Jacob Bergholtz; Shannon Briot; Javier Flores; Joseph Hartman; Trista Jacobson; Matthew Kuffer; Mario Mason, Jr.; Christopher Paul; Anthony Ross; and Laura Young.

AFA Florida Hosts Annual JROTC Drill Competition

The 2009 AFA (Florida) 21st Annual AFJROTC Drill Competition was held on March 14, 2009, at the University of Central Florida (UCF) Campus, Orlando, Florida. This competition was organized and conducted by the Cadre and ROTC Cadets of UCF Detachment 159. AFJROTC units from 17 Florida high schools participated.

Forty-nine trophies were awarded: five in the Individual Drill Routine (IDR) category, twenty-one each in the Color Guard and Drill Team categories, one for the Best of Meet, and one for Overall Excellence. In addition to the four Top Trophies, first through fifth place trophies were awarded in each of the eight divisions under the Drill Team and the Color Guard categories and the Individual Drill Routine.



Tim Brock, AFA Florida President presents top awards to Florida AFJROTC Drill Competition

Lieutenant Colonel Sharon Branch, AFA Florida AFJROTC Liaison, was Mistress of Ceremonies, and Tim Brock, AFA Florida President, participated in the Awards Ceremony. Richard Ortega, AF Florida Vice President for Aerospace Education, David Cummock, former AFA National Director, and his wife Marge, volunteered numerous hours and logistical support to ensure the event was a success.

The AE Newsletter Needs You!!!

State Presidents, state Aerospace Education Vice Presidents, chapter Presidents, chapter Aerospace Education Vice Presidents, and any member with an education related story — the AE Newsletter needs to hear from you. Please send a photograph with your story, accomplishment, or great idea to share with your fellow AFA Aerospace Educators in the field! Submit your story today to AENewsletter@afa.org.



AEC State AE Support Review

April 17, 2009

Committee

Boyd Anderson

Grant Hicinbothem

Mike Peters

AEC Tasking

- Accumulate data reflecting the current support states are providing the state or chapters AE Activities
 - Define in terms of:
 - formal foundations/organizations
 - non formal support through state
- Determine State interested in State or Chapter AE Foundations or Organizations
- Gather data from State Presidents
- Provide a report of findings

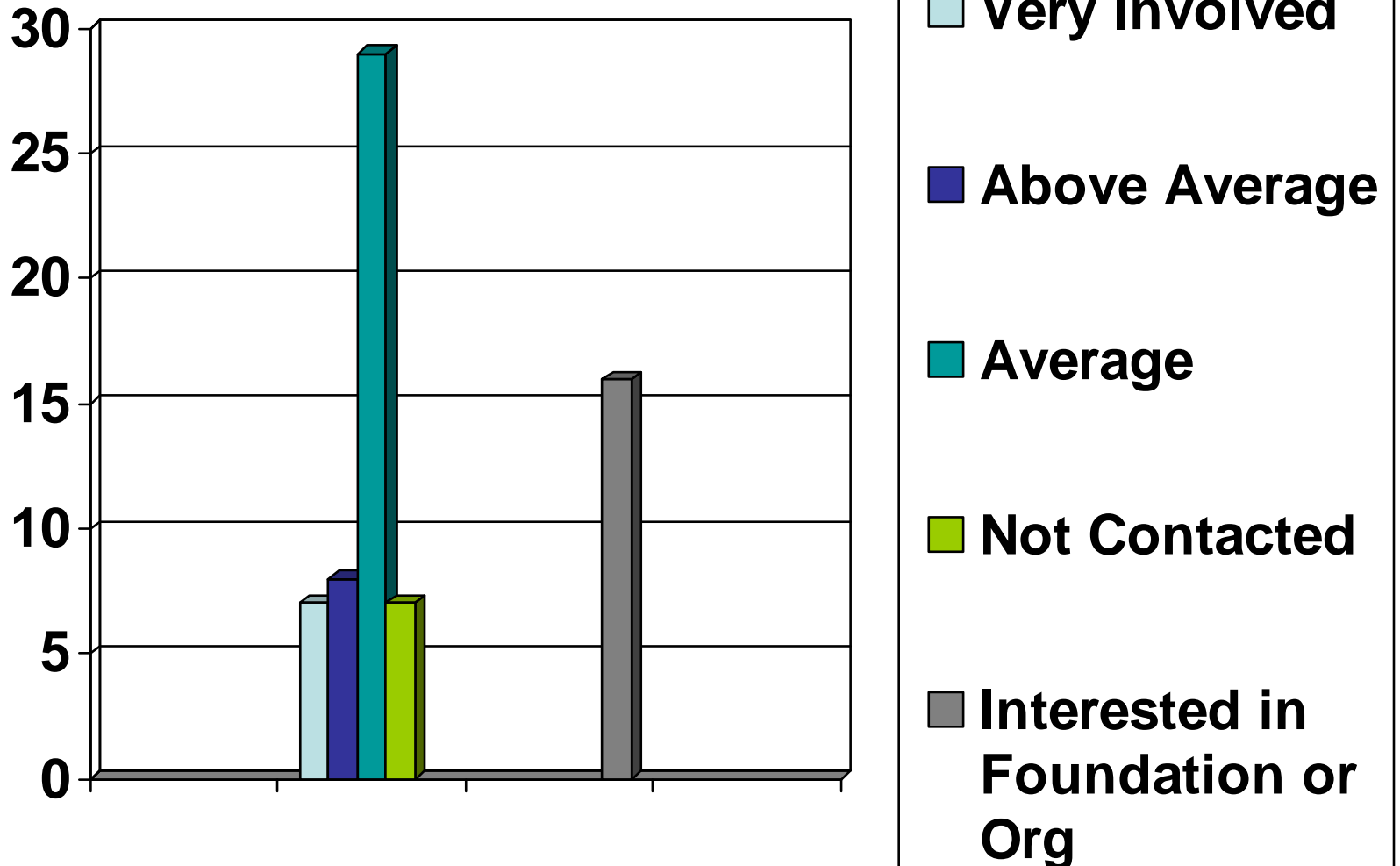
Methodology

- Called RP and State Presidents
- Used UT and VA Training Slides as basic information/starting point
- Ask common questions of each State
- Jointly prepared the report and recommendations.

Findings

- Divided States into four groups
 - Very Extensive AE Efforts – 7 states
 - All have AE Foundations or Organizations
 - AE Programs in Chapters
 - Above Average AE Efforts – 8 states
 - Some have AE Foundations or Organizations mostly Chapters
 - Have State AE representative
 - Have active AE programs.
 - Active in some but not all chapters
 - Average AE Efforts – 29 (28 states & DC)
 - Limited AE Activity
 - Most effort is for AFA support functions/activities
 - Not contacted – 7 states

AE Involvement



States by Group

- Very extensive AE Efforts:
 - California, Colorado, Florida, New Jersey, Texas, Utah, Virginia
- Above average AE Efforts:
 - Alabama, Georgia, Massachusetts, Mississippi, Minnesota, Ohio, Tennessee, Washington
- Average AE Efforts:
 - Alaska, Arizona, Arkansas, DC, Delaware, Hawaii, Idaho, Illinois, Iowa, Kansas, Louisiana, Maryland, Missouri, Nebraska, Nevada, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, West Virginia, Wisconsin, Wyoming



State Interested in AE Foundations/Organizations

- 16 States are interested
- Arizona, Arkansas, Hawaii, Iowa, Massachusetts, Mississippi, Missouri, Nebraska, Nevada, North Carolina, Ohio, Oklahoma, South Carolina, Tennessee, Washington and Wisconsin

Conclusion/Recommendations

General Recommendation To the AEC

- AEC should:
 - Accumulate data and paper work for all AE Foundations and Organizations
 - Use this data to inform States and help them
 - Continue your outstanding education of the AE mission and resources

Conclusions

- Larger states are most active AE states.
- Many state desire to grow AE programs
- No new 501 c 3s since AFA/AEF merge
- There are many viable state vice national AE programs
- We don't know the full impact of our AE efforts. State efforts and accomplishments not known
 - This data will help funding for AE

Recommendations

- Gain National 501 c 3 Status and share the information.
- Continue outstanding Newsletter & Training
- Develop an AE communications network
- Continue Visions
- Continue Grant and education support Programs



Recommendations Cont.

- Gather State AE Data
- Work with Field Council to Merge AE into state programs
- Use strong states to mentor developing states
- Establish an AE grant to start a 501 c 3
- Understand interface of national and state foundations and fund raising



QUESTIONS!

- Be Sure I have clearly shared with you.
- Ask now!